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ADULT MALE PERCEPTIONS ON THE IMPLEMENTATION OF THE SAFE MALE CIRCUMCISION COMMUNICATION STRATEGY (2009-2012) IN GABORONE BOTSWANA

Research Report by

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A research report submitted to the Faculty of Health Sciences (School of Public Health), University of the Witwatersrand, in Partial Fulfillment of the Requirements for the Degree of Masters in Public Health in the field of Social and Behavior Change Communication

Date: 26 June, 2015

Declaration

I **Samson Setumo** declare that this research report is my original work. Any work done by other person has been properly acknowledged in the text. The report is submitted in partial fulfillment of the requirements for the Degree of Master of Public Health (MPH) with the University of Witwatersrand, Johannesburg, South Africa. It has not been submitted for any other degree or exam in this or any other University.

Signature:

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Abstract

Introduction

Botswana has been hard hit by HIV with an adult prevalence rate at around 19.03% (Statistics Botswana, 2013a). Over the years many interventions have been put in place to curb the scourge without any meaningful success. In response to three randomized controlled trials which found that male circumcision reduced the risk of getting an HIV infection by up to 60%, in 2008 Botswana introduced the Botswana National Safe Male Circumcision (BNSMC) Strategy to aggressively scale up male circumcision in Botswana (Ministry of Health, 2008). However, when the strategy, was evaluated, male circumcision had only increased by a mere 13.3% in four years, instead of the anticipated 80% (Ministry of Health, 2008, Statistics Botswana, 2013a). The aim of this study therefore was to explore adult male perceptions of the implementation of the BNSMC strategy in Gaborone, Botswana, with an aim to inform future campaigns.

Methods

An exploratory qualitative cross-sectional study design was used and data were collected through In-depth Interviews (IDIs) and Focus Group Discussions (FGDs). A total of 22 (circumcised and uncircumcised) men between the ages of 18 to 49 residing in and around Gaborone, participated in IDIs (10) or FGDs (2). Participants were recruited through purposive and snowball sampling. All interviews were audio recorded and transcribed. A combination of deductive and inductive thematic analysis of the transcripts was conducted.

Results

What emerged strongly is the role played by society, friends and relatives in influencing the individual to circumcise, beyond formal campaign messages. In particular peer influence seemed to have played a crucial role. The study has identified multiple types of fear as key barriers to SMC, including fear of erectile dysfunction, fear of pain, fear of HIV testing and other fears related to adverse effects such excessive bleeding and complications with the procedure. Participants also expressed lack of trust in the health system which they attributed to incidents which occur at health facilities.

Study participants did not think that the TV and radio broadcasters used for the campaign were effective. Although most participants felt that edutainment was relatively effective because it engaged people at an emotional level and is liked by the youth, nobody describe it as influencing their own decision and some discredited using music because people do not listen to the embedded

messages. On the other hand, the use of a musician celebrity to promote SMC reportedly influenced some to circumcise.

Conclusions

Data from this study has shown that intended SMC key messages had limited reach and were insufficient on their own to increase SMC. Building on the use of celebrities, more could be done in the future to include other influential people, such as girlfriends and peers. Formative research is indicated to identify more appropriate mass media broadcasters for intended audiences and to explore additional channels. The content of messages must also be reviewed in light of what audiences say influences their decisions. In particular, the fear of testing and lack of trust in the health care services may have negatively affected the SMC up-take outcome more than implementers think. Going forward, evidence based planning of future interventions could address some of the identified gaps through the use of social and behavior change communication theories as the basis for program design, implementation and evaluation.

Acknowledgements

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List of Acronyms

ACHAP……. African Comprehensive HIV/AIDS Partnerships

AIDS…….. Acquired Immune Deficiency Syndrome

ART……..Anti-retroviral Therapy

ARVs……Antiretrovirals

BAIS……Botswana AIDS Impact Survey

BIHL…… Botswana Insurance Holding Limited

BNSMC…….Botswana National Safe Male Circumcision

EE……Education-Entertainment

FGD…… Focus Group Discussion

HBM…….. Health Belief Model

HIV……Human Immunodeficiency Virus

HREC…….. Human Research Ethics Committee

ICRW…….International Centre of Research on Women

IDI……..In-depth Interview

MPH…….. Master of Public Health

MOH……Ministry of Health

NACA……..National AIDS Coordinating Agency

NSF…….. National Strategic Framework

PI…… Principal Investigator

RCT……Randomized Control Trial

SBCC……Social and Behavior Change Communication

SMC……. Safe Male Circumcision

TFD……..Theatre for Development

UNAIDS…….United Nations AIDS

WHO…….World Health Organization

YOHO……Youth Health Organization

1 Chapter 1: Introduction, Literature Review, Aims and Objectives

1.1. Introduction

Botswana is a land locked Southern African country with a population of approximately two million people (Ministry of Finance and Development Planning, 2011). Like other Southern African countries, Botswana has been hard hit by Human Immunodeficiency Virus (HIV), with an adult prevalence rate of 19.03% in 2013 (Ministry of Finance and Development Planning, 2011, Statistics Botswana, 2013a). Over the years, the government and the people of Botswana have made concerted efforts to prevent HIV with interventions such as promotion of condom use, abstinence, prevention of mother to child transmission, reducing multiple concurrent partnerships and providing anti-retroviral therapy (ART) (Ministry of Health, 2008). Despite all these efforts, the prevalence rate among the general population increased from 17.6 percent in 2008 to 19.03% in 2013 (Statistics Botswana, 2013b). This high prevalence rate is a matter of concern when taking into consideration Botswana's small population.

In 2005, a randomized controlled trial (RCT) conducted in South Africa among uncircumcised men aged between 18 and 24 years found that male circumcision reduced the risk of getting an HIV infection by up to 60%, which presented an additional prevention strategy in the face of this crisis (Auvert et al., 2005). This finding was further corroborated by two other RCT studies conducted in Uganda and Kenya (Bailey et al., 2007, Gray et al., 2007). The potential impact on HIV prevention that can be accrued from the effective implementation of safe male circumcision (SMC) cannot be overemphasized. It is estimated that if 80% SMC coverage can be achieved within 13 priority countries in Southern Africa (including Botswana) by 2025, nearly 4 million infections could be averted (Macintyre et al., 2014). On the basis of these findings and overwhelming evidence in support of SMC, UNAIDS and WHO recommended that countries with low male circumcision prevalence and high HIV prevalence should implement male circumcision as an add-on strategy to HIV prevention (Ministry of Health, 2008).

As a result, in 2008 Botswana introduced the Botswana National Safe Male Circumcision (BNSMC) Strategy to aggressively scale up medical male circumcision in Botswana (Ministry of Health, 2008). When this strategy was introduced, the circumcision prevalence rate stood at 10.2% (Ministry of Health, 2008). At that time, the most prevalent form of male circumcision was the traditional one which was performed at the initiation ceremony for boys known as *Bogwera* (Ministry of Health, 2008), whereas

the BNSMC Strategy proscribed medical SMC. A short-term communication strategy on SMC was developed to guide implementation, monitoring and evaluation of SMC behavior change communication interventions (Ministry of Health, 2008). This add-on strategy was designed to run for four years from 2009 to 2012. The target audience consisted of uncircumcised adolescent boys, men and parents/guardians of adolescent boys.

In line with 2008 WHO communication guidance on male circumcision, the Ministry of Health identified the following key messages to the identified target audiences;

- Male circumcision reduces the risk of HIV infection but does not offer complete protection against HIV transmission. It is additional to and not a substitute for other existing prevention methods (Ministry of Health, 2008).

- After male circumcision, it is still essential to practice the existing protective behaviors (proper and consistent condom use, faithfulness/fidelity or abstinence) that are most appropriate to one's circumstances. Male circumcision is more effective in reducing HIV transmission when the existing preventive methods are used in combination (Ministry of Health, 2008).

- It is essential to abstain from all sexual activity, including masturbation and sex with condom for at least six weeks after the procedure has been performed. Resuming sexual activity before complete wound healing will delay the healing process and increase the risk of HIV infection and transmission (Ministry of Health, 2008).

- Men who are already infected with HIV should not circumcise because there is no demonstrated health benefit for reducing HIV transmission (Ministry of Health, 2008).

The BNSMC strategy used a combination of communication channels and approaches to disseminate the above key messages. Communication channels used were mass media in the form of radio, television and print. Edutainment and Interpersonal Communication (IPC) were the two approaches that were utilized (Ministry of Health, 2008).

These channels and approaches were used to disseminate key messages. Nationally, the whole campaign was coordinated by the Ministry of Health's Division of SMC and assisted by consultants from

African Comprehensive HIV/AIDS Partnerships (ACHAP) (Ministry of Health, 2008). In the Gaborone area, the Ministry of Health implemented the strategy in partnership with four local NGOs namely Mama Theatre, Youth Health Organization (YOHO), Remmogo Youth Organization and the Youth Centre (Ministry of Health, 2008).

1.2. Statement of Problem

The main aim of the BNSMC and short term communication strategy was to increase male circumcision prevalence among HIV negative men of ages 0 to 49 from less than 11% up to 80% in four years (Ministry of Health, 2008). This goal was to be achieved by addressing issues of capacity building, Behavior Change Interventions Communication (BCIC), monitoring and evaluation (M&E) and management of SMC Services. An evaluation of this strategy was commissioned by National AIDS Coordinating Agency (NACA) to establish the extent to which the above mentioned goal and its four aspects was achieved. The evaluation used a mix of both qualitative and quantitative program assessment consisting of literature review, interviews with key stakeholders and personnel and field visits for verification (Langeni et al., 2012). The problem is, the evaluation found out that, after four years of implementation, the male circumcision prevalence rate was only 24.3 % (a 13.3% increase in four years) which was far less than the intended target of 80 % (Ministry of Finance and Development Planning, 2009, Statistics Botswana, 2013b). This disappointing uptake was despite millions of Pula (Botswana currency) having been invested in this strategy (Langeni et al., 2012), which could have been invested elsewhere for a better return on investment (ROI). There is also the issue of opportunity cost. Both human and material resources were diverted to this intervention from other equally deserving and critical interventions, such as reducing multiple concurrent partnerships (NACA, 2009).

Among other things, the evaluation report raised a number of barriers to SMC which include; fear of pain/complications/death (the main obstacle), lack of time on the part of males for both the SMC procedure and the healing period (six weeks), lack of information, dislike of SMC and religious and cultural reasons (Ministry of Health, 2008). The evaluation, however, did not explore the underlying factors for reasons cited as barriers (Ministry of Health, 2008). For example, one may be interested in finding out where the fear of SMC complications and death come from and what specific information the target group lacks which prevents them from opting for male circumcision? Another factor which the evaluation did not adequately explore, but which may be important for future interventions, was the communication channels/approaches used.

1.3. Justification for the study

The evaluation results of the SMC short-term communication strategy pointed to a serious problem with SMC uptake at a high monetary and human cost. The upcoming SMC long term communication strategy planned to begin in 2015 may fall into the same trap if the above identified gaps are not addressed (Ministry of Health, 2008). It is also useful to find out what the target audience thinks about the suitability and effectiveness of the channels and approaches used to disseminate the BNSMC communication strategy. Furthermore, exploration of the above mentioned barriers to SMC (especially the top three; fear of pain, lack of time and information), the underlying and contributing factors to why men are reluctant to take up circumcision, and the acceptability of communication channels and approaches will enable Botswana to apply more evidence based and cost effective MC promotion activities as an HIV prevention strategy. These were the motivating factors for further exploration of the reasons for low uptake of MC, with an aim to identify recommendations to ensure that Botswana starts to reap the benefits of MC as an HIV prevention strategy.

1.4. Study Aim and Objectives

The overall aim of the study was:

To explore adult male perceptions of the implementation of the SMC communication strategy in Gaborone, Botswana, in the context of SMC decision making.

The aim was achieved through the following study objectives

Objective 1: To explore how circumcised and uncircumcised men aged 18 to 49 living in Gaborone, understand SMC communication strategy key messages

Objective 2: To explore how SMC communication strategy key messages may have influenced the decision to circumcise or not of men aged 18 to 49 living in Gaborone

Objective 3: To explore the main perceived barriers to SMC, among circumcised and uncircumcised men aged 18 and 49 living in Gaborone, Botswana.

Objective 4: To explore the perceptions of circumcised and uncircumcised men aged 18 and 49 on the relevance, accessibility and suitability of the channels and approaches used to disseminate SMC messages to men living in around Gaborone.

Objective 5: To compare the presumed barriers to SMC (fear of pain, lack of time and information) with barriers expressed by circumcised and uncircumcised men aged 18 to 49 living in and around Gaborone

1.5. Literature Review

This literature review begins with evidence for the use of strategic communication to increase the uptake of once-off health services. Given that the BNSMC used a variety of channels and approaches, the review looks at the evidence for each approach in the context of behavior change, particularly health service uptake. The literature review presents evidence on barriers to SMC, both from the BNSMC evaluation as well as studies in the region. Finally, theoretical explanations of how communication intersects with health service uptake are presented to provide a basis for later discussion of the study findings.

1.5.1. Strategic Communication in health service uptake

Paul defines strategic communication as '*coordinated actions, messages, images and other forms of signaling or engagement intended to inform, influence, or persuade selected audiences to support national objectives*' (see Bertrand, 2004, p.5). In defining strategic communication, other scholars bring in the strategic, operational and tactical nature of strategic communication that enables audiences to understand and sustain particular types of behaviors, especially as they relate to health services uptake (Bertrand et al., 2004, Cornish et al., 2011). The value of communication theory in strategic communication cannot be overemphasized. Communication theory posits that a message produced from a source is passed through a channel to the receiver who interprets it, and that the message could be contaminated somewhere between the source and the receiver (Hekler et al., 2013).

