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EXPLORING THE SOCIAL CONSEQUENCES OF CASH TRANSFERS ON ADOLESCENT RECIPIENTS AND THEIR RELATIONSHIPS

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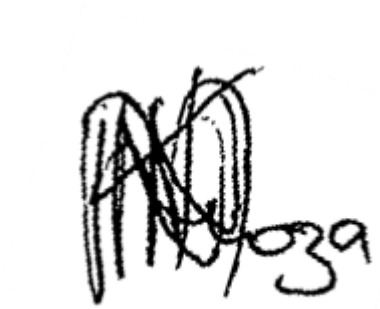
A Thesis submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, in fulfilment of the requirements for the degree of Doctor of Philosophy

Johannesburg, 2022

DECLARATION

I, Makhosazane Nomhle Ndimande-Khoza, student number 781183, declare that the thesis titled "Exploring the social consequences of cash transfers on adolescent recipients and their relationships" is my own, unaided work. It is being submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg. It has not been submitted previously at this or any other university.

I am aware that plagiarism (the use of someone else's work without their permission and/or without acknowledging the original source) is wrong. All contributors have been fully acknowledged.



Makhosazane Nomhle Ndimande-Khoza

Friday, 30 May 2022 in Johannesburg

DEDICATION

To my mom, Simonloza Mavis Ndimande, who pushed against all odds to be the first graduate in her family, under limiting circumstances. I have vivid memories of myself as a 10-year-old taking train trips to the University library to collect and drop books for you. I have memories of you sitting on the bed at midnight with your textbooks on your lap. I remember the first, second, and third graduation ceremonies I attended were yours, and I have memories of your moves to the viva academia song. The graduation gown my siblings and I wore during our graduations belonged to you. And last, your sweet voice when you told me 'ufunde' [study] and your annoyed voice when I did not do my house chores 'uyivila, ufunde khona uzoba nesisebenzi' [you are lazy, you must be educated so you can afford a maid]. I believe it is such words and exposure that made me get this far. Thank you for planting and nurturing the seed through your endless support. This is to you!

THESIS CONTENT

The research that resulted in this PhD was published in a series of papers and submitted manuscripts. Throughout the PhD, findings were presented at various local and international conferences and colloquiums. A research grant was awarded to fund this PhD study.

Conference presentations arising from this thesis

1. **Khoza, N.**, Stadler, J., MacPhail, C., Chikandiwa, A., Brahmbatt, H., & Delany-Moretlwe, S. Exploring the consequences of cash transfers for adolescent boys and girls in Inner-city Johannesburg. 21st International AIDS Conference, Durban, South Africa, 18-21 July 2016. ORAL
2. **Khoza, N.**, Stadler, J., MacPhail, C., Chikandiwa, A., Brahmbatt, H., & Delany-Moretlwe, S. Exploring the consequences of cash transfers for adolescent boys and girls in Inner-city Johannesburg. Wits Research Day, Johannesburg, South Africa, 01 September 2016. ORAL
3. **Khoza, N.,** Delany-Moretlwe, S., Scorgie, F., Hove, J., Selin, A., Imrie, J., Twine, R., Kahn, K., Pettifor, A., MacPhail, C. (2018). Men's perceptions on the impact of female-directed cash transfers on gender relations: findings from the HPTN 068 qualitative study. 22nd International AIDS Conference, Amsterdam, 23-27 July 2018. POSTER

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2. MacPhail, C., **Khoza, N.**, Selin, A., Julien, A., Twine, R., Wagner, R., Gomez-Olive, X., Kahn, K., Wang, J., Pettifor, A. (2017). Cash transfers for HIV prevention: What do young women spend it on? Mixed methods findings from HPTN 068. *BMC Public Health*, 1-12.
3. **Khoza, N.**, Delany-Moretlwe, S., Scorgie, F., Hove, J., Selin, A., Imrie, J., Twine, R., Kahn, K., Pettifor, A., MacPhail, C. (2018). Men's perceptions on the impact of

female-directed cash transfers on gender relations: findings from the HPTN 068 qualitative study. *PLOS ONE,* 13(10).

4. **Khoza, N.**, Scorgie, F., Delany-Moretlwe, S., Igbo, J., Selin, A., Kahn, K., Hove, J., Pettifor, A., & MacPhail, C. (2021). The impact of cash transfers on social relationships: perspectives from beneficiaries and non-beneficiaries in HPTN 068, BMC Public Health, under review.

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6. Pettifor, A., MacPhail, C., Hughes, J., Selin, A., Wang, J., Gomez-Olive, X., Eshleman, S.H., Wagner, R.G., Mabuza, W., **Khoza, N.**, Suchindran, C., Mokoena, I., Twine, R., Andrew, P., Townley, E., Laeyendecker, O., Agyei, Y., Tollman, S., & Kahn, K. (2016). The effect of a conditional cash transfer on HIV incidence in young women in rural South Africa (HPTN068): a phase 3 randomised controlled trial. *Lancet Global Health*, 1-11.

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Peer reviewer for journals and conferences

1. Peer reviewer for AIDS and Behaviour, July 2021
2. Peer reviewer for IAS conference scholarships, 2019
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ABSTRACT

Introduction: Cash transfers (CTs) directed to adolescent girls and young women in sub-Saharan Africa for sexual health and HIV prevention have shown mixed but promising results. Despite the goal for CT programmes to address social and structural barriers to HIV prevention, little is known about their unintended psychosocial impact when paid directly to adolescents. This PhD aimed to explore the CTs' personal, gender, and relational consequences for HIV prevention among adolescents in low-resourced settings in South Africa. While the PhD focus is mainly on CT interventions targeting AGYW, some findings focused on adolescent boys are also included as a novel contribution to the CT literature.

Methods: This PhD study is embedded in two randomised controlled trials, HPTN 068 and CHANGE, conducted in two South African provinces, Mpumalanga and Gauteng, between 2012-2015. These trials assessed the effectiveness of conditional and unconditional CTs on HIV prevention, mainly in AGYW. The PhD study used primary and secondary qualitative data collected as part of these two trials. Data collection included in-depth interviews and/or focus group discussions with male and female CT beneficiaries, non-beneficiaries, caregivers, intimate partners, and peers to gather perspectives on the psychosocial impact of CTs. Questions explored during data collection included: experiences and meanings of CTs, spending patterns of CTs, perceived psychosocial impact of CTs on adolescent recipients, and their relationships with family, peers, and intimate partners. Data was collected by the researcher and trained research assistants in local languages and audio recorded. Audio-files were transcribed and translated to English. Codebooks were generated using an inductive approach based on emerging themes, and subsequent transcripts were coded deductively. Data was organised and analysed using Atlas-TI version 7.4.

Findings: This study contributes several new findings to the current literature on the psychosocial implications of CTs paid to adolescents. We found that CTs directed to adolescents generally had unintended psychosocial benefits among adolescent beneficiaries, although with minimal negative consequences. CTs promote a sense of agency and self-worth among beneficiaries by facilitating spending on basic needs and items their parents could not afford. Receipt of CTs enabled AGYW to contribute to their intimate relationships. Intimate partners and male peers, therefore, supported CTs paid directly to girls and young women. However, it appears that if young women's receipt of CTs could

significantly change the power balance in women's favour, they may be unacceptable to men. We also found that CTs strengthened social relations by facilitating resource exchange and reciprocity and promoting participation in peer networks which increase peer identity and social status. However, our findings show that CTs may also have an unintended negative impact on social relationships, such as potential backlash related to altering gender norms that favour men superiority, perpetuating inequitable gender norms, disrupting norms of homogeneity if targeting one group and 'excluding' others. All the unintended consequences identified in the study can potentially influence adolescents' HIV risk, positively or negatively.

Conclusion: The key findings inform the literature on adolescent-directed CTs and provide evidence to inform future programmes. Future studies on CTs for sexual health and HIV prevention in adolescents should consider the unintended social consequences. These interventions should recognise that unintended social implications may affect the overall impact of the CTs on targeted behavioural and biomedical outcomes — this may be the initial step to understanding the pathways through which the CTs effect change on targeted outcomes or a way to explain lack of programme impact.

Keywords: Cash transfers, adolescent boys, adolescent girls and young women, psychosocial consequences, gendered relationships, rural, urban, HIV prevention interventions, South Africa

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"Mom are you done with your PhD?"

"Let me help you so you can finish quickly."

"Today, I have not seen you on your computer, you see you are not working."

"Mom, are you sleeping or are you thinking about your PhD?"

"On what page are you at? How many pages are remaining?''

If I were to count all the people who made this journey possible, I would write pages. Thank you to everyone who supported me through this journey, my CARTA fellows, HPTN scholars, the Green Team of the Black Management Forum's Youth Professional Development Programme. Salute!

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ABBREVIATIONS AND ACRONYMS

ACASI	Audio Computer-Assisted Self-Interview
AGYW	Adolescent girls and young women
ART	Antiretroviral Therapy
ATM	Automated Teller Machine
CARTA	Consortium for Research and Training in Africa
CoJ	City of Johannesburg
CCT(s)	Conditional cash transfer(s)
CSG	Child Support Grant
CT(s)	Cash Transfer(s)
Dr	Doctor
ESA	Eastern and Southern Africa
FGD	Focus Group Discussion
GBV	Gender-Based Violence
GCP	Good Clinical Practice
HDSS	Health and Demographic Surveillance System
HIV	Human immunodeficiency virus
HPTN	HIV Prevention Trials Network
HREC	Human Research Ethics Committee
HSP	Human Subject Protection
HSV-2	Herpes Simplex Virus Type 2
IAS	International AIDS Society
ICR	Inter-coder Reliability
IDI	In-depth Interview
IPA	Interpretative Phenomenological Analysis

IPV	Intimate partner violence
IRB	Institutional Review Board
LMICs	Low-Middle-Income Countries
MMC	Medical Male Circumcision
MRC	Medical Research Council
ODI	Overseas Development Institute
PhD	Doctoral of Philosophy
POWER	Prevention Options for Women Evaluation Research
PrEP	Pre-Exposure Prophylaxis
Prof	Professor
RCT	Randomised controlled trial
SOP	Standard Operating Procedure
SRH	Sexual Reproductive Health
SSA	sub-Saharan Africa
STI	Sexually transmitted infection
UCT(s)	Unconditional cash transfer(s)
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations International Children's Emergency Fund
WHO	World Health Organization
Wits	University of the Witwatersrand
Wits RHI	Wits Reproductive Health and HIV Institute
YW	Young women
ZAR	South African Rand

CHAPTER 1: INTRODUCTION AND LITERATURE REVIEW

1.1. Introduction

Adolescent girls and young women continue to be at the centre of new HIV infections due to interpersonal, intrapersonal and structural factors. Recent efforts to reduce HIV incidence in this population include cash payments to reduce HIV risk, addressing structural drivers of HIV such as poverty and gender imbalances, and incentivising behaviour change. However, little is known about the unintended social and relational consequences of economic interventions in a context characterised by social imbalances.

My PhD study explores the unintended social consequences of cash transfers for HIV prevention paid directly to adolescent boys, girls, and young women, in two South African provinces. It gathers perspectives from cash transfer beneficiaries, non-beneficiaries, intimate partners, and peers to assess the impact of cash transfers at intrapersonal and interpersonal levels. Using a psychosocial impact framework of unintended social consequences developed through my primary research on cash transfers, the thesis later assesses whether PrEP interventions might be viewed in the same manner — a contribution of this PhD study. The study concludes with how interventions adopted or designed for HIV prevention could have unintended outcomes that could also negatively or positively affect HIV prevention as a target outcome.

This chapter provides the background literature on the epidemiology of HIV in adolescent girls and young women (AGYW), drivers of HIV in this population, and HIV prevention interventions seeking to reduce HIV incidence in AGYW. This section also presents literature on cash transfer interventions and their psychosocial impact — specifically, looking at definitions, types, meanings, and social and gendered impacts. The chapter then explains the context of the research that informed this PhD study. Figure 1 shows nine distinct sections included in this chapter. Table 1 presents a summary of the PhD objectives, research questions and significance.

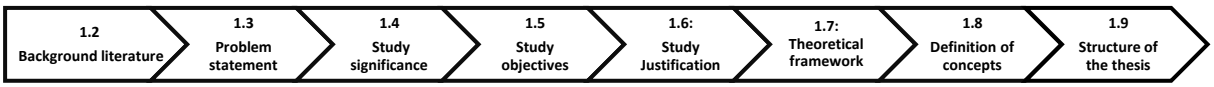

Figure 1: Content map depicting sections in Chapter 1

1.2. Background literature

1.2.1. Epidemiology of HIV among AGYW

Globally, approximately 590 000 youth aged 15–24 years were newly infected with HIV in 2017. Of these, 250 000 were adolescents aged 15–19 years; 23% were adolescent girls in Eastern and Southern Africa (ESA). AGYW continue to be the worst affected, with HIV prevalence fourfold higher in AGYW than young men and HIV incidence highest in young women (1). In this region, adolescents and youth account for 37% of all new HIV infections (2). HIV risk is higher among AGYW than men in ESA (3). Although evidence shows a decline in HIV incidence among AGYW between 2005 and 2015 in Uganda, Zimbabwe, and among female sex workers in Kenya, HIV incidence has remained largely unchanged in the highest-burdened communities in South Africa, where approximately 2000 new infections occur weekly among AGYW (4). On the contrary, HIV incidence among adolescent boys and young men is lower in most geographies. This may be due to undiagnosed cases of HIV due to their limited access to health services or that boys are not captured in the HIV response as a result, the primary focus has been on preventing HIV on women (5). For this reason, this study mainly, but not exclusively, focuses on HIV and HIV prevention in AGYW.

1.2.2. Drivers of HIV in AGYW

HIV risk among AGYW is shaped by biological, behavioural, social, and structural factors. Understanding the drivers of HIV in young women is important for developing suitable interventions. Early evidence suggests that behaviours such as substance abuse (6, 7), engaging in age-disparate relationships (8), early sexual debut (9), multiple concurrent sexual partnerships (10), and lack of or inconsistent condom use (11) are HIV risk factors among AGYW. Alcohol consumption in AGYW is associated with early sexual encounters, unsafe sex, and sex with multiple partners (12). Sexual relationships with older men are not uncommon and provide greater exposure to HIV because sex is more frequent and condom use is less consistent (13).

In the last two decades, there has also been recognition that AGYW are particularly at risk, not only because of their behaviour, but also due to social and structural factors beyond individuals' control. Social and structural drivers of HIV are defined as "interactive phenomena reflective of social and cultural processes, institutional practices, and sets of arrangements that facilitate HIV transmission" p.2 (14). They consist of a set of factors that influence the HIV risk of a given population. Figure 2 shows several factors that have been identified as social and structural drivers of HIV behaviour in AGYW. These include poverty, harmful gender norms, and power imbalances, including violence against women, availability of alcohol, stigma, discrimination, lack of secure livelihoods, lack of education, and poor access to health services (15, 16).

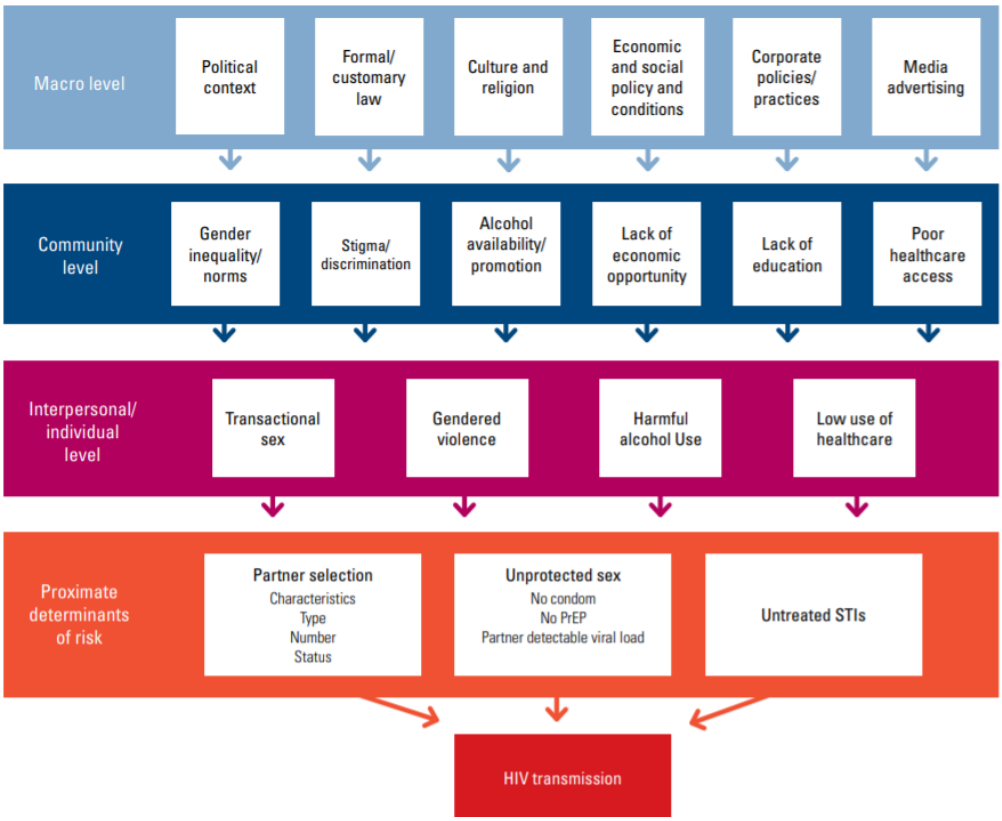

Figure 2: Structural drivers of HIV among women (STRIVE) (http://strive.lshtm.ac.uk/system/files/attachments)

Social and structural drivers of HIV reduce economic and social opportunities to improve women's lives, keeping women constrained within restricted behavioural options and limiting them from protecting themselves (17, 18). For example, poverty undermines the capacity of people to access and act on HIV prevention messages (19). Consequently, young women may engage in risky sexual behaviour such as transactional sex and age-disparate sex for survival. A study conducted among young women in Tanzania showed that young women engage in

transactional sex with fishermen in exchange for fish (20), and young women engage in sexual relationships with older men for material gain (21). Inequitable gender norms limit women's choices about when and with whom they have sex, and result in expectations of masculinity that are at odds with HIV prevention aims. A study conducted in Uganda among women engaged in sex work demonstrated that experiences of violence, early unplanned pregnancy, and the need for childcare money were reasons women entered and remained in sex work (22). Under these circumstances, women feel powerless. It is challenging for them to negotiate safe sexual practices because of their dependence on transactional sex (22). HIV stigma hampers the access and delivery of HIV prevention services (23). Social and structural factors increase young women's vulnerability to HIV and serve as barriers to HIV prevention efforts.

In the contrary, less research has been done on the drivers of HIV among boys and young men because HIV prevalence in this group is much lower and that it has therefore not been the focus of as much interest. However, evidence shows that HIV incidence increases steadily between ages 20-30 years old and this attributed to internalised traditional masculine values and misogynistic gender attitudes that are associated to sexual practices the make men vulnerable to HIV risk, for example: unprotected sex, multiple and concurrent sexual partnerships, alcohol abuse as well as gender-power relations (5). In South Africa, it has been well documented that normative masculine narratives condone multiple partnerships and physical and sexual violence within sexual partnerships (24, 25)

1.2.3. HIV prevention interventions among AGYW

Reducing new HIV infections in AGYW remains a high priority for the World Health Organization (WHO), HIV researchers, and governments in ESA (26). Since the 1980s, significant global research has been undertaken to understand risk factors for and to find effective ways to reduce or prevent the spread of HIV.

Early work on HIV prevention focused on addressing behavioural risk factors of HIV. The focus on behavioural factors followed evidence that individuals' behaviour contributes to their HIV risk. Thus, early behavioural HIV prevention efforts focused on ways to modify individual behaviour through cognitive-behavioural interventions. These interventions aimed to create HIV awareness through HIV education and knowledge. Significant HIV prevention work focused on promoting abstinence, faithfulness to one partner, and condom use (also known as

the ‘ABC’ approach to prevention) (27). In early 2000, evidence from Uganda demonstrated that the ABC approach yielded positive results, significantly reducing the HIV infection rate (28). Similarly, in countries such as Thailand, Zambia, Tanzania, and Kenya, which also implemented the ABC approach, HIV-related behavioural changes were observed (29). However, these changes were not observed in other contexts.

The ‘ABC’ method was criticised for its sole focus on the individual and for disregarding the contextual social and structural risk factors (27). Critics argued that, within the context where an individual is situated, social and structural elements influence HIV risk and represent issues over which they have limited control (27). For example, emphasising abstinence and condom use is not practical in contexts where women are not empowered to conduct such negotiations and have limited control over their sexual lives (27). While focusing on an individual’s HIV risk factors was critical, addressing the underlying social and structural issues was deemed equally essential (30). As a result, Coates, Richter (31) suggested that behavioural interventions could improve HIV outcomes if integrated with biomedical and structural interventions (31).

Given this background, there was interest in social and structural interventions — “methods that rely on altering aspects of the social, political, economic, or legal environment to promote positive health-related behaviour change” — as potential strategies to address social and structural drivers of HIV (18, 32-34). Simply put, there are root causes underlying risk behaviour that cannot be addressed by only targeting the individual. Structural interventions aim to improve social and economic structures to address the systems that shape vulnerability (35). They can be applied in combination with behavioural or biomedical interventions targeted at individuals to curb the spread of HIV and increase the effectiveness of those interventions. Evidence from initial efforts to integrate structural approaches into HIV prevention interventions supports the idea that tackling structural factors helps individuals reduce HIV risk (27, 35). Social and structural interventions have shown promising results in addressing HIV outcomes. For example, the Ugandan study mentioned above revealed that the ABC approach reduced HIV infections drastically because of community mobilisation against HIV (27). The intervention achieved this by changing community norms around HIV prevention and reducing HIV-related stigma (27). A study conducted in Malawi showed that addressing economic challenges through economic interventions reduced risky sexual behaviour among AGYW (36). As a result, several studies have assessed social and structural interventions for HIV prevention in young women (18, 37).

Structural HIV prevention interventions have sought to address contextual factors that contribute towards AGYW's HIV risk. Several structural interventions have focused on reducing HIV vulnerability among AGYW. For example, interventions that aim to create safe spaces, transform gender norms, and empower women by keeping girls in school and providing access to economic resources were introduced to address gender-inequitable norms and gender-based violence (GBV) (38-42). Interventions using community mobilisation to address poverty and livelihood options, violence against women, and stigma and discrimination were assessed. In particular, the STRIVE consortium has done significant work in India, South Africa, and Tanzania on structural interventions for HIV prevention. STRIVE aimed to enhance the impact of proven HIV prevention interventions (35).

For this PhD, I focus largely on economic interventions that place resources in the hands of AGYW. The objective is that the resources will curb poverty and violence and give AGYW control and power to make decisions, including sexual health decisions. These interventions are also premised on enabling AGYW, via the economic resources, to navigate structural barriers that make it challenging to exercise choice and protect themselves. There are three types of economic interventions that have been explored in HIV prevention, namely: 1) microfinance — provision of financial services such as loans and savings to individuals from low-income settings and those without access to formal financial services; 2) social protection schemes — created to reduce poverty and vulnerability, such as cash transfers; 3) and cash incentives — use of direct, behaviour-linked incentives to change behaviours, which are grounded in a well-established tradition of experimental research in psychology based on behaviour modification theory.

This PhD focuses on the specific economic intervention of cash transfers, described in detail in the next section. Economic interventions were selected as the focus because they are newly explored HIV prevention tools for AGYW.

1.2.4. Cash transfer interventions

Cash transfers (CTs) are a form of social protection and have been one of the most popular forms of structural intervention trialled among AGYW. The World Bank defines CTs as "the provision of assistance in the form of cash to the poor people and those who face a probable risk of falling into poverty in the absence of the transfer" (43). CT programmes aim to reduce poverty and vulnerability by enhancing individuals' health and socio-economic wellbeing,

enabling them to meet basic needs such as food, health care, and education (44). There are two types of CTs: conditional cash transfers (CCTs) and unconditional cash transfers (UCTs). UCTs do not require beneficiaries to fulfil any obligations to receive the CTs; CCTs are contingent on specific requirements being met by recipients, known as co-responsibilities (45). Researchers hypothesise that CCTs can encourage behaviours that elicit social and health benefits (36). In this study, while the current research is mainly focused on CCT trials, it also includes UCTs; thus, I use the term CTs in its broader sense.

CCTs were first developed and implemented in Latin America for health and education outcomes. They combine efforts to combat existing poverty with efforts to address the underlying causes of future poverty by improving human capital — increasing access to education and health services. CCTs are often provided either to offer relief in a short-term crisis or as a long-term goal for development purposes (46). This approach recognises the demand-side barriers to investment in human capital that impact access to health and education services. These include a lack of school uniforms, transportation, and the opportunity cost of schooling because of a reliance on children for labour (44).

CCT programmes have been linked to poverty reduction (47) and increased rates of school enrolment (48). Cash incentives have also been linked to smoking cessation (49), weight loss (50), and increased childhood vaccination rates (51). In *Progresa*, the most well-known social assistance programme in the world, which was implemented in Mexico, receipt of CCTs was contingent on families meeting requirements such as school attendance and regular clinic visits; the aim was to enhance livelihoods and invest in human capital (52, 53). Evaluation of *Progresa* has shown that the CCT increased school enrolments and clinic visits (54). This evidence suggests that CCTs can influence social and health outcomes.

Malawi was one of the first countries in Africa to use CTs to address poverty and other economic strains. Since 2000, there has been a drastic increase in CT intervention in sub-Saharan Africa (SSA) (55, 56). There are about 40 CT programmes that have a broad scope — aimed at either addressing chronic poverty, food insecurity or development. Unlike in Latin America, CT programmes in SSA are primarily unconditional (57). Most recently, governments and policymakers have been seeking ways to use CTs to tackle health and education challenges faced by several countries in ESA (58). While CT programmes are expanding in Africa, South Africa already spends approximately 18% of its gross domestic product (GDP) on social protection in the form of child support grants (CSG), old-age pensions,

and disability grants (59). It may not be feasible for SA to expand its social protection programmes, but recommendations could be made to adjust the existing CSG if found to be effective for HIV prevention.

The following section focuses on the personal meanings adolescents attach to the receipt of CTs, and the impact of CTs on gendered and social relationships.

1.2.4.1. Cash transfers and symbolic meanings

Evidence suggests that CTs hold the potential to improve the psychosocial wellbeing of beneficiaries. In several evaluative studies in low- and middle-income countries (LMICs), economic gain through CTs translated to enhanced self-esteem through financial autonomy, self-reliance, ability to control and make decisions about the CTs, and improved social status (7, 60). In the evaluation of *Progresa*, beneficiaries reported that the CT gave them a greater sense of autonomy and self-confidence (61). Similarly, a review of seven CT interventions targeting poor households and vulnerable groups in the Middle East and SSA showed that UCTs paid to female household heads enhanced financial security and reduced stress and dependency on others. UCTs gave women control over their lives through freedom and increased decision-making in household expenditure (62). Women reported that receipt of CTs restored their dignity, self-worth, and social status (63). In Zimbabwe, participants reported that the transfers reduced anxiety and stress (64). In South Africa, the evaluation of the CSG in Doornkop, Johannesburg showed that the grant offered beneficiaries a sense of personal power and courage. Recipients reported that it made them feel good about themselves (65). Findings from a qualitative study among married AGYW found that unconditional CTs improved young women's decision-making. However, they only made decisions related to the spending of the CTs (66). These personal meanings are significant indicators of personal empowerment and personal agency.

1.2.4.2. Cash transfers and social level impacts

While CT programmes intend to improve individual wellbeing (health and behaviour), the programmes may also have a pervasive effect on recipients' social relationships (67). CT interventions involve many other processes that directly or indirectly affect social relationships, social power, and dynamics at the household and community level, including gendered relationships. Below I discuss the empirical evidence of the impact of CTs on social relationships. First, I present a theoretical perspective and evidence of the effect of CTs on

male-female relationships. Then I present a theoretical perspective on how CTs impact relationships with peers.

1.2.4.3. Cash transfers, gender norms and violence — theory and empirical evidence

This section begins with a discussion of existing inequitable norms in gender roles. Thereafter, it is followed by sociologists' and psychologists' predictions about how changing the status quo through provision of CTs could potentially shift gender norms and reduce intimate partner violence (IPV).

SaveTheChildren describes gender norms as social principles that control boys, girls, men and women's behaviour and restrict their gender identity based on what is considered appropriate (68). In patriarchal African contexts, gender norms prescribe men's and women's roles in relationships; typical roles prescribe that men are providers and women are primarily seen as critical decision-makers in household matters, using money provided by men. Therefore, it is expected that men will be employed, earning more than women. Women are expected to execute domestic duties such as cooking, cleaning, and caring for the children. In settings where men are classified as superior to women, power dynamics and GBV are also common; an increase in women's earnings is likely to bring about a shift in gender roles and influence power dynamics. While most theorists postulate that women's economic empowerment could equalise power dynamics and reduce violence, others argue that providing cash to women in patriarchal settings could lead to a 'backlash' (69).

Feminist sociologists argue that social institutions promoting masculinity and gender inequality can trigger domestic violence. They hypothesise that, in this context, offering CTs to women may disrupt inequitable gender norms and power dynamics by empowering women, leading to a higher degree of financial equality, thereby reducing the prevalence of IPV (41, 70). CTs could enable women to acquire their necessities, thereby reducing transactional sex and women's reliance on men, thus building resilience to IPV. Economically empowered women are more likely to leave relationships that put them at risk (71).

Several studies have examined women's economic status in relation to CTs and experiences of violence (72). Most of these studies showed that CTs positively impacted reduction of violence; however, other studies showed mixed results. A review conducted by the Overseas Development Institute (ODI) on studies conducted in six LMICs in Africa, Asia, and Latin America showed that CTs reduced women's experiences of physical abuse but increased

emotional abuse or controlling behaviour by their spouses. One study found increased physical violence toward women when they received more substantial CT amounts (46). A study conducted among Nepalese couples showed that women who generate income were more likely to experience violence from their intimate partners and other men (72). The reasons for this outcome include anger towards women who earn more income (where men are not beneficiaries) and escalation of threats of violence by partners to coerce money from women (73). The effects of resources on women's risk of violence are dependent on their partners' gender-related beliefs. A study in the United States showed that ideologies male partners held about gender were linked to the experience of violence among women who earned more than their partners. Women who earned more and had partners who held traditional gender beliefs were more likely to report experiences of violence than women who earned more and had partners who held egalitarian views (74).

Psychologists classify domestic violence as a disorder of power and control. Constructions of masculinity are closely related to men's earning potential and their ability to provide; women's greater economic freedom and increased autonomy may challenge men's perceptions of themselves and their authoritative role over women (75) (76). While feminist views support the premise that women's economic empowerment leads to threats and violence, they predict that this could happen if women's access to CTs leads to atypical roles within the relationship. It could also occur when women challenge power distribution in the household, challenging male authority and breaking existing social taboos (74). Spouses' employment and income status play a significant role in reactions to CT programmes targeting women. For example, if a woman becomes the primary income earner and the primary provider, a man is likely to feel emasculated and turn to violence. A study conducted in Bangalore showed that women who had husbands working at the beginning of the study but who lost their jobs in the middle of the CT programme were twice as likely to experience violence. However, there were no adverse reactions in studies where men were employed and earned a salary (77).

A review of gender dynamics in three CT programmes in Kenya, Zimbabwe, and Indonesia showed that men were receptive to CTs targeting women, accepting women's capabilities to use cash to meet the family needs. However, they raised concerns about the possibility of women becoming household heads (78); this may be a sensitive issue when men cannot fulfil their masculine role as economic providers (74). For example, in Kenya, men reported feeling threatened when women had access to their own money (79). If men feel threatened by

women's financial gains, they may resort to violence or engage in risky behaviour to restore their imperilled manhood or boost their feelings of masculinity and self-esteem (76). Studies conducted in developing countries show that in circumstances where men are not able to validate their masculinity, violence may serve as an alternative option to prove their masculinity (74, 80, 81).

In contrast, feminist sociologists assert that economic empowerment of women could reduce women's experiences of violence. They argue that poverty-related stress is one of the driving forces behind domestic violence. Thus, women's economic empowerment improves household welfare and reduces stress, and should reduce the incidence of violence. It provides food security and financial stability to the cash beneficiaries and the entire household (74). A cluster randomised trial assessing the effectiveness of cash vouchers and food transfers on IPV in Northern Ecuador found that transfers targeting women reduced controlling behaviours and IPV by 30% (82). A mixed-method study seeking to understand the pathways through which the transfers reduced IPV showed that CTs reduced household stress and fights about the use of income. Women beneficiaries reported fewer conflicts with spouses or partners because, when men did not have money for daily food, women could use the transfer to buy or acquire the food they needed. This consequently increased happiness and general wellbeing of the household because there was more food available. Women became less reliant on men (83). GiveDirectly, a programme offering CTs to low-income families in East Africa, demonstrated approximately 50% reduction in reports of physical and sexual violence within marriage (66). A cluster RCT of the Intervention with Microfinance for AIDS and Gender Equity ('IMAGE') in South Africa reported a 55% reduction in IPV among the recipients (41). Similarly, in Lesotho, CTs reduced gender conflicts and tensions within households (84). Adato and Hoddinott found that receipt of CTs did not increase the experience of IPV in Latin America (85).

1.2.4.4. The gendered assumptions of CTs paid to women

There are two gender assumptions related to CT programmes targeting women as CT recipients. In this section, I present the assumptions as well as the arguments and evidence regarding these assumptions.

The first assumption is that CTs paid to women are likely to benefit the entire household, particularly children's health and education. If CCTs are paid to women, conditionalities are more likely to be met than when CTs are paid to men, who are more likely to spend the cash

on social activities (6). However, RCTs showed that the CCT recipient's gender did not correlate with children's wellbeing (73). Instead, researchers argue that CCTs paid to mothers could negatively reinforce women's traditional roles as caregivers and that monitoring CT conditions could be burdensome (78, 86, 87). The evaluation of CT programmes targeting adult women in Latin America showed that receipt of CTs kept women beneficiaries in their position as caregivers, as CCTs added the burden of ensuring that their children met the CCTs' set conditions (61).

The second assumption is that CT programmes targeting women will increase women's control and decision-making over household expenditure, empowering women to become less dependent on men, increasing their bargaining power, and encouraging them to make healthy decisions and sexual behaviour choices (73). Studies have shown mixed findings of the effect of CTs on women's bargaining power and decision-making. A case study of three CCT programmes in Latin America revealed that CCTs could empower women beneficiaries through increased bargaining power within the household and improved social status in the community (88). Women reported enhanced self-confidence and social standing due to CTs and noted that this increased their role in decision-making (89, 90). Some studies reported improved communication due to CTs, which increased women's bargaining power in relationships (91).

However, other studies demonstrated little or no improvement in women's bargaining power and decision-making. A review of CCTs and UCTs in Ghana, Peru, and Pakistan showed that, although receipt of the CTs increased psychosocial wellbeing among women beneficiaries, there was little evidence that women's decision-making power in the household had improved. There was also little evidence to suggest that CTs brought significant changes in gender relations, roles, and responsibilities (92). Where CTs allowed women to make decisions, they were limited to the use of the CTs. A qualitative evaluation of the Social CT Programme (SCTP) in Malawi, which showed an increase in women beneficiaries' bargaining power and decision-making in the household, also showed that decisions made were limited to the spending of the CTs (93). Other studies showed that, even though the women were the recipients of CTs, spending decisions were made jointly with their spouses (94, 95). In a few studies, spouses made expenditure decisions related to CTs (61). These studies suggested that the CT did little or nothing to change household decision-making norms; men remained the primary decision-makers (95). While changing gender norms may not be the primary goal of

CT interventions, it is arguable that providing CTs to women would, one way or the other, affect gender norms. If gender norms are ignored, CTs may not be effective if the beneficiaries' context does not help them exercise choice.

Overall, the literature demonstrates that CTs do not transform entrenched structural gender norms that oppress women's economic growth. One explanation is that gender norms are hard to change; they require focused interventions (96). The majority of programmes acknowledge the importance of taking into account gender issues to make them more effective (94). The closest CT programmes get to 'addressing' gender issues is through targeting women as cash beneficiaries, assuming that merely targeting CCT delivery will address gender inequities. A review of eight programmes showed that the gender transformative dimension was not explicitly mentioned (88). Programme designers make little attempt to address unequal power relations in programme design, which explains why CTs have not changed norms. Some reviews concluded that programmes should not assume that CTs paid to women will change decision-making power dynamics within households; instead, programmes should be specifically designed to address gender inequities by ensuring that gender-equitable principles are built into the design of CT programmes and transformation of gender relations is central to the programme (7).

1.2.4.5. Cash transfers' impact on social relationships

Several studies have explored the social consequences of CTs. These studies showed evidence of both positive and negative social impact of CTs. At the community level, CTs positively addressed social inequalities and promoted unity and social cohesion within communities (65, 97, 98). Evidence from ESA shows that receipt of CTs enhanced adult beneficiaries' ability to participate in community events, make financial contributions, and borrow and lend CTs to others (65, 99). These outcomes were evident in Kenya, where CTs offered to households promoted sharing, borrowing, eating together, and participating in community events, including burial societies (100). However, in Zimbabwe, where money was offered in response to a food crisis, adult beneficiaries shared food aid, but they did not share the cash payments. In South Africa, CSG recipients reported that spending the grant on family gatherings contributes to family responsibilities and promotes social support and reciprocity, which is important in fostering household cohesion and social capital (65). The CSG offered South African women beneficiaries creditworthiness, enabling them to borrow cash from others or get credit to meet their needs. The ability to repay debts and participate in social or community

events helped women beneficiaries gain social respect and status, leading to social integration and social interaction, strengthening social capital (65).

While cash payments generally show positive consequences for social and community relationships, some studies have shown that CTs could also lead to unintended adverse outcomes for social relationships (67, 101). The unintended negative consequences are related to the targeting of beneficiaries and the use of the money. Unfavourable changes associated with CT programmes include igniting jealousy, stigma, tension, conflict, and resentment among non-beneficiaries within the community; this can increase division and long-term vulnerability (102, 103). Qualitative studies exploring the social impact of CTs provided to households for poverty reduction suggest that targeting specific groups and excluding others may lead to stigma, tension, conflict, and resentment between recipients and non-recipients (67, 97, 103), which can compromise relational wellbeing. Findings from a qualitative study assessing dignity and stigma among female beneficiaries of CTs in Soweto, South Africa, indicated that families who received the cash payments were stigmatised, labelled as poor or lazy, and experienced shame due to receipt of the grant (104). Fearing such stigma, in Kenya cash beneficiaries reported that they intentionally kept their beneficiary status secret because of concerns about what the community would say (105, 106).

1.2.5. Cash transfers for HIV prevention among AGYW

While the previous sections have shown that CTs are used globally to address a range of economic, health, and development agendas, CT programmes in SSA have also aimed to address specific vulnerabilities, including high HIV incidence (DFID, 2011). Following their success as economic interventions in Latin America, CCTs emerged as potential HIV interventions to reduce HIV risk in ESA. Subsequently, CTs for HIV sexual health, including HIV prevention, have been explored in SSA (36, 107). A systematic review published in 2011 showed that CCTs could promote health behaviours by improving access to health services or modifying risky sexual behaviour in low- and middle-income countries (53). There were three assumptions about how CTs could achieve this:1) CTs paid to adolescents from low-income households would address the upstream drivers of HIV risk. Here the focus is on reducing poverty and building human capital. If conditioned to school attendance, CTs would reduce HIV risk as research indicates that school attendance/higher educational achievement is protective against HIV (45). 2) CTs paid to AGYW could empower them to make independent decisions, including sexual health decisions. This could indirectly address issues of gender

inequality and enable them to cope in contexts with structural factors that make it difficult for them to exercise choice and protect themselves (108). 3) CTs could serve as an incentive to seek or access HIV prevention behaviour. These programmes are designed to change behaviour directly.

A systematic review of the effect of cash payments as a strategy to reduce HIV showed that CTs, particularly CCTs, were a promising intervention to reduce sexual health risks among AGYW (45). Evidence from observational studies and randomised controlled trials (RCTs) demonstrates mixed findings on the effects of CTs on HIV outcomes. An observational study in South Africa showed that adolescent girls from households receiving a CSG were less likely to engage in intergenerational sex, which is a risk factor for HIV infection (109). The Zomba trial in Malawi among young women aged 13-22 years indicated that CTs effectively prevented HIV prevalence by reducing the selection of higher-risk, older partners. The trial found that CTs led to reductions in teenage pregnancy, early marriages, and risky sexual behaviour (36, 107). A study in rural southwest Tanzania (RESPECT) offered CTs to men and women conditioned on participants staying free of sexually transmitted infections (STIs). Findings from this study showed that cash recipients had a lower prevalence of curable STIs than those in the control group after 12 months, but no gender differences were found (110). Another study conducted in Lesotho that offered a lottery ticket to adolescents if they stayed STI- and HIV-free found that participants had a 25% lower HIV incidence (110). The parent study for this PhD research, the HPTN 068 trial, found that a CT conditioned on school attendance was associated with reduced IPV and risky sexual behaviour. However, the study found that CCTs did not affect HIV incidence. Most of the studies found that CCTs had positive outcomes on risky sexual behaviour. However, only one study showed decreased HIV prevalence, and none impacted HIV incidence (36).

Despite inconsistent findings, funding agencies like UNAIDS and the World Bank are keen to support governments to scale up CT programmes, specifically those targeting young women (111). The United Nations Development Programme (UNDP) and the Joint United Nations Programme on HIV/AIDS (UNAIDS) have recommended further exploration of the potential of CTs to prevent HIV among key populations(112). They believe that CTs could positively impact HIV outcome ‘development synergies’ (112), that is, multiple HIV, health, development, and human rights goals simultaneously. The UNDP highlights that CTs could impact HIV outcomes in two ways: firstly, by addressing economic and gender inequalities as

the structural drivers of HIV and, secondly, by increasing the uptake of HIV prevention services such as HIV testing and medical male circumcision (112). Based on these assumptions, and despite inconclusive findings, the Eswatini Ministry of Health plans to scale up CCT programmes to promote HIV prevention among AGYW (113). CTs have also been included as part of recommended combined interventions, including biomedical and behavioural approaches, to address the structural drivers of HIV. The multi-country, PEPFAR-funded DREAMS initiative, which is implementing and assessing combined HIV prevention interventions in AGYW, includes educational subsidies in the form of CTs (114).

1.3. Problem statement

Research assessing CT interventions for HIV prevention in AGYW has narrowly focused on HIV outcomes with limited focus on the social impacts of the intervention on beneficiaries (115, 116). Devereux et al. have criticised research evaluating the impact of CT programmes for their sole focus on material outcomes such as health, education, and consumption at an individual level (101). These interventions often fail to embrace the intrinsic, social, and structural factors that affect targeted outcomes. Similarly, MacAuslin et al. (2008) have criticised CT interventions for failing to assess the relational impact of CTs. These authors argue that CT recipients form part of a web of social relationships; they are guided by social values and beliefs. While CT interventions for HIV prevention are intended to improve individuals' health and behaviour, these interventions may have a pervasive effect on recipients' social relationships (67). CTs for HIV prevention may involve many other processes that directly or indirectly affect social relationships, social power, and dynamics at the household and community level, including gendered relations. These relational factors can, in turn, affect the intended HIV programme outcomes.