As is clear from the definition, the range of issues strategic communication, particularly mass media, can address is broad. For instance, comprehensive reviews of studies in the United States of America have associated strategic communication that employed a mix of mass media (mostly radio and television) to a decline in young people starting smoking and an increase in the number of adults stopping(Wakefield et al., 2010). Strategic mass media mixes of radio, television and print in Finland to prevent cardiovascular diseases yielded high awareness and improvements in risk reducing behaviors such as changes in diet and increase in physical activity (Wakefield et al., 2010). Similarly, the BNSMC communication strategy sought to increase SMC uptake among sexually active men at a national level through a strategic mix of radio, television, and print channels, drawing on edutainment (music and theater) as well as IPC approaches.

Strategic communication has been associated with increased uptake in once-off or short-term health services, such as immunization and vitamin supplementation. For instance, in Mexico, a radio program was found to be effective in increasing parental uptake and to promote community participation in large scale immunization activity (Cuevas, 1999). In this immunization campaign, 87.5% of children whose mothers were exposed to this mass media program were immunized as compared to only 43.4% of those whose mothers were not exposed to the radio program (Cuevas, 1999). Immunization is a relevant example, as it is similar to male circumcision in that it is a one-time discrete procedure. In another study in Nepal, a multi-prong communication strategy (such as was used by the BNSMC communication strategy) was employed to raise awareness of vitamin A deficiency and to inform people about supplementation (Melanie et al., 2010). IPC was used as the primary source of information, but just like with the BNSMC strategy, television and radio spots, posters and pamphlets were also used. The impact was good as 95% of the 3.3 million children that were targeted were reached and Vitamin A deficiency is no longer a public problem in Nepal (Melanie et al., 2010).

There are various channels and approaches that have been used to increase SMC uptake in the Southern African region. Interviews held with adult males in Zambia revealed that media was one of the most common source of information for men seeking SMC (Price et al., 2014). In this study, the top four channels of information were TV or Radio (43%), print media (38%), health program/campaign (28%) and the Internet (8%). In Uganda, a combination of word of mouth, short message service (SMS), occasional radio announcements, fliers, posters and pull-up banners were used to recruit men for circumcision in an urban setting (Galukande et al., 2012). This communication approach resulted in 79% of those reached being circumcised with only 12.5% not turning up (Galukande et al., 2012). In South Africa the Brothers for Life strategic communication for SMC combined radio talk shows, a mass media television drama (edutainment approach) and print media, which increased SMC uptake by 28% in four clinics(Khumalo, 2010).

One noteworthy approach that was deployed by the BNSMC strategy was entertainment for education, otherwise known as edutainment (Ministry of Health, 2008). Edutainment derives its name from entertainment and education which is a term often used to refer to any communication project that sets out to use popular culture to educate and challenge people (Perlman, 2013). Prominent scholars Singal and Rogers (cited in Teweldemedhin, p.82) define edutainment as *'the process of purposely designing and implementing a media message both to entertain and educate, in order to increase audience*

members' knowledge about an educational issue, create favorable attitudes and change overt behavior' (Teweldemedhin, 2004). Edutainment is increasingly used as a behavior change communication strategy to influence attitudes and adoption of health behaviors (Goatley et al., 2013). Goately (2013, p.113) argues that, '*edutainment has been a powerful tool for HIV communication because individuals tend to engage, identify and involve themselves with the material*'.

One form of edutainment that was used in the BNSMC is theatre (Ministry of Health, 2008), which falls into the tradition of Theatre for Development (TFD). Theatre for Development is when live performances and drama are used as a tool for development (Mwansa, 2004). One study in Nigeria found out that TFD was effective as an alternative and complementary medium for communicating reproductive health information to urban dwellers (Nwadigwe, 2012). In another study in Zambia, TFD was used within the Zambian Defense Force (ZDF) to boost behavior change intervention among males in the area of condom use, HIV testing and antiretroviral adherence within the ZDF (Mwansa, 2004). In this intervention, TFD consisted of training of animators in participatory research using participatory learning approach (PLA) techniques, and facilitation of group events and theatre skills in dance and drama (Mwansa, 2004). The themes of the dramas which were performed around the camps included; the plight of widows in the camps, drunkenness and risky sexual behaviors of service men as a result of a widely held practice of 3Ws (*wine, women and war*) (Mwansa, 2004). The stage drama was also converted into a television drama which was shown at camps around the country (Mwansa, 2004). Some of the reported results of the intervention included; more high ranking officers disclosing their HIV status, more discussions on the military life style of *wine, women and war*, reduction of HIV stigma within camps and improved adherence to antiretroviral (ARVs) (Mwansa, 2004) .

It is important to note that, as much as strategic communication has recorded relative success in increasing health services uptake, it is not without challenges. Gowing and Paul (cited in Cornish et al, 2011) argue that the fundamental problem for strategic communication in most cases is the lack of strategy, which results in reactive as opposed to responsive approaches (Cornish et al., 2011). They further argue that lack of comprehensive measurable indicators of performance often lead to inability to link the communication campaign with the outcome (Cornish et al., 2011). This challenge was raised by a study of TFD in Zambia, where funding constraints mean that were not integrated systematically into the intervention (Mwansa, 2004). As a result, most of the outcomes for this study were self-reported by participants, without empirical validation (Mwansa, 2004). Similarly, a study in Cambodia to raise

awareness about gender norms and how they can fuel the spread of HIV, lack of baseline data and process evaluation, were linked to the difficulty of measuring any effect of the intervention on the results (Spratt and Kundu, 2011). Beyond measurement challenges, in the Cambodia study, a limited implementation time frame, lack of community involvement and follow up were also raised as challenges to the multiple communication approach (Spratt and Kundu, 2011).The other factor which should be taken into consideration is what Hekler (2013) refers to as extraneous or background noise which can contaminate the intended messages (Hekler et al., 2013). This is particularly, relevant to this study and to the BNSMC communication strategy, as it had clear intended messages.

1.5.2. Barriers and Facilitators to SMC

The evaluation of the BNSMC communication strategy and some studies in the region highlighted some barriers and facilitators which need to be reviewed. Some of the barriers to SMC identified in the evaluation of the SMC strategy included fear of pain, lack of time, lack of information and the belief that excessive bleeding was an SMC risk (Langeni et al., 2012). Religious and cultural barriers were found not to be significant enough to have an impact on the overall outcome (Langeni et al., 2012). The literature review reveals some similarity with these known barriers as well as some deviations.

The fear of pain has been noted across most SMC studies (Gray et al., 2007, Herman-Roloff et al., 2011, Macintyre et al., 2014, Hatzold et al., 2014). The Kenyan and Ugandan studies raised the issue of myths such as sexual impotence, lack of sex enjoyment and erectile dysfunction (Herma-Roloff et al., 2011, Gray et al., 2007). For example, some men believed that male circumcision reduced sensations which in turn compromised one's ability to enjoy sex (Herma-Roloff et al., 2011, Gray et al., 2007). Additional barriers raised in the literature include adverse effects such as excessive bleeding, lack of partner support, reluctance to abstain from sex and time lost from work (Gray et al., 2007, Herma-Roloff et al., 2011, Macintyre et al., 2014, Hatzold et al., 2014). Studies in Zambia and Kenya also found that reasons for non-acceptance of SMC were related to unavailability of service, unacceptable service conditions such as lack of privacy, female providers and long queues (Macintyre et al., 2014, Price et al., 2014).

Beyond the perceptions of target audiences, a poorly designed or implemented campaign can contribute to low SMC uptake, which includes having insufficient infrastructure to meet increased demand. Studies on communication campaigns have noted that ill prepared personnel, lack of facilities, shortage of equipment, inadequate infrastructure, such as theaters and logistical challenges often contribute to targets not being met (Williams, 2008, Herma-Roloff et al., 2011). In a study of a HIV

prevention campaign on radio, Williams found that some campaign targets were too ambitious and externally driven, thereby running '*the risk of losing local leadership, ownership and eventually, buy-in of communities and individuals'* (Williams, 2008). In a SMC example from Kenya, several environmental factors contributed to low male circumcision uptake, including shortage of operating theatres, HIV and SMC counseling (which was time consuming) and confusion around places where men could get SMC (Herman-Roloff et al., 2011).

Both the BNSMC evaluation and other SMC studies in the region have identified factors which facilitate SMC. The BNSMC facilitators included the belief that a circumcised penis looked better and improves personal hygiene (Langeni et al., 2012). These facilitators, particularly about hygiene, are consistent with other study findings (Macintyre et al., 2014, Skolnik et al., 2014, Hatzold et al., 2014). These same studies also identify additional facilitators including; sexual satisfaction for self and partner, cervical cancer protection for partner, prevention of diseases and social recognition. One study conducted in South Africa also raised the issue of social influences, where males were influenced by family and community relationships such as mothers, spouses and girlfriends (Macintyre et al., 2014). The same study also identified peer influence as one of the main motivators for SMC uptake (Macintyre et al., 2014).

1.5.3. Theory Informing SMC Interventions

Although the BNSMC strategy did not use any specific theory to influence the design of its specific interventions, theory has been used to influence SMC intervention designs in the region. According to Coffman, communication campaigns are guided by a Theory of Change (ToC), which requires a critical consideration and establishment of a link between intervention activities and outcomes (Coffman and Henry, 2003). A ToC is '*based on a combination of objective evidence, theory, experience and subjective opinion and personal ideology'* (Frunkin, 2002 cited in Coffman, 2003, p. 118).

For example, a Zambian SMC study discusses the role of strategic communication as it relates to both theory of change and stages of behavior change (Price et al, 2014). Authors of this study sought to establish how communication campaigns aided decision making through the three stages of behavior change namely *pre-intention, intention and action stages* (Price et al, 2014). The pre-intention stage consisted of exposing the target audiences to SMC messages such as through TV, Radio, print and edutainment. This stage was followed by the intention stage, which is the decision making stage. The third stage is the action stage, when the target audience seeks SMC. Most of them made several

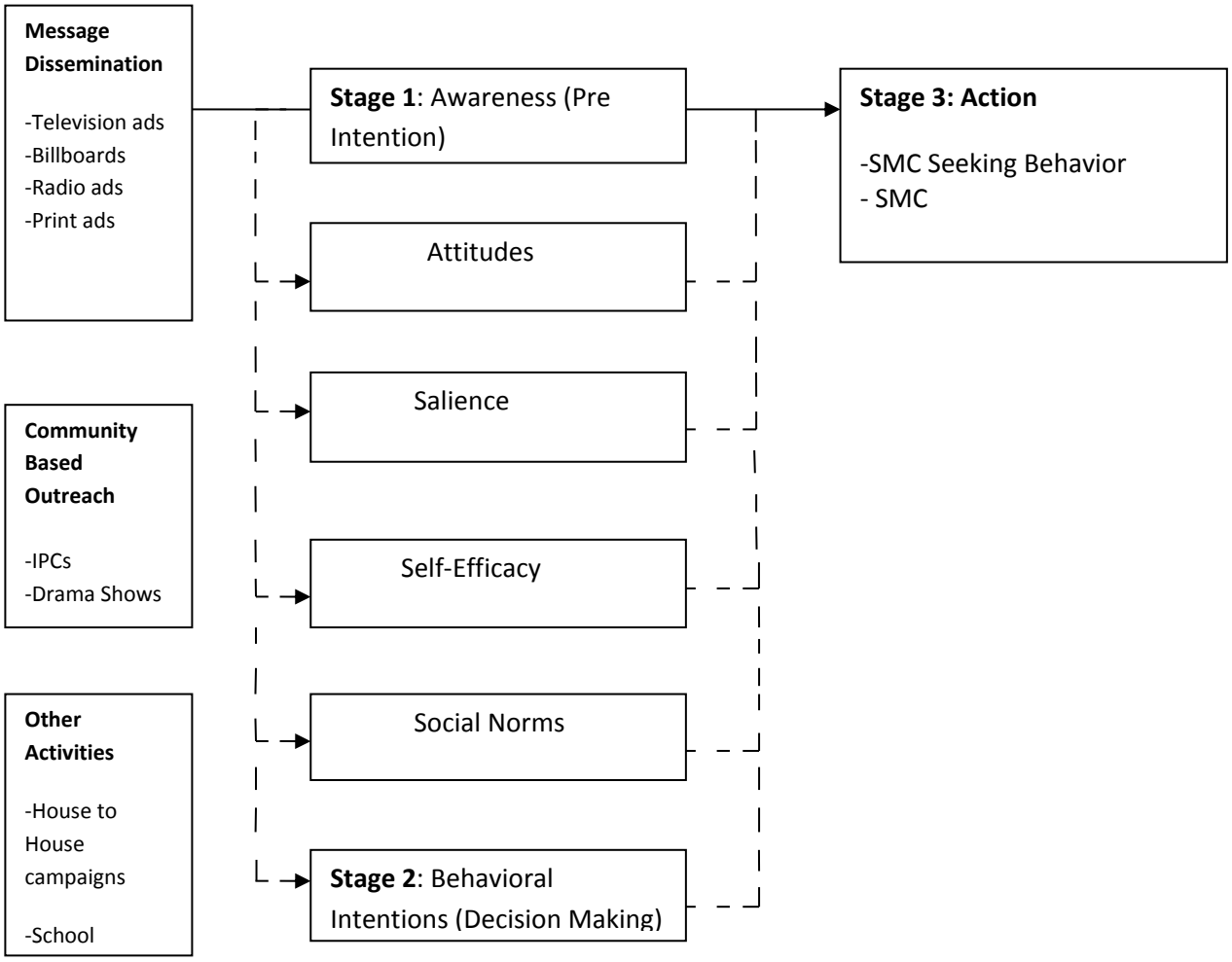
attempts before they succeeded, hence Price et al. (2014) called it 'missed opportunities'. This stage was characterized by barriers and facilitators as discussed above.

One of the purposes of the BNSMC Campaign was to target a specific individual behavior and mobilize communities to address factors that stop men from circumcising (Ministry of Health, 2008). In order to achieve a similar purpose, the Swaziland SMC campaign used the Social Ecology model (Magagula et al., 2013). This particular theoretical approach suggests the need for a comprehensive social and behavior change communication program that targets individual behaviors, mobilizes the community and helps address underlying societal factors that either promote or limit access to SMC (Magagula et al., 2013). This theory highlights the role of social networks as a motivator and source of encouragement in SMC decision making (Magagula et al., 2013). As a result of Swaziland including as target audiences the sexual partners of males, parents and peers, they managed to increase SMC prevalence from 8.2% to 21.2% in one year (Magagula et al., 2013).

Research and experience have shown that awareness alone cannot necessarily bring about behavior change, hence these campaigns sought to act on other influencing factors such as self-efficacy, social norms and subjective norms (Coffman, 2003). Figure 1 (see the following page) illustrates a general theory for behavior change campaigns, like the BNSMC, in light of the theory of change and the stages of behavior change, showing how a strategic communication intervention (activities on the left) is theorized to change individuals to bring about a behavior change. According to this theory, mass media in the form of television, radio and print advertisements are used to raise awareness about SMC and its benefits. The theory assumes that sustained awareness may ultimately shift attitudes which may cause the individual to consider SMC (pre-intention). Messages need to stand out from other messages that are competing for the same attention hence there is salience as one of the constructs. Interventions, in the form of interpersonal communication and drama, are expected to impact on social norms to create a conducive environment for an individual to effect change. Since interventions at this stage are interactive, they are also expected to increase the individuals' self-efficacy to feel competent that they have the ability to circumcise. Bandura(1997) defines Self-Efficacy as the belief in ones' ability do a behavior(Bandura, 1997). So, at this stage, the individual is expected to make the decision to circumcise. Once, the decision has been taken, it is expected, according to the theory that, the individual will circumcise as the last stage.

Figure 1. General Theory of Change for BNSMC

Adapted from Coffman and Henry (2003)



2 Chapter 2: Research Methodology

This chapter describes the research methods employed by the researcher. The chapter starts by describing the study design, setting and sampling. This is followed by a description of various study tools and how they were administered. The chapter rounds it off by a description of how data were managed and analyzed, concluding with ethical considerations.

2.1 Study design

In this study, the researcher sought to explore adult male perceptions of the implementation of the SMC communication strategy in the context of their decision making about circumcision. When the purpose of research is to identify issues from the perspective of research participants and to explore the meaning they attach to behavior and events, qualitative methods are appropriate (Ulin, 2004)(Ulin, 2004). For this purpose an exploratory cross-sectional qualitative study design was used to help the researcher understand adult male perceptions of the implementation of the SMC communication strategy in the context of their decision making. The use of qualitative methods enabled the researcher to probe for underlying factors influencing men to circumcise or not.

2.2 Study Setting

The study was carried out in Gaborone, the capital city of Botswana and a village in South East district situated thirty kilometers from Gaborone with a population of 85014 (Ministry of Finance and Development Planning, 2011). According to the most recent census (Ministry of Finance and Development Planning, 2011) the population of Gaborone is estimated to be 231,592. Gaborone, has an HIV prevalence of 16.2 percent (Statistics Botswana, 2013a). The HIV prevalence rate of South East district is estimated at 15.8 percent (Statistics Botswana, 2013b). Data show that, still in Southeast, males are more hard hit with 17.7 percent compared to their female counterpart at 14.2 percent (Statistics Botswana, 2013b). At least 23.5 percent of males in Southeast district indicated that they were circumcised compared to Gaborone where circumcision prevalence was estimated at 18.8% (Statistics Botswana, 2013a). This comparatively higher prevalence rate of circumcision has been attributed to the Balete traditional initiation school, which performs non-medical circumcision for males (Statistics Botswana, 2013b).

2.3 Study Population

The study population consisted of sexually active men aged 18 to 49 who were either circumcised (medically) between 2009 and 2012 (the duration of the communication strategy under review) and those who remained uncircumcised at the time of the study. All the participants either lived in Gaborone

or the study village. Some participants worked in Gaborone but resided in the study village and commuted daily between Gaborone and the study village. Males below the age of 18 and above 49, friends and relatives of the researcher were excluded from the study.

2.4 Study Sample

The researcher used purposive sampling with a provision for snow ball sampling to recruit both circumcised and uncircumcised males aged between 18 and 49. Service providers in Gaborone and the study village who were also part of the SMC campaign, recruited uncircumcised males who in turn recruited participants from their communities. It must be noted that recruitment of circumcised males was relatively smooth because service providers readily had lists of males who had circumcised. On the other hand, it was difficult to recruit uncircumcised males because there were no records of circumcised males to draw from and there was no easier way of identifying them without invading on their privacy. This was specifically difficult as the researcher avoided recruiting friends and family. Ultimately, friends and family recommended and recruited uncircumcised participants within their circles.

A total of 22 men participated in the study as summarized in Table 1. Individuals who could not make it to the Focus Group Discussion (FGD) because of time constraints or distance to the FGD venue were interviewed individually and those available for a group discussion were marked for FGD. For the FGDs, eligible males of 18 to 49 were segmented into two groups (18-29 and 30-49) to allow free discussion of matters with sexual connotations. Initially six FGDs were planned but the researcher stopped after two FGDs as it was evident that the discussions had reached saturation levels. There was no significant variation of content between information from IDIs, which were conducted first, and the FGDs.

Table 1. IDI and FGD Matrix

		Circumcised	Uncircumcised	Total Individuals
IDIs	**18-29**	3	2	10
	30-49	3	2	
FGDs (#s)				
	18-29	1 (6)	0	6
	30-49	0	1 (6)	6
TOTALS PARTICIPANTS		**12**	**10**	**22**

2.5 Pre-test of FGD and IDI guides

Both the IDI and FGD guides were designed in line with the BNSMC theory of change to enable them to collect relevant data in the different stages of change. For example, all the tools had awareness, attitude, salience and social norms questions. The researcher pre-tested both FGD and IDI guides with six respondents (four in a FGD and two IDIs) from the study population but not within the study sample. The pre-test of the guides was to verify clarity and the flow of questions and whether the questions elicited responses which are capable of answering the research objectives. The pre-test of the tools revealed that some questions were repetitive whereupon they were removed. In some instances some questions were removed because of clarity and flow issues.

2.6 Data Collection

This section describes how IDIs and FGDs were used to collect data. The data were collected between the months of July and December 2015. Some researchers advocate for the use of IDIs in data collection in cases where intimate subjects are discussed (Ulin, 2004). It is for this reason that the researcher chose IDIs as one of the data collection methods. Focus groups, on the other hand, were used to explore peer dynamics and norms around circumcision. Morgan highlights the point that, '*a focus group is the use of group interaction to produce data and insight that would be less accessible without the interaction found in a group*' (1988, p.12 cited in Ulin, 2004, p.71). Over and above IDIs and FGDs the researcher used field notes as an additional source of data. This included notes of emerging issues and other non-verbal communication, such as body language and facial expressions. Each interview or discussion was accompanied by field notes.

Data collection, especially the FGDs, was very vibrant and smooth. This is because the researcher has been in the field of behavior change communication and HIV prevention for over twenty years and has conducted FGDs for many years. IDIs on the other hand proved to be a bit of a challenge in terms of asking questions naturally without reading them, especially for the first two study interviews. Although the researcher has conducted IDIs before, the use of an interview guide was relatively new to the researcher, but it got better with every interview.

A research assistant, who has been working with the researcher for over ten years, provided important moral and technical support to the researcher. The research assistant is also a qualified social worker who has participated in several research studies. The researcher also conducted an orientation and refresher session for the research assistant on research methods, particularly as they related to the

research in question. During data collection, the research assistant was specifically responsible for taking field notes, keeping track of whether all the critical questions in the interview guide were asked and alerting the researcher on any omissions noted. The assistant also managed the tape recorder and was also responsible for filling and storage of transcripts in their order.

a) IDI Guide

The researcher used IDI guides to explore reasons for circumcising or not, perceptions on SMC communication strategy key messages, channels and approaches employed by the SMC communication strategy. The researcher developed and used two IDI guides, one for circumcised men and the other for uncircumcised men (see Annexes 1&2).

All the in-depth interviews were conducted by the researcher with the help of an assistant who took notes as a back-up plan and to augment other observations which may not be captured by the tape. The researcher decided that the assistant, who was also the translator/transcriber be present during interviews to give him a circumstantial advantage during transcription. Before each interview could commence all the interviewees had to go through two types of consent processes; first they had to sign a participation consent indicating that they are participating on their own free will and understood that they can pull out of the interview at any time (Annexes 3 & 4). They were also informed of their right to refuse to answer any question they were not comfortable to answer. The second consent form was for the use of the tape recorder (Annex 5).

All of the IDIs were conducted in the researcher's office to have some privacy and each participant was reimbursed the sum of BWP 20 for transport to and from the office. Setswana was the primary language used but both the interviewer and the interviewees were allowed to mix Setswana and English where it was convenient to do so. The issue of language was always discussed and agreed on before each interview started. In-depth interviews lasted between 30 and 45 minutes at most.

b) FGD Guides

The researcher used two different FGD guides (see Annex 6), one for circumcised males and the other one for uncircumcised males. Both sought to collect data around SMC perceptions, messages, channels and approaches from the perspective of peers in a group. As with the IDIs, both study consent (see

Annexes 7 & 8) and audio consent (Annex 9) were sought before data collection. FGD participants were also reimbursed the sum of BWP 20 to and from the venue.

The FGDs were conducted in a training room of a Community Centre which was reasonably secluded. However it proved to be almost impossible to avoid outside interruptions altogether. Twice or thrice, the FGDs were interrupted by people who entered the room for various reasons. When this happened we stopped the discussions to keep it private. Also in an attempt to have some level of confidentiality, participants were identified by use of numbers, which they were assigned once they consented to take part in the study. One of the FGDs was conducted by the researcher in Setswana while the other one was conducted by the research assistant in the presence of the researcher. The size of each focus group was six participants and this enabled the facilitator to be able to stimulate good but manageable discussion. Each group discussion lasted between sixty to ninety minutes at most.

The research assistant used a voice recorder to capture all the discussions during both of the FGDs. There were two main reasons for this arrangement; one was to give the assistant who was also the translator/transcriber the opportunity to experience the FGDs and the questions firsthand so that he has a grasp and understanding of the issues firsthand when he is translating and transcribing. The second reason was to give the researcher another perspective on the FGD and to enrich the discussion by introducing a different way of asking questions and probing. When the researcher was conducting the interviews and facilitating the FGD the research assistant was operating the voice recorder and taking notes to augment the voice recorder in case of a technical hitch.

2.7 Data Management and Analysis

The research assistant carried out a simultaneous translation/transcription of audio recordings with the help of the researcher. After each interview the assistant proceeded to translate/transcribe while each interview was fresh in his memory. In order to ensure consistency and integrity of the transcription/translation, the researcher also transcribed/translated some sections of each interview to compare with the assistant and check for inconsistencies and discrepancies. The researcher then thoroughly edited the transcribed Microsoft Word document for typing errors and any other omissions. The researcher also used field notes to contextualize some of the errors or omissions due to audibility challenges and interruptions from background noises. The researcher removed all real names of people where they were used by respondents and replaced them with pseudonyms. The researcher also

checked, corrected and verified transcripts before loading them into MAXQDA for analysis. Then the researcher typed emerging issues from the field notes and attached them to transcripts for analysis.

The researcher conducted the analysis process at three stages. The first stage was coding, whereby some codes derived inductively emerged from the text, while the researcher defined other codes using a more deductive approach, based on domains of interest included in the interview guides. These domains were underpinned in the BNSMC theory of change which informed the design of interview guides. From these, the researcher drafted the initial code book. The researcher also used Excel to record all research objectives alongside the emerging codes, themes and supporting quotes. The researcher used this tool to keep track of codes in relation to research objectives. These were shared with the supervisor, with some revisions. In order to check the reliability of the revised codes, the research assistant used the same code book to code a sample of transcripts as a means to identify and discuss any discrepancies with the researcher. The researcher then revised the codebook further, which he used to code all transcripts. The second stage of analysis was aligning of codes, themes and patterns with the study objectives to make sense of the data. It is at this point that the researcher changed some codes accordingly. The final stage was interpreting the now organized data against each study objective.

2.8 Ethical Considerations

This study was conducted under the auspices of the School of Public Health, Wits University in South Africa, but the study itself was conducted in Gaborone, Botswana. Specific steps were taken to ensure that ethical and legal considerations were met for both the school and the country of Botswana. As per the regulations of the University of Witwatersrand, the Wits Human Research Ethics Committee (HREC) approved this study protocol and issued certificate number **M131158** before recruitment (Annex 10). In Botswana, the Ministry of Health's Health Research and Development Division granted permission for this study to be conducted (Reference NO: **PPME 13/18-268**) (Annex 11).