Current evaluations of CTs for HIV prevention are primarily experimental designs, with limited use of qualitative methods. This methodological gap suggests a need for assessments to understand the contexts and pathways through which programmes generate outcomes in different situations (117). Incorporating qualitative approaches can clarify and evaluate distal layers of influence and context (117). Gathering beneficiaries' own words about their experiences and perspectives on the interventions provides an understanding of whether and how the intervention has impacted their lives (66). These experiences and perspectives are unique, based on who the beneficiary is; they are subjective, embedded in culture, age, gender, and personal experience (67). Individuals' judgements of the programme could impact their

agency. The perceptions they have about the programme may have an unplanned impact. However these perceptions are rarely central to programme design or evaluation (67). Therefore, it is proposed that programme designers of HIV prevention interventions develop programmes with the end-user's perspectives and contexts in mind to make interventions more efficacious.

This PhD study was inspired by the fact that, at the time of my higher degree enrolment (2015), CTs paid directly to adolescents to prevent HIV were a new concept. Previously, CTs were generally paid to adult women; however, given the risk of HIV and IPV among AGYW, studies assessing CTs for HIV prevention predominantly explored CTs paid directly to AGYW (36, 107). CTs paid directly to adolescents could have more impact on sexual health than cash paid to their caregivers. In the short term, the assumption was that CTs paid directly to AGYW could improve their livelihoods, reducing their need to engage in transactional sex for basic needs (118). Researchers also recognised that AGYW are autonomous actors and make independent decisions. Hence, recent studies have paid a portion or all of the CTs directly to adolescents (107, 119). The Zomba trial was one of the first trials that paid a percentage of CTs directly to AGYW. However, this trial's evaluation showed inconclusive results comparing the effectiveness of cash given directly to adolescents and money given to parents (119). Few studies have assessed the social consequences of paying CTs directly to adolescents.

There were several concerns about the appropriateness of targeting adolescents as beneficiaries of CTs (108). The general concern was that cash payments paid directly to adolescents could elicit unintended adverse outcomes. The SHAZ! study showed that AGYW's access to microfinance led them to experience harassment, which increased their risk and vulnerability instead of reducing it (40). Specific concerns regarding CTs paid directly to adolescents were: (1) CTs could promote risky behaviours, such as multiple sexual partners, alcohol and drug use (120, 121). This concern was warranted as adolescence is an explorative life stage characterised by peer pressure and often involving exploration of drugs and alcohol (122). (2) CTs could disrupt interpersonal relationships with the family, peers, and intimate partners, complicate already complex gender relations, and lead to a backlash, resulting in more harm than good (108, 123). As outlined in section 1.2.4.3, gender-related concerns are not unique to AGYW but were also observed in studies with adult women. Although only a few studies have shown that CTs paid to women resulted in repercussions (95, 124), IPV remains a likely unintended

outcome that requires attention when assessing CTs, particularly in settings with high IPV rates.

Moreover, CT programmes targeting specific individuals and excluding others could negatively impact social relationships. Studies among adult CT recipients showed that targeting specific households and excluding others had divisive consequences in close-knit, poverty-stricken communities (54, 125). Researchers documented that unhappiness with allocation led to tension, jealousy, and conflict among peers and community members (67, 126, 127). A pilot study conducted among South African AGYW that sought to explore the acceptability of CTs for HIV prevention showed that most girls reported the cash did not change their social relationships. Only a few said their relationships improved, and very few reported relationships worsening because of CTs. Slight jealousy was reported between the participants who were in the control arm and those who received the CTs (127). While few changes in social relationships were reported in this pilot study, the authors noted that the duration of the study was short and therefore might not have captured the changes in relationships that occurred over longer time periods (127).

Most concerns were raised about CT interventions targeting AGYW; however, there were also concerns about excluding adolescent boys and young men from HIV prevention interventions. A critical review of structural interventions for gender equality and livelihood security showed that most interventions targeted AGYW, and a few partially focused on adolescent boys (128). In this critical review, Gibbs et al. (2012) underlined the significance of involving boys in HIV prevention structural interventions, given the intersection between livelihoods, masculinities and HIV (128). Govender et al. (2018) supported the view that including boys and young men in HIV prevention interventions is necessary. They argued that although boys' HIV risk is low, it increases between ages 20–30 due to internalised masculine values that influence their sexual practices. These authors encouraged boys to participate in HIV prevention interventions at an early age to promote healthy masculinities and the health of AGYW (5).

These concerns lead to questions about whether payments to adolescents, especially AGYW, are appropriate and what the potential unintended consequences of cash payments to this population might be. These questions highlight the need to investigate the impact of CTs when paid to adolescents. In addition to concerns about the negative consequences of CTs given to adolescents, emerging evidence from the HPTN 068 trial during the duration of this PhD suggested that CTs conditioned on school attendance reduced risky sexual behaviour and IPV

experiences. However, the same study showed that CCTs did not reduce HIV incidence among school-going AGYW. Consequently, questions about how CTs may or may not work to prevent HIV became more relevant. Understanding the social consequences of CTs for HIV prevention will enable us to identify the potential pathways through which CTs may work to influence HIV outcomes.

1.4. Justification of the study

Three primary reasons warrant the need to investigate the social impact of CTs paid to adolescents to prevent HIV: 1) the growing interest in expanding CT programmes to adolescents; 2) concerns about the unintended consequences of providing CTs to this population; and 3) uncertainties about how CTs work to influence individuals' HIV risk. The social consequences refer to "significant improvements or deterioration in people's wellbeing or significant change in an aspect of community concern and is focused on individuals, groups, communities, and sectors of society affected by the change" (129). Social impact assessment aims to understand how an intervention changes how people live, interact, and modify social norms. It focuses on analysing both the positive and negative, planned and unplanned social consequences of planned interventions and any changes in the social domain that may be caused by interventions (130, 131). Assessing the social consequences is valuable in understanding how CT interventions shape social norms and in identifying the unplanned positive and negative consequences of interventions. Additionally, social science studies are important for understanding the social effects and application of new technologies. The call for HIV prevention interventions to pay attention to social impact acknowledges that HIV interventions may affect firmly held social values and beliefs and recognises that social factors may influence their effectiveness (116).

The evaluation of social impact in this study also adopted the beneficiary assessment and gender analysis approaches. The beneficiary assessment approach involves an evaluation of beneficiaries' and stakeholders' perceptions of the programme to make sure their concerns are understood and incorporated into programme design (132). This is valuable in giving recipients a voice, highlighting challenges to recipient participation, and obtaining feedback on interventions. Intervention recipients' views provide critical insights into the actual effect of the interventions. These perspectives are crucial in identifying the social impact and determining the potential impact of CT interventions on HIV outcomes. The gender analysis approach focuses on understanding and documenting the distinct roles, behaviours, needs, and

opportunities for men and women in a specific setting (17). Social relationships are gendered; thus, assessing the impact of interventions on male-female relationships and gendered norms of behaviour could support effective programming (17). This is particularly significant in evaluating HIV interventions, in which both risk and prevention are gendered experiences.

Several studies have shown how understanding the personal and social impacts of interventions has translated to understanding the decline in HIV rates in some countries (133). Evidence shows that many challenges can affect efficacious HIV prevention interventions; these include stigma and discrimination, absence of a mitigation plan for unintended consequences, and broader social impact. Kippax et al. (115) underlined the significance of understanding how social factors work for or against HIV prevention. These authors argued that interventions that engage people in their context, incorporating social science research to understand cultural and social settings, are more effective. There is a requirement to develop interventions that fit the needs and social contexts of adolescents. Interventions that do not fit a given context or hold no relevance or meaning to targeted individuals will be unsuitable and less likely to achieve impact (115, 134).

It is critical to understand the social consequences of HIV prevention interventions. Failure to measure and understand the personal and social impacts could undermine the potential success of structural and biomedical interventions. It might also lead to false conclusions about efficacy and potentially diminish our understanding of the full implications of these interventions on health and welfare more generally (116). Given this background, the overarching question this PhD aims to address is whether CTs for HIV prevention in adolescents are socially disruptive. What can we learn about making them more positively disruptive and the least negatively disruptive possible — maximising the spin-off benefits that people derive from them?

1.5. Research objectives

This PhD study aimed to explore the personal, gender, and relational consequences of CTs for HIV prevention interventions among adolescents in low-resourced settings in South Africa. While the PhD focus was mostly on CT interventions targeting AGYW, I also, to a certain degree, included adolescent boys.

Specifically, this study sought:

Objective 1: To explore the experiences and symbolic meanings attached to CTs for HIV prevention among adolescent boys and girls in a low-resource setting.

Objective 2: To explore spending decisions and spending patterns among adolescent boys and girls receiving CTs.

Objective 3: To explore the impact of CTs offered to AGYW on gender norms and relationship dynamics.

Objective 4: To explore the perceived social impact of CTs on same-sex peer relationships.

Objective 5: To explore whether social impacts observed in CT interventions exist in other kinds of HIV prevention interventions, specifically oral Pre-Exposure Prophylaxis (PrEP).

1.5.1. Research questions

- What are the experiences and symbolic meanings attached to CTs for HIV prevention among adolescent boys and girls in a low-resource setting?
- What do adolescent boys and girls spend CTs on, and how do they make spending decisions?
- How does AGYW's access to CTs impact relationships between them and the men around them, specifically intimate partners and platonic relationships?
- What is the perceived impact of adolescent-directed CTs on same-sex peer relationships?
- How can the social impact observed in CT interventions for HIV prevention be applied to other HIV prevention interventions?

1.6. Significance of the PhD study

Overall, the research study findings convey an understanding of the social consequences of CTs offered to adolescents for HIV prevention. Broadly, the PhD study contributes to the existing literature by facilitating an in-depth understanding of the symbolic meanings that adolescents and young women hold about HIV prevention interventions. It contributes to: (1) evidence about how these interventions could shape social and gendered relationships; and (2) ways in which these relationships could influence the effects of HIV prevention behaviour. As shown in the previous sections, there are several benefits to understanding young people's

symbolic meanings and subjective experiences of HIV prevention interventions and their impact on social and gendered relationships.

Findings from this PhD provide valuable knowledge about the potential social impacts that HIV prevention interventions may have beyond HIV outcomes. The findings also provide an understanding of the social impact of these interventions at different socio-ecological levels. In so doing, the study allows us to identify unintended positive and negative consequences of HIV prevention interventions targeting adolescents and collates valuable knowledge to improve these interventions. Finally, the PhD study findings provide a psychosocial impact framework for researchers to consider when assessing the broader impact of HIV prevention programming.

1.7. Theoretical framework

My research assesses the social consequences of HIV prevention interventions using two theoretical perspectives, reflected in Figure 3. The first is Heise's dynamic framework, which adapts Bronfenbrenner's socio-ecological framework (135). The second is the theory of gender and power (15). Heise's theory postulates four domains of influence on social norms and relationships: individual, social, material, and institutional (135). The 'material domain' — also known as 'first-order outcomes' — includes physical items such as income, assets, expenditure, and consumption, and could also refer to health outcomes (67, 136). The 'individual domain' consists of factors such as attitudes, aspirations, beliefs, and self-efficacy (135). It pays attention to what individuals value, their desires, and their feelings about their lives (137). Individuals' judgement of HIV prevention interventions could impact the primary 'material' outcomes. Within the individual domain, a good, and desirable state of life improves decision-making and health outcomes. If personal wellbeing is not accomplished, individuals may experience feelings of shame, withdrawal, depression, and a reduction in personal efficacy (138).

The 'social domain' dictates that individuals do not exist in isolation; they belong to communities and families and form intimate relationships. It encompasses social support and social networks. The way HIV prevention interventions are designed and implemented may include social benefits, costs, and unintended consequences. They may have effects on gender and social relations. Hence, it is crucial to assess social dynamics in programme evaluation. Communities' perceptions of an HIV prevention intervention could shape end-users' behaviour

and attitudes that eventually impact individuals' and households' economic development and wellbeing (67, 135). Lastly, the 'institutional domain' includes the formal system of laws and policies (135). Heise et al. articulate that these domains overlap, generating cross-cutting factors that intersect to influence individuals' actions (135). Heise's framework asserts that individuals access health interventions when they understand the services they will receive and believe they are necessary and beneficial. They may also access health interventions when they know the interventions are socially approved by those around them (135). This ties into community mobilisation and peer influences, highlighting a need for a supportive community around individuals to sustain change.

In relation to Heise's framework, this PhD study looks at how CT interventions for HIV prevention shape adolescents' individual and social domains. I follow Heise's framework to explore how these domains interact to shape the response to HIV prevention interventions. Programmes need to consider all these domains, how they influence programme uptake and 'material outcomes', and how the programmes themselves affect these domains. Considering all domains will determine programme success and gaps in the targeted outcomes and assess impact beyond the primary biomedical (material) outcomes. Assessing the individual and social outcomes can help identify the programme's positive and negative consequences, providing a more comprehensive picture of its impact.

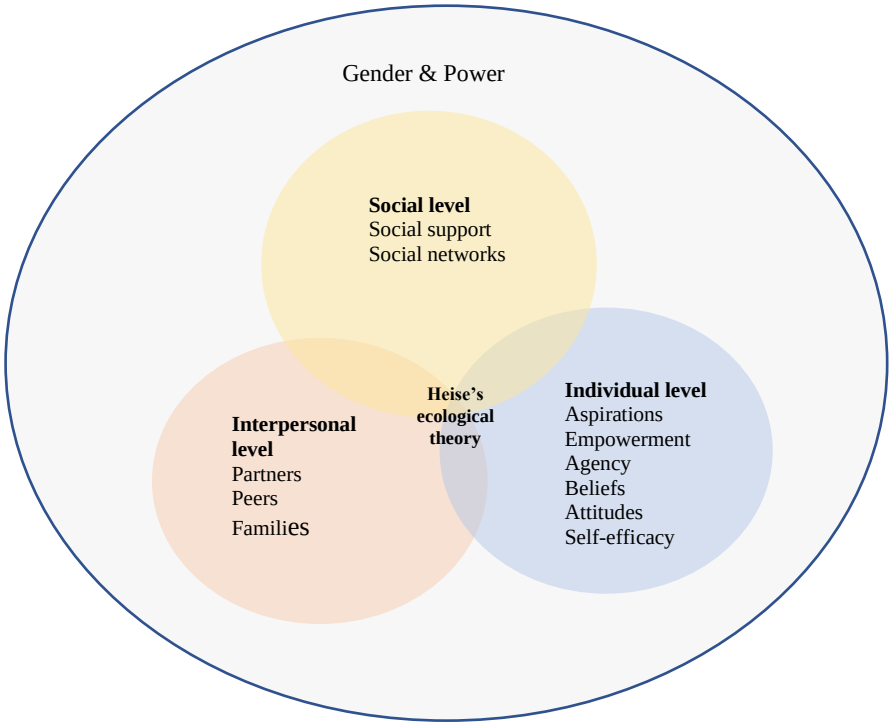

Figure 3: *Heise's ecological theory and theory of gender and power*

This PhD study also uses Raewyn Connell's theory of gender and power to unpack gender and power dynamics associated with the HIV interventions under investigation. The theory of gender and power comprises three domains, namely: sexual division of labour (economic imbalances); the sexual division of power (violence); and the structure of cathexis (social norms) (15, 16). The three domains influence women's ability to adopt healthy sexual behaviours. The sexual division of labour "ensures women's lack of or limited access to economic, educational, and other resources, which may, in turn, produce adverse health outcomes" (p.1) (139). Across many cultures, men have been encouraged to engage in remunerated work to support their families. At the same time, women are socialised to participate in "unpaid nurturing work" (15), such as childcare and domestic work. These distinctions in labour create disparities in income and social status and often force women to depend financially on men, making them more vulnerable to HIV risk.

The sexual division of power refers to "gender differences in the ability to influence others or create change" (p.2) (140). It also talks to normative sexual values that prioritise men's sexual needs and men's sexual values. It, therefore, reduces women's ability to discuss and negotiate safe sex (141). Men exercise power "through control, authority, and coercion within heterosexual relationships" (p. 276) (142). Gender differences in power are reflected in the form of physical and sexual violence against women. Gendered power relations are an essential determinant of the outcome of sexual negotiations (143). In terms of health, fear of violence restricts women from negotiating condom use with their sexual partners, exposing them to STIs, including HIV, and hindering women's uptake of HIV services or interventions (139, 144). The structure of cathexis refers to social norms and expectations concerning behaviour characterised by women's sexual attachment to men (15). Gender inequities are a result of societally prescribed gender roles. Acceptance of gender roles erodes women's power in intimate relationships, which also makes them vulnerable (15, 145).

In this study, the interaction of these two theories is demonstrated in that gender and power operate at the individual, interpersonal and societal levels. This study focuses on how CTs impact the division of labour, division of power, and societal norms at the individual, interpersonal, and community levels.

1.8. Definition of key concepts

Cash transfers refer to cash payments to vulnerable individuals to improve wellbeing. In this study, we refer to CTs designed to reduce HIV risk. We refer to both conditional and unconditional cash transfers. Conditional cash transfers (CCTs) are attached to certain conditions to encourage behaviours that elicit social and health benefits. Unconditional cash transfers (UCTs) are simply provided to reduce poverty. They do not require beneficiaries to meet certain conditions to receive the cash payment (36).

Gendered consequences refer to the impact of interventions on gender and power dynamics in relationships between men and women determined by culture, religion, or socially acceptable ideas. These relationships are socially constructed based on how individuals are socialised and how they internalise gender roles, including similarities and differences in how males and females experience CT interventions.

HIV prevention interventions refer to behavioural, structural, and biomedical interventions to reduce new HIV infections (146).

Individual agency refers to the individual's ability to act.

Material outcomes refer to the types of impacts that are usually assessed, such as income and basic needs, including HIV incidence (67).

Non-recipients refer to individuals who are not beneficiaries of CTs. The term is used interchangeably with non-beneficiaries.

Oral Pre-Exposure Prophylaxis (PrEP) is a daily antiretroviral pill taken by HIV-negative individuals to reduce the risk of becoming infected with HIV.

Personal consequences refer to the subjective changes in aspects of people's lives that are not economical or material, such as their personal and relational needs. They include the feelings and emotional states concerning experiences and having a sense of meaning; this includes feelings of self-worth, agency, autonomy, self-reliance, empowerment, and confidence. It is about what people value, desire, and feel about their lives, as well as their ability to 'take control of one's life'.

Recipients refer to individuals who were recipients of CTs in this study. The term is used interchangeably with beneficiaries.

Social consequences refer to how personal and social relationships affect, specifically, positive and negative social effects that are often discreet and unnoticed.

Social relationships refer to the "connections that exist between people who have recurring interactions that are perceived by participants to have personal meanings" (147).

Study objectives	Research questions	Significance
Objective 1: To explore the experiences and symbolic meanings attached to CTs for HIV prevention among adolescent boys and girls in a low-resource setting.	- What are the experiences and symbolic meanings attached to CTs for HIV prevention among adolescent boys and girls in a low-resource setting?	- Responses to this question are critical to understanding whether the CT intervention had a meaningful personal and social impact on adolescent recipients and how meaning could impact individual agency.
Objective 2: To explore spending decisions and patterns of CTs among adolescent boys and girls.	- What do adolescent boys and girls spend CTs on, and how do they make spending decisions?	- The findings inform the targeting of CTs and give insights into unintended consequences of gearing CTs to either adolescent girls or boys (or both).
Objective 3: To explore the impact of CTs offered to AGYW on gender norms and relationship dynamics.	- How does AGYW's access to CTs impact relationships between the young women benefitting from CTs and the men around them, specifically intimate partners and platonic (male peer) relationships?	- Responses clarify CTs' role in contexts characterised by gender inequalities and insights on how they may affect HIV prevention outcomes. - Understanding the gendered impact could add value in helping researchers and programme designers understand the acceptability of CTs and identify the potential gaps of the interventions and unintended consequences.
Objective 4: To explore the perceived social impact of CTs on same-sex peer relationships.	- What is the perceived impact of adolescent-directed CTs on same-sex peer relationships?	- Understanding the social impact of CTs on peer relationships could help programme designers and policymakers to think strategically around targeting. - It would also help understand issues of stigma related to uptake of HIV prevention interventions.
Objective 5: To explore whether the social impact observed in CT interventions exists in other HIV prevention interventions.	- How can social impact observed in CT interventions for HIV prevention be applied to other HIV prevention interventions?	- This provides the basis for understanding the unintended social benefits the intervention may have that could be harnessed; it also helps identify the unintended social hiccups that could limit the planned effect of the programme.

Table 1: Summary: objectives, questions, and significance

1.9. Structure of the thesis

Chapter 1	Introduction and literature
Chapter 2	Methods
Chapter 3	Paper 1: Meaning and experiences of cash transfers
Chapter 4	Paper 2: Spending patterns of cash transfers
Chapter 5	Paper 3: The impact of cash transfers on male-female relationships
Chapter 6	Paper 4: The social impact of cash transfers on same-sex peer relationships
Chapter 7	Key findings on the social consequences of cash transfers and PhD psychosocial framework
Chapter 8	Application of the PhD's psychosocial impact framework to oral PrEP interventions for AGYW: A case study
Chapter 9	Synthesis, implications, recommendations, limitations and strengths

CHAPTER 2: METHODS

2.1. Introduction

The chapter begins with a description of the two research trials in which this PhD study was embedded (summarised in table 2) and my roles in these trials. The overarching research design that was followed in this PhD study and the setting where the study was conducted are described. Thereafter, I describe the data sources, sample, recruitment and data collection, and data analysis for each PhD objective (summarised in table 3). The chapter concludes with a description of the ethical issues addressed in this study.

2.2. Description of projects leading to this PhD

To explore the social implication of CTs given to adolescents in low-resourced settings, this PhD was nested in two randomised controlled trials (RCTs) that the Wits Reproductive Health and HIV Institute (Wits RHI), along with partner organisations, undertook to assess the impact of CTs on adolescent health between 2011 and 2015.

HPTN 068 (also known as Swa Koteka) was a Phase III RCT conducted in rural Agincourt, Mpumalanga. It aimed to assess the effectiveness of CCTs in reducing HIV incidence among young women (n=2537) in South Africa. The intervention involved randomly assigning young women and their parents or guardians to receive a monthly CT (ZAR300, conditional on the young woman attending school) or no CT. Young women randomised to receive the CCT and their households received a monthly payment (ZAR100 and ZAR200 respectively) for three years or until the expected completion of high school.

Participants completed surveys and were tested for HIV and HSV-2 at baseline and at 12, 24, and 36 months. A subsample of young women was recruited into a longitudinal qualitative cohort and repeated interviews were conducted with them and their parents/guardians. The study also conducted focus group discussions (FGDs) with young women, young men, and teachers in study villages. Preliminary results presented at the International AIDS Society Conference (IAS), 2015, in Vancouver showed no significant difference in HIV incidence between those who received CCTs and those who did not receive CCTs. However, this study

found that cash recipients were less likely to report having a sex partner in the past 12 months. They also reported less unprotected sex and were less likely to have experienced IPV (148).

CHANGE was a Phase II pilot RCT of the feasibility, acceptability, and outcomes associated with three CT strategies offered to male and female adolescents (n=120). It was conducted in the inner city of Johannesburg, including Hillbrow and the surrounding areas. The study evaluated monthly unconditional CTs (over six months), monthly CTs (over six months) conditional on school attendance, and a single incentive conditional on at least one clinic visit in a three-month period after enrolment. Cash (ZAR280) was paid directly to adolescents monthly for six months, with the exception of adolescents who received a once-off payment after meeting the clinic visit criteria.

Participants completed surveys at baseline and six months later at the end of the intervention period. Participants were also qualitatively interviewed six months after they had received CTs and up to 12 months after the intervention ended to understand the social impacts, if any, of ending the cash payments. Preliminary results showed that CTs were acceptable and feasible and were not associated with social harm. Interestingly, recipients of the direct incentive for health care visits were 2.5 times more likely to visit a health centre than those receiving monthly payments (149). (See Table 2 for a summary of parent studies.)

This PhD study contributes to understanding the social impact of CT interventions among AGYW enrolled in both trials and boys enrolled in the *CHANGE* trial. The reason for drawing from the two trials is that they provide rural and urban perspectives. In addition to data used from the two trials, the researcher collected data from intimate partners of young women recipients of CCTs in Agincourt.

2.3. The role of the investigator in parent projects

The PhD study consists of primary and secondary data; therefore it is essential to underline the role played by the PhD candidate (NK) in the parent studies and the collection of primary data for this PhD. NK was employed at Wits RHI as a social scientist working on both parent studies. In the HTPN 068 trial, as the qualitative manager, she managed all qualitative data collection processes and data management. NK was involved in topic guide development, fieldworker training, transcript review, and data management. She was also involved in data coding, matrices, managing the coding process, data analysis and interpretation. In the *CHANGE* trial, NK was involved in developing topic guides and in the quality check of

transcripts and matrices; she managed the coding process and data analysis. In terms of primary data for this PhD study, NK conceptualised the PhD research questions and developed the data collection instruments (topic guides, consent forms). She administered the consent form to the participants and conducted the interviews. She also completed the coding, analysis of the data and interpretation of the findings.

Project	Objectives	Sample & recruitment	Conditional/ unconditional	Qualitative data	Quantitative data
HPTN 068 Agincourt	To assess the effectiveness of CCTs in reducing HIV incidence among young women in South Africa	Young women, 13-20 years old, n-2533, half randomised to CCTs and half no CCTs Sampling from DHS community population data (1 AGYW from each household)	Conditioned on school attendance. Monthly payment YW (R100), parent/guardian (R200)	In-depth interviews *Adolescent women, *Parents/guardians Focus group discussions *Young men *Adolescent women, educators	Audio Computer-Assisted Self-Interview (ACASI) Adolescent women **Household survey** *Parents/guardians Baseline, 12, 24, 36 months post-baseline HPV and HIV tests
CHANGE JHB	To explore the feasibility, acceptability, and potential effectiveness and unintended negative consequences of three CT interventions	Young men and women, 15-24 years old, n-120. Randomised CCTs conditioned on school attendance, clinic visits, and UCTs Respondent-driven sampling (RDS)	Conditioned on school attendance, clinic visitation; & unconditional CT (UCTs). UCTs and school attendance R280 monthly payments; clinic visit CCTs — once-off payment	In-depth interviews *Adolescent boys & girls Parents/guardians, educators, health care providers	Computer-Assisted Personal Interviewing (CAPI) Adolescent boys & girls

Table 2: Summary of HPTN 068 and CHANGE trials

*Indicates data analysed for this PhD

2.4. Overarching PhD research design

2.4.1. Research method

A study can either follow a qualitative or quantitative research methodology. These methodologies differ in ways in which questions are explored, methods, and procedures followed during the research process (150). In qualitative research, data is collected in written or spoken language, whereas in quantitative research, data is gathered in numbers and statistics used for analysis (151).

Since this is an exploratory study, a qualitative research approach was adopted. The concept 'qualitative' means "an emphasis on the qualities of entities and on processes and meanings that are not experimentally examined in terms of quantity, amount, intensity or frequency" (152). Qualitative methods are concerned with meanings in the text. Unlike quantitative methods, where the research process is predetermined or fixed in advance, qualitative methods are open-ended and present an in-depth study of the issues to identify and understand the categories of information that emerge from the data (151). Qualitative researchers often criticise the quantitative assumptions that reality can be studied and comprehended completely. Instead, qualitative researchers argue that reality can only be approximated, as it is impossible to capture it fully. They believe that reality is not consistent but is forever changing and is a product of the subjectivities of research participants and the researcher (152).

A strategy of enquiry (also known as a research design) is "an approach to qualitative research that has distinguished history in one of the disciplines, and that has spawned distinct methodologies that characterise its approach" (p. 2) (153). It involves the entire research process, from conceptualising a problem to writing a narrative. Qualitative researchers draw on a wide range of interconnected interpretative practices to understand the phenomenon under investigation. These practices include phenomenology, narrative, ethnography, and grounded theory. Though each practice makes the world visible in a different way, this provides room to identify various viewpoints attached to a particular subject matter (152, 153). Specific qualitative research designs applied in this PhD study are longitudinal qualitative cohort study (154) and cross-sectional qualitative studies. The former enabled in-depth understanding of the complexities of CT interventions over time, and the latter focused on understanding experiences at a specific time and enabled recollection of prior experiences. Qualitative research allows the researcher to comprehend the perspectives and interpretations as shaped by the participants (155). The use of qualitative methods enabled the researcher to explore participants' subjective views and experiences concerning CT interventions.

The PhD study adopted Interpretative Phenomenological Analysis (IPA) as its epistemology. This approach is interested in the participants' subjective experiences of phenomena and the meanings attached to those experiences. Jonathan Smith developed the IPA to explore, in detail, idiographic subjective experiences and social cognitions (156). The IPA manifests ideas from phenomenology, symbolic interactionism, and hermeneutics (157). It has phenomenological ideas as it is concerned with the individual's perception of an experience. It

incorporates symbolic interactionism as it holds the notion that meaning emerges from social interactions. It also possesses a hermeneutic element as it is based on interpretations.

IPA is concerned with exploring experience in its own terms. Thus, it is interested in the way participants make sense of their life experiences (157). IPA is known to be idiographic, in a sense that it examines a given case to investigate in detail individuals' experiences of a particular phenomenon. Researchers using this approach study a few cases to reveal the uniqueness and commonalities in the participants' experiences of the same phenomenon (157). Therefore, when using this approach, a homogenous sample is essential to compare individuals' experiences meaningfully.

IPA uses semi-structured in-depth interviews (IDIs) to describe how humans perceive, experience, live, and display a phenomenon and explore the structures of consciousness in human experiences (153). During the analysis stage, interview transcripts are analysed individually through a systematic, qualitative analysis. Thereafter, this is turned into a story, whereby the researcher's analytic interpretations are presented (157).

2.4.2. Study setting

The research was conducted in two South African sites, namely inner-city Johannesburg (Hillbrow) and rural Agincourt, Bushbuckridge.



Figure 4: Image of the Gauteng province showing Johannesburg, Hillbrow and surroundings (158)

Wits RHI (previously known as Reproductive Health and HIV Research Unit (RHRU)) was established by Prof. Helen Rees in 1994 to support the new South African Government to formulate and implement national policies around sexual and reproductive health. Wits RHI is situated in Hillbrow, and provides health services and conducts research studies in the Johannesburg inner city and nationwide. Hillbrow is characterised by dense, overcrowded high-rise residential buildings and abandoned industrial buildings informally occupied by migrant workers from within and outside South Africa. Fifty-one percent of the population in the area are males, 20% are aged <15 years, and 21% are aged 15–24 years. The area has a high concentration of low-income households (<R1000 per month) and an unemployment rate of 41% (Statistics South Africa, 2012 as cited in USAID report (159)). Wits RHI partnered with the City of Johannesburg (CoJ) and the Gauteng Department of Health to establish the Hillbrow Health Precinct to address HIV and related diseases, poverty, and urban renewal in CoJ. The CHANGE trial was conducted in a collaboration between the Wits RHI and John Hopkins Bloomberg, School of Public Health.

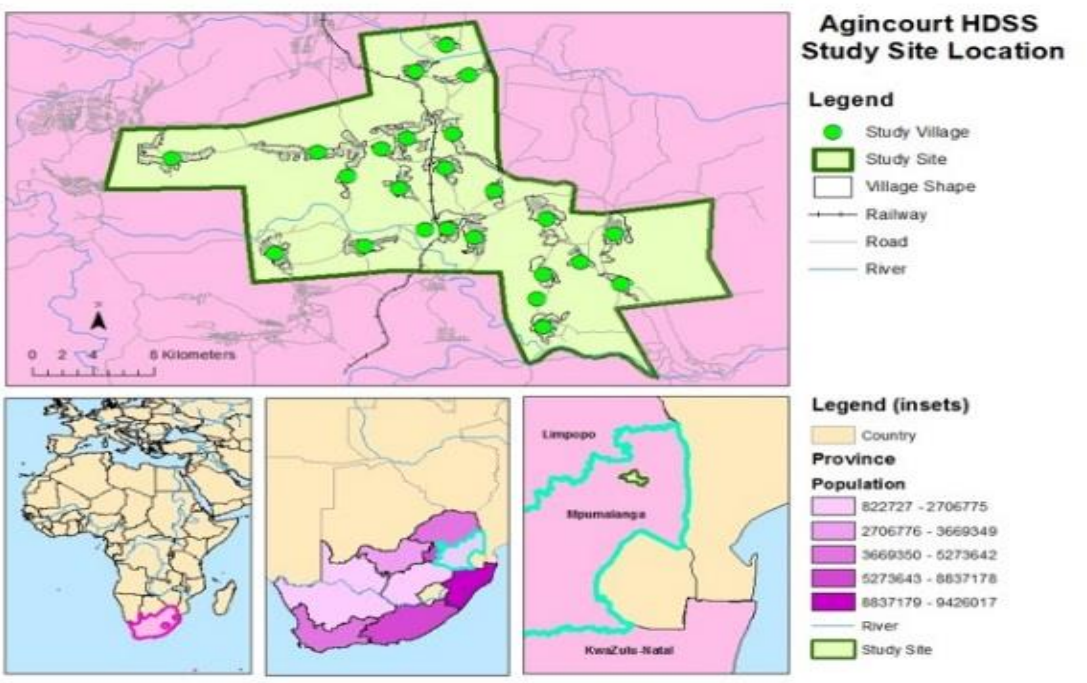

Figure 5: Image of MRC/Wits Agincourt HDSS study area (https://www.agincourt.co.za/?page_id=1896)

MRC/Wits – Agincourt Unit is a research unit established in the early 1990s by Prof. Kathleen Khan and Prof. Steve Tolman as a rural health surveillance site in which biomedical and ethnographic research takes place. The unit is situated in Agincourt, a subdistrict of Bushbuckridge, Mpumalanga, near South Africa's border with Mozambique. This location is

characterised by poverty, unemployment, poor infrastructure, and temporary migration (160). HIV prevalence in this area is 19.4%, with a prevalence of 23.9% among women and 10.6% among men (161). The HPTN 068 trial was conducted in collaboration with the MRC/Agincourt Research Unit, the University of North Carolina, and Wits RHI.

Objectives	Parent study	participant descriptions	Data collection	Primary/ Secondary	Data points	Description of actual data	Research output
Objective 1: To explore the experiences and symbolic meanings attached to CTs for HIV prevention among adolescent boys and girls in a low-resource setting	CHANGE	Adolescent beneficiaries of CTs: boys n=30 and girls (n=19) HPTN 068 – beneficiaries of CTs (n=39)	IDIs	Secondary data	12 months after first cash payment	Questions explored included: demographics; use and the perceived impact of CTs; the impact of cash on relationships; the negative and positive impact of receiving CCTs.	Published manuscript titled: CT interventions for sexual health: meanings and experiences of adolescent males and females in inner-city Johannesburg
Objective 2: To explore spending decisions and spending patterns among adolescent boys and girls receiving CTs	HPTN 068 CHANGE	AGYW beneficiaries of CTs as indicated in objective 1	Serial IDIs IDIs	Secondary data	6, 12, 24, 30 months	Questions explored decision-making regarding CT, spending patterns.	Published manuscript titled: Cash transfers for HIV prevention: what do young women spend it on? Mixed method findings from HPTN 068 Spending patterns of adolescent boys and girls in the CHANGE trial were published as part of research output for objective 1
Objective 3: To explore the impact of CTs offered to AGYW on gender norms and relationship dynamics	HPTN 068	Intimate partners (n=20) Male peers (school-going boys) (n=72)	IDIs FGDs	Primary data Secondary data	12, 24, 26 months	Questions explored gender dynamics related to the provision of CTs to girls. This information includes perceptions and experiences of their partners receiving CCTs, change in relationships that may be linked to CCTs.	Published manuscript titled: Men's perceptions of the impact of female-directed CTs on gender relations: findings from the HPTN 068 qualitative study
Objective 4: To explore the perceived social impact of CTs on AGYW same-sex peer relationships	HPTN 068	AGYW CT beneficiaries and non-beneficiaries (n=39) Parents/ guardians	FGDs IDIs	Secondary data	12, 24, 36 months after study enrolment.	Explored views around the influence of CTs in relationships in the community. FGDs were conducted at	Submitted manuscript titled: The impact of conditional cash transfers for HIV prevention on peer relationships: perspectives from female recipients and non-recipients in HPTN 068
Objective 5: To explore whether social impacts observed in CT interventions exist in other kinds of other HIV prevention interventions	HPTN 082 EMPOWER POWER	AGYW PrEP users	Review of manuscripts			Both studies conducted three serial interviews with AGYW using oral PrEP.	PhD thesis chapter

Table 3: Summary table of PhD study objectives, data collection/data sources, and research outputs

2.5. Objective 1: to explore the experiences and symbolic meanings attached to CTs for HIV prevention among adolescents in a low-resource setting

2.5.1. Data sources

For this objective I used secondary data collected as part of the *CHANGE* and *HPTN 068* trials. I describe the sample, data collection, data analysis procedures for the *CHANGE* trial and then discuss the same for the HPTN 068 trial.

2.5.2. CHANGE trial: Qualitative sample and data collection procedures

From the 120 participants enrolled in the intervention, we purposively selected a subsample of 49 adolescent boys (n=30) and girls (n=19) to participate in IDIs. We selected participants who had adhered to study conditions such as attending school and visiting the clinic across the three study arms (i.e., unconditional, clinic-conditioned CTs, and school-conditioned CTs). Purposive sampling is a non-probability sampling strategy in which researchers use their judgement when choosing members of the population to participate in data collection (151). The main objective of a purposive sample is to produce a sample that can logically be assumed to represent the experience that the research aims to investigate. This sampling method is recommended in phenomenological studies, as it increases the value of information obtained from a small sample (162). Data were collected six months after participants had received the conditional and unconditional CTs (March 2014) and up to 12 months after the intervention had ended (March 2015). Different sets of participants were interviewed at two time points. The purpose of the second interview was to gain insights into the effects of the cessation of a CT programme. We contacted participants telephonically and invited them to take part in the IDIs. Participants were interviewed in a private room at Wits RHI research offices in Hillbrow. The interviews were conducted by one male and two female interviewers, fluent in isiZulu and Sesotho. Each interview took approximately one hour, and participants were compensated ZAR100 (approximately USD10) for transport costs and their time. The interview guide consisted of the following topics: (1) descriptions of adolescents' households (household membership, employment, domestic relationships); (2) experiences of the CT programme; (3) participants' sources of income before, during, and after the CT intervention; and (4) spending

patterns and perceived impact of CTs. We focused on these particular topics because of the main trial's needs and the literature review about the impact of CTs (36, 148, 163). All interviews were audio-recorded and transcribed by the interviewers. Interviews in isiZulu and Sesotho were transcribed and translated (one-step) into English by trained transcribers. Personal identifiers were substituted with pseudonyms during transcription.

2.5.3. Data analysis

The IPA was employed to explore how adolescents make sense of their experiences of CT programmes. The phenomenological approach focuses on how people perceive and talk about objects or events (157). This approach helped facilitate an understanding of adolescents' experiences and the meanings they attached to CT programmes. As an initial step, two of the authors of paper 1 focused on meanings adolescents attach to CTs (Jonathan Stadler and Nomhle Khoza), reviewed the transcripts to identify preliminary themes and subthemes, using an interpretivist approach to analyse the data (157). Atlas.ti version 7.4 was used to code and organise the transcripts. A codebook was generated using an inductive approach and transcripts were initially coded based on emerging themes. Open codes were applied to five initial transcripts. The analysts met to review and describe the codes. Subsequent transcripts were coded deductively. Two coders completed the coding. Every fifth transcript was double coded by the two coders, and the codes were discussed by analysts and discrepancies resolved. The final code frame consisted of 61 codes. These codes were grouped into five thematic categories: demographic information, perceptions and experiences of CT, spending patterns, meanings of CT, and developments after the CT programme. After forming the thematic categories, a comparison between males and females was made to identify gender differences in the meanings and the spending of CTs. Thereafter, common themes were identified, compared, and contrasted within and between cases.

2.5.4. *HPTN 068 trial*: Qualitative sample and data collection procedures

From the 2,533 AGYW enrolled in the HPTN 068 trial, a subsample of AGYW (n=39) was recruited into a longitudinal qualitative cohort with whom repeated interviews were conducted to explore experience over time. Purposive sampling was used to ensure that qualitative data overrepresented intervention participants, sexually active young women, girls who reported missing school, and those reporting transactional sex. This was to ensure that issues we

hypothesised to be related to HIV risk were represented in the data. Participants were informed that the study team was interested in talking to young women about their intervention experiences and thoughts about the CTs. They were also informed that they would be asked to reflect on their attitudes and beliefs about schooling, sex, and HIV risk for young people in South Africa. Participants provided additional written informed consent for participation in the qualitative cohort at the start of the first interview, and this was verbally reconfirmed before each subsequent interview.

Semi-structured interviews were conducted with each participant twice annually throughout their engagement in the trial for a potential total of six interviews per participant, with an average of three interviews completed by each participant. Verbal re-consent was done at each subsequent interview. As young women in the qualitative cohort exited the main study, they were replaced by young women with similar characteristics; data is therefore primarily from women over 15 years of age, although many had been enrolled in the trial from 13 years old. Of the 39 AGYW recruited into the qualitative cohort, 26 were interviewed three times, 12 interviewed four times, and six interviewed five times. Face-to-face interviews of between 30 and 90 minutes were conducted by a team of four experienced qualitative interviewers. They were all female, local residents with a minimum grade 12 completed education and fluent Xitsonga speakers.

At each interview, young women were asked a range of questions about managing the CT. Questions included, among others: “How do you usually spend your money?” “How do you feel about having access to your own money?” “Tell me about any experiences you have had with someone taking your Swa Koteka money from you.” We also asked about negative and positive experiences and feelings associated with receiving the CT. We asked about the impact of receiving the grant on family and community relationships. We followed the question “Have there been any negative outcomes in your family after receiving the money?” with a probe to establish what those negative outcomes were (for example, arguments in the household about controlling or spending the CT). Additional probes were provided for the interviewers to use for all questions, but they were also encouraged to use probes that best suited the context of each interview.

2.5.5. Data analysis

Qualitative interviews were digitally recorded and then translated and transcribed by the interviewer in a single step. All transcripts were checked for clarity and then coded in Atlas.ti (version 7) using a coding frame that was both inductively and deductively generated by two of the authors (Catherine MacPhail and Nomhle Khoza) following a framework approach (164). In this approach, themes are generated from a priori issues and questions guiding the objectives and aims of the study (deduction), and then augmented by issues generated from the data (induction). Coding was conducted by five researchers who completed initial training and worked towards acceptable intercoder reliability (ICR) scores on initial study transcripts (165). A random sample of 10% of the transcripts underwent double coding throughout the study to ensure that ICR remained acceptable. For qualitative data analysis, codes directly linked to the theme of "spending" and "grant experience" were examined. These codes included information about items on which young women spent their portion of the CT, discussions about saving the transfer, their experience of having access to their own money, and how this money was controlled within the family.

2.6. Objective 2: To explore spending decisions and spending patterns among adolescent boys and girls receiving CTs

2.6.1. Data sources

For objective 2, we used qualitative data collected from CHANGE and HPTN 068 as described in objective 1. While the PhD study was predominantly qualitative, objective 2 also includes quantitative data collected as part of the HPTN 068 trial to enable triangulation.

2.6.2. Recruitment, sample, and data collection procedures

Qualitative procedures are similar to those described in objective 1. Quantitative data are as detailed in the description of the projects in section 2.2 and Table 2. 2533 AGYW enrolled in HPTN 068 completed a baseline interview using ACASI. Further details about the quantitative survey methods are available in Pettifor et al. (148).

2.6.3. Data analysis

To analyse qualitative data on spending patterns and decision-making we analysed IDIs with CT beneficiaries in the CHANGE and HPTN 068 trials.

To analyse **CHANGE data**, specific codes on CT decision-making and spending patterns were assessed. A comparison between male and female beneficiaries was done. Common themes were identified, compared, and contrasted within and between cases.

For **HPTN 068** qualitative data analysis, codes directly linked to the theme of 'spending' and 'grant experience' were examined. These codes included information about items on which young women spent their portion of the CT, discussions about saving the transfer, their experience of having access to their own money, and how this money was controlled within the family. We also examined codes we had used to document positive and negative outcomes of receiving the CT.

For quantitative analysis, we analysed data only from baseline HIV-negative intervention young women who completed at least one follow-up visit (n=1209). Within this sample, the median visit number was two. For this analysis, we focused on the module of the questionnaire that asked about CT spending habits. To examine the spending of the CTs, we analysed the question "What was the Swa Koteka transfer allocated to you spent on?" To examine who controlled the young women's portion of the CT, we descriptively analysed a range of questions: "Who usually spends your portion of the Swa Koteka money?" and "Who decides how to spend the Swa Koteka money allocated to you?" Finally, we examined data from the question "Who normally withdraws your R100 Swa Koteka money?" The records with missing responses to the question were excluded from the analysis (166).

Across all 2,597 visits, 31 records were missing data for spending questions, and 45 were missing for other questions. Logistic regression with robust variance to account for repeated measurement on each young woman was used to test the association between demographic variables and young women's decisions about managing the CT. Explanations for behaviours reported in the quantitative survey were illustrated with participants' words in the qualitative data and differences between the two sources specifically noted (166).

2.7. Objective 3: to explore the gendered impact and dynamics of CTs when offered to AGYW

2.7.1. Data sources

For objective 3, we analysed primary data collected specifically for this PhD from male intimate partners of AGYW who were CT beneficiaries in the HPTN 068 trial. In addition, we analysed data from FGDs conducted with male peers who were enrolled in the same schools and grades as the AGYW enrolled in the HPTN 068 trial.

2.7.2. Recruitment, sample, and data collection procedures

Two groups of men — intimate partners and peers — were purposively selected to participate in IDIs and FGDs.

Interviews with intimate partners

As a specific primary data collection associated with this PhD, intimate partners (n=20) of young women who had received CTs were invited to participate in an IDI. Young women who indicated having an intimate partner at their last follow-up survey were contacted by telephone. They were asked if they were willing to give their main partner a written invitation to participate in the IDIs. The rationale for recruiting participants indirectly was to minimise potential social harm. Interested partners then contacted the research team by sending a call-back message via a short message service (SMS); thereafter, the study team called to schedule interviews. A semi-structured topic guide was used for IDIs with intimate partners. The guide consisted of questions on 1) demographic information; 2) perceptions of the CT trial; and 3) the impact of the CT trial. The last questions focused on cash issues, power, and decision-making in the relationship, communication, and decision-making about condom use and HIV testing. The IDIs were carried out by the PhD candidate, with the assistance of a trained female fieldworker. The interviews took place at the participants' homes or workplaces and lasted between 45 and 60 minutes.

FGDs with male peers

We recruited male peers (n=72) of girls receiving the CT in Swa Koteka to participate in FGDs. To be eligible for participation, the peers had to be male, enrolled in the same secondary schools as the female CT recipients, in grades 8–12, and willing to provide consent/assent. We collected

boys' class registers from the 22 participating secondary schools. Class records were captured in an Excel spreadsheet, and potential study participants were randomly selected. We visited schools to contact these potential participants, informed them about the study, and invited them to participate in the FGDs. None of the young men approached declined to participate.

Over three years, a total of 12 FGDs were held with male peers, four per year. FGDs lasted approximately 60 minutes and comprised 10–11 participants. Each year different young men participated in the group discussions. Themes included: 1) general perceptions of the CT; 2) the impact of CTs on the relationships between young men and women; and 3) the perceived impact of CTs on school attendance. The FGDs were conducted in schools (during weekends) within the villages where study participants resided. Trained female fieldworkers facilitated these discussions; a note-taker was available to take notes during the discussions. Refreshments were served after the completion of the IDIs and FGDs. Written assent was obtained from men younger than 18 years, with written informed consent obtained from their parents or guardians at their homes. Men aged 18 years and older provided written informed consent.

For IDIs and FGDs, assent and consent forms were in English and Xitsonga, the dominant language spoken in Agincourt. All FGDs and most IDIs were conducted in Xitsonga; the remainder were conducted in English, as preferred by participants. Discussions and interviews were audio-recorded, transcribed verbatim, and translated into English, where necessary. The fieldworkers transcribed and translated the IDI and FGD data. All transcripts were reviewed for accuracy and quality checks, and 10% were checked against the audio records. Transcripts were uploaded into Atlas-ti version 7.0 for analysis.

2.7.3. Data analysis

A thematic content analysis approach was used to analyse the data. The codebook was largely developed on the basis of the topic guides of the IDIs and FGDs (164). However, some codes emerged inductively from the data. Two coders (Nomhle Khoza and Jennifer Hove) independently coded the transcripts, and 10% of the transcripts were double coded to ensure inter-coder reliability; inconsistencies were discussed until the coders agreed on interpretation (165). The codebook was updated as the themes emerged from the data. We extracted and analysed code reports on themes relating to the perceived impact of the CT programme on the relationships of female CT recipients with their intimate partners and male peers. Memos were used to summarise findings, and illustrative quotes were extracted from the transcripts.

2.8. Objective 4: to explore beneficiaries' and non-beneficiaries' perspectives of the impact of CTs on social and community relations

2.8.1. Data sources

For objective 4, IDIs with AGYW in HPTN 068 as described in objective 1, section 2.5.4 were conducted. Data sources to answer objective 4 also included interviews with parents/guardians of AGYW described in section 2.8.2, as well as FGDs with CCT beneficiaries and non-beneficiaries.

2.8.2. Sampling, recruitment, and data collection procedures

Interviews with AGYW

For information about interview procedures with AGYW refer to HPTN 068 trial qualitative sample and data collection procedures as described under objective 1 (section 2.5.4), as the same procedures were used for the current objective.

Interviews with parents/guardians

Parents/guardians included any member of the household who had signed consent for the young women to participate in the study. These were mostly mothers of AGYW selected to participate in the qualitative longitudinal cohort. Recruitment procedures described in section 2.5.4 were applied in recruiting AGYW, and their parents/guardians were approached at the same time. All parents/guardians interviewed were associated with AGYW already included in the qualitative sample.

FGDs with young women

AGYW, both beneficiaries and non-beneficiaries, were selected from the trial database to take part in FGDs. With assistance from our data team, we randomly selected approximately 120 young women to participate in FGDs. The study team telephonically contacted the identified participants to inform them about the planned FGDs, telling them that the study team was interested in talking to young women about their experiences of the intervention and thoughts about the CCTs. The study team scheduled appointments with interested participants to obtain written assent/consent from women and parental consent for those below 18 years old.

FGDs were conducted between 2012 and 2015. FGDs were conducted only with young women in the trial, not with parents/guardians. FGDs were used to explore how cash recipient and non-recipient young women thought about the CCTs and their impact on relationships between recipients and between recipients and non-recipients. Three types of groups were conducted: 1) cash recipients only; 2) cash non-recipients; and 3) a mixed group of recipients and non-recipients. This was done to observe group dynamics in homogenous compared to heterogenous groups. A total of 18 FGDs were completed throughout the three years. FGDs were held during weekends and school holidays in local schools. Each discussion group consisted of 10–12 participants, and a total of 108 young women participated. Each discussion took between 60 and 90 minutes. FGDs were facilitated by four trained interviewers, who were all female local residents and fluent Xitsonga speakers.

2.8.3. Data Analysis

FGDs were audio-recorded and subsequently transcribed verbatim and translated into English by fieldworkers. Quality checks of transcription were done against the audio files, and transcripts were checked for errors. Transcripts were imported into Atlas-ti then coded using a coding frame that was inductively and deductively generated by two authors (Catherine MacPhail and Nomhle Khoza) following a framework approach (167). In this approach, themes are developed from a priori issues and the questions guiding the objectives and aims of the study (deduction), and from issues generated from the data (induction). Coding was conducted by five researchers who completed training and worked towards acceptable intercoder reliability (ICR) scores on transcripts coded initially (165). A random sample of 10% of the transcripts underwent double coding throughout the study to ensure that ICR remained acceptable.

2.9. Quality assurance in qualitative research

Lincoln and Guba (168) suggested that internal validity, external validity, reliability, and objectivity are more related to the traditional positivist paradigm and are inappropriate to qualitative inquiry. Consequently, these authors proposed credibility, transferability, dependability, and conformability as alternative terms that together contribute to the trustworthiness of qualitative data and analysis. These terms reflect the assumptions of the qualitative paradigm. Trustworthiness in this study was achieved in the following manner (168).

2.9.1. Credibility

Credibility (an alternative to internal validity) demonstrates that the research was conducted in a manner wherein the participants were accurately identified and described (168). Patton (169) states that research credibility depends on the richness of the data and analysis and can be enhanced by triangulation. This author describes four ways of establishing credibility: data triangulation, methodological triangulation, theoretical triangulation, and investigator triangulation. To ensure the credibility of this PhD study, the data was collected from multiple sources such as AGYW, intimate partners, and male peers (data triangulation). Various data collection methods (IDIs and FGDs) were used (methodological triangulation). Transcripts were reviewed, coded, and analysed by multiple researchers, and the manuscripts emanating from the PhD underwent a peer review process (investigator triangulation).

2.9.2. Transferability

Transferability (an alternative to external validity) demonstrates the generalisation of the research findings from one context to another (168). Merriam and Tisdell (170) stated that qualitative researchers should give sufficient descriptive data to make transferability feasible. This study ensures the research findings' transferability by providing a detailed description of the research context, sample, recruitment, data collection procedures, and data analysis processes. The theoretical assumptions guiding the research are well described. Consequently, the findings from this study can be transferred from the current to a similar context.

2.9.3. Dependability

Dependability or consistency (an alternative for reliability) refers to the extent to which the research results can be repeated (168). According to Merriam and Tisdell (170), it is challenging to assess reliability in qualitative research since human behaviour is not static. Thus, replicating the research with the same participants may not provide similar findings. The key strategy for dependability is ensuring research findings are consistent with study data (168). The study was conducted with integrity; data management and quality assurance were ensured throughout the research process. This also enabled us to verify the consistency between the transcripts and the research findings (168). Procedures were well documented through field notes and standard operating procedures (SOPs).

2.9.4. Confirmability

Confirmability refers to the confidence that the research findings are based on the participants' experiences and not the researcher's biases. As mentioned in the previous section, stringent data management and quality assurance processes were followed (168). In this study, confirmability was ensured by remaining grounded in the data and using rich detailed quotes for conclusions drawn directly from the data.

2.10. Ethical considerations

Ethical issues are fundamental aspects of the research process to be considered when working with research participants. To ensure that the welfare and the rights of participants in this study were protected, the Nuremberg code of ethics (171) was followed to guide the conduct of the study. This code emphasises the importance of voluntary participation, benefits of the study to society, and prevention of physical and mental harm to the participants (172). The HPTN 068 trial received Institutional Review Board (IRB) approval from the University of North Carolina at Chapel Hill and the University of the Witwatersrand Human Research Ethics Committee (Wits HREC) (medical). HPTN 068 also received approval from the Mpumalanga Department of Health and Department of Education. The *CHANGE* trial was approved by the Wits HREC and the IRB of the John Hopkins Bloomberg School of Public Health. In addition to these approvals, I obtained ethical approval for data collection with intimate partners from Wits HREC, clearance certificate: M150270 and I also obtained approval for this PhD study from the Wits HREC (medical) – clearance certificate: M170623 (See Appendix 1). The trial staff were repeatedly trained on good clinical practice (GCP) and human subject protection (HSP). The HPTN 068 trial as a whole had a Data Safety and Monitoring Committee and was subjected to bi-annual ethical monitoring reviews. During the data collection process, the objectives and processes of the study were thoroughly explained to the participants to obtain informed consent. Before commencing data collection, the consent form was read word for word by the researcher and trained fieldworkers. Thereafter, the participants were requested to sign two copies of the consent form. The interviewer also signed the consent forms confirming that she had read the consent form to the participant. One copy remained with the participant for future reference, and the other copy was stored in the study office at the relevant site. At both sites, participant files were kept in a secured data room with limited access, as per GCP guidelines.

Though some of the questions were somewhat sensitive because they dealt with issues such as sexual behaviour, special care was taken to make sure the participants were not harmed in any way. The participants were informed that they could refuse to answer if they felt uncomfortable responding to a particular question. Knowing that they were not obliged to participate or to respond to questions they found sensitive made them feel at ease. The trials had SOPs describing how to handle potential sensitive issues, distress, and social harm; stringent procedures were followed to screen for and document social harms. Identified cases were referred to study counsellors or psychologists. Study participants were also offered a list of contacts for medical and psychosocial services in the local area.

To guarantee anonymity and confidentiality, in this thesis pseudonyms are used to conceal the personal identity of the participants. All the raw data collected for this research (audio recordings and soft copy transcripts) are kept in a password-secured computer. The hard copies of the consent forms are kept secure at the Agincourt and Wits RHI offices.

CHAPTER 3: CASH TRANSFER INTERVENTIONS FOR SEXUAL HEALTH: MEANINGS AND EXPERIENCES OF ADOLESCENT MALES AND FEMALES IN INNER-CITY JOHANNESBURG (PAPER 1)

Full citation: Khoza, N., Stadler, J., MacPhail, C., Chikandiwa, A., Brahmbatt, H., & Delany-Moretlwe, S. (2018). Cash transfer interventions for sexual health: meanings and experiences of adolescent males and females in inner-city Johannesburg, BMC Public Health, 18: 120, 1-11.

3.1. Introduction

Cash transfer (CT) programmes are largely used in low- and middle-income countries as a mechanism to alleviate poverty. In the past two decades, they have been used to improve health outcomes and promote healthy behaviour. Evaluative studies show that conditional and unconditional CTs have significantly improved health-seeking behaviours and the uptake of healthcare services (53, 173). Following the impact of CT programmes on improved health outcomes in Latin America, there is a growing interest in their use for HIV treatment and prevention (45). It is hypothesised that through mitigation of the underlying economic drivers of HIV infection or incentivisation of healthy behaviour, CT programmes could lessen engagement in risky behaviour, thereby reducing HIV infections (174, 175).

Studies in developing countries show promising findings on the potential role of CTs in reducing HIV infection by changing risky sexual behaviours (45). Studies have also shown that CT programmes could support HIV treatment by enabling recipients living with HIV to buy food and pay for costs associated with treatment access, thereby improving adherence to antiretroviral therapy (ART) and retention in HIV care (176, 177). There are also debates on the potential role of CTs to improve utilisation of and retention in mother-to-child transmission services (PMTCT) (178). CTs conditional on prenatal clinic visits increased retention in the PMTCT cascade and uptake of prenatal services (179). While CT programmes are a promising

mechanism to leverage HIV outcomes, the effectiveness of interventions may vary according to the demographic attributes of a given population (180, 181).

CT programmes have historically targeted adult women (182) and there is limited evidence regarding the impact of CT programmes wherein cash is given directly to adolescents. Despite limited evidence, there is a growing interest in expanding social protection programmes in the African region and in using CTs to improve HIV outcomes in adolescent girls and young women (AGYW), given this group's high incidence of HIV infection (183). Research findings in support of the effectiveness of this approach are limited, but promising (184). An observational study in South Africa showed that adolescent girls from households that were receiving a child support grant were less likely to engage in intergenerational sex, which is a risk factor for HIV infection (109). A randomised controlled trial (RCT) in Malawi showed that AGYW who received school-conditioned CTs were less likely to become pregnant, marry early, and engage in risky sexual behaviour(36). A recent South African study indicated that, while CTs conditional on school attendance reduced risk behaviours in adolescent girls, the intervention did not reduce HIV incidence (163). Similarly, Abdool *et al*. (2015) found that conditional cash transfers (CCT) had no effect on HIV incidence, but reduced HSV-2 incidence (185).

Despite the inconsistent findings, funding agencies such as UNAIDS and the World Bank are willing to support governments to scale up CT programmes. The United Nations Development Programme(UNDP) has recommended further exploration of CTs with regard to their potential to prevent HIV among key populations (181). Moreover, Swaziland's Ministry of Health is considering scaling up the implementation of CCT programmes to prevent HIV infection among AGYW (113).

While AGYW are a priority target group for structural interventions to address HIV; Gibbs *et al.* (2012) highlights the need to include men in structural interventions for HIV prevention as evidence show an association between men's income, their views of manhood and the risk of HIV (76, 186). The pathways in which perceptions of manhood and livelihood influence HIV remain unclear (187). Moreover, studies indicate that CT interventions may impact men and women in different ways (188). While CTs may encourage healthy behaviours and elicit intended behaviours among recipients (45), CTs may also encourage unanticipated negative behaviours, which in turn may increase the recipients' health risks.

Currently, it is not known how adolescents in a low-resourced African urban setting perceive CTs, how they spend CTs, or what receipt of transfers means to them. This limits the understanding of the impact of CT programmes designed for HIV prevention and treatment in various contexts, thereby suggesting a need for further research in this regard. In this paper, we present a qualitative study conducted on adolescent boys and girls who participated in a CT intervention. In the study, we explore participants' experiences of the CT intervention and the meaning they attach to the intervention, from a gender perspective.

3.2. Methods

3.2.1. The intervention

We implemented the *Change* study, a pilot RCT assessing the feasibility and acceptability of CTs in a low-resourced urban setting. The trial was conducted in the inner city of Johannesburg, South Africa. The aim of the intervention was to compare different types of CT interventions to assess the impact on access to health care and school attendance; since evidence has shown that keeping adolescents in schools reduces the risk of HIV infection (189). We recruited male and female adolescents (n = 120) for participation in the intervention through distribution of pamphlets at three schools and by word of mouth. The inclusion criteria were being aged 16–18 years, self-identifying as sexually active, and enrolled in school. Potential participants were contacted and invited to our research offices (along with a parent/ legal guardian, for those aged 16–17 years, who were considered minors).

Participants were randomised into the following three cash strategies using sealed numbered envelopes: 1) Unconditional monthly payments of 280 ZAR (USD 20 for 6 months); 2) monthly payments of 280 ZAR for 6 months, conditional on 80% school attendance; 3) and a single payment of 280 ZAR conditional on a once-off clinic visit involving sexual reproductive health education, services related to family planning and contraception, HIV counselling and testing, HIV risk assessment, and HIV risk reduction counselling. Payments were made through a cardless service that allowed cash withdrawals from an ATM using a pin code, which was sent to participants' mobile phones via a short message system (SMS). Those who either did not have a mobile phone or had a shared phone were paid using ATM cards with a linked pin; these were provided to participants at enrollment. Participants completed surveys at 6 and 12 months after receiving CTs; the survey results were reported elsewhere.

3.2.2. Study population and setting

The research was conducted in the inner city of Johannesburg, including Hillbrow, Berea, and Yeovile areas, in South Africa. This location was selected because of evidence that HIV prevalence in South Africa is highest in informal urban areas (183, 190). The area is characterised by dense, overcrowded high-rise residential buildings and abandoned industrial buildings informally occupied by migrant workers from within and outside South Africa. Fifty-one percent of the population in the area are males, 20% is aged <15 years, and 21% is aged 15–24 years. The area is characterised by a high concentration of low-income households (<R1000 per month) and unemployment rate of 41% (Statistics South Africa, 2012 as cited in Delany-Moretlwe et al., 2014).

3.2.3. Study design

An interpretative phenomenological approach was employed to explore how adolescents make sense of their experiences of CT programmes. The phenomenological approach focuses on how people perceive and talk about objects or events (191). This method was useful in facilitating an understanding of adolescents' experiences and meanings of CT programmes.

3.2.4. Sample and data collection procedures

From the 120 participants in the intervention, we purposively selected a sub-sample of 49 adolescent boys (n = 30) and girls (n = 19) to participate in-depth interviews. We selected participants who adhered to study conditions such as attending school and visiting the clinic and those who did not for example those who missed the clinic visit across the three study arms (i.e., unconditional cash transfers, clinic-conditioned cash transfers, and school-conditioned cash transfers).

Data were collected six months after participants had received the conditional and unconditional CTs (March 2014) and up to 12 months after the intervention had ended (March 2015). Different sets of participants were interviewed at the two time points. We contacted participants telephonically and invited them to take part in the interviews.

The interviews were conducted by one male and two female interviewers, who were fluent in isiZulu and Sesotho. The interview guide consisted of the following topics: (1) descriptions of adolescents' households (household membership, employment, domestic relationships); (2)

experiences of the CT programme; (3) participants' sources of income before, during, and after the CT intervention; (4) and spending patterns and perceived impact of CTs.

Participants were interviewed in a private room at our research offices in Hillbrow. Each interview took approximately 1 hour, and participants were compensated with 100 ZAR (approximately USD 7) for transport costs and their time. All interviews were audio-recorded and transcribed, and translated (one-step) into English if necessary. Personal identifiers were substituted with pseudonyms during transcription.

3.2.5. Data analysis

As an initial step, two of the co-authors of this paper (JS and NK) reviewed the transcripts to identify preliminary themes and sub-themes, using an interpretivist approach to analyse the data(191). Atlas.ti version 7.4 was used to code and organise the transcripts. A codebook was generated using an inductive approach; transcripts were initially coded based on emerging themes and subsequent transcripts were coded deductively. The final code frame consisted of 61 codes. These codes were grouped into six thematic categories, namely, demographic information, perceptions and experiences of CT, spending patterns, meanings of CT, and developments after the CT programme. Data were also grouped by gender to enable comparisons across the various themes Thereafter, patterns in categories were identified, compared and contrasted within and between cases.

3.3. Results

3.3.1. Socio-demographic characteristics

We had intended to include 30 participants at each follow up, making up an envisaged total of 60 participants. However, obtaining a balanced representation according to gender was challenging, especially at the 12-month visit. Some of the contact information was invalid and some participants had completed school, while others had relocated. Our final sample, therefore, had more male participants and more participants in the unconditional arm than was initially planned. Table 4 illustrates the final study sample.

Demographic Characteristics	Sample at 6 months n (%)	Sample at 12 months n (%)	Total sample: 6 and 12 months n (%)
Age (years)	16–18	17–19	16-19
Gender			
Male	10 (53)	21 (70)	31 (64)
Female	9 (47)	9 (30)	18 (37)
Study arm			
Unconditional cash transfers	8 (42)	13 (43)	21 (43)
Clinic-conditioned cash transfers	5 (26)	8 (27)	13 (27)
School-conditioned cash transfers	6 (32)	9 (30)	15 (31)
Total	19 (100)	30 (100)	49 (100)

Table 4: Demographic characteristics of young men and women who participated in IDIs in the CHANGE trial

The majority (n = 21) of participants were recipients of unconditional CTs, followed by 15 participants who formed part of the school arm, and 13 participants in the clinic arm. At six months follow-up, the age range was 16–18 years. Participants were in grades 10–12. At 12 months follow-up, the majority (67%) of participants had completed the 12th grade; some (13%) participants were enrolled in tertiary education, some (30%) worked piece jobs, and others were seeking employment (23%). Most participants' households were headed by single parents, who were in unskilled employment or ran informal businesses. Moreover, the majority of participants lived in one-bedroomed apartments. On average, there were four occupants per household, with parents sleeping in the bedroom and siblings sharing a bed in the living room. In some instances, two or three families shared a living space.

3.3.2. Experiences of the CT intervention

At the beginning of the CT programme, adolescents and parents doubted its authenticity. "Receiving money for doing nothing" seemed too good to be true; this perception was also due to the high rate of scams and crime in the study area. P9 (male, school) stated: *"At first, I didn't trust it; I thought it was a scam because, how can someone give you R250…just giving you just like that?"* Some of the female participants thought that they would be expected to do something in return for CTs. However, the mistrust and uncertainties diminished upon adolescents obtaining more information about the intervention and receiving their payments.

Overall, the unconditional and conditional CT intervention was acceptable to adolescents and their parents, who indicated that the programme encouraged adolescents to be responsible and attend school, and prevented girls from engaging in sex with older men, and boys from committing crime to get money. As one participant noted: *"…at least there is a project out*

there that is willing to help young girls and guys and show them that they don't have to do bad things that are out of their comfort zone to get money." (P19, female, unconditional).

While the intervention did not offer formal lessons on sexual reproductive health (SRH), several participants mentioned that they liked the session on HIV/AIDS and sexually transmitted infections, which they were exposed to through their participation in the study. In relation to this, P8 (male, unconditional) illustrated: *"For me, being in the programme was all about learning about HIV and how to protect ourselves from contracting such diseases by practicing safe sex."* Similar to other participants, P8 reported that he gained knowledge about HIV and testing by completing a mobile phone-based survey in the main trial.

We asked participants about their experiences of the conditionality of CTs. Both adolescent boys and girls were open to the school condition, since they had been attending school before the programme; so, being compensated for this with cash was an added advantage. As P32 (female, school) noted: *"I was going to school every day. It is something that I was doing since grade 1; so, it was not like I was working for it, because it was something that I was already doing. So, I was just getting paid for something that I was doing, but I was now pushing even harder because I was getting paid for it."* Several adolescents in the school arm reported that CTs had minimal to no impact on their school attendance. Some indicated that the programme encouraged them not to miss school. They put in extra effort into their attendance, as they did not want to miss their cash payments; for example, they attended school even when they were sick. However, this was contradictory to the main trial's findings, which showed that participants who received school-conditioned payments were more likely to report missing school (192).

Among adolescents in the clinic arm, several girls reported that they disliked clinic visits because of the stigma associated with being at the clinic, but that the friendly clinic staff had put them at ease. Receiving clinic-conditioned CTs encouraged participants to attend the clinic, as per study requirements, which offered the adolescents, particularly boys, an opportunity to get tested for HIV, something that they would be less likely to do if they were not receiving conditional CTs.

"Since I got the clinic part of the study, what I saw is that they gave me a chance to go to the clinic and actually get myself tested or just do anything that I wanted to do, and that has never

come to mind. I got the chance to know my status and also get counseling and be taught more about STIs." (P14, male, clinic).

Nearly all participants were satisfied with the sum of the grant (280 ZAR). They stated that the amount was "more than enough"; some described it as "*neither too small nor too much.*" It was sufficient to cover their needs. P5 (male, unconditional) remarked: *"It was a lot because I am not used to having that amount of money."* For the adolescents, the money was also sufficient because it was not common for them to receive such money without having worked for it. Only two participants articulated that the grant was insufficient, "*this money was not enough for me … because there are things I thought I would do but the money was not enough.*" suggesting that they should have received more or the same amount on a weekly basis. Some participants stated that if we offered adolescents more money, they would misuse it. P13 (female, unconditional) commented: *"It was a good amount because knowing us, youth, we would buy alcohol. With two-eighty (280), we could buy necessities, and not things that we want, but things that we needed."*

While adolescents were generally satisfied with the amount provided, the frequency with which the cash payments were made mattered. Participants across arms stated that the programme was unfair to those who had received once-off payments. Adolescents who had received once-off payments raised a concern especially in relation to peers who misused the CTs on expensive items when there were 'deserving' participants who would have done anything to get the money. The assumption was that those who 'need' the cash were more likely to spend it sensibly compared to those for whom the transfer was extra income.

Adolescents received their payments using a bank card or a cardless system at an automated teller machine (ATM). They liked both payment methods, reporting that receiving their payments was stress-free. Participants who utilised the card method stated that they could withdraw money from any ATM, and those who used the cardless method said that they did not have to carry cards and wallets around, which they regarded as a safe option. Making ATM transactions offered participants a sense of maturity. However, several reported that they could not withdraw the entire amount from the some ATMs; so, they had to use the remainder to purchase airtime.

3.3.3. Patterns of spending CTs

Participant	Items bought/ activities paid for	Amount spent (ZAR)
P41, male, school; expenditure over 6 months	Gym Nutritional supplements Airtime Toiletries Pocket money Savings	200 400 50 50 - -
P6, female, school; expenditure over 6 months	School jersey Groceries Transport fare for her mother Stationery Pocket money Airtime	100 100 - - - 30
P15, male, unconditional; monthly expenditure	Alcohol Snacks Airtime	200 50 20
P10, female, unconditional; monthly expenditure	Other personal items Electricity Toiletries Snacks Airtime	100 50 50 50 30
P21, male, clinic; a month's expenditure (once-off payment)	Gym Airtime	180 -
P4, female, clinic; a month's expenditure (once-off payment)	Groceries Movies Savings Toiletries	140 60 50 40

Table 5: Typical examples of adolescents' spending patterns

Both adolescent boys' and girls' spending and saving patterns reflected the desire to look and feel good about themselves. Adolescents mostly used CTs to meet personal and household needs. Typical personal spending was on personal care and hygiene products, clothing, school necessities, airtime, gadgets, and social activities such as attending a school dance. Spending also included contribution towards groceries or helping others, such as giving a parent money for transport to work or buying a t-shirt for a sibling (see Table 5).

Most adolescents stated that CTs allowed them to pay for activities and items that their parents would not buy them or pay for; these included expensive clothing, make-up, gadgets, and entertainment. In some instances, participants could purchase essential items that parents could barely afford; for example, a "school jersey, food in the house, and toiletries." Not much spending was reported on school items, and one young woman reported spending cash on transport to the clinic and medication. About four participants, male and female, mentioned that they used CTs to buy condoms to protect themselves, mentioning that it was difficult for them to access free condoms at the clinic because of stigma.

We noted gender differences in the adolescents' decision making regarding the use of CTs and some differences in their spending and saving patterns. Most girls sought advice from their

parents or other family members on how to use the money. Some girls believed that they had to discuss this with their parents first, even though they made the ultimate decision. The most common advice that they received from parents was to spend the money wisely, and some were encouraged to save it. In some instances, mothers used and controlled the CT, but even then, this had been the participants' decision.

"I sat down with my mom and told her that I have got the money, and she asked what I have decided to do with it, and I told her that I would give her half of the money to buy what she needs in the house, while I would use the other half to buy toiletries for myself." (P4, female, clinic)

Contrary to girls, most boys made independent decisions regarding expenditure. They did, however, mention discussing the use of CTs with their peers. Boys were also most likely to spend CTs on social activities such as "going out with the boys" and the school dance, which was quite a popular and expensive event. They also spent CTs on clothing, physical fitness, and technology. P18, a young man enrolled in the unconditional arm, described how he spent the money each month:

"I just spent the first payment on useless things, going to the movies with friends. Then, I used it to go to the camp. The second payment, I asked my mom to add more money onto it, and I bought sneakers for R450…the third month…that was when I wanted a phone. I asked my mom to add more money onto it, then I purchased a phone for R500 … the fourth payment was like the first payment…I just spent it; I just bought anything I saw that I was interested in…it was like earphones and a memory card and all that. The last two months…that's when I saved my money."

In contrast to the above, girls spent some of their CTs on their personal necessities and shared some with family members. They mostly spent the cash on domestic necessities, for example, buying food, helping their parents with transport money, and helping siblings with pocket money. They also paid for personal necessities such as personal care and hygiene products. P6, a girl who had received school-conditional payment, illustrated how she spent her monthly payments:

"… the first payment, I bought a school jersey, then the second payment, there were things that we needed in the house; so, I bought the things that we needed. At other times I lent to my mom if she did not have money for transport to go to work. When others had money, they liked

[to buy] Kentucky [fried chicken]; so, I would go and buy vegetables or a tray of chicken, and go home, cook, and eat with my mom."

There were also similarities between intervention arms. Similar to girls who had received monthly payments for six months, those who had received a single payment also spent CTs on their personal needs and to support family members.

"I gave half of the money my mom to buy groceries in the house, and then I used some of the money for entertainment. I went to the movies with my friends, and I used some of it for toiletries like perfume, make-up and other things that I needed." (P4, female, clinic)

Only two male participants reported spending CTs on alcohol, to entertain themselves. However, adolescents highlighted that expenditure of CTs on alcohol was common among their friends and acquaintances. They spoke of peers who used CTs on "alcohol and drugs" and "gambling," and "falling prey to money lenders," which reflected some form of moral judgment. *"Most of the young people that I know used their money for drugs and alcohol."* (P20, male, unconditional).

We also noted that the meanings attached to CTs could influence how adolescents spent the money. Some participants in the unconditional arm considered CTs "free money" because they "did not work for it" and there were no conditions for receiving the cash. This is how P44, a young man, perceived unconditional CTs: *"To me, it was just free money. (Laughs) So, it didn't matter ... like, it was just free money."* Some participants who had received a once-off payment viewed it as "luck money"; one participant in the clinic arm described it as money that you pick up on the street. The notion of "free money" or "luck money" yielded two possibilities among participants. For most, free money was supposed to be saved or spent wisely on necessary items, and for a few, it was to be spent randomly and not carefully planned for.

3.3.4. The meaning of CTs for adolescents

3.3.4.1. Financial autonomy

One of the most prominent themes cited by the adolescent boys and girls in this study was the sense of economic independence that they experienced upon receiving CTs. P43 (male, unconditional) remarked: *"I felt great because it made me more independent."* Likewise, P34 (female, unconditional) stated: *"… it taught us how to be independent, and not to rely on boys."* Adolescents described CTs as helpful, convenient, and providing access to resources that they

needed. *"We need clothes; some of us use make-up, and we may need money to party with our friends; so, sometimes our parents can't afford to give us money."* (P4, female, clinic). Therefore, the cash provided them with resources that they would not otherwise have accessed.

Before the intervention, adolescents depended on their parents and family members, and some girls relied on their sexual partners for financial support. For most participants, this was stressful and caused conflicts, particularly in instances where funds were insufficient. When asked to describe her family relationships, P38 (female, school), who lived with her sister responded: *"There are no [conflicts], because I don't ask her [sister] for money. Sometimes ... you see, sometimes it's bad when you start asking for money from people. If you don't [ask] it's okay."*

Participants recognised the financial constraints faced by their parents, who were mostly single parents and held informal jobs or ran small businesses. Hence, they were mindful of putting extra financial pressure on their parents. Receipt of CTs lessened financial demands on participants' parents. Moreover, to some extent, CTs provided resources that parents would have had to pay for; this meant that they could focus on other competing domestic needs, as the extract below indicates:

"It was one less stress for her. She was not worried about the matric dance anymore … She wasn't going to be paying for it anymore. Because she was already worried about buying the books." (P26, male, unconditional)

Feeling independent and responsible enhanced participants' self-esteem and decision making, as P4 noted: "It [CT] boosted many young peoples' confidence by showing them that they can do things on their own without asking for help or working hard." CTs seemingly offered adolescents choices, including choices about their behaviour. Some of the girls spoke about how receipt of CTs changed their behaviour. P35, a young woman who received school-conditional payments, reported that, before the intervention, she counted on her boyfriend for financial support, since her mother was unemployed. As a way of showing appreciation to her boyfriend, she felt pressured to have sex with him. When she received CTs, she did not ask her boyfriend for money because she could support herself. She decided not to have sex with her boyfriend. She said:

"It helped me because I didn't have to sleep with my boyfriend when I asked him for money…No, he never forced me to have sex with him, but I know that it makes him happy, you know…he said that if I want him to make me happy, then I must also make him happy."

P35 continued to do things for herself, even after the intervention; she found part-time employment. Similarly, P1 stopped having multiple relationships and dating older men for financial support, and remained with one partner.

"The first one was the cash I received because it helped me stop doing many things that I used to do to get cash…Like dating older men, who usually gave me money to buy myself things." (P1, female, school)

3.3.4.2. Cash Management Skills

Adolescents spoke about the gains that they had made from their involvement in the programme. The majority mentioned that day-to-day administration of CTs equipped them with financial management skills. These skills included drawing up a budget, saving, and making independent financial decisions. *"It taught me things ... like, I can now budget for my money appropriately and know when to spend on the right things ..."* (P11, female, unconditional). Some participants reported saving their transfers over a short-term period for essential purchases or for an event that they wanted to attend. Participants felt in "control" and "responsible." Some reported that had become open-minded, could help others, and had gained self-confidence.

3.3.5. Developments after the intervention

Most adolescents, particularly those who had received a once-off single payment, reported that everything remained the same as it was prior to the programme, stating that they knew that receipt of CTs was temporary. "*Nothing [changed]… I knew that I was going to get it once. It was like picking up money; you never know you are going to be lucky enough to pick it up again…"* (P21, male, clinic). Adolescents of both genders in the school and unconditional arm felt that a valuable resource had been taken away and that they are back to where they had started, relying on other people. This was stressful, as they had grown accustomed to having their own money and doing things for themselves, as the quotation below illustrates:

"Right now, everything that I come across that has to do with finances, I have to ask my parents, and sometimes this is difficult because they have their own things to pay for. So, I can say that

my life has now changed, since I don't have that money. Yeah, I can say that it went back to where I started. I'm used to having money, and I made myself." (P40, male, unconditional)

Receipt of CTs appears to have somewhat pressurised adolescent boys into earning an income. Two male participants reported that after the intervention, they saw a need to find employment, so as to meet their personal and families' needs.

"I have to hustle to get money…When in the study, there was no need. But when the money stopped, there was a need because I still had those needs; so, I had to get more money to patch up that empty space." (P28, male, unconditional)

The end of the CT programme made few of the boys think of easy ways of making money, such as engaging in criminal activities. However, only one criminal incident was reported.

"Money is an addiction for some people; so, the less they had, the more they wanted. Some had to try and steal other peoples' goods to get the money for whatever they had to buy. I remember there was an incident by one person that stopped receiving the money; he mugged someone, took the person's phone, and sold it to get money."

One male participant (P45, male, school) reported that he was used to getting easy cash, money that he did not work for; so, after the programme ended, he considered engaging in criminal activities to get quick cash without putting in much effort. It also appears that such thoughts and frustrations were experienced mostly by those who were neither in school nor employed after the programme.

3.4. Discussion

This qualitative study on CTs in a low-resourced, inner-city neighbourhood explored adolescent recipients' experiences and meanings of CTs. It also provided insight into adolescents' spending patterns and outcomes after cessation of the CT programme.

In our study context, CTs mostly generated positive experiences and meanings when transfers were offered directly to adolescents of both genders. Specific benefits included a sense of independence, financial freedom, and social growth; these attributes form a crucial component of adolescents' development, as related to the transition from childhood to adulthood (193). In low-middle income households, it is not always feasible for families to meet some adolescents' needs, as these may be regarded as luxuries, in comparison to other competing household

essentials. In our study, CTs enabled adolescents to purchase necessities such as toiletries, clothes, airtime, and make-up, and to pay for entertainment (see Table 2). CTs enhanced their financial stability and enabled them to participate in social and economic groups, thereby boosting their self-esteem. Increased self-confidence, autonomy, and decision-making among CT recipients influence women's decisions to engage in protective sexual behaviour (83, 194)

Most studies have shown that CTs offered to parents/guardians improved children's outcomes (195, 196). However, we hypothesised that when beneficiaries are adolescents, the impact and outcomes may differ, as do adolescents' needs from those of caregivers, resulting in adolescents using the money differently. In our study context, adolescents generally controlled the transfers and made decisions regarding expenditure; however, we observed some notable gender differences regarding these decisions. Boys were inclined to make independent decisions regarding expenditure, whereas girls discussed their expenditure plans with close family members; this is consistent with studies of adult women (196). The extent of the independence with which adolescents made spending decisions might have influenced their spending and saving patterns. Although boys and girls generally spent the transfers in a similar manner, we observed some gender differences. Boys' expenses reflected a concern with maintaining a social identity — to fit in with their peers — they were more likely to buy expensive clothing and spent the cash on socialising. On the contrary, girls' spending was more likely to reflect concern with domestic affairs and provision of support to other household members. This finding supports evidence showing that transfers directed to women tend to benefit the household and support family members (196).

While the adolescents in our study mostly reported positive expenditure; it is important to consider the implications of their expenditures in the local context. Research has shown high levels of alcohol consumption among young South African men (197); thus, entertainment and socialisation are likely to involve alcohol consumption by adolescent boys. Alcohol may not always elicit antisocial behaviour; in fact, in some instances — as in our study — it enhanced men's social status in the community (196); however, research shows that alcohol increases violence and the risk of HIV infection (198). In our study, the issue of alcohol was raised by adolescents, as they spoke of friends or acquaintances who had spent CTs on alcohol. However, this did not emerge in the quantitative data, and only two young men reported personal use of CTs on alcohol. Additionally, regarding adolescent girls' spending on domestic affairs, some

argue that targeting women as beneficiaries of CT programmes may perpetuate traditional gender roles, adding onto existing domestic responsibilities that women already carry (199).

The sustainability of the CT programme's effects after the programme's cessation remains questionable. In our study, the benefits to adolescents' appeared to be short-lived, as they reverted to old behaviours and relying on their parents; this was probably because of the short intervention period. In a few instances, the intervention introduced pressure to earn money, particularly among boys. Pressure to make money may be either a positive or an adverse outcome; positive in the sense that, after the programmehad ended, some adolescents had also completed schooling, so they had found employment to sustain themselves. However, for others, the programme created a need to make easy money, and could lead to committing crime as reported by two participants.

The experience of the programme and its processes, conditionalities, cash delivery strategies, and the grant size were acceptable to the majority of boys and girls. Our findings showed that conditionality based on routine activities such as school attendance was not felt, since they do not require additional effort, unlike if unusual or dreaded activities had been set as conditions. However, if conditions include activities that adolescents consider necessary (i.e., knowing one's health status), then CTs are more likely to encourage uptake of the dreaded service. Contradictory to other studies that reported jealousy and tension between recipients of CTs and participants in the control group (200), no adverse outcomes for social relationships were reported in our study. This could be because we conducted the project in a few schools, and not many people in the participants' neighborhoods knew about the study. Moreover, all participants in the trial, including those in the control and intervention groups, received transfers.

3.5. Study limitations

This study was not without limitations. We acknowledge that interviewing a different set of individuals at 12 months follow-up limited the depth of understanding of individual experiences. Participants provided self-reports on how the transfers were used; thus, there potential for bias in their reports of their spending patterns, with the possibility that responses perceived as desirable were provided.

3.6. Conclusion

Our findings demonstrate that from the perspective of young men and women, adolescent-directed CT programmes are acceptable and benefit individuals as well as households in low-resourced urban environments. They instill a sense of agency and responsibility in adolescents, facilitating transition into adulthood. The gender differences in adolescents' spending decisions and expenditure regarding CTs are also worth noting. Spending on domestic domains in girls and public domain in boys show that CTs could potentially reaffirm traditional gender norms in this population. Programmeimplementers ought to take this into consideration, and therefore think strategically about targeting adolescent girls with the provision of CTs. However, we also recommend that boys be considered for CT programmes. Despite no data being available on the effects of CTs on HIV prevalence or incidences among males, access to transfers contributes towards their psychosocial development, while also posing risks of expenditure on alcohol and alternative money-making strategies that could lead to consideration of criminal activities when the CT programme ends. These, however, require further exploration.