In order to safeguard the rights of participants, all potential participants were given information related to their participation at the point of recruitment. Participation was strictly voluntary. Each interviewee signed two consent forms before the IDI or FGD could take place; one consent form was for consenting to the IDI/FGD while the other one was consenting to be tape recorded. All recruited participants signed both consent forms in the exception of one individual who did not consent to be recorded and was excluded from the study. Participants were informed about their right to decline answering any question which they do not want to answer. All electronic information related to this study was pin number

protected and access was restricted to the researcher, the assistant researcher, transcriber/typist and the academic supervisor. Audio recordings will be destroyed two years after publication or six years after the end of the project.

3 Chapter 3: Results

3.1 Understanding of SMC Communication Strategy Key Messages

The first objective of the study was to explore recollection of SMC messages. The SMC campaign messages were not shared with the study participants. Rather, messages were explored through open-ended questions. The inductive message themes that emerged from participants are presented first and then compared with the deductive message themes expected from the SMC campaign.

3.1.1 SMC Reduces HIV Risk

One message that the study participants frequently mentioned was about SMC reducing the risk of HIV infection. Eighteen out of 22 males (circumcised and uncircumcised) correctly stated that SMC can reduce the rate of HIV infection. This message was repeated by both circumcised and uncircumcised males in all the IDIs and some of the individuals within the FGDs. In addition to recalling that SMC reduces the chances of infection, they also seemed to understand that it does not offer complete protection against HIV transmission.

> *What I know about male circumcision being done in clinics is that radios have announced that male circumcision can reduce the spread of the virus. They are not saying it can stop the infection but if men can try and go get circumcised it can curb the spread of the virus*. (1DI 1-Circumcised 30+)

A similar sentiment was shared by an uncircumcised participant when he said:

> *…so even when using a condom if by chance it breaks and the man is circumcised the chances of getting the virus are minimized. Not that he won't catch the virus, but that the chances are lowered… (IDI 4-Uncircumcised 30+)*

However some participants felt that the message about SMC reducing HIV risk took more prominence at the expense of other equally important messages about the benefits of circumcising. Emphasizing this point one participant said:

> *Hey …let the people be taught more about benefits. Let's not just concentrate on the one about reducing the spread of HIV. Let's have more convincing benefits because there are myths about SMC.* (IDI 6, Uncircumcised 30+)

3.1.2 SMC Reduces Risk of Other STIs and Cancer

Most participants mentioned reduced STI risk along with HIV: '*Ok, the main message was about STIs, that circumcision reduces the danger of catching HIV by 60% if I remember w*ell' (IDI 2-Circumcised 18-29). In addition to mentioning STIs broadly, the human papilloma virus (HPV) was specifically discussed in the context of SMC reducing their chances of passing HPV to their female partners. The idea about SMC reducing chances of passing HPV to their partners seemed to be more popular among circumcised participants over 30 years of age. As one participant puts it, '*…actually, the reason why my girlfriend was encouraging me is the fact that they say if you are not circumcised you can pass on the HPV virus to the lady, the one that causes cervical cancer'* (IDI 1-Circumcised 30+). Although not coming out strongly, the ability of SMC to reduce the spread of cancer was mentioned by a few participants. For instance, '*The messages are just that it helps in reducing the cancer for men or even the one for women is reduced*' (IDI 4-Uncircumcised, 30+).

3.1.3 SMC and Protective Behaviors

Some participants mentioned that there is need to use condoms even after circumcision. As one respondent put it, '*…Yes that the chances of getting the HIV virus go down and that even while circumcised one needs to use a condom'* (IDI 4-Uncircumcised 30+). However the issue about condoms was only mentioned by participants over 30 years of age (both circumcised and uncircumcised).

The issue of abstinence was only mentioned as it relates to abstaining from sex to allow the circumcision wound to heal, one participants summed it thus, '*The reason why I am scared to do it is that I get very easily aroused, so if they stitch me up and I have to wait for weeks without sex, my thoughts hey..I would end up hurting myself*' (FGD 1, Uncircumcised 30+).

3.1.4 Other benefits of SMC

Several messages on the theme of sexual relationships emerged in the interviews and FGDs. Circumcised men discussed SMC in terms of improving ones sexual performance or endurance. Several participants within the circumcised FGD mentioned this: '*I mean sexual performance, that when you meet a woman you perform better than you used to*'. This idea was buttressed in interviews, particularly with 30+ circumcised males, where there was a perception that women prefer circumcised men. This was even mentioned by uncircumcised male: '*I have not heard of any other advantage, oh, the one that women also like a circumcised penis'* (IDI 6, Uncircumcised 30+). One uncircumcised male also mentioned the

idea that SMC heightens sexual pleasure: '*The advantages…. I don't really know any, I hear from people that once you have circumcised sexual pleasure becomes heightened*' (IDI 6 Uncircumcised, 30+)

Another common message about SMC was the hygiene benefits. This notion that SMC helps men to maintain cleanliness around their private parts was very popular among circumcised participants aged between 18 and 29.

> *Actually, I could advise those who have not done it, looking at the advantages to do it because before cutting when you bath you don't feel clean but after cutting when you bath you feel cleaner and it's easier to bath down there*'(IDI 2-Circumcised, 18-29)

3.1.5 Intended SMC campaign message recollection

Table 2 summarizes the four intended messages of the campaign and the recollection of some or all of these messages among the study participants, which notes absence of recollection as well as presence. The tabulation was done for all study participants in FGDs and IDIs. The percentages were calculated from IDI responses as well as mention from individuals within the FGDs, e.g. if two men in the same FGD mentioned the message, they were counted as two individuals.

Table 2: SMC Identification and Recollection by Target Group

SMC Communication Strategy Intended Messages	**% Recollection by Target Group (Participants*)**
Male circumcision reduces the risk of HIV infection but does not offer complete protection against HIV transmission. It is additional to and not a substitute for other existing prevention methods (MOH, 2008).	18/22 =**82%** Recollection
After male circumcision, it is still essential to practice the existing protective behaviors (proper and consistent condom use, faithfulness/fidelity or abstinence) that are most appropriate to one's circumstances. Male circumcision is more effective in reducing HIV transmission when the existing preventive methods are used in combination (MOH, 2008).	4/22=**18%** Recollection NB* ***These 18% only mentioned condom use and nothing about faithfulness/fidelity or faithfulness***
It is essential to abstain from all sexual activity, including masturbation and sex with a condom for at least six weeks after the procedure has been performed. Resuming sexual activity before complete wound healing will delay the healing process and increase the risk of HIV infection and transmission (MOH, 2008).	3/22= **14%** Recollection

Men who are already infected with HIV should not circumcise because there is no demonstrated health benefit for reducing HIV transmission (MOH, 2008).	0/22= **0%** Recollection

As indicated in the table, none of the participants mentioned abstinence from all sexual activity as a protective behavior, nor was the issue of faithfulness raised. When responding to SMC messages they were aware of, none of the participants mentioned the aspect of being HIV positive as it relates to circumcision.

3.2 Perceptions of Campaign Channels and Approaches

In addition to message recall, study participants were asked to reflect on the channels and approaches of the SMC campaign. This section presents the results related to appropriateness, effectiveness and suitability of the channels, approaches and the messages.

3.2.1 Perceived Appropriateness of Mass Channels

Participants were asked to comment on the appropriateness of the channels used during the SMC campaign and recommend which channels they consider appropriate for disseminating SMC messages. Specifically they were asked to comment on radio, television, newspapers, and any other form of print media.

Participants did not think that radio was an effective SMC channel for several reasons. The first reason was that radio is not the first choice of entertainment for the target group. As one participant put it, '*it is rare to find youth listening the radio'* (FGD 2, Circumcised 18-29). Secondly, the radio station being used (RB1) is not listened to by youth: *'..we might listen as the youth but it depends…because information only goes to some radio stations like Radio Botswana, the youth don't listen to that..*' (FGD 1, Uncircumcised 30+). Another issue they raised with using the radio was that, the language used is deemed not to be suitable for children, who also listen to the radio: *'The radio mostly has adverts that will just out of the blue say, 'to cut the foreskin reduces the chance of HIV infection' so children start asking questions...' IDI 1, Circumcised 30+)*

Television was dismissed as an inappropriate channel for similar reasons to radio. Chief among these reasons was the channel, BTV, is not preferred by young people. Participants also raised the issue of

cost, as they felt television use was expensive (for both government and individuals), requiring more money than it produces results.

> *Like I said earlier they use BTV and RB1, most youth do not listen to that, they are used by elderly people who have done that a long time ago and don't need the information. With Television, it is not like all people afford to buy it*' (FGD 1, Uncircumcised 30+)

Commenting on the government cost of producing television programs, one participants said, '*Like they all said, I think the government is spending lots of money on television Dramas like Makgabaneng*' (IDI 2, Uncircumcised 18+)

Commenting on the effectiveness of posters, a few participants seemed to prefer posters because posters are not constrained by time like radio. These few participants also said posters were complementary to other channels as they can carry more information and can also be written in Setswana.

> *Posters work on people who can read, they make one want to find out more, actually because they are not constrained by time like radio and TV messages they can even carry more information.* (IDI 1, Circumcised 30+)

The use of billboards was rejected as ineffective: '*Ah! When you read them from a billboard…sometimes you go past them very fast and you don't see the message, unlike if you could read…*'(IDI 1-Circumcised 30+) Other participants shared this perspective on billboards.

3.2.2 Perceived Effectiveness of Approaches

The two approaches that participants commented about their effectiveness or lack of it were edutainment and IPC. Their comments were based on what they had seen or experienced.

Edutainment

There were mixed reactions to the use of a popular musician to create demand for SMC. The opposing views were almost split at 50/50, where one school of thought was for using a celebrity while the other one was against the approach. Those who were against it argued that people just came to be entertained and not for the message. *'The Vee campaign…I don't think it passes the message well, because Vee is a musician, when people come to Vee they come to listen to his music not the message*'

(FGD1-Uncircumcised 30+). On the other hand, those who were of the view that the celebrity SMC champion approach was effective believed that, people, especially the youth, may want to emulate popular musicians like Vee.

> *But the Vee one, the youth like his music, it attracts people. You see the youth have celebrities that they like and Vee is a celebrity for the youth. When he says we must cut the skin, we must get circumcised; they all say we must be like Vee*.' (FGD1, Uncircumcised 30+)

One FGD participant actually shared a personal experience that he and his friends were directly motivated by Vee to circumcise. *'We were just talking and we happened to talk about Vee and the fact that he has circumcised and is still able to perform**,** this really encouraged us and we decided to all go and circumcise.'*(FGD2, Circumcised 18-29)

Participants cited drama as a preferred approach for two reasons. Participants expressed that, drama is loved by young people and can be shared through various forums and channels such as stage, radio and television. One FGD participant had this to say when commenting about the SMC radio drama: '*Yes, the drama on radio, the youth like that, even on TV programs such as Ntwakgolo…people can understand when the message is passed through live drama*..' (FGD 1, Uncircumcised 30+). The other reason advanced for the SMC television drama was the fact that it is visual and therefore could engage people emotionally, intellectually and even physically through discussions and asking of questions: '*In today's life people believe in seeing the danger of the thing, in that way, they are able to ask questions, argue or even cry…that's the beauty of talk-drama-talk'* (FGD 1, Uncircumcised 30+). 'Talk drama talk' is a street name for interactive drama where the play is stopped at strategic points for discussions.

Interpersonal Communication (IPC)

Most participants preferred IPC as they indicated that it was personal, interesting and very informative to a point where one feels they can make the decision to circumcise. They also noted how IPC could be supported by other channels, such as print media and drama, as is reflected in another quote about 'talk-drama-talk': *'I think when is Talk Drama Talk is suitable for all of us because we can all see what is happening and discuss it among ourselves right there and there.'*(FGD2-Circumcised 18+) One interviewee also shared an experience around IPC: '*Sometimes when you go to the clinic before service begins; there are discussions where people talk face to face about these issues*' (IDI 7-Uncircumcised 30+)

3.2.3 Suitability of Messages

There seemed to be a general agreement among both circumcised and uncircumcised participants that the '*one size fits all'* approach to messaging adapted by the communication strategy was not quite suitable or effective as different age groups have different preferences and cultural sensitivities. Of major concern was the use of some words by the public broadcaster which are considered unsuitable for either older or young listeners for cultural reasons.

> *Really according to me the messages were not clean especially on the ears of children because as it is, we stay with children and the messages talk about things that you cannot explain easily to children. Like I am saying, you will hear the radio just saying 'to cut the male foreskin can help reduce the spread of HIV'*. (IDI 1-Circimcised, 30+)

Another participant commented on the cultural insensitivity of the message when he said:

> *Yeah, I think people my age can listen to them, not that they would understand. When it gets to someone older they may not be right because culturally as a Molete I believe you cannot use words like 'bonna (penis)' when talking to an elder*. (IDI 3, Uncircumcised 18-29)

3.3 SMC Communication Strategy: Enablers and Barriers to SMC Decision Making

Beyond recollection of messages and opinions about campaign delivery, a key objective was to explore how the messages of the SMC communication strategy may have influenced the decision to circumcise or not. The following section presents what influenced SMC decisions;

3.3.1 Perceived Enablers of SMC

Participants attributed their decisions to circumcise to various influencing factors which acted as a positive trigger to go and do the procedure. While the SMC communication strategy was cited as an enabler, most factors were social.