CHAPTER 4: CASH TRANSFERS FOR HIV PREVENTION: WHAT DO YOUNG WOMEN SPEND IT ON? MIXED METHODS FINDINGS FROM HPTN 068 (PAPER 2)

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4.1. Background

Social grants have been found to impact health and wellbeing in multiple settings (201). Worldwide, social grants have traditionally been paid to adult women (202). There is evidence showing that cash transfers paid to adult women are more likely to be used for the good of the household (203) than those given to men which might be used for socially irresponsible behaviours with negative outcomes (204). Who receives the grant, however, has been the subject of discussion with regards to how grant money is spent and who benefits from the grant. There are concerns that that adolescents might be more vulnerable than adults to social pressures, with the overriding concern being that providing access to cash to adolescents by making social grant payments to them might result in undesirable behaviours or place adolescents at risk of social harms. Such concerns are particularly significant in South Africa where a large-scale government social protection programme has provided grants to caregivers of children in poor households since 1998. From the inception of the Child Support Grant (CSG), there have been fears about adolescents deliberately getting pregnant to access resources through the CSG (205, 206). Rumours of the role of the CSG in promoting teenage pregnancies abound in the media and community consciousness, despite a number of studies establishing that there is no such relationship (207-209). Such concerns are in the context of a growing materialism in South African society (210) and evidence from other contexts of the key symbolic value of consumer goods for positioning young people in their social networks and the development of their identities (211, 212).

A recent focus on the potential for social protection programmes to limit HIV risk has led to an increase in HIV prevention programmes adopting a social protection approach. However, relatively few pay cash transfers directly to adolescents (213-215). One of the first to pay young women was in rural Zomba province of Malawi. They implemented both conditional (school attendance) and unconditional payments ranging from USD1 to USD5, as well as making small payments to parents (213). In South Africa conditional payments were paid to young people in KwaZulu-Natal province for a range of behaviours, including school attendance (185); and an ongoing combination HIV prevention intervention is paying cash transfers to female adolescent in Tanzania (216). However, there has been little investigation of how cash transfers are spent by adolescents; whether concerns about access to cash promoting undesirable behaviours; and limited discussion of the meaning that access to such money might have for adolescents in impoverished environments. Using mixed methods data from the HPTN 068 trial of a conditional cash transfer for HIV prevention in South Africa, we examine young women's cash transfer spending patterns and social impacts that access to cash engendered.

4.1.1. The Swa Koteka (HPTN 068) cash transfer project

This analysis was situated within the Swa Koteka cash transfer project (HPTN 068). The study was a phase III individually randomised trial to assess the impact of a cash transfer conditioned on school attendance on HIV and HSV-2 incidence and other behavioural outcomes (217). The study provided young women and their parent/guardian in the intervention arm with a monthly cash transfer conditional on 80 percent monthly school attendance. Young women and their parent/guardian in the control arm did not receive any payment. The study was conducted in the Medical Research Council/Wits University Agincourt Health and Socio-Demographic Surveillance System (HDSS) site in the rural Bushbuckridge sub-district of Mpumalanga Province in South Africa. The area currently covers approximately 450 square kilometres, contains 32 villages and has largely underdeveloped infrastructure. The majority of roads are unpaved and commercial and retail space is limited. In this area, there are high levels of unemployment and poverty, and strong reliance on government social grants. HIV prevalence in the area is high. During 2011, HIV prevalence was 5.5% among 15-19 year old women and increased to 46% for women aged 35-39 years (218).

At enrolment into the study, young women and their parent/guardian in the intervention arm were asked to open a South African post office banking account if they did not already have a bank account. This was the preferred approach to making payments to young women for a

number of reasons. There are two post offices located in the study site and one in a township close by; the documentation requirements for opening an account are less stringent than for banks, significant for some families who have not accessed birth and other registration documents; and unlike banks, there were no administrative charges on the accounts. Additionally, the study site has limited Automated Teller Machine (ATM) banking infrastructure. There were no ATMs in the area at the start of the study, although over the duration of the study ATMs became available in the centre of the site, and an unknown number of cash points at various smaller shops emerged, owing to an initiative for more access from a major bank. Young women therefore had to travel to access their cash. The project was not able to make payments in cash, as has been the case in other similar studies (40), because we had no means to ensure staff and young women's safety when carrying large amounts of cash. Instead, we used automated electronic payments to make monthly deposits into young women's accounts. Total monthly payments of ZAR300 were made through the study (ZAR100 to young women themselves and ZAR200 to their nominated parent or guardian — approximately USD12 and USD24, respectively). This amount was matched to CSG payments at the time that the study started. Additional information on how we assessed eligibility for monthly payments based on recorded school attendance is available elsewhere (217).

During HPTN 068 we collected both quantitative and qualitative data on the spending patterns of women in the intervention arm and their parents. In this analysis we focus only on young women's spending to explain the management of money and spending patterns of young women in South Africa who receive cash transfers. Moreover, we reflect on concerns about the belief that payment of cash transfers to adolescents might lead to negative consequences and harms.

4.2. Methodology

4.2.1. Survey data

Study participants were drawn from a sample of young women aged 13-20 years enrolled in schools within the Agincourt HDSS. Inclusion criteria were that young women should not be pregnant or married at baseline; they and their parent/guardian should have the necessary documentation to open an account; and they should be currently residing in the study area and attending a local school. After obtaining written informed consent from a parent/guardian and written informed consent or assent from the young women, all participants completed a

baseline interview using Audio Computer Assisted Self Interview (ACASI), provided blood samples for HIV and HSV-2 testing and were randomised to receive the cash transfer or not. Young women were then interviewed annually until the study completed or until they graduated from high school, whichever happened first. Each annual visit included an ACASI interview, blood draw, HIV and HSV-2 testing for those negative at their previous visit, and HIV and HSV-2 counselling. Full details of the trial methods and outcomes are available elsewhere (219). Surveys were also completed by parent/guardians; however, this analysis is limited to young women's data.

4.2.2. Qualitative cohort

A sub-sample of young women was recruited into a longitudinal qualitative cohort with who repeated interviews were conducted in order to explore experience over time (220). Purposive sampling was used to ensure that qualitative data overrepresented intervention participants, sexually active young women, girls who reported missing school and those reporting transactional sex. This was to ensure that issues we hypothesised would be relevant to experience of the cash transfer would be represented. Participants were informed that the study team was interested in talking to young women about their experiences of the intervention and thoughts about the cash transfers. They were also informed that they would be asked to reflect on their attitudes and beliefs about schooling, sex and HIV risk for young people in South Africa. Participants provided additional written informed consent for participation in the qualitative cohort at the start of the first interview and this was verbally reconfirmed before each subsequent interview.

Semi-structured interviews were conducted twice annually throughout young women's engagement in the trial for a potential total of six interviews per participant. As young women in the qualitative cohort exited the main study, they were replaced by young women with similar characteristics; data is therefore largely from women over 15 years of age, although many had been enrolled in the trial from 13-15 years old. A total of 39 intervention young women were recruited into the qualitative cohort. Face-to-face interviews of between 30-90 minutes were conducted by a team of four experienced qualitative interviewers. The interviewers were all female, local residents with a minimum grade 12 completed education and fluent xiTsonga speakers. We conducted refresher training in qualitative interviewing at the start of the study and at regular intervals throughout the duration of the data collection. We also conducted topic guide specific training at the start of each round of qualitative data

collection. Training focused on the meaning and intentions of questions in the interview guide, appropriate xiTsonga language for the interview concepts and role playing to develop familiarity with questions and procedures. Each participant was allocated to a single interviewer to ensure that they developed a relationship over time and so that interviewers could reflect on information from previous interviews. The interviewer reviewed previous interview transcripts prior to each subsequent interview to improve their recall of information previously provided by participants.

At each interview, young women were asked a range of questions about how they were managing the cash transfer. This included questions such as 'How do you usually spend your money?', 'How do you feel about having access to your own money?', 'Tell me about any experiences you have had with someone taking your Swa Koteka money from you.' We also asked about negative and positive experiences and feelings associated with receiving the cash transfer. We asked about the impact of receiving the grant on relationships within the family and community through questions such as 'Have there been any negative outcomes in your family after receiving the money?' after which we probed to establish what these negative outcomes were (for example, arguments in the household about controlling or spending the cash transfer). Additional probes were provided for the interviewers to use for all questions, but they were also encouraged to use probes that best suited the context of each interview.

4.2.3. Data analysis

Qualitative interviews were digitally recorded and then translated and transcribed in a single step by the person who conducted the interview. All transcripts were checked for clarity and then coded in Atlas.ti (version 7) making use of a coding frame that was both inductively and deductively generated by two of the authors (CM and NK) following a framework approach (221). In this approach themes are generated from a priori issues and questions guiding the objectives and aims of the study (induction), as well as issues generated from the data (deduction). Coding was conducted by five researchers who completed initial training and worked towards acceptable intercoder reliability (ICR) scores on initial study transcripts (165). A random sample of 10% of the transcripts was double coded throughout the study to ensure that ICR remained acceptable.

For analysis of the qualitative data, codes directly linked to the theme of 'spending' and 'grant experience' were examined. These codes included information about items on which young

women spent their portion of the cash transfer, discussions about saving the transfer, their experience of having access to their own money and how this money was controlled within the family. We also examined codes that we had used to document positive and negative outcomes of receiving the cash transfer.

We analysed quantitative data only from baseline HIV-negative intervention young women who completed at least one follow up visit (n=1209). Within this sample the median visit number was two. For this analysis, we focused on the module of the questionnaire that asked about cash transfer spending habits. At each annual follow-up visit we asked intervention young women a range of questions about their understanding of the cash transfer and their experience of both accessing and spending the transfer. To assess spending of the cash transfer we analysed the question 'What was the Swa Koteka transfer allocated to you spent on?' To examine who controlled the young women's portion of the cash transfer we descriptively analysed a range of questions including: 'Who usually spends your portion of the Swa Koteka money?' and 'Who decides how to spend the Swa Koteka money allocated to you?' Finally, we examined data from the question 'Who normally withdraws your R100 Swa Koteka money?' Each category of spending question was summarised across all young women and all data collection points. The records with missing responses to the question were excluded from the analysis. Across all 2597 visits, 31 records were missing for spending questions and 45 were missing for other questions. Logistic regression with robust variance to account for repeated measurement on each young woman was used to test the association between demographic variables and young women's decisions about managing the cash transfer.

During analysis, data was triangulated through comparison of the findings from each of the data sources. Explanations for behaviours reported in the quantitative survey were illustrated with participants' words in the qualitative data and differences between the two sources specifically noted.

4.3. Results

4.3.1. Decision-making about spending the cash transfer

From the quantitative survey data it was clear that decision-making about spending the cash transfer rested overwhelmingly with the young women themselves. Across all data collection points, 78% percent of responses indicated that decisions about spending the money were their

own; a further 18% indicated that an adult or other household member told them how to spend the money and 3% percent discussed how the money should be spent with other household members. A very small percentage (<1%) indicated that young women's boyfriends had a role in decision making about the cash transfer (154). This level of autonomy is further reflected in who physically accessed the money and spent it. Banking infrastructure is limited in the study site, with post offices in two villages at the start of the study and ATMs/cash points becoming more available across the site over the duration of the study. Two-thirds of responses indicated that young women accessed their money from the post office (rather than a bank ATM), largely in the study site. A further 20% of responses indicated travelling between 30 minutes to 1 hour, depending on their location in the study site, to a nearby larger town to withdraw their money. The remainder (13%) indicated travelling to other (unspecified) places to withdraw their cash transfer. Despite the necessity for many participants to travel to access the money, 73% of responses indicated that young women withdrew the cash themselves, followed by mothers (15.4%). Involving other family or household members in withdrawing the money was negligible (less than 3% for all categories), but specifically involved other female relatives such as older sisters and grandmothers. Older participants were significantly more likely to report withdrawing the cash themselves ($p<0.0001$) when comparing younger women (13-16 years) to older women (17 years and older).

Young women's autonomy in accessing their cash transfers was echoed in actual spending of their portion of the cash transfer, with 80% of them indicating that they spend the money themselves. Approximately ten percent of participants reported that their mothers also spent their portion of the cash transfer, but less than two percent reported other family members spending their money.

In qualitative discussions, there were very few reports of young women having their money forcefully taken or being side-lined in decision making about spending the money. In one instance, a young woman hints that this has been attempted, when she says '*they do not take it. I resist',* although she did not discuss this issue further in subsequent discussions. Another young woman spoke about giving her money to her mother for safe keeping and to enforce some degree of saving. She noted that her mother was completely trustworthy in this regard but then mentioned a friend, who is also a study participant, and whose mother cannot be trusted because she does not return money given to her for safe keeping.

She doesn't give the money to her Mom because her Mom will use the money and she won't give it back to her. So she keeps it, but it won't last for a week because she buys her friends things and she ends up not knowing what she spent her money on. (Participant 5956, 19 years, Interview 1/1)[1]

Similarly, a 19-year-old participant spoke during her interviews of her family's declining relationship with her step-father. She discussed how there were complaints in the household about the cost of food and that her mother and step-father were *'saying that I must contribute in the household.'* In a context of general concern about household resources, her control of the cash transfer became contested and there were instances in which her money was used without her consent.

I'm not the one who drew my last payment. My mother has taken it and said that she bought relish. I didn't say anything. She said that she's only left with R50 then I said to her 'Please keep it for me. I want to buy some shoes.' Last Monday I was in need of money, then I requested R50 from my mother but she said that she had given it to my stepfather to use it on transport. With this money I didn't say anything until now. She said he will come back yesterday on Friday. I don't know if he will give her or not. If he doesn't give my mother I will accept it no problem. (Participant 4728, 19 years, Interview 2/3)

Finally, there was one report of the cash transfer being stolen. The young woman mentioned that both her identification document and post bank card were stolen, and her belief that someone in her family was responsible: *'I can say that it is a family member because there is no one who knows here better than family members.'* There were no other reports of negative outcomes related to access to the cash transfer. This in keeping with our assessment of social harms during the study (n=16), the majority of which were related to teasing for study participation and reported by both intervention and control participants (219).

4.3.2. Items bought with the cash transfer

In the quantitative survey data young women reported spending their cash transfers on a range of items. The most common item was toiletries (56.2%), followed by clothing (35.0%), school uniform and school supplies (30.5%), mobile phones, ringtones and airtime (29.7%),

[1] Reflects age at the time of the interview. Interview number of total qualitative interviews

hairdressing (29.3%), cool drinks, sweets and fast foods (25.6%), and makeup or cosmetics (20.5%). We noted a difference in spending patterns as participants aged within the study. There was a significant difference ($p < 0.05$) in spending between older participants (17 years and older) and younger participants (13-16 years) on toiletries, mobile phones, makeup/cosmetics, hairdressing, school uniform or supplies, birth control, transportation, health care and child care. Responses to these items were more common among the older participants.

There was little reporting of spending on items perceived to be detrimental to young women's health and wellbeing. Only 1.8% reported buying cigarettes and 2.3% reported using the money to buy alcohol. Echoing data reported in the surveys, in the qualitative interviews young women talked about items that were viewed as irresponsible spending and for which they did not use the cash transfer.

There are no risk behaviours because of this money. I know how to manage it. I don't buy drugs or alcohol, most of the time I spend the money on the most important things. I don't abuse the money. (Participant 6961, 17 years, Interview 1/5)

If someone can buy for me, I drink. But I cannot take my money and buy alcohol. (Participant 1343, 18 years, Interview 4/5)

In discussions with young women there was a sense that the money needed to be spent 'responsibly'; this perception appeared to stem from conditioning cash payments on school attendance, although decisions about spending the cash transfer were not prescribed or discussed with participants.

Given that the payment was conditioned on school attendance, it seems that many participants and their families viewed the money as being intended for school related items such as school uniforms and stationary supplies.

Everything that Swa Koteka study has brought in the community is good. Because the study wants us to focus on our education and be able to take care of ourselves. (Participant 8254, 18 years, Interview 2/2)

Spending that might be related to the outcome of interest in the main study (HIV incidence) was low, with only 9.25% mentioning that they used the money to purchase birth control or condoms (grouped in the analysis).

Similarly, despite the relative poverty of the area in which the young women live, the young women's portion of the cash transfer was infrequently used to support the household more generally. Less than 10% of young women reported that their portion of the cash transfer was used for general household groceries (8.8%) or paying rent and utilities (2.1%). When asked specifically to comment on whether their portion of the cash transfer was used for groceries, one participant responded that *'the one for the parent we buy food'*, reflecting the general belief that the young women's portion was not intended for general household spending. Despite some participants already having children at baseline and pregnancies in the cohort subsequent to study enrolment, only 1.9% of intervention girls reported spending their cash transfer on crèche or childcare. Given that the intervention only recruited young women who were already enrolled in school, this might mean that financing childcare arrangements had already been made to accommodate their schooling, such as applying for and receiving a CSG for their child.

Triangulation of the quantitative and qualitative data from the study validated the information on spending. Reports across the interviews matched the items that young women reported spending money on in the quantitative surveys, with one significant addition. In the interviews, young women were most likely to mention taking the money to school as 'pocket money' and sharing their money with siblings for this purpose. This particular category was not provided to young women in the quantitative survey, although is likely represented in the 25.6 percent who reported spending the cash transfer on cool drinks, chips, sweets or fast foods. Across the qualitative interviews, there were few instances in which participants discussed spending their cash transfer on more substantial items, with two notable exceptions. One recognised that she was losing R20 each time she had to pay for transport to get to the ATM to withdraw her money and therefore started a small business selling sweets to recoup this money.

I have a small business. I am selling some sweets…I started my business since I started to get the money from Swa Koteka. I am trying to make extra income and I am getting profit. The reason why I started this business is that I want to get the money I pay for transport when I go to Thulamahashe to withdraw the Swa Koteka money. (Participant 5833, 17 years, Interview 1/3)

Another decided that having an identification document was significant for her future and determined to use the cash transfer payment to get this vital document. She noted:

I decided to spend the money on the ID document when the principal announced at school that there were people from [the Department of] Home Affairs who will come at school to assist us register for ID documents. So I regarded it as an important thing to me since I told you that I usually spend the money on the most important things. (Participant 6961, 15 years, Interview 1/5)

We did not ask young women in the quantitative component of the study whether they saved the cash transfer specifically. This was however reported by very few young women in qualitative interviews; mostly reporting that they asked their mothers to keep the money for them so that they were not tempted to spend it on smaller items. One participant noted that *'she [mother] deposits the money into her bank account and then I will take the money when it's R1000.'* Such forms of saving were generally short term and with specific purchases in mind, such as clothes for the Christmas season or a particular occasion. A very small number of young women reported that they were saving their money for longer term goals such as university costs. One participant consistently saved her cash transfer through the life of the project, but another, who began the study saving for university, admitted in subsequent interviews that she had stopped saving as *'I'm a human being and I have needs.'* Another young woman discussed her plans to begin saving, but acknowledged that she had not yet started.

I haven't started saving the money but I'm thinking of it. I don't know if I can be able to do it, but I think of saving the money. I will take the R200 that my mother gets and that R100 for me and save it into one account so that I can use it when I go to tertiary school [university]. I will apply for a bursary, and then I will use the money for food and paying for accommodation. (Participant 3285, 18 years, Interview 1/4)

Although there was generally an acceptance that the cash transfer amount was appropriate, the quote above is indicative of the fact that most participants reported spending most or all of their cash transfer every month. While saving for a long-term future might have been desired by participants, it was not something that most felt was practically possible in their current circumstances.

4.3.3. Sharing the money

In most instances there was no expectation that young women would share their portion of the cash transfer with other members of their household. Indeed, in some cases parents chose to give the household portion of the cash transfer to the young woman as well as their own portion. In the qualitative interviews most young women noted that they didn't share the cash transfer, with one participant noting, *'no I didn't give it to anyone and I like money too much. I can't survive without money'.* Despite there being no expectation that young women would share their portion of the cash transfer, many chose to do so anyway. One of the participants talked about sharing widely in the family, saying: *'If my sibling asks for money I give him, my mom too. If she asks for money, I give her. Sometimes she borrows my money.'* Sharing was most often to provide younger siblings with pocket money at school or particularly, to assist a female sibling.

I give my siblings because I help my Mom in giving them pocket money to use school. I want her to stop for a while in giving them money. If I have money, I give them to use at school. (Participant 5956, 19 years, Interview 1/1)

Sharing money with sisters appeared to be more common than sharing with same age male siblings, and these relationships were reciprocal. One young woman who enrolled in the study at age 14 and who lived with a very large three-generation extended family talked in every interview of sharing the money with her sisters, giving them each a quarter of her R100 payment. She noted: *'Mostly it's because I don't need school materials and don't need personal things, so that's why I thought they also have to be happy with that money and buy what they need.'* In a later interview she talked about this being a reciprocal relationship with her sister and that she chooses to share with her *'because sometimes when I don't have money she does give me when she has it.'*

Sharing with friends was far less common — but also discussed by a small number of participants. One young woman mentioned that she often gave money to one of her close friends:

Since they deposit R100, when I withdraw it I only manage to get R90. Sometimes I give my friend R50 or even that R90 when she needs it seriously. (Participant 4959, 16 years, Interview 1/1)

In this instance she noted that bank charges reduce her monthly payments to ZAR90, but has willingly given a friend this whole amount when the need arises. From later in the discussion it seems however that this example of sharing was in the form of a loan, rather than an outright gift, as there appears to be an expectation of being paid back. In the qualitative interviews no young women reported sharing their portion of the cash transfer with boyfriends or sexual partners. This is in contrast to the quantitative survey data and is indicative of the small qualitative sample.

Over and above the mechanisms that young women employed to access the transfers, make decisions about spending and whether they share the money with others, access to a regular sum of money held significant social meaning for young women who enrolled in the study. Specifically, the money allowed participants to assume an adolescent identity that was rooted in both an enhanced independence from their families and securing a place within their peer networks.

4.3.4. The meaning of money for adolescent women: Independence

Most young women discussed the importance of being able to make one's own decisions about money and having the independence to spend their own money without having to ask for it from family. For many, this was a completely unique experience; indeed one young woman specifically noted that she *never receives the amount of money like that* and therefore was very conscious of the independence this provided her. Participants spoke particularly of appreciating that they controlled decision-making and spending with regard to this money. A 16 year old participant who lives in a poor household with her mother and sisters said:

When I go around and maybe want something in the shop, when I have the Swa Koteka money I get in the shop and buy; not to come back and ask. I am able to say that I have access to my own money. (Participant 7915, 17 years, Interview 2/3)

This was echoed by many other participants, such as a 19-year old who, when asked about how being part of the cash transfer study felt, stated *'It feels great because no one controls it but me'* and a 20-year-old who said *'I feel good because when I want something I do it for myself.'* Further, a 19-year-old woman mentioned that to have control of your own money, allowed for control and independence more broadly when she mentioned that '*If someone can give you money, he/she will always shout at you every day and night.'* Throughout this participant's interviews she reports going hungry and there is a real sense that she feels herself (and other

children in the family) are a burden to their household in terms of the cost of feeding them. Through her interview she implies that when you receive money from others you are under their control and that in contexts of poverty this breeds resentment.

This appreciation for independence was also bound with family relationships, particularly with mothers given that so many households in this community are single-parent families. Overall, there was a sense from the young women that they recognised the financial burden their requirements and desires placed on their families. Their access to the cash transfer allowed them an independence from their parents, and reduced the financial demands they made on families. Many of the participants discussed appreciating the feeling of independence '*because I don't trouble them*.' Among many other examples of such statements, two women both 17-years-old at the time of interview, reported relief at no longer perceiving themselves to be a burden or 'bothering' their parents.

I feel happy because before I got money from Swa Koteka I used to bother my mother all the time. I used to buy [sanitary] pads and it was difficult for me, sometimes I felt like a burden to her. (Participant 5833, 17 years, Interview 1/3)

I feel well because I stop bothering my Mom for asking money to braid my hair. (Participant 2811, 17 years, Interview 1/1)

Indeed, many young women spoke about better relationships with their families, mothers in particular, since reducing their requests for money. One of the participants suggests that this is the case when she mentions that:

I avoid bothering people asking for money. People might get tired, even parents, when you keep on asking for money. She [mother] gets bored sometimes. (Participant 4959, 16 years, Interview 1/1)

Most young women discussed independence from their families, but there were some limited indications that access to the cash transfer might also increase independence from male sexual partners. Indeed, one of the young women in the qualitative cohort noted that '*this money is good. Even if you don't have a boyfriend you can buy hair extensions and body lotion'*, implying that such items were generally out of reach of those young women without boyfriends providing for them. There were, however, no young women who specifically discussed their own enhanced independence from boyfriends in the interviews.

4.3.5. The meaning of money for young women: Enhanced peer status and identity

Identity formation and peer group belonging were frequently discussed in interviews. In discussions about their future aspirations, the young women in our study almost universally discussed their desire to have better lives than their parents — symbolically signified through a career, access to their own money, having their own home and assisting their parents and community. This is exemplified by one young woman who said *'So I want to be a person that owns herself and do what I want in my time.'* Another who said that her future aspirations were to *'finish my studies and get a job, and have my own possessions'* and a further woman who noted that she would like to be a mechanical engineer as *'it is the job that I like in future and I will be able to have enough money to buy what I want.'* Even in the present moment the role of identity and finding a place within the peer group was premised on access to consumer items. This is exemplified by one participant who said that she was pleased with her involvement in the study *'because friends like superior things and I am able to buy it with the money from Swa Koteka.'* Identity and acceptance within the peer group appear to be largely determined by two main factors: cleanliness and having visible resources, signified through adequate school uniform or having pocket money to spend at school.

A number of young women discussed how peer acceptance was influenced by their personal appearance at school. Although tuition costs are free at all schools included in our project, school uniform costs remained a significant burden for families in the area. Young women also discussed their need to have cosmetics and toiletries that would ensure that they were not embarrassed by their personal hygiene at school. Two young women discussed how they had been teased and ridiculed at school because of the poor state of their clothing and how the cash transfer money had played a significant role in changing this behaviour.

So, we have a feeding scheme at school and l don't have a problem with the food we eat, but l did not have a school uniform and they were laughing at me, they were pointing fingers on me. So the money that I am getting from Swa Koteka, I bought a school uniform. It boosted my self-esteem because children at school are no longer laughing at me. (Participant 5833, 17 years, Interview 1/3)

As you can see my family background, the time I was attending school, there was no one who could buy me a t-shirt, if my shoes were damaged or skirts for schooling, I was using Swa Koteka money to buy. (Participant 5212, 19 years, Interview 1/1)

Other young women specifically discussed their personal grooming. When asked why she spends the cash transfer on cosmetics, one young woman explained *'we want to be beautiful. We want to be clean.'* Others also talked about the importance of cleanliness. In particular, an 18 year old participant sharing a one roomed home with eight other family members remarked:

I regarded this as the most important things to me because when I go to school I must be clean and smell nicely to everyone. (Participant 4728, 18 years, Interview 1/3)

A further necessity for peer group belonging was having access to cash, generally called 'pocket money' at school. From young women's discussion it seems that pocket money at school was less about hunger, than it was about conspicuous consumption. For example, one of the participants noted that girls tend to share food at school, but that it was good to be seen to spend pocket money. This is exemplified in one young woman stating *'there is no change [in our relationship] because we are able to do what we were doing in the past. Like if another learner didn't carry food at school, we share with her. If I didn't carry mine, she shares with me.'* A participant who enrolled in the study when she was 14 years old and who spoke specifically about using her cash transfer as pocket money, mentioned that the change in her circumstances engendered by receiving the cash transfer allowed her to feel more included at school.

Sometimes I went to school without pocket money…There are great changes [since participating in the study] because my friends were having money most of the time and I felt like I am left out. (Participant 8129, 15 years, Interview 1/3)

Pocket money at school appears to be an important signifier for young women of their families' ability to provide them with something extra, and they frequently discussed the shame and embarrassment of not having access to cash for snacks while at school. Students at all schools in the study area are eligible for a government school nutrition programme that provides a cooked meal each day. There are, however, also informal traders who gather at the school gates selling snacks and sweets, and it is the ability to access these items that appears to hold significance for the participants in our study.

4.4. Discussion

This study is one of the first to document the spending patterns of African young women directly receiving cash transfers as part of HIV prevention efforts. Quantitative and qualitative data from the study show that young women were largely responsible for decisions about accessing, spending and saving the cash transfer. This is similar to findings from Malawi where a similar proportion (two-thirds) of young women reported controlling decisions about spending their portion of both conditional and unconditional cash transfers (222), but is counter to general perspectives on income in poor families, in which it is generally accepted that income is pooled within households (223). We specifically asked young women about negative experiences associated with receipt of the cash transfer, but these were almost universally not reported. We were particularly interested in this issue given that Baird, de Hoop and Özler speculated that increased psychological distress in conditional cash transfer recipients in Malawi was related to perceived pressure of being an income earner in their household (224). It is possible that higher socio-economic standards more generally in South Africa compared to Malawi, and the fact that young women in our study did not seem to be expected to use their cash transfer for household expenditure, contributed to this difference - this despite the fact that at baseline in our study, over 80% of young women reported that their family received the CSG, while approximately one-third reported food insecurity (217), indicating a high level of relative poverty for South Africa. Caregivers were most likely to report spending their portion of the cash transfer on household groceries and other household items, possibly addressing family shortfall without having to resort to using the young women's portion of the cash transfer. Despite the focus of the intervention on HIV prevention, almost no participants reported spending the cash transfer on condoms. This is not completely surprising as the communities in which we worked have seven local clinics and three health centres where free condoms are available and limited geographical access to sexual and reproductive health services where payment is required. Young women overwhelmingly reported spending their portion of the cash transfer on items of 'symbolic capital' — the clothes and accruements of adolescent life most likely to evoke peer acceptance and belonging (225).

The value of cash transfers as a vehicle for young women's independence and autonomy should not be underestimated in this environment. Research with adolescents in other contexts has shown that the source of adolescent income impacts the degree of independence it offers (212). In Palan et al.'s study of French and American adolescents (212), income earned by adolescents

was more likely to engender independence than income provided by the family. In our setting, opportunities for adolescents to access their own money are limited: poverty prevents many families from being able to make regular contributions to their adolescent children, and community poverty and limited infrastructure mean that employment opportunities are very limited. The cash transfers therefore filled an important gap in income potential for adolescent girls living in this community, and were particularly perceived to engender independence.

The very low level of negative outcomes reported qualitatively from women receiving the cash transfer in our study is in contradiction to evidence from other African countries. A study in Uganda which randomised adolescent women to two different treatment groups (savings account only vs savings account and safe space group meetings with education on reproductive health and financial planning) found that women who received the full intervention were less likely to report experiences of verbal harassment than those receiving just the financial component of the intervention (226). The authors concluded that interventions with adolescent women should focus on building both financial and social capital. The SHAZ! microcredit programme in Zimbabwe also reported negative consequences for young female recipients, although experiences of harassment and fear of theft were particularly related to small business ownership, the goal of the intervention microloans, rather than having access to cash (40).

Although there were concerns expressed during community and service provider meetings about the study in the MRC/Wits-Agincourt HDSS, and among stakeholders working in social protection globally about the consequences of allowing adolescent women access to cash, our findings suggest very little spending on items such as cigarettes and alcohol. These findings are similar to evidence from a number of other cash transfer programmes for adolescents in other regions of the world. *Yo Puedo* ('I can' in Spanish), a cash transfer programme for adolescents aged 16-21 years in San Francisco, similarly found no evidence that programme participants used their cash payments for illicit or high-risk behaviours. Indeed, despite their intervention not specifically focusing on substance use, they noted that youth receiving cash were less likely to report spending on alcohol and marijuana (227). The Mexican *Oportunidades* ('Opportunities' in Spanish) programme for male and female adolescents also did not note negative consequences; in fact, the *Oportunidades* programme noted a reduction in smoking and alcohol consumption associated with access to social grants (228). Our study adds an African perspective to this issue.

Although our cash transfer was premised on assisting families with the costs of education, the reality in South Africa and many sub-Saharan African countries is that (primary) education is free (including secondary in South Africa) and therefore additional money in households can be used to symbolically distance adolescents from poverty and enhance their standing in peer networks. This was certainly the case in our study where young women mentioned that being able to buy new school uniforms and access to 'pocket money' allowed them to feel a greater sense of belonging with their peers. An intervention in Zimbabwe noted similar findings. In this study, the impacts of a community-led cash transfer intervention were viewed as increasing school attendance, but also allowing school-going children to 'look smart' (229).

Largely driven by concerns about the role of transactional sex in increasing young sub-Saharan African women's HIV risk, there is an emerging body of literature concerned with what has been called the 'commodities of modernity' (210). In initial discussions of adolescent transactional sex, the focus was on the role of poverty and young women's desperate attempts to access food and shelter. Increasingly though, has been the recognition that *perception* of need is significant and that young women's needs have increasingly come to include 'commodities that are symbolic of sophistication and a lifestyle commonly perceived as modern' (210, p.224), also sometimes called 'symbol capital' (230). A focus on symbol capital has been recognised in post-apartheid changes to South Africa, in which worth is increasingly measured through consumerism and self-esteem determined by peer-pressure to achieve material goods (223). Adolescents have very limited access to real power; however, consumerism allows for access to status power within the peer group and is therefore, a significant motivator in developing adolescent identity (211). It has been noted that "All teenagers, including those living in low-income environments, have been affected by the cultural focus on wealth, within which money equals power and consumption marks independence and defines the self" (211, p.232). Certainly, our results show that young women in this community are acutely aware of the symbolic value of their appearance to status in the peer network and perceived social attributes. The cash transfer represents a significant resource for young women to participate in a 'modern' lifestyle in the context of limited family income and resources.

Deutsch and Theodorou (211) also note that adolescents tend to minimise the economic gap by presenting an image of higher socio-economic status than they actually have; one which is not tempered by their actual family socio-economic status. Certainly, responses to questions about

their future aspirations suggest that our participants' *perception* of their need for items beyond their parents' economic means is key to development of their autonomy and social standing. The fact that the majority of our participants chose to spend their cash transfer on toiletries and cosmetics is in keeping with previous researchers' findings that young women "engage in consumptive acts which solidify and reinforce their present engendered identities as feminine while constructing future aspirations aimed at securing individual wellbeing as financially independent adults" (211, p. 245). This was particularly true for older participants in our study, among whom a greater proportion reported spending the cash transfer on items to enhance their personal appearance. Perhaps this is a reflection of the relatively limited opportunities for independence that exist for young women once they leave school in this community.

4.5. Conclusions

The findings from this study show that providing cash transfers to young women living in low socio-economic communities was largely associated with positive outcomes. This is despite the lack of impact on the intended outcomes of HIV infection and pregnancy reduction. Access to money, independent of their parents, is a key developmental issue for adolescents both in terms of their emerging autonomy and developing identity. While these issues may not be the key rationale for social protection programmes, our findings illustrate additional unplanned benefits of such programmes for adolescent women. These findings are significant at a time when increasing pressure is being felt to address structural drivers of HIV risk, and for female adolescents in particular. The results of this study show that adolescents themselves can be the recipients of social grants without the concerns about negative outcomes related to their vulnerable status as young people being realised.

CHAPTER 5: MEN'S PERSPECTIVES ON THE IMPACT OF FEMALE-DIRECTED CASH TRANSFERS ON GENDER RELATIONS: FINDINGS FROM THE HPTN 068 QUALITATIVE STUDY (PAPER 3)

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5.1. Introduction

High incidence of HIV among adolescent girls and young women (AGYW) in eastern and southern Africa remains a critical public health issue, with AGYW representing two out of three new infections in 2016 (231). HIV incidence in this region is driven in part by social and economic circumstances (232) and gender inequality, including intimate partner violence (18). Recognition that structural factors influence the risk of HIV infection and act as barriers to accessing HIV services has stimulated interest in the potential role of cash transfers (CTs) in HIV prevention and treatment (45, 179, 233, 234). A review of 16 CT interventions that aimed to reduce risky sexual behaviour with a view to supporting HIV prevention in nine countries showed promising results, especially when CT were targeted at young women (45). Of three randomised controlled trials with HIV endpoints reviewed, one in Malawi (n=1289) found that unconditional and conditional CTs reduced pregnancy and early marriage among AGYW (36). Another trial (HPTN 068) in South Africa found that AGYW receiving CTs with school attendance as a condition were less likely to report intimate partner violence (IPV) and risky sexual behaviour, compared to their counterparts in the control arm; although, the CT did not reduce HIV incidence (235). Similarly, another trial also in South Africa (CAPRISA 007) found that cash incentives conditional on 80% participation in a life skills programme, taking an HIV test, passing academic tests, or submitting a report on their community project had no effect on HIV incidence, but did reduce HSV-2 incidence (185).

While the pathways through which CTs influence risky sexual behaviour, IPV, and ultimately HIV remain unclear, several hypotheses have emerged. One assumption, grounded in behavioural economics theory, is that CTs could reduce risky sexual behaviour through improving individuals' socio-economic status, their access to better-quality food and education (236), facilitating access to healthier behavioural choices (237), and thereby increasing individuals' self-efficacy and societal power and standing (91). Evidence has also shown that CT programmes can reduce violence by alleviating day-to-day stress and conflict among couples, enhancing the psychosocial wellbeing of household members and the confidence and decision-making abilities of the women in those households (83). A sub-study conducted recently among AGYW participating in HPTN 068, showed that conditional cash transfers (CCT) delayed coital debut and reducing the recipients' number of sexual partners thereby giving them greater agency over partner choice (238).

Understanding the mechanisms by which CTs influence HIV-related outcomes is essential for refinement of HIV prevention policies (239). One way to understand these pathways is through understanding the way in which CTs change social relations, particularly male-female relationships (234). HIV is an inherently gendered disease in eastern and southern Africa, not only because more women than men are infected, but also because socially constructed gender norms work to increase women's HIV-infection risk (240-242). The provision of CTs to young women alone in such a context adds another dimension to existing complex social relations where patriarchal values are entrenched, gender inequality is the norm, and violence against women and girls is pervasive (196). It raises concerns about complicating young women's relationships with their male partners or possibly even setting them up for more violence.

In our attempt to understand how CTs influence social relations in the context of a trial among young women in South Africa, we used qualitative data collected during the trial to explore men's perceptions of the impact of CTs on male-female relationships, both intimate and platonic, peer relationships.

5.2. Methods

5.2.1. Study design

We collected qualitative data as part of an ancillary study nested within the HIV Prevention Trials Network (HPTN 068) or Swa Koteka trial, which was conducted in rural Agincourt,

South Africa. HPTN 068 was a phase III randomised controlled trial assessing the effect of CCT on HIV incidence among young South African women (n = 2448) aged 13–20 years. The trial provided monthly CTs to young women (R100 ≈ USD 10) and their parents/guardians (R200 ≈ USD 20), conditional on 80% school attendance. Young women were eligible to receive the cash each month in which they met the attendance criteria as long as they were eligible to attend school and up to a maximum of 3 years. The funds were deposited directly into bank accounts for the young woman and parent or guardian separately. At baseline, the participants completed an Audio Computer-Assisted Self-Interview (ACASI), before HIV test counselling, HIV and herpes simplex virus (HSV)-2 testing, and after HIV post-test counselling. Participants were seen annually at 12, 24, and 36 months until the study completion date or their planned high-school completion date, whichever came first. Each study visit included the ACASI, HIV and HSV-2 testing (if negative at the previous visit), and HIV pre-test and post-test counselling (235). The young women in the control arm of the trial underwent similar procedures except receipt of CCTs. The study was approved by the Human Research Ethics Committee of the University of the Witwatersrand, the Institutional Review Boards of the University of North Carolina and the Provincial Department of Basic Education in Mpumalanga Province.

5.2.2. Study setting

Qualitative data were collected between September 2012 and September 2015 in rural Agincourt, South Africa. Agincourt is a sub-district of Bushbuckridge, Mpumalanga province, situated near South Africa's border with Mozambique. This location is characterised by poverty, unemployment, poor infrastructure and temporary migration to seek employment opportunities (160). HIV prevalence in this area, among those 15 years and older, is estimated at 17.2% (161).

5.2.3. Participant selection and data collection

We purposively selected two groups of men (partners and peers) to participate in focus group discussions (FGDs) and in-depth interviews (IDI). Written assent was obtained from men younger than 18 years, with written informed consent obtained from their parents or guardians at their homes. Men aged 18 years and older provided written informed consent. For both IDIs and FGDs, assent and consent forms were in English and Xitsonga, the dominant language spoken in Agincourt.

We recruited male peers (n = 72) of girls receiving the CT in Swa Koteka to participate in FGDs. To be eligible for participation, the peers had to be male, enrolled in the same secondary schools as the female CT recipients, in grades 8–12, and willing to provide consent/assent. We collected boys' class registers from 22 participating secondary schools. Class records were captured in an Excel spreadsheet, and potential study participants were randomly selected. We visited schools to contact these potential participants, informed them about the study and invited them to participate in the FGDs. None of the participants approached declined participation.

Over a period of three years, a total of 12 FGDs were held with male peers, four per year. FGDs lasted approximately 60 minutes and comprised of 10-11 participants. Each year different young men participated in the group discussions. The themes covered included: 1) general perceptions of the CT, 2) the impact of CTs on the relationships between young men and women, and 3) the perceived impact of CTs on school attendance. The FGDs were conducted in schools (during weekends) within the villages where study participants resided. These discussions were facilitated by trained female fieldworkers; a note-taker was available to take notes during the discussions.

In addition to these FGDs, intimate partners (n = 20) of young women who had received CTs were invited to take part in an IDI. Young women who indicated having an intimate partner at their last follow-up survey were contacted by telephone. They were asked if they were willing to give their main partner a written invitation to participate in the IDIs. Interested partners then contacted the research team by sending a call-back message via a short message service (SMS); thereafter, the team called to schedule interviews.

A semi-structured interview guide was used for IDIs with intimate partners. The guide consisted of questions on 1) demographic information, 2) perceptions of the CT trial, and 3) the impact of the CT trial. The last set of issues focused on cash issues, power and decision-making in the relationship, communication, and decision-making about condom use and HIV testing. The IDIs were carried out by one of the authors (MNK), with the assistance of a trained female research assistant. The interviews took place at the participants' homes or workplaces and lasted between 45 and 60 minutes.

Refreshments were served after completion of the FGDs and IDIs. All FGDs and most IDIs were conducted in Xitsonga; the remainder were conducted in English, as preferred by

participants. Discussions and interviews were audio-recorded, transcribed verbatim, and translated into English, where necessary. The fieldworkers transcribed and translated the FGD and IDI data. For accuracy and quality checks, all transcripts were reviewed, and 10% were checked against the audio records. Transcripts were uploaded into Atlas-ti version 7.0 for analysis.

5.2.4. Data analysis

A thematic content analysis approach was used to analyse the data (243). The codebook was largely developed on the basis of the topic guides of the FGDs and IDI. However, some codes emerged inductively from the data. Two coders (MNK and JH) independently coded the transcripts, and 10% of the transcripts were double-coded to ensure inter-coder reliability; inconsistencies were discussed until the coders agreed on interpretation (244). The codebook was updated as the themes emerged from the data. We extracted and analysed code reports on themes relating to the perceived impact of the CT programme on the relationships of female CT recipients with their intimate partners and male peers. Memos were used to summarise findings, and illustrative quotes were extracted from the transcripts, where relevant.

5.3. Findings

5.3.1. Participant overview

Our participants included male intimate partners (n = 20) and peers (n = 72). Intimate partners were aged 20–32 years; most of them had completed the 12th grade, and over half were employed and working outside the study villages. Most intimate partners had been in relationships with the young women for 2-3 years, and had fathered a child with them. These births had occurred after enrolment in the study as women were excluded from enrolment if pregnant at the time of recruitment, but not during follow-up. Only one participant was married to a woman receiving the CT. Nine partners reported having casual sexual partners outside of the main, or serious, relationship with women receiving the CT.

In contrast, the peers were slightly younger than the intimate partners: they were school-going boys aged 13–21 years and in grade 8–12. While our study design was based on a strict conceptual division between intimate partners and peers, in practice the lines between these two groups of men were somewhat blurred. Relationships between young women and their male peers were mostly platonic, but at times they became sexual in nature, as the peers often

tried to attract or charm the girls into sexual relations by sharing small amounts of cash (whenever they had it) with them, or by buying them cell phone airtime and snacks at school.

In trying to understand men's perspectives of CTs given AGYW, we discuss four themes solicited from the data; men's perceptions of female-directed CTs; perceived impact of CTs on intimate relationships; relationships with school-going male peers; and men's perceptions of the CTs programme beyond receipt of CTs.

5.3.2. Men's perceptions of cash transfers given to young women

Both male peers and intimate partners considered receipt of CTs as beneficial for young women participating in a CT project. Peers perceived young women as having a greater need for cash, owing to their low-income family backgrounds, peer pressure and the need for enhanced social status. Consequently, they were said to engage in 'bad things', which one peer described as 'dating older men because of money'. He continued: 'they [girls] do not even stay at home because of money, sometimes they have sex with people who are infected with diseases because of money.' Men were aware of the role that access to CTs might play in reducing young women's vulnerability to risky sexual behaviours, for example, by reducing the need for multiple sexual partners, and dependence on transactional sex and dating of older men for financial benefits. In a FGD, one boy felt this impact was already evident:

'I think they [CTs] have helped because some involve themselves in relationships with multiple boyfriends just to get money, and since they started getting money [from Swa Koteka], they have fewer boyfriends.' (FGD 02)

Participants reported that receipt of CTs enabled young women to meet their basic needs such as buying food and cosmetics and having pocket money for daily use at school. Despite these positive outcomes attributed to the CTs given to women, peers mentioned that CTs could elicit unintended consequences. Sometimes the girls had to travel to access the automated teller machines (ATMs) or post office; according to the boys this led to instances where recipients missed school to collect their money. They also mentioned that some young women used CTs to buy alcohol or to visit their boyfriends. Consequently, a few peers suggested that the programme should have provided food or school uniform to young women instead of cash.

5.3.3. The impact of cash transfers on intimate relationships

In several interviews, partners described how young women receiving CTs had been empowered to make a financial contribution in their intimate relationships. This took the form of lending or sharing cash with partners, buying them gifts, and paying for transport to visit partners who were staying outside the study area.

‘I remember one time I was at home, and I had not received my salary; she gave me her card and told me to buy toiletries. When I paid her back, she refused and said no I must not pay her back. She also used it [cash] for transport sometimes. I remember in December, she took transport and came here [his workplace] and she said she used money from Wits [CTs]’ (Partner 008, 23 years, employed).

In some instances, the young women paid for their partners’ basic needs. Many partners, however, were uncertain about whether it was the cash from the CTs that was being used for these activities, or money from other sources.

‘Khensani (girlfriend) would sometimes pass by and find that there is no food; she would buy 10 kg of maize meal, chicken feet or something to eat. Things that I did not have like Colgate [toothpaste], soap, and so forth ... She was able to cover some things in the house. She was not staying with me; she was just passing by, but she brought stuff, and it must have cost money, but I do not know from where’ (Partner 004, 26 years, employed).

For partners who stated that the young women shared the CTs with them, the women’s access to additional resources seemingly did not absolve the men of their gendered obligation to provide financially for their partners. These men reported that they continued to give the young women monthly pocket money or buy them gifts. One partner explained the local expectation that ‘men are providers and should not depend on women financially; rather, it should be women who rely on men.’ So while the CTs might have lessened the burden of responsibility on men to care for their female sexual partners, they did not completely erase men’s perceived masculine role as providers.

‘I felt great because instead of me giving her money … okay, I would give, but sometimes you find that I did not have money and she would say, “do not worry; this month I will do this and that with the R100; you do not need to worry yourself and all that”. But if I have … I did not

take advantage and resolve that I would not give her [money]; I gave her' (Partner 005, 31 years, employed).

Decisions about how to use the cash were made entirely by the women receiving the CT. Most partners displayed no interest in details of the conditions and the amount and expenditure of the CTs, stating that they did not want the women to think that they were 'after their money.' Partners believed that the money was for the women to use at their own discretion. 'We never spoke about the money; I did not want to be involved.' (Partner 002, 26 years, employed)

Although most men were supportive of women receiving the cash, they feared that women's access to cash might somehow change the power dynamics of intimate relationships providing women with power and control that they otherwise would not be able to exert. Partner 004 remarked: 'Sometimes if a wife has money, she becomes superior and you inferior.' Likewise, Partner 002 stated: 'In other relationships, it happens…Let us say that she is the one who provides the man with money; sometimes she may cheat because she does not beg him [for money], he will beg her.' However, intimate partners reported that in practice, the power dynamics in their relationship with cash recipients had not actually changed. It was a surprise to many men interviewed that despite their partners' access to money, the relationship had continued to embody traditional gender roles and power dynamics:

'If I told her [to do] something, she would not retaliate; like, if I said "do this and [do] that," she would not say "I can't." When a woman has money, and a man does not, life becomes difficult because a man would not be able have rules or give his woman or wife instructions because she controls everything. Nkateko did not change' (Partner 004, 26 years, employed).

While some men portrayed their female partners as different from 'other women' (since the money apparently had not changed them), others noted that the money was simply too little to trigger change, especially in relationships where men were employed.

'When a woman has money she likes to control, it is normal. Maybe she did not want to control because it was just R100; she could not control [because] I used to carry more money. So maybe that didn't give her a chance' (Partner 006, 32 years, unemployed).

This participant hinted further that it was the size of the CT in relation to men's income levels that made all the difference. He said,

‘If she has more money and I do not, it would be a problem. She will not allow you to tell her anything if you are not providing. She will provide and want to control, and if she wants to control me, then there will be a problem.’

The balance of power, in other words, was maintained when the men continued to earn more than their female partners.

5.3.4. How cash transfers impact on young women’s relationships with school-going boys

In contrast, male peers had a different outlook to intimate partners when it came to the symbolism and significance of money. For them, money represented an important source of power in both platonic and potentially sexual relationships. They debated among themselves who had more power or control — men or women — once women had started to receive money from the CT intervention. The peers identified this cash as a (new) source of power for women because it lessened young women’s dependency on men in general. Also, many of the peers were still trying to attract or charm these girls into sexual relationships and felt that their power to persuade women was reduced when women had their own access to resources.

The cash also meant that the boys had less control over young women, as this young man explained:

‘Things have changed; before the study, it was not a problem if you can go and pick a girl and take her to your house because she knows that in the morning I will give her R20 to buy bread, but nowadays they want nothing to do with us because they are getting money, they are buying for themselves’ (FGD 05).

As a result of these changes, they felt that young women were becoming equal to men, with some even stating that women were becoming more ‘powerful’.

‘Before Swa Koteka [CT trial], boys had power because most of the time — as I have mentioned that boys like to work so that they can get money — they always have money, because they work for themselves. So, when Swa Koteka came, these girls no longer depended on boys because they know that at month-end, they get a little amount’ (FGD 08).

‘Before this research, boys had more power than girls because boys always have money … because if someone asks one to make bricks … one would get money. But now we are all equal because we are all getting money’ (FGD 05).

Male peers expressed ambivalence about how the CTs had influenced their own relationships with young women. Some young men seemed to be happy with the ‘equality’ between men and women that had been induced by CTs. They considered the intervention as beneficial to young women who needed cash, thereby enabling them to be independent. However, some male peers did not appreciate the change, instead preferring a system in which they derived a sense of control and self-worth from having young women financially dependent on them:

‘I think that before, it was good because when a person depends on you, you can be proud of yourself and being able to control your girlfriend is nice…’ (FGD 08).

There were also feelings of rejection and inferiority among some peers. Participants stated that after commencement of the young women’s participation in the programme, they demonstrated a lack of trust towards young men, no longer mingling with their male peers, with some even ending their relationships with them, as illustrated in this participant’s remark: ‘They dump us because they now have their money' (FGD 05). This was echoed by FGD 01 participants who thought their relationships with young women had deteriorated because of the receipt of CTs:

‘As my brother [referring to another participant in the FGD] said, this money enables them to have long-distance relationships. Like maybe when she goes to collect her money, and then goes to Mkhuhlu and meets another boyfriend there. So, even if we do talk to them, they will reject us because we are now nothing to them’ (FGD 01).

The above extract suggests that CTs were seen to give young women a greater say in partnership selection — and possibly also access to a larger pool of partners from whom to choose.

5.3.5. Beyond the Cash: views on the conditions and desired outcomes of the trial

Discussions with young men about the CT trial inevitably prompted remarks about the goals of the trial, namely, keeping girls in school and reducing HIV infections. Many participants

felt that participation in the CT trial would positively shape the young women's futures, since the CT encouraged — indeed, compelled — girls to attend school, lest they lose their payment.

'It [CT] is good because it makes learners — those who get the money — attend school regularly because they know that if they do not go to school regularly, they will not get the money. So, it helped improve their school attendance' (FGD 08).

While participants across FGDs acknowledged that the conditionality improved school attendance, a small number of young men argued that it could pressurise young women to attend school even when it was not ideal to do so — for example, when ill.

While HIV testing was not a requirement for CT receipt, it was part of the trial procedures and was therefore observed by participants to be a compulsory part of the study. The routine HIV counselling and testing provided during annual study visits was regarded by both partners and peers to be a key benefit of the young women's participation in the trial. When men were asked to mention 'good' elements of the study, a common remark was that: 'The good thing about Swa Koteka is that they are teaching the girls about HIV; they are also testing them for HIV' (FGD 08).

An unexpected finding was that the young women's participation in the study afforded their intimate partners an opportunity to test and know their HIV status, and that this turned out to be highly valued by men. Some partners reported that it is often difficult for men to go for an HIV test when they feel healthy. However, since the young women participating in Swa Koteka were aware of their own HIV status, men reported feeling pressure from their partners to also seek HIV testing and counselling to learn what *their* status was.

'As men, we hate testing [for HIV] because we are … the majority of men do not like testing. If I had not met her, I would have last tested a long time ago; so, it [CT trial] did have an influence' (Partner 016, 21 years, unemployed).

These sentiments were echoed in FGD 04, where a young man stated that CT programmes should target men because it is difficult for them to visit the clinic and undergo HIV tests. They reported financial constraints and fear of HIV positive results as barriers to testing.

'It is too difficult to tell your parents that you need money to go to the clinic to do an HIV test … if you test [HIV] positive you will be afraid to tell them' (FGD 04).

‘We are scared to go to the clinics and do the test because once you find out you are positive, you will be stressed that you are going to die’ (FGD 04).

Some partners were only in favour of the inaccurate notion of ‘proxy testing’, in which the young women’s HIV status is presumed to be a reflection of their own. A 32 year old partner (IP 006) stated that by testing his wife, we had also tested him indirectly because ‘her blood is my blood’:

‘When she tests, she tests on my behalf; it also helps me know what is happening. She and I are partners. So, it is obvious; we are not protecting ourselves; so, if she is [HIV] positive, it means that I am also positive; if she is [HIV] negative, it means that I am also negative. So, that is how I know my status, through her.’

Knowing or presuming to know each other’s HIV status translated into trust in intimate relationships and this was perceived by couples as justification for cessation of condom use. As this young man explained: ‘[We stopped using condoms] upon knowing that we had both tested; she told me that she tests for HIV and I showed her my results; so, from then on, I trusted her’ (Partner 007, 25 years, employed).

Improved communication about HIV and sex, as well as young women’s involvement in sexual decision-making, was widely attributed to their participation in the trial. Sexual partners reported that the young women had become comfortable talking about sex and HIV and had started to engage more with condom use decisions — something they had not done before. Partners felt that the young women’s involvement in the study distinguished them from other women who were not part of the study and felt that they could trust the former because they had recently tested for HIV. Peers noted that HIV knowledge and awareness of one’s HIV status made the girls cautious about engaging in risky behaviours, such as having multiple partners, engaging in unprotected sex and dating older men.

While the intervention overall was generally regarded as acceptable and supported by men, across the various FGDs, male peers raised concerns about the exclusion of boys from the CT programme. They felt that the programme favoured females over males, but that knowing one’s HIV status was important for everyone, and that men were also at risk of contracting HIV.

‘It would be good if this programme could be rolled out to boys because boys also want this money [they laughed]. We also want to be tested, and we do not know our statuses, and when

I think of going for a blood test and not getting anything in return, it is hard; but, if I know that I have or will get R100, I will also run to do the test' (FGD 01).

Similar to intimate partners, peers noted that many young men did not know their HIV status, and argued that inclusion in such interventions would also be beneficial for men. They bolstered their arguments regarding the unfair nature of the programme by reflecting on implications for the girls in the control arm, noting that their exclusion was also unfair, although overall the intervention was well received in the community.

5.4. Discussion

In our attempt to understand how CTs influence social relations, we used FGDs and IDIs to explore men's perceptions of CTs and their impact on male-female relationships, during a female-directed CT trial conditioned on school attendance and aimed at HIV prevention. We found that, overall, both intimate partners and male peers were supportive of the CT programme targeting young women, in spite of concerns that the money might diminish their power and status in relationships with women. The younger, peer-aged men felt this concern more acutely than the actual partners of young women who were older and more likely to be working and have a degree of financial power.

Our findings illustrate that — from the perspective of intimate partners — receipt of CTs generally empowered young women to make a financial contribution in their intimate relationships. However, the girls' ability to make such contributions did not challenge their male partners' masculine role as providers, nor did it appear to change their financial power. These findings are similar to studies among adult women that have shown that economic empowerment through CTs did not necessarily translate to change in gender relations in their households (7, 196). However, in our study, data from partners suggest that the gendered roles remained unchanged because the amount of the CTs received by young women was too little. They seemed to believe that if women received the same or greater amount of cash than they did (as 'providers' within the relationship), this could significantly change the power balance in women's favour, which would be unacceptable to their partners.

While the status quo appeared to have been maintained in young women's intimate relationships, there was more evidence that CTs were perceived to have altered power dynamics in their relationships with male peers. These men reported that once young women had access to their own money they had a measure of independence from them. Effectively,

the CTs received by the girls allowed them to buy things that would have otherwise been provided by their male friends, such as airtime, snacks, and lunch at school. This was interpreted by male peers as leading to a state of greater equality between girls and boys, which most peers found undesirable as it meant that girls no longer needed their (minimal) resources, making them less attractive to the girls. Some peers even interpreted this as the reason why their attempts to propose love to girls had been unsuccessful. This finding echoes much of the literature on contemporary masculinity in South Africa, which has cautioned that some men may view women's perceived gains as challenging to their domination over women, while other men may well embrace these changes (245-247). In Dworkin et al.'s study conducted in six provinces in South Africa, men reported that women's ability to secure their own material belongings made it difficult for men to attract women and assert control over them (248). This sentiment may explain a portion of the male peers' intimidation by young women accessing CTs in our study. As these young men were school-going, they had fewer opportunities to earn money than the older partners of the women had, and consequently, ZAR 100 became enough to pose a threat to their normative role of 'male provider'.

A noteworthy finding of this study is the observation that the HIV testing requirements of the study appeared to have inadvertently improved communication about sex and HIV in intimate relationships, with some women even actively encouraging their partners to do an HIV test. In this study, it appears that the young women's ability to engage in decisions about sex and HIV testing was accepted by partners and did not create conflict. This is important, since we know that communication is one of the strongest and most consistent predictors of lower risk behaviours (249), and inequitable gender norms and power dynamics often hamper communication in intimate relationships (250). These findings suggest that linking CTs to HIV testing and other prevention services could be a real benefit in future programmes. HIV testing is valuable not only for identifying those who require treatment; it is also an important entry point for emerging biomedical HIV prevention programmes targeting AGYW. CTs could potentially be one way to accelerate uptake of HIV testing and counselling (HCT) in this population. The effectiveness of linking cash incentives to STI/ HIV testing is demonstrated in a systematic review of studies conducted in Africa and the United States, which showed that incentives increased the uptake of HIV/STI testing (251, 252). As in most behaviour change interventions, however, there could be unintended consequences: in a study in Malawi, cash incentives linked to negative HIV test results actually increased risk behaviour in men (253). Indeed, our own findings about male partners remaining content with 'proxy HIV testing'

suggests that there is still some way to go in developing interventions to successfully challenge HIV misinformation among young men in this setting.

As noted here, as well as by some studies in sub-Saharan Africa (166), women's receipt and control of CTs gives them autonomy to spend their own cash, but this does not necessarily change inequitable gender relations with intimate partners, since these are often based on culturally rooted gender norms. The shift that *did* occur, instead, was restricted to the power dynamics within platonic (and potentially sexual) relationships between young women and school-going younger men. There is clearly the potential for conflict, although this outcome was not observed in the HPTN 068 trial. Despite our concerns about violence within young women's relationships with their intimate partners, no such violence was reported in the trial (235). Pettifor et al. (235) found that CCTs led to fewer experiences of physical violence among adolescent recipients; also, aside from the minor teasing from peers — which happened equally in both arms — no major social harms were observed. While the purpose of the CT intervention in the Swa Koteka trial was not explicitly to alter gender norms, there is growing evidence that this is indeed what CTs for empowerment are able to do (254) — most likely because cash becomes the hook to engage recipients in a broader set of discussions. In our study, the mechanism for empowerment seems to have been greater autonomy for young women, which in turn facilitated conversations about HIV.

This study was not without limitations. Most partners reported that they were not interested in the cash, but rather in HIV testing and the knowledge they gained from the programme. While focusing on the male peers and intimate partners of recipients was necessary to limit the scope of this research, views from the cash beneficiaries and partners of non-recipients may have provided additional insights to understand whether it was the cash or the study outcomes such as HIV testing that influenced the reported changed behaviours. Views from control arm partners may have also shed some light on whether reported impacts were different or the same for recipients and non-recipients. Given that recruitment strategies for partners of young women receiving CTs were designed to protect young women who may not have disclosed their study participation to partners, this may have introduced some bias in the type of partners recruited to the study. It is possible that there was over-selection of partners who are more gender egalitarian and less likely to be perpetrators of IPV. Finally, FGDs and IDIs were facilitated by a female fieldworker/researcher, which may have influenced the responses men

gave — particularly in group settings, where the presence of a woman may have elicited responses engineered to boost one's reputation vis-à-vis other male peers.

5.5. Conclusion

Overall, our study found that intimate partners and male peers were broadly supportive of CTs directed to young women. Notwithstanding some signs of dissatisfaction with male peers' apparently diminished control over women, the Swa Koteka trial showed how gender attitudes are already entrenched at an early age — but also that there is a population of young people that is ready to embrace more equitable gender relations. CTs provide AGYW with a measure of autonomy and power to contribute in their gendered relationships, albeit in limited ways. However, there is potential for CTs to have a negative impact on male-female relationships if the cash received by AGYW is equal to or greater than the income earned by their male counterparts or sexual partners. These findings strengthen existing evidence that CTs given to women have a clear potential to positively influence the power dynamics within male-female relationships, but that when CTs are seen to threaten fundamental principles underlying gendered power (such as those relating to income-earning potential), unintended negative consequences — in the form of a male 'backlash' — may be likely. Future CT interventions for AGYW need to develop innovative ways to pre-empt such consequences, and not allow this to detract from the overall aim of reducing AGYWs' vulnerability to HIV.

CHAPTER 6: THE IMPACT OF CONDITIONAL CASH TRANSFERS FOR HIV PREVENTION ON PEER RELATIONSHIPS: PERSPECTIVES FROM FEMALE RECIPIENTS AND NON-RECIPIENTS IN HPTN 068 (PAPER 4)

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6.1. Introduction

In low- and middle-income countries, cash transfers (CTs) have been paid to vulnerable households to provide a social safety net to cover the costs of basic necessities such as food, health care or education. Cash payments have been successful in reducing poverty and improving health and social outcomes (255, 256). CTs have generally been paid to female caregivers based on the evidence that cash controlled by women is likely to benefit the entire household, particularly children (257). Evaluations of these programmes have linked CTs to increased child immunisation (258) and school enrolment and attendance (259, 260). Recently, in sub-Saharan Africa, trials assessing CTs for HIV prevention have experimented giving the cash directly to adolescents (36, 107, 261). The trials have either paid CTs solely to the adolescent (261) or paid a portion to the adolescent and a portion to the parent/ guardian (36, 107).

Studies examining the effect of CTs on HIV outcomes have documented mixed results. Most studies show that there are benefits to both conditional and unconditional CTs for adolescent girls and young women (AGYW). The Zomba trial in Malawi paid AGYW up to USD 5 and their parents up to USD 10 monthly to assess the effect of CTs on HIV prevalence among AGYW (36). Findings showed that AGYW who received CTs had lower HIV prevalence. They were less likely to engage in risky sexual behaviour and less prone to teenage pregnancy and

early marriage (36). In South Africa, HPTN 068, a randomised controlled trial (RCT) assessing the effect of a CT conditional on school attendance on HIV incidence among AGYW, paid USD 10 to AGYW and USD 20 monthly to their caregivers. In this study, adolescent recipients were less likely to report risky sexual behaviour and intimate partner violence than were non-recipients. However, no impact was found on HIV incidence (107). Qualitative studies forming part of these trials show that CT payment to adolescents increased their autonomy, peer status, self-esteem, and decision-making abilities (166, 262).

Evaluation studies suggest that the payment of CTs to individuals in vulnerable households also has a broader unintended impact on social relationships (67, 101, 263). Studies carried out on national social grant programmes in Eastern and Southern Africa have shown that in addition to reducing poverty, the grants also strengthened social networks. The social grants promoted participation in community events and social cohesion (63, 263-265). In Kenya, the CT provision to women caregivers encouraged sharing, borrowing, eating together, and an increased ability to partake in community events (100). However, these studies also showed that targeting specific households and excluding others can have divisive consequences in close-knit, poverty-stricken communities (54, 125). Such targeting potentially leads to tension, jealousy, and conflict (67, 126). Even the eligibility criteria used in CT programmes to identify recipients could threaten social ties (266). Targeting specific individuals or households and excluding others may induce stigma and resentment between recipients and non-recipients (67, 98, 126, 267).

Adolescence is a unique developmental stage in which peer social relationships play a significant role in one's development and wellbeing (268). A sense of belonging is essential among adolescents, demonstrated by their heightened need for acceptance and social inclusion, and the desire to identify with and participate in events with their peers (269). Adolescents spend time together, discussing issues such as sex, alcohol, fashion, and hairstyles. The behaviour and values of individual adolescents tend to be heavily influenced by peer group norms. A significant part of peer norms is looking and dressing well (270).

Consequently, self-presentation and physical appearance are often essential to adolescents (270). Peers may influence one another's behaviours through a variety of mechanisms, including persuasion, information exchange, modelling, and social interactions (271). In this way, peers contribute to adolescents' wellbeing and perception of themselves and have the potential to become a primary source of support (272, 273).

This background raises several questions about cash payments directed to adolescents. What does the provision of CCTs to a sub-group of adolescents mean for peer relations within the larger group? Specifically, what are the unplanned social consequences of cash payments to AGYW on their peer relationships? Answering these questions is critical. There is currently a limited understanding of how direct CT payments to AGYW affect their relationships with peers and others in the broader community. Recent studies that explored the CTs' influence on adolescent recipients' interpersonal relationships focused on intra-household relationships (154), intimate and platonic relationships with members of the opposite sex (274). However, a pilot study of CCT paid directly to AGYW prior to the full implementation of HPTN 068 found that social relationships between young women and their peers remained unchanged. The study showed limited negative impacts on social relationships, such as jealousy between recipients and non-recipients, although the duration of the study may have been too short to observe social impact over time (127). Furthermore, it was hypothesised that any negative effect might dissolve once people better understood the intervention.

Interventions that seek to improve sexual health outcomes in adolescents should also monitor and assess the impact on social norms, which could mitigate or strengthen the impact of these interventions (275). To contribute to our understanding of the broader effects of CTs directly paid to AGYW on peer relationships and social norms, we analysed qualitative data from the HPTN 068 study (also known as Swa Koteka). This paper advances findings from the HPTN 068 pilot study by examining how peer interactions of both recipients and non-recipients were impacted over a more extended period.

6.2. Methods

6.2.1. Study setting

The study was located in Agincourt, South Africa, a sub-district of Bushbuckridge, Mpumalanga province, situated near South Africa's border with Mozambique. This location is characterised by poverty, unemployment, poor infrastructure and temporary local migration, with family members of working age typically migrating to Johannesburg or nearby cities for work and visiting home infrequently (160). HIV prevalence in this area among those older than 15 years is estimated at 19.4%, with a prevalence of 23.9% among women and 10.6% among men (161).

6.2.2. The HPTN 068 trial

We report findings from a qualitative study nested within the Swa Koteka trial. Swa Koteka was a Phase III randomised control trial assessing the effect on HIV incidence of CTs conditioned on 80% school attendance among South African young women (n = 2448) aged 13–20 years. The trial provided a monthly CCT (R100 ≈ USD 10) to AGYW and their caregivers (parents/guardians) (R200 ≈ USD 20). They received cash deposited into their bank account every month during which they had met the school attendance criteria, for up to 3 years. At enrolment, participants underwent pre-test counselling, sample collection for HIV and herpes simplex virus (HSV)-2 testing, post-test risk reduction counselling and completed an Audio Computer-Assisted Self-Interview (ACASI). Participants had annual study follow-up visits at 12, 24, and 36 months until the study completion date or their planned high-school completion date, whichever came first. Follow up procedures were the same as enrolment (235). School attendance was collected from local schools monthly. The young women in the control arm of the trial underwent the same procedures, except for receipt of CCT. Social harms, such as experiences of violence due to receipt of CCT or participation in the study, were assessed at each follow-up visit by a counsellor (see Pettifor et al., 2016 for more details).

6.2.3. Qualitative study design and data collection

A qualitative study was nested within the trial to explore the acceptability of the intervention, the social and relational impact of CTs, and the meanings attached thereto.

6.3. Participant selection and recruitment

From a sample of 2448 AGYW in the trial, we purposively recruited a sub-sample of 39 AGYW for participation in up to six serial in-depth interviews (IDIs) conducted 6-monthly. We used purposive sampling to ensure that sexually active AGYW who reported missing school and those reporting engagement in transactional sex were represented in the sample (154). Using the trial contact database, potential participants were contacted telephonically and invited to participate in IDIs. A home visit was scheduled where additional information about the study was provided. Participants were asked to provide written assent and/or consent. Caregivers provided written consent for AGYW who were minors to participate in the qualitative study.

We also randomly selected approximately 120 HPTN 068 CT recipients and non-recipients, for participation in focus group discussions (FGDs). Those who had participated in the IDIs were not eligible to take part in the FGDs. Potential participants were contacted by telephone to invite them to participate in the planned FGDs. Home visits with interested participants were scheduled to obtain written assent and/or consent, as described above.

6.4. Data collection

IDIs and FGDs took place between 2012 and 2015. IDI participants were interviewed twice a year throughout their participation in the trial, providing verbal re-consent at each interview. The IDIs explored perceptions of the CCT programme, use and impact of CCT, exclusion from the programme, and social relationships in households, schools, and communities. All interviews were conducted at participants' households. The duration of the interviews was 30–60 minutes.

Six FGDs were conducted annually for three years. FGDs explored participants' thoughts about the CCTs and the impact of the cash on peer relationships among recipients and between recipients and non-recipients. The FGDs were conducted on weekends and during school holidays at local schools. Each FGD comprised 10–12 participants and lasted approximately 60 to 90 minutes.

The IDIs and FGDs were facilitated by four trained interviewers, all of whom were women, local residents, fluent in XiTsonga, and with a minimum Grade 12 education. The study was approved by the Human Research Ethics Committee of the University of the Witwatersrand, the Institutional Review Board of the University of North Carolina, and the Provincial Department of Basic Education in Mpumalanga Province.

6.5. Data analysis

Interviews were audio-recorded and subsequently transcribed and translated into English by the interviewers. Transcripts were checked for quality by one of the authors (MNK) through comparisons with the audio files. The transcripts were subsequently imported into Atlas.ti. Transcripts were coded using a coding frame that was both inductively and deductively generated by two of the authors (CM and MNK), following a framework approach (167). This approach entailed the generation of themes from *a priori* hypotheses and questions that guided the objectives and aims of the study (deductive), and issues derived from the data (inductive).

Coding was conducted by five trained researchers, who were also involved in data collection. Coders sought to attain acceptable intercoder reliability (ICR) scores on early coded transcripts (165). A random sample of 10% of the transcripts was double-coded throughout the study to ensure that ICR remained acceptable.

6.6. Findings

6.6.1. Description of participants

A total of 39 AGYW took part in the interviews. Twenty-six AGYW were interviewed three times, 12 interviewed four times, and six interviewed five times. Interview participants comprised 18 CCT recipients and 21 non-recipients, and their age range was 13–20 years. A total of 18 FGDs (n=108) were conducted during the three-year study period. Study participants came from households where the majority were dependent on child support grants, and on income from single parents and migrant remittances. Most households were made up of 5 to 8 family members, with grandmothers mostly assuming the role of guardians if both parents were absent or had died.

6.6.2. Positive consequences of the CCT on peer relationships

The CCT allowed recipients to identify with peers: 'I am now like other children'

Receipt of the CCT enabled AGYW to fit in within their peer groups in terms of how they looked and ate, and the activities they participated in. CCT recipients reported that before the CCT trial, there was a distinction between 'girls from 'rich' households' and 'girls from 'poor' households.' Young women from better-off families had pocket money to take to school, which afforded them better meals during lunch breaks at school, had proper school uniform and supplies, and had better clothes than those from poor family backgrounds, who relied on 'free food from the feeding scheme' and lacked some school necessities. Consequently, young women from poor households felt that they were different from their peers — they 'felt out of place'. As Yolisa (recipient, IDI) indicated, 'if I go to school without money, it's like I'm not like other people.' This affected some participants emotionally. Thembi (recipient, IDI) recounted that before she received the CCT, she was unwell and dreaded going to school, knowing that her friends would have money and she did not. Emyoli also shared a similar experience: 'In the past, I was not feeling well; I was feeling like I'm down [depressed] when I'm with my friends, and they have money, and I don't have it' (recipient, IDI).

For other participants, these feelings were exacerbated because they were ridiculed by their peers for lacking desirable items. For example, Thandeka (recipient, IDI) reported that girls from well-off households had branded clothing, while she wore the cheapest, unbranded clothes. She also said that she was hurt because her peers ridiculed her for lacking necessary school supplies. This was echoed in one FGD where a participant shared experiences of young women who were ridiculed for lacking in personal care and hygiene because they could not afford to buy cosmetics. In some instances, this led to young women missing school. She recalled, '…some of the kids were not going to school because they were afraid because boys were laughing at them because they smelled bad under their arms' (recipient, FGD).

Young women reported that receipt of the CCT allowed them to 'be like other young women', a phrase used by many participants to describe how the CCT had changed their lives in relation to their peers.

'When the **other young women** buy something at school, I also buy because I do have money.' (Emyoli, recipient, IDI)

'When you go to school, **you feel like other learners** like having lunch.' (Zama, recipient, IDI)

'Since I take part in the study, I do have money to carry when I go to school every day **like other learners**.' (Sbonga, recipient, IDI)

These quotes show how significant it was for young women to be or feel the same as their peers, particularly when it came to having pocket money at school. Thandeka reported the CCT made a difference in her life and that her peers had stopped making fun of her:

'I have my school bag, school uniform, I feel happy about it. At school they were laughing at me because I was using a shopping bag to carry my books, now they are no longer laughing at me.' (recipient, IDI)

The cash enabled recipients to fit in and not be seen as different from other young women; this gave them a sense of peer identity and a sense of belonging. Receipt of CCTs enabled AGYW to not stand out as different from their peers, which had previously made them vulnerable to teasing or bullying.

The CCT facilitated interactions, conversations, and information sharing among young women

Receipt of the CCT created networking opportunities between AGYW. Generally, the participants travelled together to the post office to collect or withdraw the CCT. A young woman in an FGD mentioned that networking improved as a result of participation in the CCT trial:

You find that you did not have someone's phone (contact) number, but you find that now you can communicate and ask one another what is going on. Like the other day, they came home, and then I asked her if they [trial staff] did come to her house as well… but we did not communicate before [the trial]. (recipient, FGD)

Some non-recipients observed that CCT recipients formed groups, hung-out together, and made friends with one another:

Those who are getting money, they are grouping themselves as they are getting money; because of the money that they are getting from the study ... (Lettie, non-recipient, IDI)

Londiwe, a non-recipient, also believed, 'now they [recipients] get together, but in the past, it was not like that.' These findings suggest that participation in the CCT trial may have led to new friendships, particularly among recipients.

Unsurprisingly, there were conversations between cash recipients and non-recipients, and study group allocation became common knowledge. The conversations entailed sharing subjective experiences, perceptions of the trial, advising, guiding each other, and sharing trial information with one another. These took place in communities, schools, during study visits, and at the post office bank when recipients went to withdraw their CCT payments.

Conversation among recipients was mostly about the CCT. Lucy, a CCT recipient, remarked: 'We ask each other if you received it [money]?'. Similarly, Khensani stated: **'**we are chatting about many things like when are you going to take money from Wits [the trial]?' (Recipient, IDI). CCT recipients shared their spending plans and advised one another on how to spend the cash appropriately. As a CCT recipient in the FGD indicated: 'we are able to share how we spend the money, and if she misuses the money, we tell her that it is not good — you have to use it on necessary things.' CCT recipients also shared complaints and frustrations related to

cash payments, such as missed payments or dissatisfaction with the amount of cash received. Nkateko recounted the following about her friend: ‘She is always complaining that they must add money.’ (recipient, IDI). Thuthu also remarked: ‘They [recipients] are complaining that the amount is too little; it can only buy a bag of mealie meal.’ (non-recipient, IDI)

It appears that the conversations were not only limited to discussion about the cash being received, however. Participants also discussed HIV information learned from the CCT trial and encouraged one another to attend school and protect themselves from HIV. During an IDI, Zinhle, a CCT recipient, stated, ‘our relationship is good because we chat with the other girls and we guide each other. We talk about good and bad things and how we should take care of ourselves.’ Information sharing was also common among study participants and their peers who were not participating in the trial.

The CCT facilitated reciprocity and resource sharing

Most CCT recipients spoke of how the money allowed them to assist friends and family members financially, particularly those who gave them money prior the CCT trial. They described how, before the trial, girls from ‘poor’ households had relied on those who had pocket money for lunch at school. Not only did the receipt of the CCT enable recipients to be more self-reliant, but it also improved some recipients’ ability to pool finances with their friends and enhanced these relationships by allowing reciprocity. A young woman in a recipient-only FGD remarked, ‘Before I received this money, she [friend] was able to help me, and now that I have my own money, we can help one another (FGD3). Another participant reported:

‘When I go to school the money that I get from Swa Koteka, I use it as pocket money. When my friend doesn’t have pocket money, I share food with her, and if I don’t have pocket money, she shares with me.’ (Thoko, recipient, IDI)

The ability to help in this way therefore gave recipients a sense of personal fulfilment, as they could also return the favour. The ability to reciprocate financially also gave recipients a higher social standing, as access to cash appears to have increased one’s visibility and perceived value in the peer group.

Recipients could also lend money to their friends, including non-recipients. Noma, a non-recipient, had a friend who was a CCT recipient. She reflected on the day she found out that she would not be receiving the monthly CCT payment:

'I just told her that 'my friend, you know I did not get the money' and then she just said, 'do not worry … if you have a problem like you need something, just tell me I will share with you …' When she has money, she comes to my class and gives me money and says, 'go and buy food.' (Noma, non-recipient, IDI)

Only in a few instances did it seem that the CCT had negatively affected the reciprocity between peers and the culture of lending and sharing. Some participants felt that once CCT payments started, the inclination to share disappeared. Non-recipients observed that some recipients found it tiring to be the only one buying items for friends who never contributed. As one FGD participant explained,

'You go to the market together, and she buys you snacks for two days, and after that, she will complain that 'I am not going to buy her stuff anymore because she always does not have money; I cannot, anymore.' (FGD1, non-recipients)

6.6.3. Negative consequences of the CCT on peer relationships

As hinted at above, we found a few instances where CCTs appeared to have negatively impacted peer relationships. This negative impact took the form of an increase in negative emotions, rumours, teasing, stigma and gossip. Disrupted friendships was a further negative consequence.

Negative emotional consequences

Some conversations by non-recipients in the IDIs and FGDs portrayed cash payments to their counterparts as unfavourable and triggering negative emotions such as jealousy, anxiety, hurt, and resentment. Participants said, 'I become worried', 'I feel heartaches', 'Sometimes, my heart breaks', and 'I get bored [irritated]'. These emotions were often prompted when recipients talked about the CCT. Sindy, a recipient, reported, 'if we told them [friends not getting cash] that we are going to the post office to collect money, they become angry.' (IDI). These negative emotions were also triggered when non-recipients observed recipients' purchases, such as lunch at school or a new outfit.

‘We do have jealousy because those who are in the intervention [recipients] eat well. They buy cool drinks, fish, and chips; that makes us jealous, as we are in the control arm [non-recipients].’ (Mantwa, non-recipient, IDI).

The non-recipients felt that the recipients ‘always spoke about the Swa Koteka money’. Some non-recipients interpreted this as being boastful. In one of the FGDs, a non-recipient reported: ‘They [recipients] are boasting on us saying ‘on Friday we are getting our payment, I am going to buy chocolate ...’ These encounters made non-recipients jealous and felt left out since they did not have money or the items they bought. One young woman in the FGD narrated the following example:

‘You find that you are three friends and then those two got the [CCT] payment [intervention arm] and you are in the control [arm] and then find that on Saturday it’s the 1st [date], and they are going to get the money, and then one says ‘my friend, let’s go to the post office and withdraw money because I saw a jersey at Fashion World [store],’ and find that you [a non-recipient] sat alone and you do not have anything (money) and in that way, you feel like they are discriminating [against] you.’

In an FGD, one young woman described a scenario that triggered such emotions:

‘Let us say we are friends and when we are hanging out, and then P11 [another FGD participant] says “tomorrow I am going to Thulamahashe [shopping centre], I am going to get the money.” Definitely, that will hurt me. She is going to get the money, and I do not have the money or money to carry to school, and she is telling me that she is going to withdraw the money and her family is wealthy, they have everything, she wears Carvella [a luxury brand of shoes], and I am wearing cheap takkies [trainers/gym shoes].’

Hearing recipients talk about their money, and the fact that recipients’ lifestyles had visibly improved meant that spending time with recipients was distressing for the non-recipients. Many of these non-recipients did not explicitly express or show their anxiety; instead, they tried to hide it:

‘When I am with them, my heart breaks, but I do not show them; when I am alone, I can see that it is not fair.’ (Mbali, non-recipient, IDI)

However, these negative emotions were also sensed by some recipients, even if non-recipients were discreet in showing it.

‘When I buy something now, those who are not getting the money ... they get angry because she knows that she does not have money and, at that time, she hates you (FGD, recipient).’

During an IDI, Thandeka, a cash recipient, also alluded to this:

‘It was difficult when you talk with them [non-recipients]. You can feel that this person is not happy, especially if you can tell her that tomorrow you are going to the post office to withdraw money.’

In some instances, recipients reported that they stopped talking about the CCT money altogether to avoid upsetting the non-recipients.

Rumours, teasing, gossip, and stigma

Despite ongoing community engagement and information activities, participants noted that most of the girls who were not part of the study did not have accurate information about the CCT trial. As a result, several rumours about the study circulated about who was being offered or not offered the CCT. Some of the rumours were overlapping and contradictory. On the one hand, rumours circulated that cash was being given to AGYW who tested positive for HIV. The assumption was that the CCT was to enable them to buy healthy food to manage their HIV. Some believed that non-recipients enrolled in the trial were not being given CCTs because they were HIV positive and had ‘unclean blood’. On the other hand, there was another rumour that cash was being paid to girls who were HIV negative as they had ‘clean blood.’ Others believed the CCT was only being given to AGYW from poor households.

Another rumour reported by participants emerged around the fact that one of the study procedures necessitated the drawing of blood to run various tests. For some people not enrolled in the study, blood draws meant that CCTs were payments for selling or donating blood.

‘They say they are withdrawing our blood and sell it. They are making fun of us that we are selling our blood.’ (Mpumi, recipient, IDI)

Non-recipients were teased for ‘giving their blood for free.’ They were also teased for choosing a ‘non-winning ticket’ [randomisation into the control study arm]. Mantwa, a non-recipient,

recalled, ‘they say we are not clever because we chose to [remain] in the control [non-benefitting] arm.’ While much of this teasing, jealousy, rumours, and stigma apparently emanated from young women outside the CCT trial, teasing also occurred between recipients and non-recipients enrolled in the trial, despite them understanding the randomisation process underpinning the allocation of participants to the two study arms.

Recipients were also teased about the amount of cash they received. One recalled:

‘They say you think you are smart; meanwhile, you only get R100, and R100 is nothing to us because it is a small amount.’ (Yandi, recipient, IDI)

Among the non-recipients in the trial, jealousy was also tied to the belief that some CCT recipients were undeserving. Non-recipients highlighted instances where they felt CCTs were being paid to young women from well-off families and that impoverished families had been left out.

‘We feel the pain as our family background is bad, and when you look at those who got the money, they do not care; that is why they don’t have something important to do with this money because they are coming from rich families.’ (YW FGD, non-recipient only)

The non-recipients suggested that the targeting criteria for CCT recipients should include a socio-economic background assessment and means-testing. They believed that CCT should be given to only low-income or poor households.

When you do it [the CCT trial] again, they do not make us choose [randomise], the people who go around in our households [census] have to look for the situations like in this household there is a big house that is roofed by tiles, so it means they eat well… here there are three rooms so definitely there is no way they could eat well; and then when you sit down and check those forms you will see that ok, at P10’s household they are poor, so we have to give her intervention [CCT].

Besides one exceptional incident of physical assault, in general, the girls managed the teasing and stigma by considering it harmless and laughing it off or by suppressing their feelings.

Disrupted friendships

Significantly, a few AGYW recipients reported ending friendships with friends (non-recipients). In the one instance, Sasa (recipient, IDI) explained that before the trial, she and her friends had influenced each other to miss school, but since she started receiving the CCT she no longer missed school out of fear that she would not receive her school-conditioned cash payment. As a result, she grew apart from her friends. In another instance, Musa, a cash recipient, mentioned that she was no longer spending time with her old friends because they were hanging out at taverns, whereas she had decided to focus instead on her schoolwork.