SMC Communication Strategy

The majority of circumcised participants mentioned that they were influenced or encouraged by the communication strategy to circumcise. The aspect of the communication strategy which seems to have worked well is the use of a celebrity musician going by stage name Vee as an SMC ambassador or role model. They indicated that they took the decision to circumcise after hearing Vee say he has circumcised and seeing that nothing bad has happened to him. As one participants puts it, '...*Again the strategy that*

were used was great because they used people like Vee who did that but still looked fit and when I saw him performing then I realized this is not a problem'(FGD 2,Circumcised 18-29).

Peer Influence

Nearly half of the participants, most of whom were younger circumcised males (18-29), reported being encouraged by loved ones to circumcise. Friends seem to be leading the pack as those who wield the most influence in the decision to circumcise or not.

> *I was encouraged by friends telling me that to circumcise is nothing and it doesn't mean when you do it you will die and I then realize that indeed they are fit and even telling me that it reduces rates of getting HIV/AIDS by 60%* (FGD2,Circumcised 18-29)

Another participant in the same FGD raised the issue of peer pressure as an influencing factor:

> *I was motivated by the fact that each time I walk around I heard everyone talking about SMC and seemed that all those who are talking about it have done it, then I asked myself that since many people have done it I should also go and do it too*. (FGD2, Circumcised 18+)

Girlfriend Influence

With the exception of one or two older circumcised participants, circumcised and mostly younger participants seemed to identify girlfriends as wielding the most influence on their decision to circumcise. However, although girlfriends were mentioned several times by several participants, they were not mentioned as often as peers:

> *The first person I talked to was my girlfriend who then told me that she long waited for that decision because she has been thinking about it but afraid to approach me, then I went on with my decision knowing that I got the support I wanted and avoided who can discourage me*. (FGD 2-Circumcised 18-29)

Observational Learning

Some participants seem to have been influenced by seeing other people who have circumcised and looked okay. This was some sort of motivation for those who were skeptical.

*At first I was afraid of circumcising wondering whether this people have the knowledge of doing that operation but when they explained to us I then realized that this thing was not a big deal and showing us people who have done it but still alive and not having any signs that they circumcised, I then took a step to go and circumcise. (*FGD2, Circumcised 18-29)

3.3.2 Perceived Barriers to SMC

In addition to positive influences, the study participants were asked about barriers to SMC. Several categories of perceived barriers emerged.

Fear

The notion of fear as a barrier was discussed by most participants and seemed to manifest in different forms:

- **Erectile Dysfunction**: Most participants (8/22) raised the fear of erectile dysfunction as a barrier to SMC. One participant said, '*There are two problems, some say it's okay even the ladies are fine with it. Some say they have developed erectile problems because it*'. (IDI 4, Uncircumcised 30+). This fear, which seemed to be popular among uncircumcised participants (30+) was echoed by another participant in an FGD: '*…there is also the issue of what if the wound doesn't heal well or it interferes with my sex life and I no longer get erections*'. (FGD 1,Uncircumcised 30+)

- **Fear of Adverse Events and Pain**: Some participants cited adverse events and pain associated with SMC procedure which could be a barrier to SMC. One that is worth mentioning was revealed by one participant when he said,' *They were saying it is not good because after doing it, it might have negative impact on you like excessive bleeding to an extent of being hospitalized*.(IDI 2 Circumcised 18-29). A similar fear was expressed by a participant in a discussion: '*I think of pain…I will tell you why, sometimes when people go for simple procedures like to extract teeth, they are not always successful, you hear of teeth remaining….so such things*' (FGD 1, Uncircumcised 30+). Also related to these was the fear of healing complications. Some participants reported a few cases where they knew someone who took long to heal and had re-infections. For example, one participant said, '*I am scared because I saw a guy who did it but took a long time to heal. When he was about to heal he got some re-infection and I thought, hey, I will go when the time is right. Right now? No'* (IDI 6-Uncircumcised 30+)

- **Fear of HIV Testing:** The fear of testing, which is a pre-requisite for circumcision is significantly raised as an impediment to circumcision: *'…there is also the issue of testing; testing on its own is a big decision. When I think of those two giant steps… I can't deal with both of them at the same time'* (IDI 6, Uncircumcised 30+)

Myths and Rumors

Respondents raised some rumors about SMC that could be a barrier. Chief among these is the rumor that the real reason behind SMC is so that the skins can be sold to cosmetics companies. One participant revealed that, *'I am not sure, I just hear that the skins are sold, I don't know where. They say they are used to make women's cosmetics, we will never know...'* (FGD 1, Uncircumcised 30+) Another participant in the same FGD raised another rumor to the effect that foreskins are sold to traditional doctors, *'Hey, its human flesh, human flesh works in traditional medicine, especially from such organs that's why I believe it could be true*.' (FGD 1, Uncircumcised 30+) Also related to this issue of myths, was the motive for SMC. Some respondents, especially the uncircumcised have a suspicion that there might be some ulterior motives for SMC other than HIV prevention: *'I just hear that skins are sold.*. .' (FGD 1, Uncircumcised 30+)

Lack of Trust

Some uncircumcised participants and some few circumcised participants expressed lack of trust in the health system. Some participants cited bad experiences or accidents which happened to other people in the past as the main barrier to them going for circumcision. To this end one respondent of FGD 1 says; '*When I think of instances where procedures such as giving birth have gone wrong…scissors being left in people… and looking at the sensitivity of that organ… when I think of the procedure going wrong, and how I would live…personally I don't trust anything.'* (FGD 1-Uncircumcised 30)

Some respondents, especially the uncircumcised, reported lack of trust in the authenticity of the SMC message and how conclusions were reached. One participant said:

> *I don't trust them. I don't trust them because I don't know how the people who did the research that said SMC reduces the chances of getting HIV by 60% reached that conclusion. Did they do the procedure and then have unprotected sex? The issue of what if after circumcision, there is*

some new illness that requires one to have a foreskin to protect the penis? What if such as disease comes? So I don't trust the information. (FGD 1, Uncircumcised 30+)

Structural Barriers

Some participants, though very few (3/22), raised a structural barrier of distance to health facilities, especially in very remote areas. Distance to health facilities as a barrier was most likely raised as an observation by said participants from the study village. It was apparent that this barrier related more to smaller and more remote villages neighboring the study village. Commenting on this barrier one participant says, '*There are some villages far from developments, so youth there are unable to come from that far to visit clinic for circumcision because after circumcision you are not supposed to walk a distance*.' (FGD 2, Circumcised 18-29).

3.4 Presumed Versus Expressed SMC Barriers

Another study objective was to compare the presumed barriers to SMC from the literature (fear of pain, lack of time and information) with those expressed by the study participants. Presumed SMC barriers according to the evaluation of the SMC short-term communication strategy included fear of pain/complications/death, lack of time (for healing and procedure) lack of information, and dislike for SMC for religious or cultural reasons (Langeni et al., 2012). Table 3 below compares presumed barriers against those expressed by participants in this study, which have already been presented in detail, including a new theme.

Table 3: Presumed Versus Expressed Barriers

Presumed Barriers	Expressed Barriers
Fear of Pain/Complications/Death	Fear of pain and complications was common, though not death '*I was scared at first, I feared the pain and how others who would know I had done it would look at me,'* (IDI 2, Circumcised 18-29) Other types of fear were also mentioned, as presented earlier
Lack of Time (Healing time and	Lack of Time for the procedure was mentioned in both FGDs and

time to do the procedure)	IDIs several times '*when you think of them…like injections, waiting for weeks to heal or the procedure not going well…you see, I want to do it but I don't trust the results of the procedure*'.(FGD1-Uncircumcised 30+)
Lack of Information	Although lack of Information was mentioned, it was only by a few participants '*The medical people only talk about it when you are there and we don't go there often. They only encourage you when you come for medical help'*(FGD 1-Un30)
Dislike of SMC for Religious/Cultural Reasons	Dislike of SMC for cultural/religious reason was not raised as a barrier in this study. The only aspect of culture that was discussed was as it related to language.
Distrust of Health Services	Lack of trust: Distrust of health services, the research underpinning SMC or the motives for promoting SMC emerged inductively, as discussed previously Most uncircumcised participants (7) cited bad experiences or accidents which happened to other people in the past. *'I don't trust them; I don't trust them because I don't know how the people who did the research that said SMC reduces the chances of getting HIV by 60% reached that conclusion.* (FGD 1,Uncircumcised 30+)

4 Chapter 4: Discussion, Limitations, Conclusion and Recommendations

4.1 Overview

This study sought to establish perceptions towards the BNSMC communication strategy so as to inform future communication strategies. Specifically, this study sought to explore messages and how those messages influenced SMC decision making among circumcised and uncircumcised males of ages between 18 and 49. The study also explored perceived barriers and sought to compare presumed barriers and those expressed by the study participants to identify similarities and differences. In addition, the study explored perceptions on the effectiveness and appropriateness of channels and approaches utilized by the BNSMC communication strategy.

The BNSMC strategy, which did not deliver fully on its targeted results, used a multi-media channel approach including radio, television, IPC and edutainment. Findings of this study build on the findings of the BNSMC strategy evaluation and begin to shed light on some of the explanations for why the BNSMC communication strategy did not achieve most its objectives. Green and Kreuter's assert that '*any serious effort to improve the health status and quality of life of a population must take into account the powerful role played by the ecosystem and subsystems such as family, community, culture and the physical environment'* (Green and Kreuter, 2009, p.96).The findings are discussed taking this advice into account, including analysis of various behavior change theories that may explain what these findings mean for future campaigns to increase SMC uptake in Botswana.

4.2 Understanding of SMC Communication Strategy Key Messages

The first objective of the study was to explore recollection of SMC messages where inductive message themes which emerged were compared with the deductive message themes expected from the SMC campaign. The BNSMC communication strategy set out to disseminate four critical messages namely; 1) SMC reduces HIV infection, 2) it is essential to practice protective behaviors after SMC, 3) it is essential to abstain from sex for at least six weeks after SMC procedure and 4) Men who are already infected with HIV need not circumcise (Ministry of Health, 2008). Findings of this study show that only the first message, that SMC reduces the spread of HIV and that it is not a substitute for other prevention methods, seems to have been clearly communicated. The rest of the messages did not come out as clearly. This leads to the first discussion question: why the other three messages were not reported by the study participants?

Communication theory posits that a message produced from the source, such as the BNSMC campaign, is passed through a channel to the receiver who then interprets it (Whitehead, 2004). This theory holds that the effectiveness of communication is dependent on the channel, which could be contaminated by '*extraneous*' information, which in this study could be linked to unintended messages which are discussed below (Whitehead, 2004). The theory of information therefore, sheds light on issues of salience as regards messages 2 and 3. A plausible explanation as to why these two messages may have failed to stand out and be reported by participants could be the fact that they did not even address SMC uptake itself but were more on post circumcision. Only messages 1 and 4 actually addressed SMC uptake itself, which is the key behavior change by which the strategy was measured, hence participants managed to pick them.

When comparing inductive messages that emerged from participants with deductive messages expected from the SMC campaign, one thing becomes evident; messages emerging from participants were more about SMC benefits to the individual and less about SMC enhancing behaviors (messages 2 to 4) that the strategy sought to promote. Instead, participants seemed to be 'recalling' messages about what they stand to benefit on a personal level. Participants, both circumcised and uncircumcised also talked about messages related to how SMC can help protect their loved ones from being infected with HPV. They talked about SMC enhancing sexual performance and how it improves feeling of being clean. These were not intended messages of the communication strategy and it is not quite clear where these messages were coming from. However, similar SMC studies carried out in Lesotho, Kenya and Zimbabwe may shed some light as to where these unintended messages were coming from. Sources of information for similar messages in the said studies were linked to social networks such as peers, family members and sexual relations (Hatzold et al., 2014, Roloff et al., 2011, Skolnik et al., 2014).

FGD participants in Lesotho reported experiencing peer pressure from friends who shared several benefits of SMC to the effect that, a circumcised penis had a better shape and that women preferred sex with circumcised men, as well as the idea that SMC enhanced sexual pleasure (Skolnik et al., 2014). Since participants in this study also reported being influenced by their friends, family and sexual partners, it can be concluded that the social networks were also the source of these unintended messages. This conclusion raises both a challenge and an opportunity. It raises an opportunity in that future interventions could use the identified social networks to their advantage, but it raises a challenge in as far as the same social networks spread negative messages which could be detrimental to the

campaign. Participants in this study mentioned rumors to the effect that foreskins from the SMC procedures are sold to cosmetic companies. Unintended messages like this one may pollute the message and cause misunderstanding which may in turn lead to low uptake of SMC.

It is also possible that, although the BNSMC strategy only mentioned the four documented messages, the situation may have been different on the ground during implementation. Service providers and other community mobilisers on the ground may have added some of these messages in their desperate bid to recruit more men for circumcision. The majority of participants in an SMC study in Zimbabwe listed health and community workers as their primary source of information.

This therefore suggests that messages to promote up-take of SMC should be more aligned with what could motivate men to circumcise and not to be only confined to requirements related to the procedure as it was the case with the SMC communication strategy. Janz and colleagues actually even suggest the promoting non-health benefits of SMC, such as looking good and saving money, to the health benefits could improve uptake (Janz et al., 2002). This idea was presented by one study participant as previously reported;

> *Hey …let the people be taught more about benefits. Let's not just concentrate on the one about reducing the spread of HIV. Let's have more convincing benefits because there are myths about SMC* (IDI 6-Uncircumcised 30+).