Overall, however, most of the participants reported that friendships did not change during the course of the trial. For some, the CCT only disrupted peer relationships at the beginning of the trial but these settled over time, as the trial progressed. Senzi, a non-recipient, said, 'There is no change with my closest friends like I said because we grew up together.' Other participants believed that a change in friendships would be unjustifiable, considering that the CCT was only operational for a limited period. Some participants reported that no changes had occurred because their friends (enrolled in the study) understood the randomisation process and that receipt of CCT depended entirely on 'luck.' It was also evident that many recipients had invested in existing friendships, deemed safe and reliable, which potentially mitigated the likelihood of relationships with friends deteriorating as a result of the CCT.

6.7. Discussion

Current studies on CTs geared towards AGYW for HIV prevention have primarily focused on education and HIV outcomes, with little attention paid to impacts on peer relationships. Yet CCTs for HIV prevention may have impacts beyond HIV outcomes; they potentially have spill-over implications for other aspects of recipients' lives. This study contributes to the growing body of research that seeks to understand the broader social implications of CTs for HIV prevention.

Our findings demonstrate that CCTs provided to encourage school attendance with the primary goal to reduce HIV in AGYW also had unintended consequences for peer social relationships. From the recipients' viewpoints, CCTs improved their social standing within their peer groups, facilitated peer identity, and promoted social connectedness among AGYW receiving the CCTs. Receipt of CCTs enabled AGYW to look and act like their peers who had money, and in so doing, diminish visible signs of their poverty. This gave young women a feeling of conformity to a set of positive social norms and a sense of belonging. CCTs also facilitated

social interactions, information sharing and instrumental social support between AGYW. CCT recipients experienced an increase in their social capital, which was evident in their ability to network, share, and reciprocate with others. Evidence shows that improved social connectedness among peers is significant. Social interaction, resource exchange practices, and reciprocity form an integral part of adolescent development and social capital generally (276). Social ties provide a sense of interdependence and belonging, which are often sought after by adolescents and associated with improved personal and social wellbeing (276, 277).

Paradoxically, for the non-recipients, the CCT trial disrupted peer norms of 'homogeneity' with the recipients being resented for seeming to be 'better' than their peers who were non-CCT recipients. Giving CCTs to one group of young women and excluding others elicited negative emotions among non-recipients, and triggered some gossip, teasing, and rumours. However, these were slight disruptions overall and did not last long, with most young women reporting that they had maintained relations with their existing friends. Similar findings were observed in our pilot of HPTN 068, that showed that jealousy, teasing, gossip and tension should be anticipated in CCT programmes involving adolescents (154).

Consistent with the literature, our findings illustrate how the psychosocial experiences of poverty were negative for young women. Being different from peers, exclusion, and failure to meet social expectations generated feelings of distress, indignity and humiliation. As a result, poverty and social exclusion could lead to AGYW engaging in negative coping strategies, including engaging in sexual risk behaviours (278, 279). In this context, CTs paid to vulnerable AGYW may reduce vulnerability by improving their economic wellbeing and social standing. In the context of HIV prevention, these results are significant as evidence shows that social connectedness to peers has crucial health implications for adolescent development (280, 281). Strong social connections with helpful peers and sharing of health information can support positive health behaviour and buffer health risk-taking (280-282). Studies have shown that interventions that build social ties are more likely to influence HIV related outcomes in the long run. However, this impact depends on the content and resources available from social connections (279, 283). The current study findings underscore the building of social capital among peers as a potential pathway by which CCT could reduce HIV risk, depending on whether these interactions encourage negative or positive behaviour.

Surprisingly, cash recipients made instinctive associations between receipt of CCT and positive/ good behaviours. They shared narratives about shedding bad behaviour since the trial

had started and distancing themselves from the friends of 'bad' influence; for example, friends who skipped classes or those who hung out in taverns. Recipients reported that instead they focused on their schoolwork and church, and spent the money wisely. However, it is unclear what informed this behaviour as trial organisers did not prescribe how AGYW should use the CCT, aside from encouraging school attendance. These findings suggest the trial and conditionality of the CT, school attendance, as well as other trial procedures such as HIV testing might have led to the CCT being interpreted as promoting 'good behaviour' in general. While these findings require further exploration, they highlight another possible way a CCT may reduce risky behaviour among AGYW recipients.

To a lesser extent, our findings suggest that provision of CCT to selected AGYW maintained or widened the gap of socio-economic inequality among peers — AGYW who were lacking before the CCT remained in that position because they were not selected to receive the CCT, yet peers who were thought to be better off or those who were at the same level with them (non-recipients) before the CCT, progressed. These findings indicate that CCT given to certain young women and excluding others could potentially negatively impact on HIV outcomes. In line with evidence on the role of peer pressure on HIV risk behaviours, a desire for respectability, and a desire to appear 'rich' among non-recipients has the potential to drive AGYW towards risky sexual behaviours in order to achieve parity with their peers who are CCT recipients. In the HPTN 068 trial, AGYW were allocated to receive CCT through a randomisation process. In a real-life context, some of these issues may be less significant as CTs are generally allocated according to need. However, this is not to say these issues may not come up even in a needs-based approach, as previous studies have reported unhappiness with how decisions are made, and cut-off points and criteria used to define the needy (67, 101). This may be an issue particularly in communities where most people may be considered poor, despite the criteria used to allocate CTs.

Findings from the current study highlight the critical role peers can play as a support structure for AGYW, and their potential role in both mitigating and fuelling social vulnerabilities associated with HIV risk. These findings have important implications for research and CT programming for HIV prevention that seeks to optimise the impact of CTs' HIV-related outcomes. Our results point to the need for researchers to recognise existing social connectedness and the opportunity it poses for CT programming targeting AGYW for HIV prevention. They should seek ways to leverage peer interactions and social ties, and use these

as platforms to promote sexual health, build critical consciousness, and modify harmful norms to maximise HIV impact. CCT programming targeting AGYW should monitor peer interactions and assess these interactions as a potential pathway CCT work to reduce HIV risk in AGYW. This could provide valuable evidence given the literature that show that social connectedness to peers (mutual feelings of trust, reciprocity, shared norms and identity and information and resource sharing) has crucial health implications for adolescence development. Strong social connections with helpful peers and sharing of health information can support positive health behaviour and could buffer health risk-taking (281, 284). Cross-sectional studies have shown that interventions that build social ties were more likely to influence HIV related outcomes depending on the content and resources available from the social connections (283, 285).

CT programmes targeting AGYW should incorporate peer and community engagement processes such as peer-led strategies and social mobilisation to leverage these social ties. CT programmes should include education that ties together the social and health implications of behaviours and social structures. This may enhance the impact on HIV outcomes, given the evidence that effective HIV prevention interventions also consider social networks which can influence behaviour, communication and norms (286). These findings are complementary to evidence that underscores the need for multiple combined interventions for HIV prevention (287), and CTs programming provides a platform for this work to occur.

Overall, the idea of paying CCT directly to AGYW seems to have largely facilitated peer relationships. Adolescent recipients made their own arrangements for collecting the CCT, and spending plans. There is a reason to believe that if cash was paid to and controlled by caregivers only, it would have been limiting for adolescents. AGYW would not have had a chance to accompany one another to the post office to collect their CCT or engage in activities that allowed interactions between them. The findings indicate how paying CCT directly to AGYW contributes to their personal and social wellbeing.

One important contribution of this study is that it captured the voices of the non-recipients, which are often missing from studies of CCTs. These voices are significant as they represent the views of the broader community on the impact of CCTs to a specific group and illustrate something of the potential unintended consequences of this intervention. In our study, non-recipients' concerns were expressed through negative emotions such as jealousy, as well as stigma, and rumours. Considering the evidence that shows the association between social

networking, peer pressure, and HIV risk (279, 284), CCT programmes need to find ways to monitor and mitigate the risk. We, therefore, suggest that in poverty-stricken communities, CCTs should be provided to all AGYW in a setting, and not only to a selected few. In South Africa, universal targeting used in social grants has proven to limit unintended adverse effects on community relationships (263). In instances where CCTs are offered to selected AGYW, the eligibility criteria should be clear, as imprecise and random eligibility criteria could lead to unintended negative consequences (263).

This study was not without limitations. We only gathered perspectives of AGYW who were enrolled in the trial. Including voices of peers outside of the trial would have brought additional insights about the CCT trial and the experience of exclusion. The perspectives of male peers are also missing from this analysis, but are reported elsewhere (274).

6.8. Conclusion

This is one of the first studies to explore the impact of adolescent directed CCTs on peer relationships. Overall, our findings indicate that CCTs have enormous benefit in AGYW's peer relationships. However, they may also induce social changes which have negative consequences. The implementation of HIV prevention interventions focused on structural drivers needs to be conscious of these dynamics and ensure that the negative consequences do not outweigh benefits. Our study confirms the critical role of peer relationships for adolescents' wellbeing. This study also echoes research highlighting that a more holistic approach is necessary when assessing the impact of CTs — understanding not only intended outcomes but also the broader social and relational effects of CT programming.

CHAPTER 7: KEY FINDINGS ON THE SOCIAL CONSEQUENCES OF CASH TRANSFERS AND PHD FRAMEWORK

7.1. Introduction

The overall aim of this PhD was to explore the personal, social, and relational consequences of CTs for HIV prevention interventions among adolescents in low-resource settings in South Africa. The PhD study was guided by Heise's ecological framework (135) in conjunction with the theory of gender and power (288). The study used qualitative methods to answer the research questions. Data collection included IDIs and/or FGDs with adolescent CT recipients and non-recipients, caregivers, intimate partners of AGYW receiving CTs, and male peers.

This chapter presents key lessons learned from CTs offered to adolescents for HIV prevention. The chapter begins with a summary of key PhD findings. I first present the positive unplanned psychosocial consequences of CTs generated from understanding adolescents' experiences and meanings of CTs and their effect on intimate, platonic, and same-sex peer relationships. Next, I present the negative consequences of CTs at intrapersonal and interpersonal levels. Each section summarises the status quo before the trial as reported by participants and then discusses the changes brought about by the CT intervention, followed by my reflection on what CT-related changes observed could mean for HIV prevention efforts.

Thereafter, I depict the key findings in an psychosocial impact framework showing positive and negative psychosocial consequences of CTs found in this PhD study and how these could potentially affect HIV prevention outcomes. The framework also depicts links between key PhD findings. The framework is suggested as a tool for researchers assessing the influences of HIV prevention interventions in adolescent populations.

7.2. Key findings from CT interventions for HIV prevention among AGYW

7.2.1. Positive consequences of CTs

The PhD study indicates that CTs paid directly to adolescents have unintended positive consequences on the recipients and their relationships with partners and peers. A summary of the positive consequences of CTs and their potential impact on HIV risk is presented in this section.

7.2.1.1. Positive intrapersonal consequences of CTs: Personal empowerment and agency

Chapters 3 and 4 sought to understand the personal impacts of CTs by exploring adolescents' subjective experiences and meanings of these prevention interventions. These chapters reflect that AGYW have financial and sexual health needs. However, these needs are mostly met through negotiations with their caregivers or sexual partners because AGYW are economically dependent on them. This places AGYW in a vulnerable position in terms of HIV risk. It is not always feasible for families to meet adolescents' 'hidden needs', which include commodities such as branded clothing, entertainment, and cosmetics, which adolescents perceive as promoting their social standing. Caregivers may regard these as luxuries, compared to competing household essentials. Consequently, AGYW may engage in transactional sex or date older men to cover their wants (hidden needs). In such circumstances, it is challenging for AGYW to negotiate their sexual health needs (289, 290).

The PhD study findings indicate that receipt of CTs and day-to-day administration of CTs, including activities such as handling cash withdrawals, budgeting, saving, making independent financial decisions, and navigating their spending power, provided adolescents with a **sense of autonomy**, **self-reliance**, **choice**, **decision-making power**, and **self-confidence**. It made them feel **happy**, **reducing their anxiety and stress** related to lack of economic independence. Consequently, their sense of personal power to exercise control over their lives was enhanced. These findings add to the literature that underlines CTs' psychosocial benefits for adolescent recipients from poor households (291). Additionally, the findings provide adolescents' accounts of CT interventions for HIV prevention in their own voices. Recipients' voices are significant because there is limited literature on recipients' experiences and opinions of CT programmes, as most evaluations of CT programmes employ quantitative methods to assess

programme success or failure outcomes based on a pre-defined matrix, but fail to explore recipients' views of the programme's implications (67, 101).

Empirical evidence highlights personal empowerment and personal agency as the strongest predictors of HIV preventive behaviour. These psychological attributes are significant for enabling individuals to make healthy sexual decisions and adopt HIV preventative behaviours (30, 292). The PhD data shows that improved personal wellbeing is a potential pathway through which CTs may reduce risky sexual behaviour among AGYW. From the data, it seems that autonomy and personal agency allowed AGYW to articulate and take charge of their sexual reproductive health needs. It appears that the increased personal agency helped AGYW avoid engaging in risky sexual behaviours and resist sexual pressures. CTs provided AGYW with control and the ability to make independent decisions about when and how to spend the CTs (Chapters 3 and 4). It also empowered them to withstand pressure to engage in sexual intercourse if they did not want to (Chapter 3). Having access to their own money allowed them to choose not to engage in sexual relationships in exchange for cash (Chapter 3). CTs further allowed AGYW to decide on their preferred sexual partners (Chapter 3); this included ending undesirable sexual relationships, which lessened their HIV vulnerability by reducing exposure to risk behaviours and potential for IPV (293).

These findings contradict those from studies which show that CT-related decisions do not automatically translate to decision-making in other aspects of their lives, e.g., sexual health decisions (46). This contradiction suggests that more research is required to assess the role of psychological wellbeing as a potential outcome of CTs, leading to a positive influence on HIV outcomes.

7.2.1.2. Positive intrapersonal consequences of CTs: Spending power and decision-making

Concerns have been expressed about excluding boys in many HIV prevention programmes, and there have been discussions about whether adolescent boys would benefit from CT interventions (128). The PhD study findings show that boys also gained psychosocial benefits as CT recipients. Boys made independent decisions; their expenditure showed more involvement in social issues, such as spending on social events and hanging out with the boys. This was in contrast to girls in Johannesburg, who sought spending advice from their family members and spent more of their CTs on household needs (Chapter 3). These findings are similar to those of studies conducted among adult CT recipients, showing that CTs paid to women were likely to benefit the entire household. Men were likely to use CTs on socialising

(84). These findings suggest that, while CTs given to adolescent boys and girls have personal benefits, they can also perpetuate inequitable gender norms prescribing women's roles as domestic and caregiving while men socialise with other men (62). This is one of the first studies that looks at adolescent boys' CT spending. A limitation of this study is that it did not explore how CT benefits among adolescent boys influenced their HIV risk. These findings highlight a need for studies to explore boys' spending patterns of CTs, as spending on entertainment/social activities may include alcohol and drugs. This is particularly relevant in South Africa, where hegemonic masculinity involves heavy alcohol consumption, and the country has among the highest rates of alcohol consumption per drinker in the world (197).

In contrast to spending decisions in urban Johannesburg, the PhD study findings demonstrate that AGYW in rural Agincourt made independent decisions and had control over CTs. They spent the cash on their needs/wants; few AGYW reported spending on household necessities. Although adolescent girls in Johannesburg also controlled the money and made decisions regarding its expenditure, this group sought spending advice from family members and spent a large portion of the CT on domestic needs. The differences between AGYW at the two sites could be explained by the fact that the caregivers in Agincourt received an amount of the CTs, whereas in Johannesburg only adolescents received CTs. It could also be because economic pressure is greater in Johannesburg than in rural Agincourt, where living costs are lower and families can partially sustain themselves through subsistence agriculture. Control and decision-making may influence how CTs are spent. The ability to make independent decisions about the CTs and the autonomy this provides appears to enhance the individuals' self-perception, which may also translate to better self-care concerning sexual health (46). Decision-making is guided by other factors such as household income, societal norms, and subjective norms (one's view of others' expectations of one's role in decision-making). For example, individuals who perceive themselves to have a shared or passive role in decision-making are likely to leave decision-making to others (295). The extent to which AGYW decide where and how they spend the cash has implications for their risk behaviours. The current study did not explore whether the independent decision-making in Agincourt was more likely to be associated with decision-making in other areas of their lives than was the case in Johannesburg.

7.2.1.3. Positive interpersonal consequences of CTs: Male-female (intimate and platonic) relationships

The findings indicate that men generally held a position of power in intimate and platonic relationships (Chapter 3). The reason for this is that intimate partners were usually older, employed, and earning income. On the other hand, AGYW were younger, in school, and had no income. This power imbalance was also due to strong existing societal beliefs about gender roles in relationships that support male superiority, men as providers, and women as subordinates (274). Gender and power imbalances in general are perpetuated by the perception of men as decision-makers concerning sexual matters, including condom use, and the dependence of women on men to make sex-related decisions. In this study, intimate partners were the primary financial providers in the relationships, and women depended on them. Male peers also provided some financial support to AGYW. As a result, intimate partners and male peers had control over AGYW in our study because of women's dependence on them (Chapter 5).

The PhD research findings show that CT provision to AGYW brought about some changes in intimate and platonic relationships. CTs helped AGYW **contribute financially** to their intimate relationships and **reduced pressure on intimate partners** to provide. In platonic relationships, participants perceived the CTs as **promoting AGYW's power status** (Chapter 5). In contrast to the trial circumstances, before receiving the CTs, girls would sometimes have no choice but to have sex with men/boys for cash. Additionally, the findings show that trial participation **improved HIV and sex communication**. AGYW's exposure to HIV counselling as part of their participation in the trial provided them with the confidence to negotiate condom use and to encourage their partners to test for HIV — something they had not done before (296). This is because participation in the trial provided AGYW with an opportunity to know their HIV status, and they wanted to remain HIV-negative. While this may be a consequence of participation in a trial and not the effect of cash alone, this is another potential reason for CCT recipients reporting less risky sexual behaviour. Despite the common concern that change in the gender status quo could trigger negative reactions, sexual partners did not express negative feedback about this outcome (Chapter 5).

In the context of CTs used to prevent HIV among AGYW, the PhD findings suggest that CTs have the potential to address inequitable gender norms that perpetuate women's risk of HIV. CTs could do this in four ways: 1) By enabling AGYW to become **economically 'equal' with**

their male counterparts. This could reduce power dynamics driven by financial inequalities. As shown in Chapter 5, male peers reported feeling the loss of power and control over AGYW because of their receipt of CTs, which rendered the two groups 'equal'. In such instances, the boys could not sexually exploit the girls as they had done before the CT trial. 2) By enabling AGYW to **contribute financially to their intimate relationships**. This could translate into a feeling of empowerment among AGYW, giving them a sense of gender equality in financial roles in intimate relationships — assuming that the contribution of women filters into empowerment in negotiating their sexual needs. 3) By **reducing pressure on men to provide for AGYW**. This could reduce the financial burden on men and associated potential conflict, stress, and IPV related to financial strain and their inability to provide. This finding supports works that show CTs could potentially reduce IPV through managing financial-related conflict and stress (83). 4) By **improved communication about HIV/sex**. This may not be a direct outcome of CTs but rather of participation in a trial where the CCT is associated with HIV outcomes. The inclusion of HIV/sex outcomes may serve as another pathway through which CTs could reduce risky sexual behaviour among AGYW. Furthermore, it underlines the potential for using the administration of CTs as a vehicle for HIV education. This may suggest alternative co-responsibilities that could be incorporated into CT programmes for AGYW. These findings were reiterated in later analysis that looked at the mechanism through which the CT intervention might influence sexual relationships and behaviour. Stoner et al. (296) found that CTs motivated AGYW to use condoms and encourage their sexual partners to test for HIV. They attributed these changes to improved communication with partners.

The PhD study findings on how CTs influenced male-female relationships, both platonic and intimate, support literature showing that women's economic empowerment could address gender inequalities (61, 94, 297). However, the findings also show that the impact is limited by context, age, and the value of the CTs. Data from this PhD study shows that power dynamics changed slightly with male peers because they were of the same age, and male peers did not have a lot of money. However, power dynamics did not change majorly in intimate relationships because partners were a little older and had more money than the girls had even after receipt of the CT, because most of the partners were employed. The minimal changes that occurred were beneficial for both partners and AGYW and did not put AGYW at risk of repercussions as a result of those changes. However, it is also possible that there were no repercussions because the study sample was skewed towards couples that already had more balanced gender power relationships.

The PhD findings add a perspective to the literature on relationships outside the household context, as most research on CTs and gender is conducted in household contexts among married couples. It also adds the views of dynamics outside intimate relationships. It captures the perspectives of male peers, who may also be classified as potential sexual partners but who have no defined relationships. These findings demonstrate that, even though CCTs are not explicitly designed to disrupt the gender status quo, they provide small nudges that lead to gendered shifts. They show the potential of CTs in promoting AGYW's status and reducing power and control by male peers over women. These findings are consistent with studies that have shown that CTs paid to women have the potential to shift inequitable gender norms and roles, thereby reducing young women's HIV vulnerabilities that result from inequitable gender norms (78, 298). However, as mentioned in the previous section, the gender shift is limited by existing gender norms about men's and women's roles in intimate relationships, partners' age and size of the CT. CT interventions for HIV prevention are not explicitly intended to address gender inequalities; as a result, entrenched inequitable gender norms limit their impact. Scholars suggest that programmes should be intentional and explicit about gender transformation to shift inequitable gender norms (299). This could be achieved by integrating gender-transformative programming into the design of CT programmes. The Global Fund suggests including men and boys in HIV prevention interventions and health services in general and deconstructing inequitable gender norms and stereotypes in this population (300).

7.2.1.4. Positive interpersonal consequences of CTs: Same-sex peer relationships

Peer relationships are generally characterised by the need for social identity and a sense of belonging. However, a lack of economic resources can limit participation in peer activities and leave adolescents feeling excluded from their peers. Studies underline that social exclusion contributes to the spread of HIV (301, 302). Groups who are socially excluded are likely to have low self-esteem and low self-worth, leading them to engage in risky sexual behaviour. AGYW in the current study reported that, prior to receiving the CTs, they felt excluded by their peers because they did not have money to buy specific items their peers valued. This made them feel isolated and different from their peers. Although there were no explicit reports of AGYW engaging in risky sexual behaviour because of lack of cash or items valued by their peers, we can assume this might have been the case, considering the literature that indicates significant association between peer pressure, intergenerational sex, and transactional sex in this context (13, 303).

In Chapter 6, recipients' viewpoints suggest that the CCT improved AGYW's dignity and social standing within their peer groups, facilitated **peer identity**, and promoted **social connectedness** among AGYW receiving the CCTs. Receipt of CCTs allowed AGYW **to look and act like their peers** who had money and, in so doing, diminish the visible signs of their poverty. This gave AGYW a **feeling of sameness** and a **sense of belonging**. CCTs facilitated **social interactions**, **information sharing**, and **instrumental social support** between AGYW. These findings also show that CCT recipients experienced an increase in their social capital, which was evident in their ability to network, share, reciprocate, and help others. Findings showing improved social connectedness among peers are significant. Social interactions, resource exchange practices, and reciprocity form an integral part of adolescent development and social capital in general (276). These social elements provide a sense of interdependence and belonging, which is sought after by adolescents, and are associated with improved wellbeing (276, 277). The findings are consistent with those from studies showing that CTs promote social inclusion and increase social connections. A study among CT recipients in Uganda found that children reported feeling more accepted at school and having more friends than they had before receipt of CTs (304).

These findings are significant in the HIV prevention context. Evidence shows that social connectedness to peers has considerable health implications for adolescent development. Strong social connections with helpful peers and sharing of health information can support positive health behaviour and buffer health risk-taking (281). Cross-sectional studies have shown that interventions that build social ties are more likely to influence HIV-related outcomes, depending on the content and resources available from the social connections (283, 305). The study findings underscore social capital among peers as a possible pathway through which CTs may reduce HIV risk, depending on whether these interactions encourage negative or positive behaviour. There were no negative behaviours associated with CTs and, therefore, we can speculate that there was positive rather than negative social capital created. These findings reiterate the point mentioned earlier about the idea that including HIV outcomes or education as co-responsibilities of CTs could possibly build social support that is well-informed and positive.

7.2.2. Negative social consequences of adolescent-directed CTs

While this study shows that CTs positively impact adolescent recipients, my findings also show that providing CTs to AGYW can elicit negative social consequences. In the next section, I

present insights on the negative gendered impact of CTs directed to AGYW, specifically looking at how CTs affected gender norms through the lens of boys' and girls' spending patterns and CT-related decision-making, and how CTs can negatively impact male-female relationships. I also discuss how CTs can compromise CT recipients' and non-recipients' psychosocial wellbeing.

7.2.2.1. Negative social consequences of CTs: Potential to promote inequitable gender norms

It is ironic that, although CTs can disrupt inequitable norms and roles, the PhD findings also show that CTs can **promote inequitable gender norms**. As stated in section 7.2.1.2, in urban Johannesburg gender differences were observed in the expenditure of and decision-making regarding CTs by adolescent boys and girls. Where boys made independent decisions and their expenditure showed more concern with social activities (spending on social events and hanging out with the boys), girls sought advice from family members and spent more of their CTs on household needs (Chapter 3). These spending decisions could be an indication of how boys and girls are socialised. For example, women are typically expected to take care of household needs and ensure the wellbeing of others. In contrast, men are typically expected to socialise outside the home with other men (306). Chapter 4 reflects socialised roles of men as primary decision-makers, and demonstrates that women sought permission or advice even in instances where they could make independent decisions. In this respect, some scholars argue that targeting women as recipients of CT programmes may **perpetuate traditional gender roles**, adding to domestic responsibilities that women already carry (17, 50).

7.2.2.2. Negative interpersonal consequences of CTs: male-female relationships

While this study shows that CTs could potentially shift gender norms and power dynamics, they also pose a potential threat to HIV prevention. Findings from this study show that AGYW-directed interventions have unplanned negative impacts on male-female relationships. CTs are perceived to threaten the gendered power dynamics. They challenge men's role and power positions, posing a risk of **potential backlash** (Chapter 5). These dynamics were evident in HPTN 068, where men appeared to have a clear role as providers and decision-makers in intimate relationships. In the current study, AGYW's CTs did not disrupt the status quo in their intimate relationships because the male role as provider was not jeopardised by the benefits enjoyed by the AGYW. Men continued to provide for their female partners, but they appreciated the increased financial role that AGYW were able to take in relationships, and

there was, therefore, no backlash. However, partners said that if the CTs had disrupted traditional roles in their relationships — creating an impression that the men were no longer in control or indicating that the young women might have other partners — there could potentially have been a backlash. One explanation cited for the absence of a CT-related backlash in intimate relationships was that the CT payments were an inconsequential amount, mainly because partners were employed and earned more (Chapter 5). On the other hand, male peers were unhappy with their apparent loss of potential sexual partners and loss of control over AGYW who took part in the intervention, which they associated with the girls' receipt of CTs in excess of the males' ability to earn through casual employment while enrolled in school (Chapter 5). These male peers reported that access to cash gave AGYW a measure of independence, which might result in the male peers' loss of status as potential sexual partners. Male peers had limited access to resources; hence the CT had larger negative impacts for them compared to older male partners. Effectively, the CTs allowed AGYW to buy items that would have otherwise been provided by their male friends, thereby generating a need for some form of reciprocity (which male peers indicated might have included a sexual relationship). Male peers interpreted girls' autonomy as leading to greater equality between girls and boys, which most male peers found undesirable because it suggested that girls no longer needed their resources, making them less attractive to the girls (274). These findings suggest that the status quo could change if the AGYW's CTs were equal to or more than their male partners' incomes. They suggest gender norms cannot be altered by merely providing CTs; if CTs alter existing gender norms, there is a risk of causing harm — meaning programmes either have to work within the existing bounds of gender norms or make efforts to transform inequitable social norms more intentionally by systematically pairing CT interventions with social norm change interventions.

The findings affirm psychologists' and feminists' views that women's greater economic freedom and increased autonomy may challenge men's perceptions of themselves and their exercise of control over women (74). This is especially true if women's access to CTs leads to atypical roles within relationships, or if women start challenging the distribution of power in the household, challenging male authority, and undermining existing social norms (307). Similar findings were observed in a multi-country study conducted in Kenya, Zimbabwe, and Indonesia, wherein men raised concerns about women assuming their (male) roles, especially in instances where men could not fulfil their masculine role as economic providers (74). These findings also reflect arguments about zero-sum power — young men feeling alienated and

uncertain about their role and identity and feeling that the cost of empowering women is the disempowering of men (76). They show how men's power and control positions could continue to obstruct AGYW's ability to exercise choice as far as their sexual health is concerned. Evidence has shown how social constructions of masculinity linked to dependency, power, and gender roles have also been associated with HIV risks for men and women (308, 309). Threats to masculine identity could lead men to resort to having multiple sexual relationships or enacting IPV as a way to protect their masculinity (308). This translates to increased HIV risk. These findings indicate possible ways existing gender norms could limit the impact of CTs. Merely providing CTs for HIV prevention does not automatically translate to a change in HIV-related behaviour. Change is also tied to the existing social norms.

7.2.2.3. Negative interpersonal consequences of CTs: same-sex peer relationships

From the non-recipients' perspective, the CCT trial **disrupted peer norms of 'homogeneity'**, with recipients experiencing resentment for seeming 'better' than their peers who were non-CCT recipients. Giving CCTs to one group of AGYW and excluding others maintained or widened the gap of socio-economic inequality among peers. AGYW who were lacking before the CCT remained in that position because they were not selected to receive the CCT; yet peers who were thought to be better off, or those who were at the same economic level, progressed. This elicited **negative emotions and triggered gossip, teasing, and rumours**, particularly among non-recipients. However, these disruptions were subtle and did not last long, with most AGYW reporting maintaining relations with their existing friends. Similar findings were observed in the HPTN 068 pilot study, which showed that jealousy, teasing, gossip, and tension should be anticipated in CCT programmes involving adolescents (154). These findings are similar to evidence from studies with adult women CT recipients. Some households reported a feeling of exclusion, which often leads to negative emotions such as jealousy and resentment (105). In efforts to ensure that the social protection allocation process is transparent and equitable, some social protection programmes have involved communities and leaders in determining CT recipients, identifying the most vulnerable households in their communities to benefit from the programme. However, this could still prove contentious, with leaders criticised for favouritism — selecting friends and families rather than the most vulnerable households. Hence other programmes have avoided including communities in the selection of cash recipients and have used more objective criteria, such as age (67).

Shame and social stigma: In the current study, there were lingering social judgements about AGYW receiving CTs and non-recipients. Cash recipients reported experiencing stigma from their peers, particularly those who were not participating in the programme. They were **mocked and labelled as impoverished** because of their receipt of CTs. CT recipients were also **teased and labelled as blood sellers/donors** or **HIV-positive** by their peers, and perceptions abounded that they received cash to buy food and medication to maintain their health while HIV-infected (Chapter 6). A few participants reported **losing friends** because of assumptions that the CT recipients thought they were better than the others. Like the CSG in South Africa (310), while CTs provided recipients with dignity and released them from burdening others, CT recipients were forced to defend their dignity from pervasive discourses.

Likewise, non-recipients also experienced stigma. Peers enrolled in the trial and those outside the trial teased non-recipients saying they had 'dirty', HIV-positive blood, and this was the perceived reason the girls had not been offered the CTs, despite the random allocation to study arms being well understood and HIV-positive AGYW included in the study to avoid stigma. Although this study was an intervention trial in which participants were randomised either to receive CTs or not, these findings align with real-world CT programmes based on need, where recipients have reported being stigmatised for their CT eligibility. For example, the recipients in a CT programme in Zimbabwe reported that they were classified as poor and lazy because of their CT receipt (106). Even with the CSG, there are parents who are eligible to receive CSG but have not registered because of internalised stigma that the CSG is for impoverished people (104).

HIV literature has shown how stigma can be detrimental to HIV treatment and prevention efforts (311, 312). Anticipated and experienced stigma is one factor affecting uptake and adherence to HIV treatment and prevention technologies (311, 312). A study conducted in Nigeria found that fear of stigma among HIV-serodiscordant couples hampered PrEP uptake, disclosure, and adherence (313). A study conducted among AGYW enrolled in a PrEP trial (HPTN 082) in South Africa and Zimbabwe showed that some young women reported stigma from family members, peers and partners as a barrier to PrEP uptake, use and continuation (311). These findings suggest that the stigma attached to HIV prevention programmes could have detrimental effects, such as creating social exclusion and restricting personal freedom to protect oneself.

7.3. Psychosocial impact framework emanating from PhD findings

CT interventions assessed for HIV prevention are interested in economic and health outcomes. Their theory of change is largely based on the hypothesis that structural factors such as poverty and low levels of education caused by an inability to attend school are the main drivers of HIV risk for young women. Constrained resources undermine individuals' abilities to invest in livelihoods and access education and health services (20, 314). Providing CTs alleviates these constraints, enabling expenditure and the ability to access essential services. Consequently, this reduces AGYW's risk of HIV infection. Therefore, most measures focus on how CTs impact the targeted individuals and the desired HIV outcomes. While this is a necessary and significant starting point, CT programme evaluations have been criticised for failing to embrace CTs' relational and social impacts (67, 101). This is despite the evidence that social factors significantly impact women's sexual health choices (315). It has become general knowledge that inequitable gender and harmful social norms are drivers of HIV or hindrances to HIV prevention efforts. However, current research on HIV prevention interventions targeting AGYW does not explicitly assess or address harmful gender and social norms. Instead it focuses, primarily, on interventions that empower AGYW and equip them with financial resources, 'hoping' that these will also address these inequitable norms (61). Exceptional studies have looked at the social impact among adult women in the household context (46).

This PhD's key contribution is the evidence of how CT interventions targeting AGYW for HIV prevention could positively or negatively affect psychological wellbeing and social and gender relationships. As shown in Figure 6, this PhD's main contribution lies in deepening our understanding of the psychological, gender, and social consequences of CT interventions directed to AGYW for HIV prevention. My findings show that CT interventions impact at an individual level in terms of a sense of self, but the impact also occurs at the level of the individuals' social interactions. The findings indicate that while CTs empower individuals and benefit their relationships, the cash also has the potential to undermine both. If CT interventions are to improve HIV outcomes in AGYW, it is necessary to understand how individual and social factors may influence these HIV prevention interventions. It is also essential to know how CT interventions may affect individual and social factors. From the study findings, I identified the unintended consequences of CT payments to AGYW — focusing on individuals' meanings and experiences (Chapters 3 and 4), their intimate and platonic relationships (Chapter

5), and their same-sex peer relationships (Chapter 6). I started teasing out how these could potentially facilitate or undermine desired HIV outcomes.

Based on my PhD findings, I propose a conceptual framework, which I refer to as the psychosocial impact framework, for assessing the psychosocial impact of CT interventions for HIV prevention (shown in Figure 6). The proposed psychosocial impact framework recognises that CT interventions targeting AGYW in low-resource settings have profound unintended psychosocial and gender consequences — beyond the targeted and desired outcomes. The framework highlights the need not only to focus on the recipients but also on their interpersonal relationships.

The framework shows the impact of CTs at different socio-ecological levels, interpersonal and intrapersonal. On the one hand, the framework displays the positive consequences of CTs, depicting that CTs improve an adolescent recipient's personal wellbeing, self-esteem, and agency at an intrapersonal level. It recognises that CTs impact social relationships by improving social connectedness and social capital and providing AGYW with peer identity and social status. The framework also demonstrates that CTs may affect male-female relationships by slightly shifting gender norms and power dynamics and reducing pressure on male providers.

On the other hand, the psychosocial impact framework indicates that CTs may also have negative consequences at different socio-ecological levels that could undermine CT interventions' desired outcomes. In gendered relationships, CTs threaten existing gender roles and power dynamics. CTs trigger shame and social stigma, negative emotions, and teasing and gossip in peer relationships.

The psychosocial impact framework highlights possible ways the unintended psychosocial consequences, both positive and negative, could affect desired HIV outcomes. For example, improved psychosocial wellbeing among CT recipients could translate to their ability to make favourable health decisions. Improved relationships with partners could enable them to negotiate safer sexual practices. By contrast, if cash payments to AGYW reinforce inequitable gender norms, by threatening or disempowering men, they could potentially lead to a backlash, which could increase AGYW's HIV vulnerability. Shame and social stigma could impede AGYW from achieving the desired outcome, HIV prevention.

The overall psychosocial impact framework provides valuable knowledge to leverage the positive outcomes and find ways to mitigate undesirable outcomes.

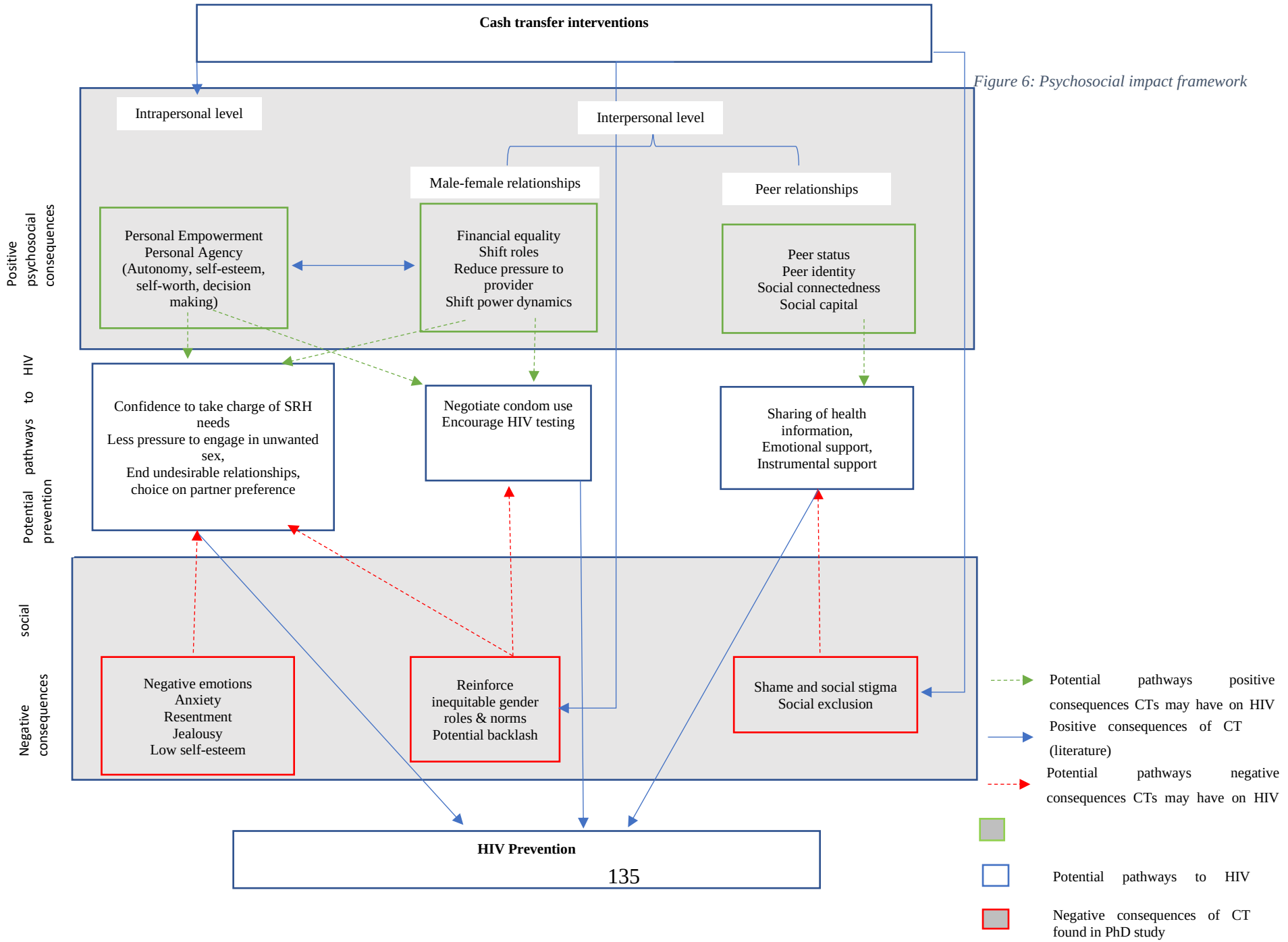

Figure 6: Psychosocial impact framework

Table 6, below, provides an outline of the research gaps identified in the beginning, and during this PhD study according to themes, key findings are summarised, and recommendations are made for researchers, programme designers and implementers.

Evidence gap	Key findings	Recommendations
• Uncertainty whether adolescent boys and girls could be appropriate beneficiaries of CTs for HIV prevention. • Concerns that CTs given to adolescents could lead to antisocial spending. • Lack of adolescents' perspectives and symbolic meanings of CTs for sexual health.	• CTs are suitable and beneficial to adolescent girls and boys. They provided adolescents with financial autonomy, sense of agency, decision-making. They give AGYW choice. • Spending among adolescents did not reflect anti-social spending. They spent CTs on 'hidden needs' essential for them as they transition to responsible adults. • Spending decision-making around CTs appears to be tied to gender norms and role expectations — reflecting the fact that CTs could reinforce traditional gender roles.	• Adolescents can be direct beneficiaries of CTs. Boys should be considered for CT programmes. Although no data is available on the effects of CTs on HIV prevalence or incidence among males, access to transfers could have knock-on effects beyond HIV prevention among boys. • There is a need for more studies to unpack the extent to which subjective meanings boys hold of CTs are translated to HIV risk. • Providing CTs to boys needs to be balanced against the risks of expenditure on alcohol and alternative money-making strategies that could lead to consideration of criminal activities when the CT programme ends. These, however, require further exploration. • There is a need to equip girls with decision-making skills, and ability to apply agency on HIV-related decisions.
• Uncertainty about how CTs would impact male-female relationships within current gender norms.	• CTs empower girls to contribute financially to their intimate relationships. • CTs have the potential to shift power dynamics if cash is equal to or more than that of males • Inequitable gender norms are deeply rooted and CTs have potential to address such inequalities, but these inequalities also have potential to hinder CTs' intervention efforts. • Provision of CTs does not automatically translate to change in existing gender norms.	• Efforts to improve HIV prevention using CTs should include gender-transformative approaches • Future HIV programming for adolescents should consist of combined interventions — for example, CT, PrEP interventions integrating gender-transformative approaches. • Futures studies on CTs targeting AGYW for HIV prevention should be explicit about gender outcomes
• Implications of CTs on social relations, specifically peer relations, are unknown.	• CTs have an impact on social relations. They can facilitate peer relationships in building and strengthening social capital. • If the targeting or selection process is deemed unfair, CTs have the potential to cause negative consequences.	• CT programming should make efforts to involve family, partners, and peers. • Community engagement and community-participatory interventions are also necessary.

Table 6: Summary of research gaps identified in the beginning, and during this PhD study according to themes, key findings are summarised, and recommendations

7.4. Conclusion

This chapter presented the key findings from this PhD study and depicted these findings in a psychosocial impact framework suggested for assessing CT interventions and other HIV prevention interventions. Overall, the PhD findings demonstrate that providing CTs to a previously marginalised group improves recipients' psychosocial wellbeing, somewhat mitigating the vulnerability that is related to their dependency on others. CTs also have unintended benefits for interpersonal relationships with intimate partners and peers. However, it also appears that, in the study context, there are entrenched harmful societal norms, stigma, inequitable gender roles and norms that are much more difficult to change which could potentially undermine the effects of the interventions and impede the targeted impact of CTs. The findings suggest that CTs could lead to a trade-off when given to adolescent boys and girls.