4.3 SMC Communication Strategy Messages and SMC Decision Making

The whole purpose of the SMC campaign was to increase demand for SMC. Particularly focusing on the first message, there seems to have been an expectation or even an assumption that awareness would lead to participants taking decisions to enroll for circumcision (see also Figure 1). So, the finding that uncircumcised males knew about SMC reducing HIV risk shows that awareness alone is not sufficient to drive SMC. This is consistent with other studies on SMC uptake, which have shown that it takes way more than knowledge or awareness to get uncircumcised men to take the decision to circumcise (Skolnik et al., 2014, Hatzold et al., 2014, Price et al., 2014). The discussion below seeks to explore further this phenomenon, to establish what could be the deciding factor(s) for men to circumcise, if knowledge of the HIV prevention benefits is insufficient.

4.3.1 Perceived Enablers of SMC

What came out strongly in this study is the role played by society, friends and relatives in influencing the individual to circumcise. In other words, the messengers communicating about SMC matter. Most circumcised participants reported being influenced by people around them ranging from celebrities, girlfriends and mothers. Peer influence also seemed to have played a crucial role in helping some participants arrive at the decision to circumcise (or not). These social influences on the decision to circumcise are corroborated by other studies in Kenya, Lesotho and Zimbabwe (Skolnik et al., 2014, Hatzold et al., 2014, Macintyre et al., 2014). Many respondents in this study, especially younger men, also relayed stories of peer-influence in their decision to get circumcised. On the hand findings of this study and of those in the region reveal an influential role played by girlfriends in the decision to circumcise (Skolnik et al., 2014, Hatzold et al., 2014, Macintyre et al., 2014).

It is therefore interesting to note that, some of these apparent influencers (i.e peers and girlfriends) were not identified as target audience of the original BNSMC communication strategy or its evaluation. This observation brings into sharp focus the criteria used for selecting target groups for the SMC campaign which was adolescent boys (and their parents/guardians) and adult males in Botswana. While these are logical primary target audiences, key secondary audiences (targeting messages at those who influence the primary target audience) may have been missed. The finding shows that, the SMC campaign missed some of the important behavior change communication considerations which could have improved SMC up-take, such as targeting girlfriends/spouses and peers of the target group. Evidence suggests that the use of behavior change theory helps to improve intervention outcomes as it informs not only the design but also guides the evaluation of programs and helps define target audiences (Hekler et al., 2013). For example, in Kenya, where sexual partners and peers were included as primary target audience, they managed to circumcise 49% of the 860 000 targeted men 2012, compared to Botswana's 23% SMC prevalence rate by the same period (Macintyre et al., 2014).

4.3.2 Perceived Barriers to SMC

This study found fear to be one of the leading barriers to SMC. Participants reported different ways in which fear manifested including; fear of erectile dysfunction as a result of SMC, fear of pain, fear of testing and other fears related to adverse effects such excessive bleeding and complications with the procedure. Except for fear of testing, the BNSMC evaluation made a similar finding (Langeni et al., 2012). Other studies in the region also identified fear as the main barrier (Hatzold et al., 2014, Skolnik et al., 2014, Herma-Roloff et al., 2011).

Researchers and Public Health program developers have investigated what could be done to help men overcome these fears which have proved to be major barriers to SMC. The Zimbabwean study concluded that demand creation messages need to be specifically tailored for different ages and should emphasize non-HIV prevention messages, such as improved hygiene, as a motivation for men to overcome their fear (Hatzold et al., 2014). This conclusion is in line with the notion of benefits as alluded to earlier on in this discussion. Some of the circumcised participants indicated that they decided to go for circumcision to protect their loved ones from HPV, a virus that causes cervical cancer. This shows that men can indeed rise above their fears to protect those whom they love. This notion of protecting loved ones from cervical cancer was also raised in the Zimbabwean study (Hatzold et al., 2014).

In the same way, SMC communication campaigns can take advantage of positive masculinity, which relates to the positive use of perceived notions and ideals about how men should or are expected to behave in a given setting (Buscher, 2005). A recognized model communication project using this approach is Brothers for Life in South Africa which launched an SBCC campaign specifically for men (Delate, 2013). This was a national campaign combining mass media with community mobilization and advocacy to raise awareness about benefits of SMC which had direct impact on intention to circumcise (Delate, 2013). In Angola, positive masculinity has been used successfully to engage men in health, social development and gender equality (ICRW, 2013). Another opportunity that positive masculinity presents for BNSMC was found out in another study in Zimbabwe where informants reported a clear and hegemonic notions of masculinity that required men to be and act in control, to have know-how, be strong, resilient, disease free and economically productive (Skovdal et al., 2011). Specifically, the perceived notion that men are strong, resilient and disease free can be used positively to overcome fear.

Among the fears that emerged from this study, fear of testing needs special attention as testing is a pre-requisite for SMC. Actually, the qualitative findings of the Zimbabwean study suggested that fear of an HIV test was a major barrier to SMC uptake (Hatzold et al., 2014). This same fear was reflected by an uncircumcised participant, whose words captured the intensity and seriousness of this fear, '..*There is also the issue of testing; testing on its own is a big decision. When I think of those two giant steps.. I can't deal with both of them at the same time'* (IDI 6, Uncircumcised 30+). It is not clear why the fear of testing did not emerge from the BNSMC evaluation while it was mentioned by a number of participants in this study. So, it is critical that the fear of testing is addressed and lessened before SMC uptake can be improved. HIV testing campaigns, specifically targeting the fear of testing, should precede SMC

campaigns at best or they should run concurrently. The current voluntary HIV testing policy provides a conducive environment to increase the uptake of HIV testing (Statistics Botswana, 2013b). Another window of opportunity is the routine testing which is offered on a voluntary basis to patients at all health facilities in the country (Statistics Botswana, 2013b).

Another barrier which emerged in this study, but did not surface in the evaluation of the strategy, is around issues of trust. Participants expressed lack of trust in the health system. This apparent lack of trust in the system was attributed to incidents which are said to be happening at health facilities such instances where simple dental procedures can lead to life threatening situations and stories of medical instruments being left on people's bodies after operations. These incidents appear to have done a lot of damage to the reputation of the health system to a point where some people may not access some health services such as SMC due to lack of trust in the health care system. Results of a study to investigate the impact of lack of trust in the health care system indicated that among others, bad reputation of health facilities hampered access to health services thereby reducing uptake of health services (Boulware et al., 2003). So, it is critical that the reputation of the health care system is restored to gain public trust if SMC uptake is to be improved.

4.3.3 Perceptions on Suitability of Channels and Approaches

Study participants did not think that TV and radio were effective tools for SMC. This is in contrast to what other studies have found out in other countries. Studies carried out in Zimbabwe, Kenya and South Africa found out that the majority of participants cited radio as their source of information about SMC, followed by Television (Hatzold et al., 2014, Macintyre et al., 2014, Khumalo, 2010). However, on a closer look at the findings of this study revealed that, actually, participants did not negate the effectiveness of television and radio as channels, but they had a specific problem with the choice of both television and radio stations (broadcasters) that were used. When choosing channels to air SMC program, the implementers opted for Btv and Radio Botswana as government broadcasters. The argument of the participants is that, most of the target audiences of the SMC campaign do not listen or watch Radio Botswana and Btv. The Brothers for Life campaign which used a combination of mass media (including use of popular channels) with community mobilization managed to have a direct impact on intention to circumcise where men who were exposed to the campaign were 1.4 times more likely to intend to get circumcised (Delate, 2013).

In essence, this finding emphasizes the importance of research before selecting channels and the actual stations to broadcast the programs. The Soul City Institute for Health and Development Communication has demonstrated how conducting formative audience research helps in designing the right program for the right audiences, channels and times (Perlman, 2013). What is worth noting related to audience research is the fact that the BNSMC evaluation did not evaluate the effectiveness of the channels. For the future, those planning the BNSMC strategy need to find out which channels and stations their target listen to and at what times, as well as what other channels are first priority for their target audiences, such as social media.

There was dissonance between the in-principle support participants expressed for edutainment as a tool for education and communication in the SMC campaign and the fact that nobody referenced edutainment as influencing their decision to circumcise. Most participants expressed that both drama and the use of a popular musician as an SMC ambassador were relatively effective. However, drama was raised more as a preferred approach and not that it was effective for the BNSMC campaign specifically. This apparent preference for edutainment was linked to the effect that, it is a fun filled approach which is liked by the youth. In addition participants said edutainment was both audio and visual, therefore engaged people at an emotional level through discussions, e.g. talk-drama-talk. Their observations reinforce Bone and colleagues (1991, p.112) assertion that '. ..*the use of drama in HIV and sexuality education engages people in a personal way which enables them to see the relevance of information in the context of their own lives.*'. The observation in relation to preference of edutainment as an approach is supported by one experimental study which found out that the edutainment concept was well received with higher satisfaction from audiences (Woratanarat, 2014). As discussed in the Literature Review, drama, especially theatre for development, was used successfully in Malawi to promote condom use, address HIV stigma and alcohol abuse within the army (Mwansa, 2004). However, although participants argued for the efficacy of drama, not one indicated that he was influenced to go for circumcision as a result of watching a play. This is not consistent with evidence on the efficacy of edutainment to increase SMC uptake elsewhere. Using edutainment as an approach for up-scaling SMC in South Africa, the Brothers for Life SMC campaign managed to reach 30 million or 78% of the population with an average frequency of 12 times and resulted in an SMC prevalence of 55% compared with the 24% prevalence achieved in Botswana.

What seems to be emerging from the data, in so far as the use of music shows is concerned, seems to be suggesting that, though music on its own may not get people to circumcise, the musician who is a celebrity can get people to circumcise. On the basis of this observation it can be concluded that the Ministry of Health strategy to appoint a popular music artist as an SMC ambassador has worked, as some participants have reported being influenced by him to circumcise. According to the theory of change in Figure1, the celebrity seems to be contributing to salience because the popular musician attracted a lot of attention to circumcision. In addition, the musician seems to have also contributed positively to shifting attitudes and addressing issues of self-efficacy, since some participants reported believing that they too can circumcise and nothing bad will happen to them after seeing the musician who had circumcised and was still fit to perform. This conclusion is supported by a similar finding in Nigeria where a popular personality was used to promote condom(Meekers et al., 2004). Just like with the BNSMC strategy, the Nigerian intervention used the celebrity in combination with other forms of mass media and reported an increase in condom sales from 41% before exposure and 61% after exposure (Meekers et al., 2004). However, in the same way as there were opposing views from study participants, there are dissenting voices from literature, on the effectiveness of this approach. In a study to establish the effectiveness of using a celebrity for endorsements to raise funds, it was found out that the use of the celebrity alone could not influence information seeking behavior or lead to action (Domino and Holtzhausen, 2002). This seems to indicate the importance of a multi-pronged strategy, as was relied upon by BNSMC.

4.4 Emerging Theoretical Framework for SMC Influences

The theory of change as shown in Figure 1 sought to illustrate how strategic communication is theorized to bring about behavior change. The first part of this section makes a comparative analysis between the predicted outcomes as per the theory and the actual emerging results from the study.

Table 4: Theory of Change versus Emerging Issues from the Study

Stages of Theory of Change (Figure 1)	Comparison of Circumcised Versus Uncircumcised and Between Age Groups
Awareness (Pre-Intention)	The majority of participants who recalled SMC messages were circumcised. A slight variation was on age groups and what part of the messages they recalled.

	For example the older group (30-49) tended to recall that SMC reduces HIV infection while the younger group recalled the entire message including the detail that it reduces HIV infection by 60%. Of the four participants who recalled condoms as an additional protective behavior, three were uncircumcised and in the age group of 30-49. All the three participants who recalled that there is need to abstain from sex for 6 weeks to allow the wound to heal after SMC were also uncircumcised males in the age group of 30-49. **Commentary:** The pattern emerging above seems to suggest that, the message that, one needs to use a condom even after circumcising and the fact that one has to abstain from sex for six weeks after circumcision, seems to have had a negative effect on the 30-49 groups, who despite of recalling all these messages still remained uncircumcised. So, contrary to what was predicted by the theory of change in figure 1, awareness did not lead to health seeking behavior.
Attitudes	In contrast to the emerging pattern around uncircumcised males in the age group of 30-49 above, circumcised individuals across all age groups on the other hand, seemed to have been driven more by perceived benefits over and above awareness. Perceived benefits which were mostly influenced by family, peers and sexual partners, seemed to have impacted on the attitudes of circumcised males as they reported to have been influenced by these social networks to circumcise. Commentary: This pattern seems to suggest that perceived benefits, which did not feature in the theory of change in figure 1 but seems to be an important determinant of SMC seeking behavior, should accompany awareness if results are to be achieved. This is so because most of those who expressed perceived benefits were circumcised.
Salience	Most of circumcised males are also those who reported either knowing of SMC because of Vee the musician or were encouraged by the fact that, Vee was

	circumcised and nothing bad happened to him. Most of the uncircumcised males on the other hand criticized the strategy to use Vee as an ambassador for SMC. **Commentary**: What seems to emerge from this pattern is that, Vee seems to have made the SMC message attractive and branded it as desirable which led to some people taking the decision to circumcise.
Self-Efficacy	Commentary: Vee seems to have also contributed to issues of self-efficacy. Most circumcised participants reported that they believed they could circumcise after seeing that Vee had circumcised and was still fit.
Social Norms	Commentary: Nothing from the study results seems to suggest that social norm were impacted on by any of the BNSMC interventions.
Behavioral Intensions	Circumcised males' decisions seemed to have been influenced by perceived benefits mostly from social and sexual networks. This however is not accounted for in the theory of change in figure 1. Uncircumcised males on the other hand, seemed to have been put off from circumcising by the fear of pain, adverse effects and myths. **Commentary**: The apparent gap in influencing social norms seems to have given way to myths and misconceptions about SMC, something which may have kept so many males away from SMC