While CTs have shown some potential benefits in terms of reducing HIV risk, increasing HIV awareness, and building responsibility, the negative outcomes associated with CTs could make adolescents vulnerable to HIV risk.

The PhD findings provide much-needed insights on CTs directed to AGYW in low-resourced settings. In the last chapter (Chapter 9), I will discuss the research and programme implications of these findings and make recommendations.

CHAPTER 8: APPLICABILITY OF THE PhD's PSYCHOSOCIAL IMPACT FRAMEWORK IN OTHER HIV PREVENTION INTERVENTIONS

8.1. Introduction

The previous chapter developed a psychosocial impact framework for assessing the impact of CTs for HIV prevention among AGYW. This chapter explores whether this framework might be useful for HIV prevention interventions more generally. In this chapter, I therefore abstract this framework to make it more broadly applicable to other HIV prevention interventions. The chapter begins with a description of the PhD's higher-level psychosocial impact framework and the various elements covered in the framework, defines the potential benefits of the framework, and ends by assessing its applicability to other HIV prevention interventions using the provision of PrEP to AGYW as a case study.

8.2. PhD contribution: A psychosocial impact framework for understanding the intrapersonal and interpersonal consequences of HIV prevention interventions targeting AGYW

The PhD's psychosocial impact framework is premised on the idea that the role of structural factors in AGYW's vulnerability to HIV necessitates researchers to assess the psychosocial impact of HIV prevention interventions over and above HIV outcomes. Its key components include a focus on the unintended positive and negative social consequences of HIV prevention interventions at the intrapersonal and interpersonal levels and the gendered impact across levels. As defined in Chapter 1, unintended consequences refer to outcomes of the intervention that were not the primary objective of reducing HIV risk or incidence. The psychosocial impact framework gathers data from the individual intervention beneficiaries, their families, intimate partners, and peers (Figure 6). Based on the research conducted in CT trials as documented in Chapters 1 to 7, there is the expectation that impacting each of these areas will potentially

influence HIV outcomes, either positively or negatively. The two focus areas for evaluating the social consequences are the intrapersonal and the interpersonal. 1) The intrapersonal describes beneficiaries' perspectives of the impact of the intervention on themselves; these are mostly — but not limited to — psychosocial consequences. It covers how the intervention has influenced the way participants feel and behave. It also assesses the meanings individuals attach to the intervention, how these meanings impact individual agency, and how they could potentially influence HIV prevention behaviour. 2) The interpersonal impact refers to how the programme influences interpersonal relationships with family, peers, and partners, including community relationships. Social cohesion, social interaction, social capital, and how these shape AGYW's experiences, including HIV risk, are evaluated. The framework also assesses the gendered impact cutting across both of these levels, focusing on intervention participants' and their social networks' perspectives of how the programme impacted male-female relationships, how it has or has not shifted existing gender norms and roles, gendered power dynamics, and IPV.

The PhD's psychosocial impact framework possesses two significant benefits. First, it helps to illustrate how social norms and practices in a given context may influence programme outcomes. Specifically, knowledge of the unplanned social impact(s) of a particular HIV prevention intervention, which may be overlooked by programme designers, could facilitate or hinder programme success. Understanding the unintended consequences provides the basis for understanding the unplanned social benefits of the intervention that could be harnessed. It also helps identify the unplanned social impediments that could limit the planned effect of the programme, consequently enabling programming designers and implementers to be aware of possible consequences and develop mitigation plans. Second, it provides a basis for understanding how interventions work or do not work to prevent HIV beyond biomedical understandings. It does this by showing the impact of the programme at intrapersonal and interpersonal levels and how this could influence the intervention beneficiaries' experiences, including HIV risk. Consequently, the framework provides an understanding of why interventions work better in one context than another. It supports the view that HIV prevention in adolescents is a community challenge rather than an individual problem.

This framework is not designed to replace existing methods for evaluating the effectiveness of HIV prevention interventions but should be incorporated as an adjunct to existing methods.

8.3. Application of the PhD's psychosocial impact framework to oral PrEP interventions for AGYW: A case study

8.3.1. Oral PrEP background

Oral pre-exposure prophylaxis (PrEP) is a daily pill that prevents HIV if taken consistently (316). In 2015, the WHO recommended oral PrEP as part of a comprehensive package of HIV prevention technologies for high-risk populations (317), including AGYW in ESA. Oral PrEP was approved in South Africa and Kenya for HIV prevention in high-risk populations, including AGYW, in 2015 (318). Several PrEP demonstration projects were conducted across ESA to find ways of supporting PrEP use among AGYW (319).

As shown in Chapter 1, AGYW in ESA account for 25% of all new HIV infections in this region and remain a priority for HIV prevention (320). Oral PrEP holds promise for HIV prevention, and Currently, approximately 2.2. million people globally use on PrEP, and the highest most initiation have been in the US, South Africa and Kenya. recent clinical trials show high PrEP uptake, with 93–95% of AGYW taking PrEP the first time it is offered to them (321-323). However, most trials show a significant decline in PrEP adherence one to six months after PrEP initiation in AGYW, with 29–37% persisting on PrEP three months after initiation and as few as 6%–8% persisting six months after initiation (323-325). High uptake and low persistence suggest that AGYW are interested in PrEP and see the need for PrEP but face challenges in using it. Several factors contribute to low PrEP adherence and persistence, there include drug-related factors, health systems issues and social issues. The only way we achieve the true PrEP impact by improving persistence. This highlights the significance of understand the influence of the social context here is my PrEP social.

Here, I share my experience and show how the PhD's psychosocial impact framework will enable us to understand unintended personal, gendered, and relational outcomes that may influence PrEP adherence in AGYW. As part of my role at Wits RHI, I had the opportunity to manage several sub-studies on PrEP for young women, working as a social scientist in these projects. Table 7, below, portrays a description of the PrEP studies I was involved in that were conducted among AGYW in ESA. In these trials, I was responsible for concept development, data collection, data management, analysis, and manuscript writing. During my engagement in

these studies, we held interviews with AGYW exploring experiences of using PrEP and its impact on their personal lives and interpersonal relationships with family, intimate partners, and peers. I believed that the psychosocial consequences of CTs for HIV prevention among AGYW potentially exist in other novel HIV prevention interventions targeting this population. Consequently, in this chapter, I assess the psychosocial consequences of PrEP using the framework developed from the PhD findings and reflect on how the lessons learned from the social consequences of giving CTs to AGYW might also exist in other HIV prevention interventions, specifically oral PrEP. This intention is contained in Objective 5 of the PhD.

Project Name	Aim	Target group & sample size	Study year	Location	Study design	Trial intervention	Qualitative component: data collection & Sample	Qualitative manuscript reviewed for the PhD	My role in these projects
EMPOWER	Assessing whether it was feasible, safe, and acceptable to integrate response to gender-based violence and harmful norms into an HIV prevention programme offering oral PrEP	AGYW 16-24 years of age (n=431)	2016-2017	Johannesburg (South Africa), Mwanza (Tanzania)	Randomised Controlled Trial	1) Standard of care consisting of counselling and SMS reminders or 2) Standard of care + empowerment clubs	Repeat in-depth interviews, 2-3 IDIs per participant Total # of participants n=25	Scorgie F, **Khoza N**, Baron D, Lees S, Harvey S, Ramskin L, et al. **Disclosure of PrEP use by young women in South Africa and Tanzania: qualitative findings from a demonstration project**. Cult Health Sex. 2021;23(2):257-72.	Conceptualization, development of data collection instruments, data collection, coding, memoing, analysis, writing, reviewing.
HPTN 082	Assessing acceptance of and adherence to daily oral emtricitabine/tenofovir (FTC/TDF) PrEP in AGYW.	AGYW 16-25 years of age (n=451)	2016-2018	Johannesburg, Cape Town (South Africa), Harare (Zimbabwe)	Randomised Controlled Trial	1) Standard adherence support, including adherence counselling sessions and educational brochures with information about PrEP, weekly SMS reminders, and monthly in-person adherence support clubs, or (2) Standard adherence support plus counselling based on PrEP drug levels measured at weeks 4 and 8 ('drug-level feedback').	Repeat in-depth interviews, 2-3 IDIs per participant Total # of participants n=25	Velloza J, **Khoza N,** Scorgie F, Chitukuta M, Mutero P, Mutiti K, et al. The influence of HIV-related stigma on PrEP disclosure and adherence among adolescent girls and young women in HPTN 082: a qualitative study. J Int AIDS Soc. 2020;23(3):e25463.	Conceptualization, development of data collection instruments, data collection, coding, memoing, analysis, writing, reviewing.
POWER	Assessed PrEP uptake, adherence, and HIV protection when offered as part of standard of care (SOC) services	AGYW 16-25 years of age	2017-2019	Johannesburg, Cape Town (South Africa), Kisumu (Kenya)	Observational	PrEP offered as standard of care	Once-off IDI and FGDs Total # of participants n=136	**Khoza, MN**., Katz, A., Delany-Moretlwe, S., et.al., (2022). Family influences on oral PrEP use among adolescent girls and young women in Kenya and South Africa.	Conceptualization, development of data collection instruments, data collection, coding, memoing, analysis, writing, reviewing.

Table 7: Description of PrEP studies conducted among AGYW in ESA

8.3.2. The unintended positive consequences of oral PrEP

The first element of the framework focuses on positive unintended consequences of HIV prevention interventions at two levels, intrapersonal and interpersonal. The positive intrapersonal level impact refers to unintended or unexpected positive programme outcomes on programme beneficiaries that could positively affect the primary intervention outcomes and other elements of AGYW's lives. In this section, I explore the intrapersonal impacts of PrEP, I also focus on positive impact on intimate, peer, and family relationships and how these fit within the framework.

8.3.2.1. Intrapersonal impact

To evaluate the effect of oral PrEP on how AGYW think or feel about themselves and the personal meanings they attach to PrEP, I reviewed several PrEP studies conducted among AGYW in ESA (see Table 7). These studies showed that, similar to CT interventions for HIV prevention, the use of PrEP facilitates some unplanned psychosocial benefits (positive consequences) for individuals. The psychosocial impact framework (Figure 6) shows that personal empowerment and personal agency through autonomy, decision-making, and increased self-worth are the primary psychosocial outcomes of CTs among adolescent beneficiaries. Similarly, consistently across PrEP studies, AGYW reported that PrEP access and use offered them a **strong sense of agency** and represented an **act of self-care** (326). PrEP offered AGYW an HIV prevention option they could control, which motivated them to accept PrEP in the first place. In the HPTN 082 trial, AGYW reported that PrEP gave them a **sense of relief** by **reducing the stress and anxiety** about getting infected with HIV, mainly when they chose to have unprotected sex or had difficulties negotiating condom use (327). Another personal benefit is that PrEP enabled AGYW to become aware of their **responsibility to take action** to protect themselves against HIV. In EMPOWER, AGYW reported that PrEP use provided them with a **sense of 'independence'**, entailing the ability to make independent decisions to protect themselves without engaging in negotiations with sexual partners. AGYW appreciated the autonomy afforded by PrEP. Making independent decisions to initiate PrEP made AGYW feel **empowered, and they gained self-confidence** (328). Hence many AGYW perceived PrEP as an 'empowering technology'. The fact that PrEP can be used discreetly made it more desirable than other prevention methods, offering them a choice of whether or not to disclose its use. This is a significant benefit to AGYW, considering the challenges they face

when negotiating safe sexual practices and the stigma associated with women's proactive decisions about their sexual health (329). Overall, the positive consequence of PrEP at a personal level was an increase in AGYW's **self-worth** and **personal agency** within their sexual relationships and SRH.

These findings suggest that, even though PrEP protects both men and women from HIV, it has some additional unplanned benefits for AGYW. Unlike CTs, where these benefits serve as potential pathways through which AGYW make sound sexual health decisions, including HIV prevention, PrEP directly prevents HIV if taken consistently. However, empowerment, autonomy, increased confidence, and personal agency gained because of PrEP use are significant as they can motivate adherence and continued PrEP use in AGYW. These consequences assist AGYW to be resilient to negative PrEP-related reactions such as shame and stigma. As shown in PrEP studies (330-332), AGYW who experienced opposition to PrEP from their social network were able to put themselves first — they continued using PrEP despite these reactions. AGYW did not have to rely on their sexual partners to protect them but could protect themselves independently. Having less anxiety and stress about HIV and a sense of self-care made AGYW aware of other aspects of their SRH. This awareness appears to have given them the confidence to negotiate condoms use with their sexual partners, based on the realisation that PrEP prevents HIV but does not prevent STIs and pregnancy.

8.3.2.2. Interpersonal impacts

Intimate relationships

The psychosocial impact framework shows that CTs for HIV prevention shifted gender norms and power dynamics in male-female relationships. To evaluate how AGYW's use of oral PrEP affected relationships with their intimate partners and/or men more broadly, I reviewed AGYW's evidence from the HPTN 082 and the EMPOWER trials. As indicated in the previous section, the introduction of and access to PrEP allowed AGYW to make **independent decisions to protect themselves from their partners' infidelities and instances where their partners' untrustworthy behaviour** threatened their wellbeing (330). In both EMPOWER and HPTN 082 studies, AGYW reported they were most motivated to start PrEP because of mistrust in their relationships due to partners' previous infidelities and controlling and sometimes abusive behaviours. Fear of sexual violence was the primary motivation for many AGYW to initiate PrEP use. It appeared that PrEP allowed many AGYW to protect themselves

without negotiating or seeking permission or approval from their partners. Young women no longer solely depended on their sexual partners to protect them from HIV (330, 333, 334). Like CTs for HIV prevention, PrEP has facilitated a shift in gender roles in intimate relationships regarding sexual health decisions and responsibility. In a context where women generally rely on men to make sex-related decisions because of social norms that promote male superiority, and because available HIV prevention methods were reliant on male cooperation, women were at the mercy of men when it came to HIV prevention. The introduction of PrEP has changed this dynamic, giving young women autonomy over their sexual health, alleviating the burden to negotiate HIV prevention, as with condoms and MMC. The fact that PrEP can be used discreetly reduces the need to negotiate and explain PrEP use. These outcomes reduced AGYW's vulnerabilities to HIV, as shown in Chapter 7. However, arguably, the fact that PrEP can be used discreetly, thus alleviating the need to negotiate HIV prevention, means that it has not heralded a genuine shift in gender relationships. If AGYW hide HIV prevention from men rather than negotiating it in an open and equal manner that is safer for both men and women, true gender change has not been achieved (335).

Despite this potential drawback, and consistent with findings depicted in the PhD framework, PrEP has also been found to trigger communication about sexual health and HIV in intimate relationships. While use of PrEP does not have to be disclosed to sexual partners as it can be used covertly, and AGYW in the EMPOWER trial were not explicitly encouraged to disclose to partners, the trial showed that 64% of AGYW had disclosed PrEP use to their partners (328). Reasons cited for disclosure were that covert PrEP use would be challenging, particularly when young women reside with their partners. In addition, some AGYW believed it was important to get their partners' perspectives on PrEP and involve them in PrEP decisions. In EMPOWER, some AGYW who disclosed PrEP use to their sexual partners stated that their partners were supportive of their PrEP use. Other partners helped by reminding women to adhere to their daily regimen. In some other cases, partners asked young women about their clinic visits or accompanied them to the clinic for their PrEP refills. AGYW's PrEP use also presented an opportunity for sexual partners to think about their own PrEP needs. Some AGYW reported that their partners were interested in joining the study and accessing PrEP for themselves. These findings suggest that intimate partners can play a significant role in AGYW PrEP use and continuation, which is essential to PrEP efficacy. They also indicate that AGYW on PrEP could influence HIV testing and PrEP uptake among male sexual partners, which is important for herd protection. As mentioned earlier, open communication about sexual health and HIV

prevention is crucial in intimate relationships to promote safety for both men and women (336, 337).

Family relationships

While the framework did not overtly focus on the psychosocial impact on family relationships, assessing the impact of HIV prevention on family relationships remains significant for the success of HIV prevention. PrEP use by AGYW seems to have provided an opportunity for an open conversation between adolescents and their parent(s) about HIV prevention (338). This is a significant finding, as evidence shows that parent-child communication about sexual health is an effective HIV prevention strategy (339). Young women reported full disclosure to trusted female family members (mothers, aunts, sisters). "The strongest motivation for disclosing PrEP use to family members was overwhelmingly women's need to explain their frequent clinic visits and the presence of pills in the home. In keeping with a social norm of children respecting parents and older relatives, young women believed they needed 'permission' for PrEP uptake, particularly if living with their parents" (330). PrEP disclosure meant young women were impelled to disclose their sexually active status. In the African context early sexual activity and conversations about sex with adults, particularly parents, are taboo (340, 341), but this appeared to be overcome among AGYW PrEP users. Among this cohort, these conversations mostly led to parents being supportive and facilitating PrEP uptake and adherence through PrEP reminders, provision of transport money to the clinic for PrEP refills. Some parents accompanied their daughters to the clinic (338). However, in instances where parents were unsupportive or anticipated to be unsupportive, it was a dreaded experience and served as a barrier to PrEP uptake and continuation.

Peer relationships

In peer relationships, PrEP appears to allow AGYW to build alliances among themselves and look out for one another. PrEP prompted conversations and information sharing about PrEP and SRH more broadly between AGYW. Across our PrEP studies, most AGYW taking PrEP reported that the first time they had heard of PrEP was from their friends who were either already taking PrEP or planning to take PrEP (330). Young women who had started taking PrEP reported having told at least one friend or colleague about their PrEP use. They were motivated to disclose PrEP use to female peers and colleagues at work, hoping that they, too, would join the study and protect themselves from HIV infection. Upon disclosure, friends had

expressed interest in PrEP and in joining the study. They asked questions about its safety and efficacy. Several AGYW reported that they visited the clinic for PrEP with their friends. PrEP also promoted a sense of togetherness and a sense of belonging among AGYW using PrEP. In some instances, where young women stayed with their friends, friends offered instrumental and emotional support for PrEP use by asking about PrEP and reminding each other about it (330).

These findings suggest that PrEP afforded AGYW peer status and power since they possessed knowledge that was useful to their peers. This also means PrEP experience enables AGYW to be knowledgeable leaders and promote their role as PrEP ambassadors, which could boost their self-esteem and peer identity. These findings support a hypothesis that peers can play a significant role in PrEP demand creation in their peer groups and support PrEP uptake. This implies that PrEP creates a space for AGYW to become knowledgeable leaders about HIV prevention or sexual health decisions. This is an important outcome considering that leadership has been viewed as a male role (342). These findings are consistent with other studies highlighting that peers have an essential role to play in supporting HIV prevention behaviour (343-345). Participation in the PrEP trials also created an opportunity for AGYW to build new social networks with other young women using PrEP, giving them a sense that "I am not alone." A study conducted among peer networks of men who have sex with men showed that peers played a significant role in filling information gaps, promoting trust in PrEP, and reducing PrEP-related stigma (346). The findings are consistent with the interpersonal elements contained in the psychosocial impact framework in that they show peer status, peer communication, social connectedness, and social integration as outcomes of PrEP given to AGYW, as was the case with CTs paid to AGYW.

The importance of these early PrEP adopters sharing their experiences with peers, partners, and family members who may also be at high risk of HIV cannot be overstated. Through participation in projects such as EMPOWER, they can influence future uptake among peers and male partners and shape attitudes at a community level, potentially normalising women's autonomous use of HIV prevention methods. Given the prevalence of PrEP-related stigma in both study sites, this aspect of disclosure potentially gives PrEP use broader social potency. Communication about sexual health and, more specifically, HIV prevention among young women and significant others in their social networks seems to be a cross-cutting impact of PrEP (330, 338). This is an important finding as empirical evidence suggests that

communication about sexual health is a potential strategy for HIV prevention in adolescents. For example, adolescents who receive information from their peers, sexual partners, and families are likely to test for HIV (347) Adolescents who discuss sexual health topics with their peers, partners, and families are likely to test for HIV, use condoms, and are less likely to engage in casual sex (348, 349). These findings underline the crucial role played by social networks as trusted sources of information (350).

8.3.3. The unintended negative consequences of oral PrEP

The second element of the framework focuses on the negative intrapersonal and interpersonal consequences of HIV prevention interventions. These refer to unintended or unexpected undesirable programme outcomes experienced by beneficiaries that could negatively affect the primary intervention outcomes and other elements of AGYW's lives. In this section, I explore the negative relational impacts of PrEP, focusing on intimate, peer, and family relationships and how these fit within the framework.

8.3.3.1. Intrapersonal impacts

Studies have shown that PrEP can also have a negative psychosocial impact among AGYW. **PrEP fatigue and stress** are some of the negative outcomes reported by AGYW using PrEP. They spoke about the burden of taking a pill every day and indicated that it is tiring and stressful at times, leading to missing PrEP doses (351). AGYW PrEP users reported that stigma, both anticipated and experienced, from family, friends and partners triggered **feelings of fear, shame, stress and anxiety** during PrEP uptake decision-making and PrEP use. Anticipated stigma led to uncertainty around the decision to disclose their PrEP use to their social network. Anticipated stigma also led to non-disclosure, which led to covert PrEP use (330, 332). In contexts where most AGYW still reside with their parents and other family members in a confined space, PrEP adherence became challenging and led to missed doses. AGYW reported that experiences of stigma upon PrEP disclosure to family or friends also caused stress and resentment, which resulted in poor PrEP adherence. While there is currently no evidence for this, there is a concern that PrEP use in adolescents could **promote promiscuity** (352). In the past, there had been similar concerns about other sexual technologies such as the contraceptive pill and condoms, but all were ultimately unfounded (353). Research is needed to establish whether this concern is justifiable.

8.3.3.2. Interpersonal consequences

Intimate relationships

Studies have shown that PrEP use in AGYW could potentially **trigger conflict** in intimate relationships and, in worst-case scenarios, this could **lead to IPV**. In the EMPOWER study, a few AGYW reported that using PrEP led to **mistrust and counteraccusations** (330). In some instances, AGYW's male partners were unsupportive of their PrEP use, raising issues of **doubts about (partners') fidelity and HIV status**. Male partners accused AGYW of having other sexual partners because of their PrEP use (330, 332) In EMPOWER, AGYW reported that they did not disclose PrEP use to their partners or admitted they **told half-truths about PrEP**, for example, saying PrEP is for prevention, but not being specific about what it is preventing, because they feared conflict and violence (330). Non-disclosure or half-truths could also perpetuate mistrust in intimate relationships, particularly when unintentional disclosure occurs. Incidents where intimate partners accidentally find out about young women's PrEP use could result in conflict or emotional and physical abuse. It could also lead to **loss of financial support** from intimate partners, and **dissolution of the relationship**. Evidence shows a strong association between reports of violence and suboptimal adherence (354). Fear of violence could lead to lack of or intermittent PrEP use or attempts to conceal product leading to poor PrEP adherence. While our studies showed the potential for PrEP to be a trigger for IPV, it did not appear to be a source of violence in intimate relationships, but rather an indication of general background violence (330).

Stigma was another unintended consequence of PrEP in intimate relationships. In HPTN 082, participants commonly reported that their male partners feared their partners' PrEP use would lead others to assume that they (the male partners) were HIV-infected (regardless of the male partner's HIV status) (311). Some participants said their male partners did not want them to use PrEP because being with a woman taking HIV medications would taint their male partners' social status and standing in the community (330). These findings reflect existing societal norms that put men's social status first, at the expense of women's health (15). They show that PrEP taken by AGYW could lead to or perpetuate the sexual division of power in intimate relationships.

PrEP use among AGYW also has the **potential to promote unprotected sex**. Some AGYW reported that after disclosing PrEP use their sexual partners refused to use condoms because they believed that they were all safe from HIV infection. Fears that sexual partners would

demand unprotected sex after hearing about PrEP were also cited as a reason for not disclosing PrEP use to partners (330). This suggests that PrEP use could create a precedent for condomless sex, meaning that, while AGYW would be protected from HIV, they would still be exposed to other STIs and unplanned pregnancies. These findings demonstrate that PrEP given to women could perpetuate incorrect assumptions that, once on PrEP, there is no need for condom use and the belief that, since young women are protected from HIV, their partners are also protected. These assumptions contradict the programmes' aims to empower women. Furthermore, they highlight gaps in communication about what PrEP can do and place the burden of HIV prevention on young women rather than on couples as a shared responsibility.

Even though PrEP can be used covertly, some young women's uptake and use depends on their intimate partners' approval (330). Findings from the EMPOWER trial showed that, in contexts where sexual relationships are characterised by gender inequalities and women's economic dependency on male sexual partners, young women were more likely to **seek permission to use PrEP** from their partners and their decisions about whether or not to take PrEP depended on their male partners' response (330). This was more common among Tanzanian participants, where discussion with partners tended to involve permission-seeking for PrEP use rather than disclosure per se. There was also more covert use in Tanzania than in South Africa (330). This implies that if the young woman's partner refuses to consent to the young woman's use of PrEP, she will not take it, thereby affecting her ability to protect herself. In other studies, male partners reported that they would end relationships with partners who used PrEP without their consent (355). This suggests male power over decision-making, even where the decision concerns women's own bodies, and illustrates the critical role male partners have in decisions about PrEP use.

Social stigma (anticipated and experienced) is a cross-cutting negative impact observed at both intrapersonal and interpersonal levels. AGYW using PrEP were assumed to be HIV-positive as PrEP was often mistaken for ART (356). As a result of social stigma, PrEP users could potentially be socially alienated — where family, partners, and friends discriminate and isolate PrEP users because they may not want to be associated with someone who is taking ART. In HPTN 082, a few AGYW spoke of instances where they felt socially isolated due to their PrEP use — they reported a loss of friends, while others had to leave their homes because family members did not want to be associated with someone taking antiretroviral treatment. These outcomes interfere with AGYW's ability to adhere to PrEP (332).

Figure 7: Psychosocial impact framework for oral PrEP

8.4. Conclusion

In this chapter, I presented the high-level psychosocial impact framework produced by the PhD findings, descriptions of the various elements of the framework, and the potential benefit of applying the framework. Thereafter, I examined the framework's applicability to other HIV prevention interventions, specifically focusing on oral PrEP, which has recently been evaluated for use among AGYW, as a case study.

The chapter demonstrates that the framework initially developed using CT data is equally relevant to issues impacting AGYW when using PrEP. As shown in Figure 7, using the psychosocial framework to assess PrEP interventions showed that, like CTs for HIV prevention, oral PrEP has unintended personal and relational benefits as well as unintended negative psychosocial impacts. Regarding the benefits, the findings show that, theoretically, like CTs for HIV prevention, PrEP gives women autonomy and equal power to make sexual health decisions to protect themselves against HIV transmission. In addition, PrEP has shown its potential to shift gender roles that position male partners as the primary decision-makers in HIV prevention. This implies that PrEP can address barriers associated with male-controlled HIV prevention option negotiations and provide young women with equal power to protect themselves. However, the findings also show underlying social norms that could serve as barriers for young women to protect themselves. These norms were visible in PrEP interventions, where young women still felt the need to engage partners and sought permission from their partners to use PrEP.

These findings suggest that PrEP is not solely under the control of AGYW users, as partners' approval is important. While involving partners in PrEP decision-making is not an issue if an AGYW decides to, this may present challenges in instances where IPV is common. Also, when an AGYW decides not to disclose, it poses a threat of IPV if a male partner finds out unintentionally. The findings support Montgomery et al.'s (357) argument that female-initiated HIV prevention methods do not challenge the status quo of men as decision-makers and heads of households. Instead, these authors argue that female-initiated HIV prevention methods signify that couples have adapted strategies for negotiating sex-related decisions in such a way that they preserve traditional roles of men as decision-makers but accommodate women's involvement in HIV prevention (357).

Based on the framework-focused outcomes, like CTs, PrEP use in AGYW facilitated social integration, social connectedness, and a peer support network. However, PrEP use by AGYW led to experiences of social stigma and social exclusion. These findings show that PrEP is a tool that can bring users together, sharing their PrEP experiences and information.

The framework shows that while PrEP and CTs may have similar psychosocial outcomes, the point at which they empower and the pathways through which these outcomes affect HIV prevention in AGYW may differ. PrEP directly affects HIV prevention; the empowerment is literal as women take the pill and protect themselves which made them in control of their sexual health. Empowerment, in this case, influenced PrEP adherence and condom use negotiation. On the other hand, CTs empowered young people structurally; the receipt of CTs enabled AGYW to take control of their lives, which increased their self-confidence, leading to the ability to make more autonomous decisions about their intimate relationships and their sexual health including leaving risky relationships or choosing the partners they desired. The cash in *itself* does not protect HIV in the way PrEP does, but the indirect effect is empowering because it is life-changing in terms of how adolescents see themselves.

These findings build on a wealth of previous research on HIV prevention interventions targeting AGYW. This PhD study reveals that interventions designed and proven to reduce the risk of HIV for AGYW could also have unplanned personal, gender, and social consequences. The findings support theoretical perspectives that suggest that gender dynamics, social norms, and stigma influence the success or failure of HIV prevention interventions (42). They illustrate the psychosocial impact of HIV prevention interventions, and the pervasiveness of gender inequalities and social marginalisation and the impact these factors have on the potential uptake and success of HIV prevention interventions targeting adolescents, especially girls and young women.

CHAPTER 9: SYNTHESIS, IMPLICATIONS, RECOMMENDATIONS, LIMITATIONS, AND CONCLUSION

9.1. Introduction

Guided by Heise's ecological theory and theory of gender and power, this PhD study aimed to explore the personal, relational and social consequences of CTs directed to adolescents for HIV prevention, with key findings presented in Chapters 3-7. The work culminated in a PhD's psychosocial impact framework that looks at psychosocial processes impacting HIV prevention work with this population. In Chapter 8, a more generalised version of the psychosocial impact framework was presented and PrEP was used as an example to demonstrate its broader applicability to other HIV prevention interventions targeted at AGYW.

The purpose of the current chapter is to synthesise and integrate findings on CT and PrEP interventions for HIV prevention in AGYW and to make general recommendations for HIV prevention interventions targeting this cohort, based on the psychosocial impact framework I developed. The PhD strengths and limitations are discussed, followed by the overall PhD study conclusions.

9.2. Synthesis of the findings

Heise's ecological theory enabled me to assess the impact of CTs and PrEP on the individual and social domains. Taken together, the PhD study findings show that HIV prevention interventions directed to adolescents, specifically girls and young women, have an impact beyond HIV outcomes. They have unintended positive and negative personal, social, and relational consequences that researchers and programme designers need to bear in mind in both intervention design and delivery. These interventions can pose psychosocial benefits for beneficiaries but can also trigger negative outcomes.

The two HIV prevention interventions targeting AGYW examined in this thesis reveal consistent conclusions regarding the psychosocial impact of interventions. At an individual domain, I looked at the participants' experiences, beliefs, and attitudes towards the intervention

and how they impact on young people's agency and empowerment. These experiences and beliefs inform an individual's judgement of the intervention, which may impact the intervention's primary outcomes (135). At the individual level, it became apparent that providing resources such as CTs and PrEP to a marginalised group improves individual agency, somewhat mitigating the vulnerability related to adolescents' dependence on parents and sexual partners for cash. Basically, these interventions go some way to remove AGYW from the vulnerable position they occupy as a result of social norms, a position which makes them vulnerable to HIV. As shown in Chapters 7 and 8, the PhD findings indicate that HIV prevention interventions support elements of personal empowerment that are necessary for the development of individual resilience.

Studies, including Heise's ecological framework, have shown that the symbolic meanings that AGYW ascribe to HIV prevention interventions are significant and enable AGYW to make favourable choices about their sexual health and reduce their vulnerability to HIV and IPV. These meanings also signify the potential of HIV prevention interventions to tackle long-existing practices (e.g., dependence on men and acceptance of violence) that predispose girls and young women to HIV risk (83). AGYW's ability to control resources increases bargaining power, giving them a voice in decision-making, and improves sexual health outcomes (358). Empowerment, agency, and decision-making are critical in building efficacy against HIV and IPV (359). They enable individuals to make healthier behavioural choices and effective use of health services (360). Personal agency and empowerment have been linked to adherence to HIV treatment and prevention regimens (361). However, in Chapters 6 and 7, the findings also showed that participation in HIV prevention interventions could cause stress and anxiety to beneficiaries because of stigma and discrimination from their social network. Numerous studies have shown that stigma and discrimination can serve as barriers to accessing health services and HIV prevention (312). Therefore, interventions should reduce harm and normalise prevention services (362).

As mentioned in Chapter 1, Heise's ecological framework states that individual do not live in isolation; they live with families, peers, and partners. Therefore, HIV prevention interventions may have social benefits, costs and unintended consequences (101). Assessing male-female relationships, I followed the theory of gender and power to reflect on how the intervention impacted these relationships. I found that, in male-female relationships, HIV prevention interventions targeting AGYW have the potential to shift gender roles and power dynamics by

placing resources in young women's hands, giving them control of what has historically been controlled by men. They empower young women, enabling them to exercise choice, reduce dependence on men, and thereby reduce women's vulnerability to IPV — which is key to fighting the HIV pandemic, given the evidence of the association between IPV and HIV (363, 364). However, existing social norms and young women's dependence on sexual partners and families continue to limit AGYW's ability to fully exercise choice, including choices about sexual health-related decisions. In this study, AGYW were empowered to some extent but not entirely. HIV prevention interventions allowed AGYW to make free choices but these were limited by subtle social norms and beliefs, which kept AGYW in their vulnerable position and limited their agency to fully adopt the desired behaviours to prevent HIV. These limitations could be due to a lack of feminist consciousness — that is, the young women are not aware of the existing inequalities, or they are unable to resist oppressive gender norms. These findings support Kippax et al.'s notion that individuals' capacities and behaviours are tied to social norms and practices (30).

In peer relationships, HIV prevention interventions promote peer identity, social status, social capital, social connectedness, and information sharing, which leads to health benefits. However, it also appears that there are harmful entrenched societal norms and inequitable gender roles and norms among male peers that could potentially impede the targeted impact of HIV prevention interventions. Jealousy, gossip, social stigma and exclusion were identified as negative consequences of HIV prevention interventions. The findings suggest that HIV prevention interventions could lead to a trade-off between positive and negative psychosocial consequences when given to adolescent boys and girls.

Our findings show the dynamics of context in relation to decision-making about participation in HIV prevention interventions. Although AGYW noted that these interventions offered them the liberty to make independent decisions related to product use or use of CTs, they still felt the need to involve family members, sexual partners, and friends in their decisions. The responses towards the interventions were, to some extent, influenced by the responses from significant others in their social network. These findings highlight a significant role social networks play in the lives of AGYW, including choices about their sexual health. The findings are consistent with evidence from other HIV prevention technologies that showed that female-controlled methods are not completely covert — uptake and adherence to female-controlled prevention methods frequently depend on disclosure to sexual partners, and disclosure is based

on relationship norms of trust in intimate relationships (335, 365). The findings also highlight that AGYW are not independent from their families, as most reside with their parents or other family members. In such contexts, children cannot make independent decisions. They need to involve family members, particularly their caregivers. These findings are also consistent with studies showing that empowerment, autonomy, and decision-making may be limited to certain areas, as girls' and young women's control in their households and heterosexual relationships is limited (366).

Overall, the PhD results build on previous work demonstrating how social norms keep young men and women in culturally prescribed gender roles (15, 145, 288). In such a context, adolescent boys and girls may actively attempt to change and construct their identities, but are constrained by limited options and therefore tend to adopt passive masculine and feminine sexual identities, respectively, which assume male superiority and which have previously been noted as damaging for sexual health (367). My findings illustrate that it is not enough to provide CTs/PrEP, or indeed other HIV prevention interventions, as a strategy to reduce HIV infections, and targeting only girls and building individual agency is not sufficient to bring about changes in AGYW's HIV vulnerability. This highlights the need also to build community agency.

Adolescents' and young men's and women's ability to protect themselves against HIV infection is constrained by traditional beliefs and expectations about appropriate forms of behaviour (15). These expectations and beliefs put young men and women into boxes by forcing them into prescribed roles, e.g., men's role as providers and decision-makers. These roles demonstrate the dominant narratives of male superiority — expectations that masculine men should be in control of women and should take on the role of provider and sexual decision-maker in intimate relationships — as well as the dominant ideal of femininity that embraces compliance and tolerance, however hurtful or oppressive this may be. The findings show that, within their unchanged social context, AGYW remain in the same vulnerable position they were in before the HIV prevention trial. Unchanged social and gender norms limit HIV prevention interventions in their attempts to reduce HIV incidence. Using the PhD's psychosocial impact framework may help capture these contextual norms and enable intervention designers and researchers to adapt interventions to suit context.

These PhD study findings have led to several implications and recommendations. These implications and recommendations are organised at two levels. At one level I present implications and recommendations specific to the use of CTs, and at the other level are implications and recommendations related to the framework for better acknowledging and accommodating social impacts of HIV interventions that I developed in Chapter 7 and further discussed in Chapter 8 of this PhD.

9.3. Implications and recommendations for HIV prevention programming targeting adolescents

A number of implications emerge from this thesis and lead to a series of recommendations about the use of HIV prevention interventions for adolescents and young people, with a specific focus in some instances on AGYW. The first implication and recommendation of this study derives from the PhD findings related to the personal meaning adolescents derive from HIV prevention interventions (see Chapter 3). The research shows that HIV prevention interventions are generally beneficial to adolescents and their psychosocial wellbeing. Generally, in this study there were limited overt negative consequences of HIV prevention interventions for adolescents, but there were subtle negative aspects to these interventions that programme designers and researchers need to consider when targeting this population.

The PhD findings provide evidence that AGYW can be direct recipients of HIV prevention interventions without experiencing significant harm (45). The findings support interventions that put resources in the hand of AGYWs to reduce their vulnerability to HIV and IPV; but they also show that simply targeting women and placing resources in their hands is not sufficient (124). Adolescents' thinking and behaviour is still very much guided by existing social and gender norms (harmful and inequitable), making it difficult for them to adapt to change, limiting individual agency and shaping their decisions (368). This supports evidence by scholars who argue that interventions cannot achieve personal behaviour change without social support from the community (115, 369). Programme designers need to consider this and think strategically about the broader context, including relationships, when targeting only adolescent girls as beneficiaries of HIV prevention interventions, as this could have both positive and negative impacts. This suggests that HIV prevention interventions should involve extensive community engagement through community mobilisation and community-based

participatory interventions, which effectively create community awareness and support for a shift in gender norms and attitudes (133, 370).

Indeed, we need to make resources available to girls, but programmes also need to equip them with knowledge and skills to support HIV prevention interventions. Specifically, AGYW need to be sensitised to existing gender inequalities in their context, involved in creating solutions to harmful norms, and equipped with decision-making skills and tools that will assess their HIV risk and enable them to apply individual agency effectively, thus enhancing HIV prevention. Pettifor et al. (2019) underline the significance of having discussions about dealing with anxiety, stress, and internalised and experienced stigma associated with programme participation (371). In addition, HIV prevention programming could leverage empowerment caused by the interventions and their ability to grasp new information quickly by strengthening education beyond HIV to include future aspirations (362). This could make young women recognise their control over their SRH and their lives in general.

The second implication and recommendation derives from the gendered impact of HIV prevention interventions. It reflects the rootedness of inequitable gender norms (see Chapter 4). The PhD findings on the gender impact support earlier work that highlights the importance of interventions that recognises the gender differential needs and responds to cater for these differences but also recognising that doing so in the absence of addressing contextual issues that causes women's vulnerability to HIV. This finding supports the need for HIV prevention interventions targeting adolescents to include a gender-transformative element to change the balance power in gender relations. HIV prevention interventions should intentionally and explicitly focus on helping both boys and girls to recognise and unlearn harmful norms and change current inequitable norms about gender roles in male-female relationships. These interventions should create awareness of gender inequalities and equip AGYW with skills to resist or address such gender disparities; they should also change norms about male superiority and female inferiority. A few such interventions that have worked closely with men and boys, including intimate partners of AGYW, to promote gender-equitable norms and attitudes and sensitise them to HIV prevention interventions targeting AGYW, include Men as Partners, Stepping Stones, have shown that programmes that work with men and boys lead to change in behaviour and attitudes related to SRH (372). These programmes have worked to change views of masculinity and femininity, teaching them that gender equality is acceptable, equipping them to appreciate and live with empowered women without feeling the loss of power and status. A

review of evidence from programmes that sought to engage men and boys in promoting equity in health showed (372). In South Africa, efforts have been made through programmes such as Men as Partners to promote SRH and gender transformation (373). While transforming gender norms may be hard, take time, and HIV prevention programmes are under pressure to deliver HIV outcomes as opposed to investing in social change, evaluations of gender-transformative programmes such as SASA! Stepping Stones and Creating Future have shown success in reducing GBV and transforming gender norms (38, 39) — implying that it is worthwhile to invest in social change to obtain maximum impact of HIV prevention efforts.

Specific to CTs and boys as recipients, we know little about men's experience of CTs. My findings are among the first to show that boys might benefit from being beneficiaries of CTs, through increasing HIV awareness. However, their CT spending decisions appeared to be tied to gender norms and role expectations, which reflect the potential for CTs to reinforce traditional gender norms (see Chapter 3).

My findings justify the need for gender-neutral programmes. My findings also point to a need for more studies on boys' spending patterns of CTs, as concerns about social harms may be more justified among boys because of spending habits that focus on entertainment/social activities, which may include alcohol and drugs. Hegemonic masculinity involves heavy alcohol consumption in South Africa and other African countries (197), and alcohol abuse is associated with high HIV incidence and increased GBV (12, 122). Men's abuse of alcohol leads to perpetration of IPV, which increases women's risk of HIV (74). This means that providing CTs to boys needs to be balanced against the risks of expenditure on alcohol and alternative money-making strategies that could lead to possible criminal activities when the CT programme ends. These speculations, however, require further exploration, particularly because only a few of the negative expectations that existed about providing CTs to AGYW have been realised. There is a need for studies to unpack the extent to which subjective meanings boys hold of CTs are translated into HIV risk.

The third implication and recommendation of this study derives from the PhD finding that adolescents' autonomy is linked to dynamics in their interpersonal relationships (Chapters 5 and 6). Behaviour and decision-making are influenced by what peers, families and partners think or say. The reactions of those in AGYW's social network can severely impact the uptake and success of prevention interventions. This suggests that HIV prevention interventions cannot be introduced without attention to the broader social context (369, 374). HIV prevention

interventions are not socially inert — they can have positive and negative consequences. When introducing interventions, we need obtain buy-in by involving those in AGYW's sphere of influence such as peers, partners, and family. There is a need to raise awareness among peers, partners and family members and provide information about HIV prevention interventions targeting AGYW. This would not only reduce social stigma but would also ensure that adolescents receive the required social support from their significant others. To achieve this, interventions could involve dialogues with peers, partners and families (116, 133, 374). Studies have shown the effectiveness of social support, self-efficacy, stigma reduction, encouraging dialogues, strengthening support networks, and stigma and discrimination workshops for public servants in reducing HIV incidence (374). With specific reference to peer relationships, as noted in Chapter 6, peer influence is critical among adolescents; therefore interventions need to engage youth in HIV preventions through peer education, youth ambassadors and youth-led advocacy campaigns (362).

The findings from this PhD echo the widely acknowledged notion that effective HIV prevention requires combined interventions (362). Economic interventions that empower women, biomedical interventions that utilise tools and technologies to reduce risk of HIV transmission, and relationship, family and community interventions that alter gender, social, and cultural norms to facilitate risk reduction and maximise the reach and impact of preventive services need to be delivered in combination (375). These also need to be combined with interventions that involve the social networks of adolescents. These interventions must be built on a clear understanding of the local epidemic and local context and be used to inform the prioritisation and targeting of the HIV prevention response.

In countries that intend to scale up HIV prevention interventions to AGYW, for these interventions to be successful, researchers and programme designers must pay attention to social and gender-related factors that may impede progress. The DREAMS comprehensive HIV prevention programme and She Conquers have shown promise in addressing the multiple HIV risk factors in AGYW (376-378). However, in practice, one of the challenges of the programmes has been reaching vulnerable AGYW under the control of parents or sexual partners who do not support their participation in the programme (114). This emphasises the need to have a community engagement component that is less about recruiting participants into trials and more about creating a supportive environment through challenging norms and social stigma. This is supported by literature that recognises community involvement as a 'critical

enabler' of effective HIV prevention (369). Hanson et. al. (2015) suggest that communities need to be offered skills to reflect on how individuals and social mechanisms that perpetuate risk behaviours are developed and normalised (375). Figure 8 below provides a summary of the psychosocial impact of HIV prevention interventions and suggestions on how interventions could leverage or mitigate impact.

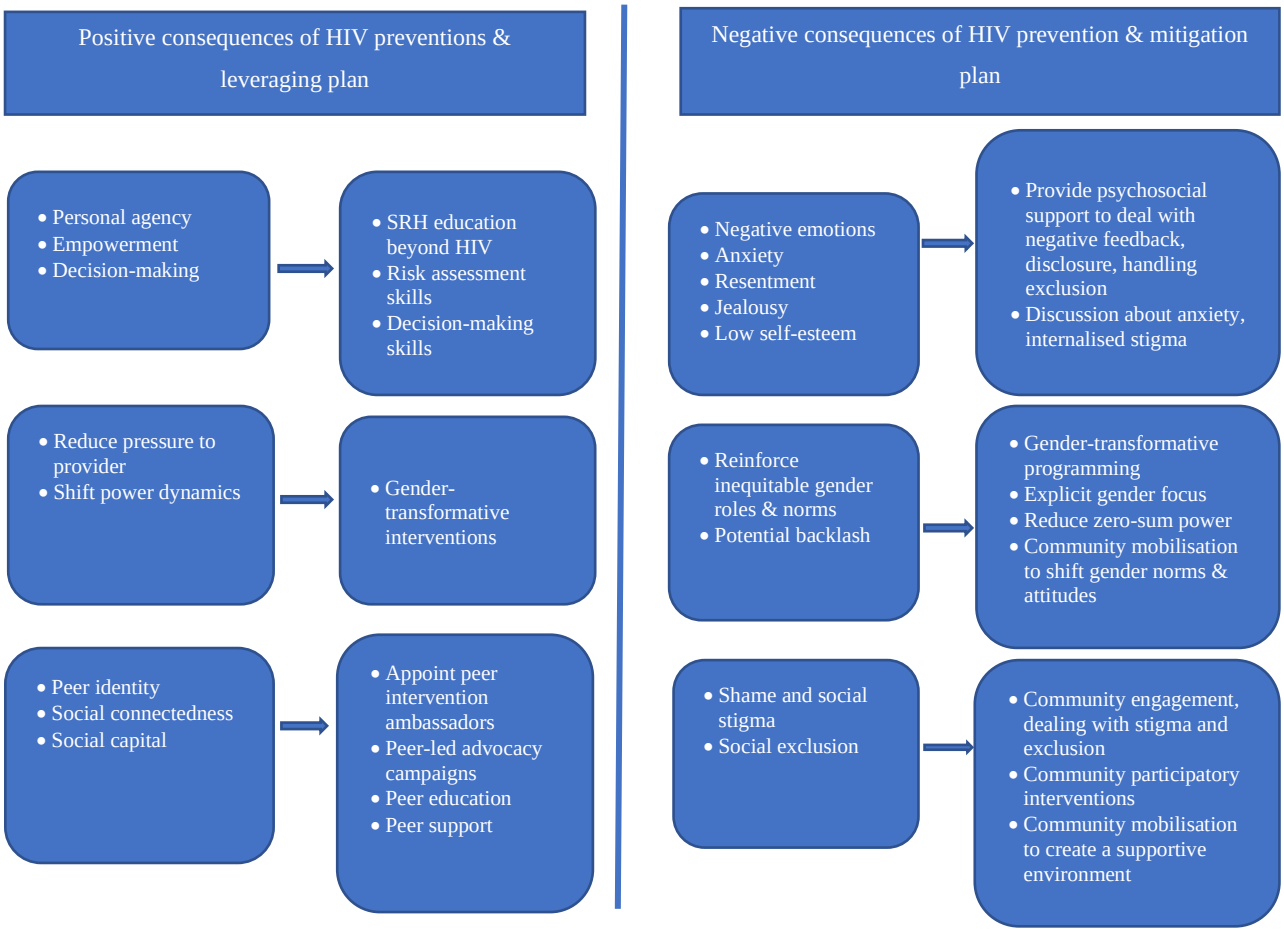

Figure 8: Positive and negative social consequences of HIV prevention interventions and how intervention can leverage the positive and mitigate the negative

The PhD findings suggest combined interventions, which include CTs, PrEP, gender-transformative interventions also including boys, and community participatory interventions that promote social agency as opposed to solely focusing on individual capabilities, are more likely to positively shape AGYW HIV prevention behaviour and thereby reduce new HIV infections. Therefore, I recommend that future research studies should assess a combination of these interventions and the impact on HIV incidence.

9.4. **Strengths of the research**

This PhD study was nested within a large intervention from the onset. This not only allowed me to collect data from multiple perspectives at the intrapersonal and interpersonal levels, it also enabled me to collect longitudinal data.

This is the first study to look at the spending patterns of CTs among AGYW in rural and urban sites, and the first to include boys both as partners and as beneficiaries of CTs for sexual health. Previous HIV prevention interventions have mostly focused on AGYW, despite evidence that boys and young men are also at risk due to an intersection between livelihoods and masculinities in relation to HIV (128). Obtaining various gender perspectives and comparisons in this regard is essential for understanding the implications of targeting boys and girls as CT beneficiaries, and to ensure that boys are not excluded as CT beneficiaries, as they also face economic-related risks (128).

This thesis contributes to research in the field of HIV prevention because the PhD findings led to the design of a psychosocial impact framework. This framework could be adopted by researchers to evaluate the psychosocial consequences of other HIV prevention interventions targeting AGYW. As noted in Chapter 7, the PhD's psychosocial impact framework will help researchers identify the positive and negative unintended consequences of HIV prevention interventions, and proactively come up with strategies to leverage the positive consequences or mitigate the negative consequences, in the same way as I have used the framework to identify the psychosocial impact of CTs and PrEP interventions (Figures 6 and 7). More research is needed to further refine the framework.

The conceptual strength of this study is that it is guided by two theoretical frameworks, namely: Heise's ecological framework and theory of gender and power. Heise's framework allows the combination of a focus on individual agency *and* the attention paid to the social and gender context within which HIV prevention interventions targeting young people are implemented. Evaluations of HIV prevention interventions targeting this population have largely focused on impact at an individual level, particularly HIV outcomes (27), with little focus on symbolic meanings, gender, and social consequences. This study was the first to assess decision-making and symbolic meanings of CTs directed to adolescents, and to study the impact of these interventions on social and gender relations. The theory of gender and power allowed me to

explored how the HIV prevention interventions impacted gender norms, economic and power dynamics.

In terms of methodological strengths, this study uses qualitative methods to provide depth, meaning, insights and first-hand experiences of receiving CTs for HIV prevention as young people. The PhD research not only gathered insights from programme beneficiaries but included perspectives of family, peers, and partners. Gathering perspectives other than those of programme beneficiaries is important for understanding social norms and acceptability of the programme. The sample included perspectives from AGYW from urban and rural contexts; this helps us to understand the role of context in relation to the environment where beneficiaries are situated. Use of qualitative methods help us understand how individuals make sense of their world (379). Quantitative methods used in the HPTN 068 trial tell us that CTs did not reduce HIV incidence (380), while the qualitative exploration of beliefs and understandings help us understand the psychological and social realities that might have influenced the trial outcomes (379, 381). Scholars have also underlined the need for social science perspectives on roll-out of biomedical HIV prevention interventions (381).

9.5. Limitations of the study

This study was not without limitations and there are several ways these could be addressed in future studies.

A key limitation is that we included boys only in the urban setting, and there is no evidence about boys as CT beneficiaries in a rural setting. Future studies should consider adolescent boys in rural settings, given that context plays a role in the impact of CTs. Conducting research with boys in rural settings will help generate data on improving their health.

While focusing on male peers and intimate partners of CT beneficiaries was necessary for limiting the scope of this research, views from the partners of non-beneficiaries might have provided additional insights. They could have helped us understand whether cash or study requirements such as HIV testing influenced the reported behavioural changes, although this was a function of the clinical trial and was not tested as a specific intervention. Views from non-beneficiaries' partners may have also shed some light on whether reported effects on intimate relationships were different or similar for beneficiaries and non-beneficiaries, thereby allowing a better understanding of whether changes were solely a result of the cash or potentially of involvement in the intervention study more broadly. Later analysis of data from

HPTN 068 captured the dynamics of CT beneficiaries' sexual relationships (296). We found that the impact of the trial on sexual risk behaviour among AGYW was a result of both receipt of CTs and the other study procedures, e.g., HIV testing and sexual health information (296). These observations were particular to AGYW in the rural site; we did not include adolescents' sexual partners in an urban setting. This limitation highlights a need for studies obtaining male and female perspectives in varying contexts. Also, this study does not include boys' and men's perspectives on other HIV prevention interventions, such as PrEP targeted to AGYW. Such information would further strengthen conclusions about the applicability of the psychosocial framework in Chapter 8 and would provide insights on how men and boys perceive PrEP in order to guide future messaging and interventions.

Given that the recruitment strategies for partners of young women receiving CTs were designed to protect young women who may not have disclosed their participation in the study to their partners, selection bias may have been introduced based on the types of partners recruited. There may have been an over-selection of partners who are more gender-egalitarian and less likely to perpetrate IPV. Moreover, FGDs and IDIs were facilitated by a female fieldworker/researcher, which may have influenced the responses given by men, particularly in group settings, with the presence of a woman having elicited responses engineered to boost participants' reputations among their male peers. Extant literature indicates that this is unlikely, but it cannot be completely discounted (382)

The study employed predominantly qualitative methods; this was valuable in obtaining in-depth participants' encounters and own words. However, the use of qualitative methods was also limiting in that we were only able to capture subjective views of empowerment. Use of quantitative research methods would allow measurement of individual agency that could allow for generalisability of the study findings. Some work has been done on CTs and wellbeing using HPTN 068 survey data which showed that CTs were empowering and had psychosocial benefits on CT recipients (383); however, this work was not a component of the current PhD study. Therefore, more analysis of survey data is required to assess the CT-related empowerment and effects on HIV risk behaviours.

Another limitation of the study was that participants self-reported their expenditure of CTs and sexual relationships/behaviours; this means that social desirability bias may have featured in their responses. Social desirability refers to the tendency to present responses deemed to be socially acceptable and not the truth (384). To counteract social desirability responses, our

interviewers were equipped with probing skills. At the beginning of the interviews, participants were informed about the confidentiality and anonymity of the interviews and our interest in their opinions; they were assured that there are no wrong or right answers (384). In addition, we interviewed beneficiaries' intimate partners at the end of the trial, requiring them to report on previous events, which does not preclude the possibility of recall bias in this regard. Recall bias occurs when participants do not remember previous events or experiences accurately or omit details (385). To minimise recall bias, during the interviews we gave participants time to think and reflect on the sequence of events before responding and interviewers were equipped with probing skills (385).

Regardless of these limitations, this study makes a significant contribution to HIV prevention interventions directly targeting girls and young women.

9.6. Conclusion

The study was conducted in response to CTs for HIV prevention that were being newly explored among adolescents at the time the PhD was conceptualised; it aimed to understand the unplanned personal, gender and social consequences of CT interventions directed to adolescents and how these could shape the impact of CTs. To our knowledge, this is the first study to synthesise social consequences of CTs targeting AGYW. During the PhD, oral PrEP interventions were approved for use in high-risk populations, including AGYW, and this provided the opportunity to incorporate other social science research that I was involved in to 'test' the psychosocial impact framework I developed using primary findings of this PhD study (Chapter 7).

Structural and biomedical interventions that target AGYW directly and place control of resources such as CTs or PrEP in their hands can provide a critical opportunity to reduce AGYW's vulnerability to HIV. These interventions improve a sense of agency, autonomy, and self-worth, and attempt to shift gender dynamics, which is necessary for AGYW to make healthy sexual decisions. However, as these interventions were not designed to explicitly challenge harmful social norms and inequitable gender norms, their impact has a positive spillover impact but also negative social consequences. From these findings it appears that the norms and relations that expose young women to HIV risk are the same factors that could impede the success of HIV prevention interventions targeting AGYW.

The target of reducing HIV infections among AGYW in South Africa and elsewhere is unlikely to be met by only focusing on empowering and equipping individuals; to address this research gap future work should incorporate social relations and gender as key factors impacting AGYW's ability to exercise sexual health choices, including making decisions to protect themselves. By incorporating social relations and gender in HIV prevention, we can create a safe social environment for young women to make safe sexual health choices.

Findings from this PhD study underline the significance of assessing how unchanged societal and gender norms and roles limit AGYW's ability to exercise choice and could serve as opposition or a pushback to the success of female-controlled HIV prevention strategies. Unless we understand and intentionally address these underlying psychosocial and gender consequences, CTs and PrEP could fall short of their intended outcomes, despite their significant potential to reduce new HIV infections in AGYW. This study recommends that research on HIV prevention interventions aiming to reduce new infections in AGYW should equip AGYW with decision-making skills and involve those in AGYW's networks. HIV prevention interventions should include gender-transformative programming and community participatory interventions to promote social agency. Lastly. HIV prevention interventions should include a process evaluation of gender and psychosocial impact.

Taken together, these findings build on a wealth of previous research on HIV prevention interventions targeting AGYW. This PhD study reveals that interventions designed and proven to reduce risk of HIV could also have unplanned gender and psychosocial consequences. The findings support theoretical perspectives that suggest that gender dynamics, social norms and stigma influence the success or failure of HIV prevention interventions (42). They illustrate the psychosocial impact of CTs and PrEP, as well as the pervasiveness of gender inequalities and social marginalisation, and how these factors impact the potential uptake and success of HIV prevention interventions targeting adolescents, especially for girls and young women. A further contribution of this PhD is to focus on young men's experiences of CTs for sexual health; this has not been previously addressed and there is limited literature in this regard.

This PhD research provides much-needed evidence of the social nuances that structural and biomedical HIV prevention interventions could bring in each context and existing social norms that could potentially affect the impact of these programmes. This information is significant, given rising HIV incidence and the growing need to address HIV prevention challenges among AGYW in sub-Saharan Africa. Understanding the psychosocial consequences of CTs and PrEP

targeting AGYW would allow programme policymakers, programme designers and implementers, and researchers to design interventions that are context-, gender-, and age-specific. This knowledge would enable programme designers to design interventions that also address the harmful social norms and inequitable gender norms.

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Appendices

Appendix A: Ethics clearance certificate

R14/49 Ms Nomhle Khoza et al

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

CLEARANCE CERTIFICATE NO. M170623

NAME: (Principal Investigator)	Ms Nomhle Khoza et al
DEPARTMENT:	Wits Reproductive Health & HIV Institute MRC/Wits Rural Public Health and Health Transitions Research Unit (Agincourt)
PROJECT TITLE:	Exploring the Consequences of Cash Transfers on Adolescent Recipients and their Relationships
DATE CONSIDERED:	30/06/2017
DECISION:	Approved unconditionally
CONDITIONS:	
SUPERVISOR:	Dr C. MacPhail and Prof S. Delany-Moretlwe
APPROVED BY:	Professor P Cleaton-Jones, Chairperson, HREC (Medical)
DATE OF APPROVAL:	26/07/2017

This clearance certificate is valid for 5 years from date of approval. Extension may be applied for.

DECLARATION OF INVESTIGATORS

To be completed in duplicate and **ONE COPY** returned to the Research Office Secretary in Room 301, Third Floor, Faculty of Health Sciences, Phillip Tobias Building, 29 Princess of Wales Terrace, Parktown, 2193, University of the Witwatersrand. I/we fully understand the conditions under which I am/we are authorized to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated, from the research protocol as approved, I/we undertake to resubmit the application to the Committee. **I agree to submit a yearly progress report**. The date for annual re-certification will be one year after the date of convened meeting where the study was initially reviewed. In this case, the study was initially reviewed in June and will therefore be due in the month of June each year. Unreported changes to the application may invalidate the clearance given by the HREC (Medical)

Principal Investigator Signature Date

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

Appendix B: Declaration

Declaration: Student's contribution to article(s) and agreement of co-author(s)

I, **Makhosazane Nomhle Khoza**, student number **781183**, declare that this Thesis/Dissertation/Research Report is my own work and that I contributed adequately towards research findings published in the article(s) stated below which are included in my Thesis/Dissertation/Research Report.

Signature of Student .... **Date**.....02 September 2021 .....

Name of Primary Supervisor...Dr Catherine MacPhail .....

Signature of Primary Supervisor ... .**Date**...07 September 2021.....

Agreement by co-authors: By signing this declaration, the co-authors listed below agree to the use of the article(s) by the student as part of his/her Thesis/Dissertation/Research Report. In cases where the student is not the 1st author of a published article, the primary supervisor must explain (under comments) why the student is entitled to use the paper for his/her degree purposes.

Article 1: Title: ...Cash transfers for HIV prevention: what do young women spend it on? Mixed methods findings from HPTN 068.....

Journal name, year, volume and page numbers: BMC Public Health, 2018, 1-12.....

Authors	Name	Signature	Date
1st author	Catherine MacPhail		07/09/2021
2nd author	Nomhle Khoza		
3rd author	Amanda Selin	Amanda Selin	
4th author	Aimée Julien		19/1/2022
5th author	Kathleen Kahn		
6th author	Audrey Pettifor		1/6/22

Comments by primary supervisor:

Nomhle has requested the use of the paper 'Cash transfer for HIV prevention" what do young women spend it on? Mixed methods findings from HPTN 068' to include in her PhD thesis. I am happy to support the use of this paper for this purpose.

Nomhle was a key colleague in the development of the ideas for the management and data collection involved in the longitudinal qualitative cohort that we established and followed through the duration of the HPTN 068 study. All qualitative data collected during the study was done under Nomhle's oversight – she was responsible for ensuring recruitment, management of timelines, data quality and majority components of the coding and analysis. In addition, she worked on various iterations of the final paper and the ideas about developing independence and social standing through access to cash are themes that we have worked on together through the duration of the parent HPTN 068 study.

1

Appendix C: Informed consent forms

Wits Reproductive Health and HIV Institute Ethics #:	University of North Carolina-Chapel Hill
Consent to Participate in a Research Study	
Consent Qualitative Young Man	

Consent Form Version Date: Version 1.0, 6 Nov 2014

Title of Study: The impact of Conditional Cash Transfers on relationships between young women and their sexual partners: A qualitative evaluation

Principal Investigator: Nomhle Khoza

Wits Department: Wits RHI

Wits RHI: 082 317 9196

Email Address: nkhoza@wrhi.ac.za

Co-Investigators: Catherine MacPhail (PhD), Kathleen Kahn (PhD), Audrey Pettifor (PhD), Sinead Delany-Moretlwe (PhD)

Funding Source: National Institutes of Health

Study Contact telephone number: +27823179196

Study Contact email: nkhoza@wrhi.ac.za

Introduction:

Hello. My name is _____ and I am working for the University of the Witwatersrand and the University of North Carolina on a project with young women, their

families and communities. We would like to invite you to participate in a study that we are doing in this area. I will tell you more about the study before you make up your mind.

We are conducting a research study in your village and in the surrounding Agincourt sub-district. Research is a way to find answers to scientific questions. We will ask approximately 20 young men to join this part of the research.

This study is sponsored by the National Health Institute in the United States and the Consortium for Advanced Research Training in Africa (CARTA) in Kenya.

This is a consent form. It gives you information about this research. You are free to ask questions at any time. You will be given a copy of this consent form to keep.

What is the purpose of this research?

The main purpose of this research study is to find ways to reduce the spread of HIV (the virus that causes AIDS) among young women in South Africa. We are not sure why HIV is spreading so fast among young South African women, but one idea is that education provides some protection against getting infected. This research will study the effects of paying young women to go to school.

In this part of this research, we are talking to young men about their experiences dating a young woman who is/was receiving a cash transfer from Swa Koteka.

Do you have to be in this research?

You do not have to be in this research if you do not want to. Just tell us if you do not want to join.

You can change your mind at any time and leave the study. You and your family will be treated the same no matter what you decide.

What are your rights as a research participant?

Your participation in this research is entirely voluntary.

You may decide not to take part in this research or to leave at any time without losing any of the care or other services you may be receiving in the community. You will be treated the same no matter what you decide.

If you decide not to join, you can still join another research study later if one is available and you are eligible.

What will you be asked to do for this research?

If you choose to take part in this research you will be asked to allow an interviewer to spend some time with you alone talking about your life and experiences. You will be asked information about personal issues such as sexual behaviour, attitudes, and beliefs about relationships, sex, and HIV knowledge. You will be asked questions about your experiences dating a young woman who is/was receiving a cash transfer from Swa Koteka. The interview will be recorded so we have an exact record of what is said.

What about confidentiality?

All efforts will be made to keep your personal information confidential. All of the research records will use a code number, not names. Research records are stored in a locked room. Your name will never be used in any publication or presentation of the research study. However, we cannot guarantee absolute confidentiality.

The research records may be reviewed by the U.S. National Institutes of Health (NIH), other government and regulatory authorities, the University of Witwatersrand and the University of North

Carolina Ethics Committees, study staff, and authorised representatives of these organisations.

An exact record of what you say during the case study will be recorded. Your name will not be on the recording. The recorded case studies will be stored for 2 years after the data is published or 6 years if the data is not published.

What are the risks and discomforts of the study?

The interview could make you feel uncomfortable or embarrassed. You may refuse to answer any question and you can stop at any time. If any of the topics discussed upset you, we can refer you to a counsellor with whom you can talk further.

If you would like to learn more information about sex, HIV/AIDS, and/or communicating with others about these topics we can refer you to another organisation that helps young people.

Additionally, if you would like pamphlets about these topics our study staff can give these to you.

Will this research benefit you or the community?

There are no immediate benefits to being in the study. However, your community and other communities may benefit from this research in the future.

Are there costs or reimbursements?

There will be no costs for being in the study.

What happens if there is a research related injury?

Because this activity only involves discussion, it is very unlikely that you could be injured.

However, if your participation in this study causes you to need ongoing care, the study will pay for this care at local public sector clinics and hospitals and cover any transport costs that you may have to reach these facilities. There is no programme for compensation either through this institution or the US National Institutes of Health (NIH). You will not be giving up any of your legal rights by signing this consent form.

What if you have other questions?

You have the right to ask, and have answered, any questions you may have about this research. If you have questions, or concerns, you should contact the researchers listed on the first page of this form. You will be given an opportunity to ask any questions before the interview begins.

Ethical Approval

This study protocol has been submitted to the University of the Witwatersrand, Human Research Ethics Committee (HREC) and the University of North Carolina Ethics Committee and written approval has been granted by these committees.

The study has been structured in accordance with the Declaration of Helsinki (last updated: 2008), which deals with the recommendations guiding doctors in biomedical research involving human participants. A copy may be obtained from me should you wish to review it.

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject you may contact, anonymously if you wish, the University of the Witwatersrand Human Research Ethics Committee. Please phone 011 717 2301 to be directed to Prof Cleaton-Jones of the committee. If you have any questions or concerns, the 24-hour telephone number through which you can reach the site Principal Investigator Nomhle Khoza 082 317 9196.

Verification of Consent

Do you agree to take part in the research study?

- -

PARTICIPANT'S AGREEMENT TO TAKE PART

Participant's Agreement:

I have read the information provided above. I have asked all the questions I have at this time. I voluntarily agree to be in:

LITERATE PARTICIPANT

_____ _____
Signature of Research Participant Date

_____
Printed Name of Research Participant

_____ _____
Signature of Person Obtaining Consent Date

_____
Printed Name of Person Obtaining Consent

ILLITERATE PARTICIPANT

_____ _____
Mark of Research Participant Date

_____
Printed Name of Research Participant

Participant's Name and Date Written By _____
FW full name

_____ _____
FW Signature Date

_____ _____
Signature of Person Obtaining Consent Date

_____
Printed Name of Person Obtaining Consent

- - - -

ILLITERATE PARTICIPANT

_____ _____
Mark of Research Participant Date

_____
Printed Name of Research Participant

Participant's Name and Date Written By _____
FW full name

_____ _____
FW Signature Date

_____ _____
Signature of Person Obtaining Consent Date

_____
Printed Name of Person Obtaining Consent

_____ _____
Signature of Witness Date

_____
Printed Name of Witness

Appendix D: In-depth interview topic guides

Feasibility of Economic Interventions for HIV Prevention in Young People (16-18 years) in the inner city of Johannesburg, Hillbrow.

Dear Participant

My name is _____ (insert your name) I work for the Wits Reproductive Health & HIV Institute (Wits RHI). Wits RHI and the Johns Hopkins Bloomberg School of Public Health are conducting research on the impact of a cash transfer intervention on young men and women around Hillbrow. Thank you for agreeing to take part in this interview following the survey you completed. We are interested in learning your views about a research or project you were part of in the last 18 months.

Please feel free to answer the questions based on what you feel and think and on your experiences. If you do not understand any of the questions or how to answer them, please ask me to clarify. You can decide to not discuss a particular topic, or, if you choose, you can stop the discussion at any point. As indicated on the consent forms, this discussion will take about an hour and the answers you give will not be shared with anyone outside our research team.

Do you have any questions before we start?

YES ☐ NO ☐

Ethics checklist	yes/no
Have you explained the purpose of the research?	
Have you explained issues related to confidentiality?	
Have you explained how long the interview will take?	

Have you asked the respondent to identify a preferred location for the interview?	
Have you tried to moderate expectations (i.e. no promise of payment, reward or immediate benefit?)	
Have you explained that the respondent can decide NOT to participate at any time?	
Have you obtained informed consent?	
Have you obtained permission to record?	

Main Question	Question to ask	Probes
Sources of income and spending amongst adolescents	What are your sources of income?	Now / When you were in this project? - Where, Who, Why?
	Is money hard to come by?	Now / When you were in this project?
	What do you use money for?	Now / When you were in this project? - Saving? - Spending (on what – list in detail)
	What do young people you know, your friends, use money for?	Now / When you were in this project?
	What did you do with the cash that	What? (buy/ lend / give away /save)

Unintended negative consequences of cash transfers	you received from us?	Why?
	Why do you think you received the cash?	Clinic/ School / Other reasons?
	Did receiving the cash make any difference to school attendance, clinic attendance?	Probe: How, What, Why?
	Did having the cash change anything for you?	Positive or Negative? Why? - Theft - Alcohol
Consequences of Withdrawal	What has happened to you since you are no longer receiving cash from us?	Positive or Negative? Why?
Context – household and neighbourhood	Tell me about where you live, who you live with?	Neighbourhood – good, bad, violence, crime, health Household – support
Future	What are your aims for the future?	How, Why, What?

Feasibility Study of Economic Interventions for HIV Prevention in Young People (16-18 years) Living in Inner City Johannesburg, Hillbrow

In Depth Interview Guide: Youth

Instructions: Please fill in this IDI INTERVIEW GUIDE, NEATLY, using a BLACK PEN. Any corrections or alterations must be signed and dated as per GCP. If you take notes in a separate notebook, be sure to attach these to these pages.

AUDIO FILE NAME	

ITEM	OPTION	ANSWER
SEX (tick the relevant box)	MALE	
	FEMALE	
DATE OF BIRTH	(DD/MMM/YY)	
CURRENT SCHOOL GRADE	WRITE AS GRADE AND NUMBER	
STUDY ARM (tick the relevant box)	1. Unconditional	
	2. Conditional School Attendance	
	3. Conditional Clinic Visit	
METHODS OF CASH PAYMENTS	A. Cash payments by card	
	B. Cash payment by phone SMS	

Interviewer preparation checklist (answer YES or NO or NA)

Is the interview room private and quiet? (Put the "please observe silence; interview on progress" sign on the door interview room and walls on corridor) Yes / No	
Is the audio recorder working? Yes / No	
Do you have the correct version of the interview script? Yes / No	

[Interviewer read to participant]

My name is _____ (your name) and I work for the Wits Reproductive Health and HIV Institute (Wits RHI) on a research project with young men and women around Hillbrow.

Thank you for agreeing to take part in this interview. I would like to have a conversation with you about your views and experiences in taking part in our project. I am interested to learn, in your words, how it was like for you to be part of the cash transfer research. We want to understand how a programme like this cash transfer research can be extended to reach more young people in different communities.

Please feel free to talk openly about this. Remember that everything you say will be kept confidential and you will never be identified by name.

If you do not understand any of the questions or how to answer them, please ask me to explain. You can decide to not discuss a particular topic, or, if you choose, you can stop the discussion at any point. This discussion will take about an hour.

We will give you R100-00 to cover your transport costs and other costs of your coming for this interview. There will be no other direct benefits for you from this research; however, we hope the information you will provide will help us understand how young people view cash transfers research/programmes.

Ethics checklist (Answer Yes/No)

Have you explained the purpose of the research?	
Have you explained issues related to confidentiality?	
Have you explained how long the interview will take?	
Have you tried to moderate expectations (i.e. no promise of payment, reward or immediate benefit?)	
Have you explained that the respondent can decide NOT to participate at any time?	

Do you have any questions before we start?

SUMMARISE QUESTIONS IN BOX BELOW

We are going to start the discussion, is it okay if I record the interview?

YES ☐ NO ☐

If NO, do not record the interview

<table>
<tr><td>THEME</td><td>Broad research question (Do NOT Read this out; please fill in the answer based on the response given. If in doubt consult supervisor)</td><td>Probes (use these suggested probes to stimulate conversation and direct the responses – do not rely solely on these questions, but continue to probe each response, asking for examples and details using the terms: WHAT, WHERE, WHEN, WHY, HOW)</td></tr>
<tr><td>1. ACCEPTABILITY</td><td>1. Was the conditional cash transfer programme generally acceptable? (Tick YES or NO)

<table><tr><td>YES</td><td></td></tr><tr><td>NO</td><td></td></tr></table></td><td>What did you think of the cash transfer programme? (Did you like / not like / why?)

What sort of advantages did you gain from this research?

What sort of problems did you experience with this research?

How do you think people were selected for the project?

How did you feel when you learnt that you would be receiving cash (R280-00):

• Group 1: Monthly (six months) without conditions
• Group 2: Monthly (six months) conditioned on 80% school attendance rate
• Group 3: Once conditioned on attending Esselen Street Clinic Youth Friendly Services

How did you feel about the conditions that were attached to receiving cash

• Group 2: Monthly (six months) conditioned on 80% school attendance rate
• Group 3: Once conditioned on attending Esselen Street Clinic Youth Friendly Services

How did you feel about the amount of money you received? (Probe: too much, too little, a lot, a little, just right/sufficient/enough)

- Why do you feel the amount given was too little/too much?</td></tr>
</table>

		- How much money would have been enough What amount of cash in a month do you think would be sufficient to meet your monthly needs?
2. FEASIBILITY	2.1 Was the conditional cash transfer programme generally feasible / practical for them? (*Tick YES or NO*) YES ☐ NO ☐ 2.2 Was the method of payment feasible/practical for them? (*Tick YES or NO*) YES ☐ NO ☐	**All Groups:** What problems did you experience with receiving the cash transfers (probe on delays on payments, bank charges, using ATMs) **Group 2** (ask ONLY the group conditioned on school attendance) What problems did you experience with your school in providing school attendance registers/proofs to this research? **Group 3** (ask ONLY the group conditioned on attending Esselen Street Clinic Youth Friendly Services): What problems did you experience with visit to the clinic? **Group A** (ask ONLY the group that received payments via card payments): What problems did you experience with cards payments? **Group B** (ask ONLY the group that received payments via phone SMS): What problems did you experience with phone payments?

<table>
<tr><td></td><td></td><td></td></tr>
<tr><td>3. MEANING</td><td>3. Did / Does the participant understand the overall aims and intentions of the project?

(Tick YES or NO)

<table><tr><td>YES</td><td></td></tr><tr><td>NO</td><td></td></tr></table></td><td>Why do you think you received the cash transfer?

What do you think this was for?

What was the money intended to be used for? (participants will mentioned some of the below options or other reasons but DO NOT read these out)

Group 1: Money to encourage HIV prevention/safe sex behaviour

Group 2: Money to encourage attend more school days and improve school marks

Group 3: Money to encourage attend clinic

All groups: What do you think was the reason for the project?

Group 2: Why do you think we asked you to attend school?

Group 3: Why do you think we gave you money to attend the clinic?</td></tr>
<tr><td>4. DISCLOSURE</td><td>4. To whom did they disclose their participation? (Tick ALL that apply)</td><td>How did you explain receiving cash from this research to other people that you live with or that you know (parents, family member, relatives, friends, school teacher, class mates etc.)</td></tr>
</table>

	Parent Sibling Household member Other relative Friend School Teacher Clinic Nurse / Doctor No-one	What did you actually tell them (parents, family member, relatives, friends, school teacher, class mates etc.) (Try to get them to tell you exactly what they said) How did they respond? (Angry, happy, ambivalent, jealous, etc.) (Try to get them to reconstruct what the person said and did in response). Who did you NOT disclose to? Did you try and keep it a secret, and if so, why? What were you afraid of if others knew of what you were involved in?
5. DECISION MAKING	5. Who made decisions about how the money was spent? (*Tick **ALL** that apply*) His / Herself Parent	When you got the money, how did you decide what to do with it? Did anyone give you advice, or tell you what to do with the cash? Tell me about what happened (*probe for when, where, who, how, why*).

<table>
<tr><td></td><td><table><tr><td>Other (Specify)</td><td></td></tr></table></td><td></td></tr>
<tr><td>6. EXPENDITURE</td><td>6. How was the money spent? (Tick ANY of the following options):

<table><tr><td>Personal</td><td></td></tr><tr><td>Transport</td><td></td></tr><tr><td>Household</td><td></td></tr><tr><td>Health</td><td></td></tr><tr><td>Entertainment</td><td></td></tr></table></td><td>Tell me about how you spent the money? Why did you spend it in this way?

Can you tell me in detail about each cash amount you received

Did you make a budget on how to spend the cash? Tell me about what went into this?

How long did the cash last after you had received it?

(If not mentioned, probe about expenditure referring to alcohol, drugs)

Tell me about how you saved the cash?

How do you plan to use your savings?</td></tr>
<tr><td>7. DISTRIBUTION</td><td>7. How was the cash distributed? (Tick ANY of the following options):

<table><tr><td>Parent</td><td></td></tr><tr><td>Sibling</td><td></td></tr></table></td><td>Did you give some of the money you received to anyone?

Who did you give the money to?

How much did you give to different people?</td></tr>
</table>

<table>
<tr>
<td></td>
<td>
<table>
<tr><td>Household member</td><td></td></tr>
<tr><td>Other relative</td><td></td></tr>
<tr><td>Friend</td><td></td></tr>
<tr><td>School Teacher</td><td></td></tr>
<tr><td>Clinic Nurse / Doctor</td><td></td></tr>
<tr><td>No-one</td><td></td></tr>
</table>
</td>
<td>(Ask for each person they gave money)

- Why did you give them money?
- What did they do with the money?</td>
</tr>
<tr>
<td>8. SOCIAL RELATIONAL CHANGE</td>
<td>8. Did the cash transfers lead to any changes in their relations within the household, within their family, or with their friends, or romantic partners? (Tick ALL that apply)

<table>
<tr><td>Parent</td><td></td></tr>
<tr><td>Sibling</td><td></td></tr>
<tr><td>Household member</td><td></td></tr>
<tr><td>Other relative</td><td></td></tr>
</table>
</td>
<td>Tell me about your family? Do you get on well with the people you live with? Did anything change after you started to receive the cash transfers? (Probe what, when, where, why?)

What about your friends? Did things change after you started to receive the cash transfers? (Probe what, when, where, why?)

And, your romantic partner/s? What changed after you started to receive the cash transfers? (Probe what, when, where, why?)</td>
</tr>
</table>

	<table><tr><td>Friend</td><td></td></tr><tr><td>Romantic partner</td><td></td></tr><tr><td>None</td><td></td></tr></table>	
9. CHANGE	9. Did the cash transfers lead to any positive changes? (*Tick YES or NO*) <table><tr><td>YES</td><td></td></tr><tr><td>NO</td><td></td></tr></table>	What has changed for you since you joined this project and started to receive cash? (*Probe for what, where, when, why?*) - Were there any positive changes? - Were there any negative changes?
10. Mechanism of action	10. What led to changes (positive and negative)? (Tick **ONE** of the following options)	**Group 1:** Did anything change as a result of receiving the cash (*Probe for which, why, how?* **Group 2**: Did your attendance at school change as a result of receiving the cash *Probe for which, why, how?*

<table>
<tr>
<td></td>
<td>
<table>
<tr><td>Cash</td><td></td></tr>
<tr><td>Conditions</td><td></td></tr>
<tr><td>Both</td><td></td></tr>
</table>
</td>
<td>Group 3: Did anything change as a result of receiving cash for attending the clinic? (Probe for which, why, how?</td>
</tr>
<tr>
<td>11. COMMUNITY RESPONSE</td>
<td>11. What was local opinion regarding the CCT project?

(Tick ONE of the following options)

<table>
<tr><td>Positive</td><td></td></tr>
<tr><td>Negative</td><td></td></tr>
<tr><td>Ambivalent</td><td></td></tr>
<tr><td>Not known</td><td></td></tr>
</table>
</td>
<td>Did you hear people discussing cash transfers in the community (school, churches, streets, etc.)

What were they saying? How did you feel when you heard these stories?

(Probe: when, what, where, why)</td>
</tr>
<tr>
<td>12. QUESTIONS</td>
<td>12. Do they have any questions or comments at the end of the interview?</td>
<td>What questions do you have for us, or suggestions, or observations? Is there anything I did not ask you about that you want to tell me about?</td>
</tr>
</table>

Appendix E: Recruitment documents

Recruitment script

The impact conditional cash transfers on relationship between young women and their sexual partners: A qualitative evaluation

Individual in-depth interviews with partners

To be read by a fieldworker and given to the young woman

Wits University is doing a small research study with about 20 partners of young women enrolled in the Swa Koteka study (HPTN 068) in Bushbuckridge. We are asking you to invite your partner to take part in this interview. You will be given an invitation card to give to your partner. If he is interested he will call or send a 'call back' message on the contact number in the invitation.

Although it is unlikely, the interview with your partner may trigger some anger which may possibly expose you to partner violence. Should this happen, please contact us on 076 557 8266 we will refer you for assistance or you can directly seek help from following units:

Police

Douglas 076 593 7292 (Ximhungwe and surroundings)

Superintendent Mabunda 082 445 8827/072 219 1423 (Thulamahashe & surroundings)

Social workers

Sindile Hlatswayo 013 708 1471 (Agincourt Health Centre)

Sizakile Mabunda 082 577 1013 (Kildare Clinic)

Vuyisile Mhlanga 072 072 4360 (Oakley Clinic)

Gift 073 443 9072 (Belfast clinic)

Study invitation card (English & Shangaan)

Dear prospective participant

We are interested in hearing about your experience dating a young woman who is/was receiving a cash transfer from Swa Koteka. You are invited to take part in a once off in-depth interview which will take approximately 1 hour. This interview will be conducted privately with an interviewer and all information you share will be confidential. You will be asked information about personal issues such as sexual behaviour, attitudes and beliefs about relationships, sex, and your HIV knowledge. You will also be asked questions about your experiences dating a young woman who is/was receiving a cash transfer from Swa Koteka. If you are interested please call or send a 'please call me' to 076 557 8266. We will contact you to schedule a date and time convenient for you.

Thank you

Study Team

Appendix F: Focus group discussion topic guides

Topic guide: young men dating intervention young women

Background information

1. Tell me a little about of yourself (age, schooling/ work, family, where you live etc.)
2. Tell me about your relationship with XXX (YW's name) (When & how you met; what attracted you to her, how long have you been together, what kind of relationship do you have, serious/not serious?) What were you doing when she was stull at school?
3. What things you do when you are together? How often do you see each other? (Probe: what they do for entertainment, approximate time spent together)
4. Do you have other partners besides XXX? Why/Why not?

Sexual behaviour

Sexual partner(s) & condom-use

5. Can you tell me about your sexual relationships (# of sexual partners)
6. Are you sexually active? How often do you have sex with XXX (name of partner)?
7. Who makes decisions about sex in your relationship with XXX? (Why?)
8. What do you think/feel about using condoms during sexual intercourse? Do you and your partner(s) use condoms? Why you choose to use/ not use condoms? How often do you use them?
9. Has XXX's involvement in SK influenced your behaviour/decisions in terms of sexual partners and condom use? If so, how? Have you noticed any change in her behaviour and thus your sexual relationship as a result?
10. What are your future plans with XXX?

HIV testing

11. Have you tested for HIV? (If no, why? Skip to question 13) If yes, ask question 12
12. Tell me about the last time you did an HIV test? (When was it, where did you do it, alone/with partner; reason for testing, feelings about testing); did XXX's participation in the study influence your decision to test? When do you next plan to test? Did you disclose to XXX and do you know her status? (Why/why not?)
13. What do you think about partners knowing each other's HIV status?

14. Tell me about any discussions you and XXX have had about HIV testing? Have these been influenced by XXX's participation in SK?
15. What are your feelings about ART, treatment? If you tested positive, would you be willing to take treatment? Why or why not?

Medical Male Circumcision

16. What do you know about medical male circumcision? (What is the relationship between MMC & HIV)
17. What are your views about MMC?
18. Have you been through this procedure? Why/why not?
19. [If previous answer is yes] What was it like for you to do MMC? What informed your decision to do MMC? (Probe: influence by SK)
20. Generally, what changes in your sexual relationship(s) have been influenced by YW's participation in SK?

Perceptions/experiences of Swa Koteka

21. Tell me anything you know about the SK (HIV testing; cash transfer)
22. How did you get to know about the SK?
23. What do you think about the study and why? (Good things/bad things)
24. Tell me about your experiences dating XXX? (How do you feel about XXX participating in SK? Why you feel that way?)
25. Tell me about any discussions you have had with XXX about SK? (Probe: Sharing of information learned from SK, discussions about HIV)
26. What changes have happened in your relationship due to XXX being enrolled in the study? (Probe: sexual relationships, decisions, providing money to the YW before the study and now, use of the money (sharing money; buying you gifts))
27. Tell me about any problems that you and XXX experienced because she was part of SK.