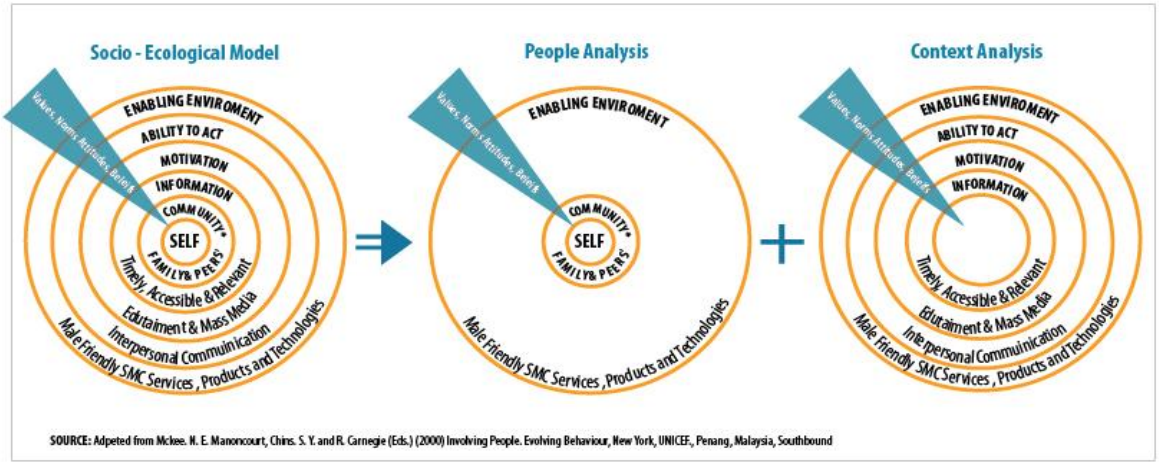
Coffman maintains that communication campaigns stand a chance to make an impact if they are guided by theory and evidence while Paul suggests that, what makes any communication intervention viable is the use of strategy at the design, operational and tactical levels (Bertrand et al., 2004, Coffman and Henry, 2003). So to close off this discussion, the researcher explores the theory of change, findings of this study and other theories from the literature to discuss the extent to which the BNSMC communication strategy could be said to be a strategic communication campaign. Using Figure 1 from the first chapter as a departure point, this sub-section uses emerging evidence to generate a theory of

change that explains the poor SMC uptake and to identify potential entry-points for future campaign designs.

In the review of both the BNSMC strategy and its subsequent evaluation document there is no evidence that a behavior change communication theory was used to guide its design, implementation or evaluation. The only scientific information referred to in the two documents are studies which confirmed the efficacy of SMC as an add-on HIV prevention strategy. The researcher arrived at this conclusion after comparing the BNSMC strategy document with a similar SMC communication strategy document in Swaziland which used the Social Ecology model to guide the design, implementation and evaluation of their SMC campaign (Magagula et al., 2013). This theoretical approach suggests the need for comprehensive social and behavior change programs that targets individual behaviors, mobilizes the community and addresses underlying societal factors that either promotes or limit access to SMC (Magagula et al., 2013).

Findings from this study show that the BNSMC omitted critical target groups in the form of girlfriends and peers of the BNSMC target group. Inclusion of girlfriends and peers as secondary audiences that could influence the primary BNSMC target groups could have assisted in the promotion of SMC. This approach has been promoted in other contexts given data that confirms the amount of influence girlfriends and peers have in SMC decision making (Magagula et al., 2013, Hatzold et al., 2014). This apparent omission by the BNSMC strategy can be attributed to the apparent lack of formative and audience research which evidence from the region has shown is a pre-requisite if any communication intervention is to get both the design and intervention right in terms of targeting the right people with the right message (Khumalo, 2010). In order to understand the context of men that are affected by SMC in light of the findings of this study, a socio-ecological model is proposed as a more plausible and effective model for future campaign designs (see Figure 2 on the following page).

Figure 2: The Socio-ecological model that defines levels of audiences (Manncourt and Chris S, 2000)



4.5 Possible Limitations of the study

The researcher conducted this study with full awareness about the possibility of bias at any stage of the study. This is because, the researcher has been in the field of behavior change communication and HIV prevention for over twenty years and has developed preferences for certain methods and ways of doing things. For example, the researcher prefers and has used edutainment more than he has used other communication channels. For this reason, the researcher made a conscious effort to ensure that all approaches were approached equally and similarly at all critical stages of the research including literature review (included mass media literature), data collection, analysis and interpretation of data.

Another potential limitation is that some participants were recruited from closed networks, particularly where snowball sampling was used to recruit uncircumcised participants. It is possible that some perspective may have been excluded from IDIs or FGDs. To limit this possible selection bias, a number of individuals who do not know each other were selected to start the snowball sampling process with the

exception of a few unavoidable instances. As the scope of the study was limited by time and resources, snowball sampling could not always be continued until saturation of themes.

Another limitation was that data were collected at a single point in time and focused on a historical campaign. Issues of recall bias may have been present, as the SMC campaign ran over a number of years and the time between exposure to the campaign messages and the time of data collection could have been significant. However, this does not diminish the value of exploring perceptions about the campaign or reflections on how similar campaigns could be enhanced in the future.

4.6 Conclusions and Recommendations

These study findings have demonstrated that participants of this study mainly recalled messages which were not part of the intended messages of the SMC communication strategy. Most of recalled messages were related to the personal benefits of SMC to the individual which seemed to suggest that, in the absence of the 'what's in it for me' kind of messages, audiences found them from other sources and associated them with the SMC campaign.

The data has shown that the one SMC key message that was recalled about HIV prevention was insufficient to drive audiences to circumcise. Instead, study participants reported that they were influenced by friends, family and celebrities or other influential people in the community. Data has therefore shown that awareness alone cannot lead to SMC seeking behavior and that there is need for participants to identify benefits, which in this study seemed to have originated from social networks as opposed to the campaign. Also noteworthy is the observation that, the social networks who were the source of persuasive information were not part of the BNSMC target audiences.

In terms of channels used in the SMC campaign, results of the study suggest that television and radio may be appropriate channels, but the implementers chose the wrong broadcasters for their audiences. Audience research is needed to find out which are the suitable channels and broadcasters for the different age groups within the SMC target audiences. On the other hand, results do not show that edutainment had any influence on increasing SMC uptake. Neither music nor drama was reported as a source of information or as an influencing factor. It could be that the edutainment concept was poorly designed and implemented, as participants indicated that they thought drama and music could be effective and data from other countries also has proven the efficacy of edutainment. Therefore it would

be critical to investigate how the edutainment package was designed and implemented and to look more closely at how it has been applied in similar contexts, such as South Africa.

Finally, the impact of HIV testing as a barrier may have been underestimated by the implementers of the SMC strategy. There is need to revisit fear of testing as a barrier and include a strategy to address it as part and parcel of the overall SMC communication strategy. Another barrier which can prove to have devastating effects on SMC demand creation is lack of trust in the health care services. This barrier also deserves investigation to establish its extent and decide whether it warrants intervention. Failure to attend to these barriers may prove detrimental to the quest to improve SMC uptake.

4.7 Recommendations

On the basis of the results and conclusions of this study, the following are the recommendations.

- **Inclusive Target Audience**: Future SMC campaigns should consider including peers, family and community as secondary target audiences. Specifically, spouses and girlfriends should be considered as critical stakeholders as evidence suggest they are a powerful influence to their male partners (Hatzold et al., 2014).

- **Target Audience Research**: It is recommended that, a qualitative and quantitative target audience formative research be carried out to determine information needs listenership/viewership profiling of the intended target groups, particularly those who have not been included in the past.

- **SMC Edutainment Evaluation**: Evaluate the design and implementation of the BNSMC communication strategy in the light of behavior change communication theories and empirical evidence.

- **Sell SMC Messages**: SMC messaging should be packaged such that benefits of SMC to the individuals are highlighted. Over and above other SMC health outcome messages, the campaign should include other non-health benefits that males can identify with. In addition, positive masculinity can be considered as an option for making SMC appealing despite the expressed fear of pain.

- **SMC Barrier Research**: There is need to commission a study to further investigate two emerging SMC barriers in the form of fear of HIV testing and lack of trust in health care services. Primarily,

the study should investigate the magnitude and extents to which these two barriers may have had in the low up-take of SMC as well as other public health services and determine if they warrant programmatic interventions.

- **Review Design Approach**: It recommended that the Ministry of Health reviews the current approach to designing the BNSMC strategy. In addition to empirical evidence on the efficacy of SMC as an HIV prevention strategy, the designers should also consider use of current social and behavior change communication theories and models to guide the design, implementation and evaluation of the BNSMC. Future evaluations should also consider process evaluation that assesses both qualitative and quantitative influences on the BNSMC.

Annex 1: IDI GUIDE –Uncircumcised Males

A. IDI Preparation Checklist

The following preparations should be completed before each IDI:

- ☐ 1 extra copy of study information sheets
- ☐ 1 extra copy of consent forms
- ☐ 2 copies of audio-recording consent forms
- ☐ Digital audio-recording equipment (tested for working condition)
- ☐ Backup batteries for audio recorder(s)
- ☐ Notebooks for interviewer
- ☐ Private room
- ☐ Food and drinks for interviewee

Name and Signature of Study Staff: _____ *Date:* _____

B. Checklist for Facilitator and Notetaker

The IDI shall only progress once the following are confirmed:

- ☐ Interviewee confirms he is age 18 or older
- ☐ Confirm he is uncircumcised
- ☐ Study ***consent form has been signed*** and ***copy given to interviewee***
- ☐ Interviewee has ***signed audio-recording consent form***

Name and Signature of Study Staff: _____ *Date:* _____

C. Introduction Exercise

Note: Start recording

Once the consent process is complete, to build rapport, have the interviewee introduce a little bit about himself without using his name, e.g. age, place of birth and what he does for pleasure

Note: Check that recorder is working before proceeding

D. IDI guide

Note: Start recording

1. What have you heard or seen about male circumcision, especially the kind done in clinics?
    a. How did you get that information?
    b. What do you think were the main messages of the campaign?
    c. Can you comment on their clarity, relevance and suitability?
    d. Have him describe any SMC campaigns they are aware of
    e. Explore whether he trusts that information
    f. How much do you listen to this information/these people?

2. In your opinion, what do you think are some of the things that stop people from being circumcised?
    a. What are some of the things that stopped you*?*
    b. Who influenced your decision and how?
    c. What (environmental factors) influenced your decision and how?
    d. What role did SMC communication channels and messages have on your decision?

3. How do you think male circumcision changes someone's life?
        a. Encourage sharing of both positive and negative expectations.

4. What more would you want to know about circumcision that would influence your decision?

5. What do you think are the advantages and disadvantages of male circumcision? Explain.

6. What do you think could be done to get men who are not circumcised like yourself, to consider SMC?
        b. Ask about suitable messages, channels (radio, TV, advertising) approaches (drama, interpersonal, music etc).
        c. Ask about any other strategy or intervention.

Annex 2: IDI GUIDE – Circumcised Males

A. IDI Preparation Checklist

The following preparations should be completed before each IDI:

- ☐ 1 extra copy of study information sheets
- ☐ 1 extra copy of consent forms
- ☐ 2 copies of audio-recording consent forms
- ☐ Digital audio-recording equipment (tested for working condition)
- ☐ Backup batteries for audio recorder(s)
- ☐ Notebooks for interviewer
- ☐ Private room
- ☐ Food and drinks for interviewee

Name and Signature of Study Staff: _____ *Date:* _____

B. Checklist for Interviwer

The IDI shall only progress once the following are confirmed:

- ☐ Interviewee confirms he is age 18 or older
- ☐ Confirm he is circumcised
- ☐ Study ***consent form has been signed*** and ***copy given to interviewee***
- ☐ Interviewee has ***signed audio-recording consent form***

Name and Signature of Study Staff: _____ *Date:* _____

C. Introduction Exercise

Note: Start recording

Once the consent process is complete, to build rapport, have the interviewee introduce a little bit about himself without using his name, e.g. age, place of birth and what he does for pleasure

Note: Check that recorder is working before proceeding

D. IDI guide

Note: Start recording

7. What do you know about male circumcision, especially the kind done in clinics?
    a. How did you get that information?
    b. Have them describe any demand creation interventions they are aware of
    c. Explore whether they trust that information
    d. How much do you listen to this information/these people?

8. Could you tell me why you took the decision to circumcise?
    a. Who influenced your decision and how?
    b. What (environmental factors) influenced your decision and how?

9. How did you learn or hear about SMC?
    a. What do you think were the main messages of the campaign?
    b. Can you comment on their clarity, relevance and suitability?

10. What was the experience of male circumcision procedure like?
    a. How did you feel about male circumcision before the procedure?
    b. How did you feel during and after the procedure?

11. Is there anything that you would have wanted to have known before you got circumcised?
    d. Explore both practical, e.g. six weeks abstinence, and informational, e.g. benefits and risks of MMC

12. What do you think are the advantages and disadvantages of safe male circumcision? Explain.
13. What do you think could be done to get men circumcised in large numbers?
    e. Ask about suitable messages, channels (radio, TV, advertising) approaches (drama, interpersonal, music etc).
    f. Ask about any other strategy or intervention.

Annex 3: IDI Consent- Circumcised

Audience Perceptions on Safe Male Circumcision Communication Strategy STUDY Participant Information and Consent Form for In-depth interviews – Circumcised Males

1. Introduction

Good Day, my name is Samson Setumo. I am a student/researcher from Wits University in Johannesburg. I would like to invite you to consider volunteering to participate in the above mentioned research study. This study is sponsored by Botswana Insurance Holding Limited (BIHL).

Before volunteering to participate in this study, it is important that you read and understand the following explanation of the purpose of the study, the study procedures, benefits, risks, and your right to withdraw from the study at any time.

This information leaflet is to help you decide if you would like to volunteer. You should fully understand what is involved before you agree to take part in this study. If you have any questions, do not hesitate to ask me.

This consent form may contain words that you do not understand. Please ask me or other study staff to explain any words or information that you do not clearly understand. You may take home an unsigned copy of this consent form to think about or discuss with family or friends before making your decision.

If you agree to take part in this study, we will ask you to sign this form to show that you want to take part. We will give you a copy of this form to keep.

It is important that you understand the following:

- Taking part in this study is completely voluntary.
- You may refuse to take part in this study or leave it at any time. By doing so, you will not lose any benefits you receive now or have a right to receive.
- Your decision to leave this study will not affect the medical care you get now or in the future.
- Your decision will not affect your ability to take part in other research studies.

2. Purpose of the Study

We are inviting you to take part in a research study. This research study is about how men decide to access male circumcision services, including the role of the media, safe male circumcision interventions, family and friends in the decision-making process through to the period after the surgery. Male circumcision is the removing of the foreskin of a man's or boy's penis. We are inviting you to take part in this study because you were referred to us by an SMC service provider in your community.

This study involves participating in an interview with a male interviewer. In this study, we would like to learn more about what you have heard about medical circumcision (if anything), the experience of having to decide whether or not to undergo this kind of circumcision, and your thoughts about how SMC partners and service providers can better communicate about circumcision with people like you. We are

mainly interested in this information because we want to learn how we can improve communication about male circumcision services.

3. Length of the Study and Number of Participants

This study is being conducted in Gaborone.

You will be one of the 9 people who will be interviewed individually.

The total amount of time required for your participation in this study is no more than one hour. The interview will take place in a private room and is a one-time event. No other interviews are required.

4. Study Procedures

If you take part in this study, we will ask you to participate in an interview which should take about one hour. You will be interviewed by a trained male in your language. With your permission, the interview will be audio-recorded so that the interview does not miss anything that you say. He will ask you a series of questions about the topics already mentioned earlier. Your honest answers to the questions will be used to help us:

- Learn about your experience of deciding to undergo circumcision
- Understand how you feel about medical male circumcision based on your experience
- Understand what you know about medical circumcision and how you got that information
- Understand how you communicate with other people about health issues in general

While we hope that you will feel comfortable enough to answer freely, you may skip any questions you don't want to answer.

5. Will any of these Study Procedures Result in Discomfort of Inconvenience?

The interviewer may ask questions or raise issues that are personal and of a sensitive nature that may make you feel uncomfortable or upset. There are no wrong answers in this type of interview. We are interested in your experiences and thoughts. However, you may skip any questions that you don't want to answer or discontinue the interview at any point. There may be other risks and discomforts that are not known at this time.

6. Benefits

You will not benefit directly from taking part in this study. Information gathered from this study may help us learn more about how to improve male circumcision communication in Botswana, better taking into account the experiences of the target group (men) both circumcised and uncircumcised.

7. Costs and Reimbursement

There is no cost to you for being part of the study. Food and drinks will be provided at the interview. You will also receive P20 reimbursement for your transport to and from the interview venue.

8. Right as a Participant in this Study to Refuse to take part

Taking part in the study is your choice. If you decide to take part, you can always change your mind. You can stop taking part at any time.

9. Ethical Approval

- This study protocol has been submitted to the University of the Witwatersrand and Ministry of Health (Botswana), Human Research Ethics Committee (HREC) and written approval has been granted by that committee.
- This study is sponsored by BIHL Trust under the Professor Thomas Tlou Scholarship.

10. Confidentiality

Anything that you share in the interview will be kept confidential in the following ways:

- We will use a pysdonym instead of your real name for any quotes, which will be transcribed directly from a translated transcription from the audio recording.
- Audio recordings and transcripts of the interview will be stored in locked and/or password protected files and destroyed three years after the study is complete.
- All information obtained during the course of this study, including personal data and research data will be kept strictly confidential. Data that may be reported in scientific journals will not include any information that identifies you as a participant in this study.
- This information will be reviewed by authorised representatives of the study team
- The information might also be inspected by the University of the Witwatersrand, Human Research Ethics Committee (HREC).

11. Sources of Additional Information

If you have any questions about this study, you may contact Mr Samson Setumo (Tel 3936132/71445088/73444366), or Ms. Sara Nieuwoudt (Cell: 83 428 4392).

If you have any questions about your rights as a participant, you may contact Prof Peter Cleaton-Jones at the University of the Witwatersrand, Human Research Ethics Committee: Secretariat (11 717 1234)

INFORMED CONSENT:

- I hereby confirm that I have been informed by the study staff (_____) about the nature, conduct, benefits and risks of the target audience perceptions on the implementation of SMC strategy Study.
- I have also received, read and understood the above written information (Participant Information Leaflet and Informed Consent) regarding the study.
- I am aware that the results of the study, including any personal details such as those regarding my age and residential area will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by Samson Setumo or on his behalf.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.

***PARTICIPANT**:*

Printed Name	Signature / Mark or Thumbprint	Date and Time

I, _____ herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

STUDY STAFF:

Printed Name	Signature	Date and Time

Annex 4: IDI Consent- Uncircumcised

Audience Perceptions on Safe Male Circumcision Communication Strategy STUDY Participant Information and Consent Form for In-depth interviews – Uncircumcised Males

1. Introduction

Good Day, my name is Samson Setumo. I am a student/researcher from Wits University in Johannesburg. I would like to invite you to consider volunteering to participate in the above mentioned research study. This study is sponsored by Botswana Insurance Holding Limited (BIHL).

Before volunteering to participate in this study, it is important that you read and understand the following explanation of the purpose of the study, the study procedures, benefits, risks, and your right to withdraw from the study at any time.

This information leaflet is to help you decide if you would like to volunteer. You should fully understand what is involved before you agree to take part in this study. If you have any questions, do not hesitate to ask me.

This consent form may contain words that you do not understand. Please ask me or other study staff to explain any words or information that you do not clearly understand. You may take home an unsigned copy of this consent form to think about or discuss with family or friends before making your decision.

If you agree to take part in this study, we will ask you to sign this form to show that you want to take part. We will give you a copy of this form to keep.

It is important that you understand the following:

- Taking part in this study is completely voluntary.
- You may refuse to take part in this study or leave it at any time. By doing so, you will not lose any benefits you receive now or have a right to receive.
- Your decision to leave this study will not affect the medical care you get now or in the future.
- Your decision will not affect your ability to take part in other research studies.

2. Purpose of the Study

We are inviting you to take part in a research study. This research study is about how men decide to access male circumcision services, including the role of the media, safe male circumcision interventions, family and friends in the decision-making process through to the period after the surgery. Male circumcision is the removing of the foreskin of a man's or boy's penis. We are inviting you to take part in this study because you were referred to us by an SMC service provider in your community.

This study involves participating in an interview with a male interviewer. In this study, we would like to learn more about what you have heard about medical circumcision (if anything), the experience of having to decide whether or not to undergo this kind of circumcision, and your thoughts about how SMC partners and service providers can better communicate about circumcision with people like you. We are

mainly interested in this information because we want to learn how we can improve communication about male circumcision services.

3. Length of the Study and Number of Participants

This study is being conducted in Gaborone.

You will be one of the 9 people who will be interviewed individually.

The total amount of time required for your participation in this study is no more than one hour. The interview will take place in a private room and is a one-time event. No other interviews are required.

4. Study Procedures

If you take part in this study, we will ask you to participate in an interview which should take about one hour. You will be interviewed by a trained male in your language. With your permission, the interview will be audio-recorded so that the interview does not miss anything that you say. He will ask you a series of questions about the topics already mentioned earlier. Your honest answers to the questions will be used to help us:

- Understand how you feel about medical male circumcision based on your experience
- Understand what you know about medical circumcision and how you got that information
- Understand how you communicate with other people about health issues in general

While we hope that you will feel comfortable enough to answer freely, you may skip any questions you don't want to answer.

5. Will any of these Study Procedures Result in Discomfort of Inconvenience?

The interviewer may ask questions or raise issues that are personal and of a sensitive nature that may make you feel uncomfortable or upset. There are no wrong answers in this type of interview. We are interested in your experiences and thoughts. However, you may skip any questions that you don't want to answer or discontinue the interview at any point. There may be other risks and discomforts that are not known at this time.

6. Benefits

You will not benefit directly from taking part in this study. Information gathered from this study may help us learn more about how to improve male circumcision communication in Botswana, better taking into account the experiences of the target group (men) both circumcised and uncircumcised.

7. Costs and Reimbursement

There is no cost to you for being part of the study. Food and drinks will be provided at the interview. You will also receive P20 reimbursement for your transport to and from the interview venue.

8. Right as a Participant in this Study to refuse to take part

Taking part in the study is your choice. If you decide to take part, you can always change your mind. You can stop taking part at any time.

9. Ethical Approval

- This study protocol has been submitted to the University of the Witwatersrand and Ministry of Health (Botswana), Human Research Ethics Committee (HREC) and written approval has been granted by that committee.
- This study is sponsored by BIHL Trust under the Professor Thomas Tlou Scholarship.

10. Confidentiality

Anything that you share in the interview will be kept confidential in the following ways:

- We will use a pysdonym instead of your real name for any quotes, which will be transcribed directly from a translated transcription from the audio recording.
- Audio recordings and transcripts of the interview will be stored in locked and/or password protected files and destroyed three years after the study is complete.
- All information obtained during the course of this study, including personal data and research data will be kept strictly confidential. Data that may be reported in scientific journals will not include any information that identifies you as a participant in this study.
- This information will be reviewed by authorised representatives of the study team
- The information might also be inspected by the University of the Witwatersrand, Human Research Ethics Committee (HREC).

11. Sources of Additional Information

If you have any questions about this study, you may contact Mr Samson Setumo (Tel 3936132/71445088/73444366), or Ms. Sara Nieuwoudt (Cell: 83 428 4392).

If you have any questions about your rights as a participant, you may contact Prof Peter Cleaton-Jones at the University of the Witwatersrand, Human Research Ethics Committee: Secretariat (11 717 1234)

INFORMED CONSENT:

- I hereby confirm that I have been informed by the study staff (_____) about the nature, conduct, benefits and risks of the target audience perceptions on the implementation of SMC strategy Study.
- I have also received, read and understood the above written information (Participant Information Leaflet and Informed Consent) regarding the study.
- I am aware that the results of the study, including any personal details such as those regarding my age and residential area will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by Samson Setumo or on his behalf.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.

***PARTICIPANT**:*

Printed Name	Signature / Mark or Thumbprint	Date and Time

I, _____ herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

STUDY STAFF:

Printed Name	Signature	Date and Time

Annex 5: Audio-recording Consent Form - IDI

The reason for audio-recording the interview has been explained to me.

I am aware that I may choose whether to participate or not to participate in the interview and to be recorded.

I am aware that I may stop the interview at any point.

The researcher will take measures to make sure that the recording is kept confidential and safe.

I consent to having the interview audio recorded.

Interviewee:

Name: _____

Signature: _____

Date:_____

Researcher

Name: _____

Signature:_____

Date:_____

Annex 6: FGD GUIDES – Both Groups

A. FGD Preparation Checklist

The following preparations should be completed before each FGD:

- ☐ 10 extra copies of study information sheets
- ☐ 10 extra copies of consent forms
- ☐ 10 copies of audio-recording consent forms
- ☐ Box of pens
- ☐ Digital audio-recording equipment (tested for working condition)
- ☐ Backup batteries for audio recorder(s)
- ☐ Notebooks for facilitator and note-taker
- ☐ Private room with at least 12 seats and enough space to arrange seats in a (semi)circle
- ☐ Nametags (for writing down Nicknames)
- ☐ Markers
- ☐ Enough food and drinks for participants

Name and Signature of Study Staff: _____ *Date:* _____

B. Checklist for Facilitator and Notetaker

The FGD shall only progress once the following are confirmed:

- ☐ All study ***consent forms have been signed*** and ***copies given to participants***
- ☐ All participants have ***signed audio-recording consent forms***
- ☐ Participants are in the correct group:
    - By circumcision status: __ Circumcised __ Uncircumcised
    - By age groups: __ 18-29 ___ >29
- ☐ At least 8 participants in the group
- ☐ No more than 10 participants in the group

Note: Participants without the appropriate consent forms or not meeting the inclusion criteria will be excluded.

Name and Signature of Study Staff: _____ *Date:* _____

C. Introduction Exercise

Note: Start recording

Once the consent process is complete, to build rapport, have everyone take a seat and in his turn introduce himself using his Nickname (false name for FGD purpose), his age, and something he likes about himself.

Note: Stop recording

Facilitator will go over **ground rules**, e.g. respect, speaking one at a time, no phones on, etc. while the audio check is happening.

Note: During ground rules, note taker should ensure that the recording equipment is working and that everyone is audible.

D. Discussion question guide – (Just a guide – let conversation flow)

Note: Start recording

See D1 for Circumcised males

See D2 for Uncircumcised males

D.1 Circumcised male FGD Guide *(to be pretested)*

1. To start, I'm interested in hearing what you know about male circumcision, especially the kind done in clinics?
a. In general, how do you get information related to SMC?
b. Who do you talk to or consult with?
c. What do you read, view, etc?

2. What was your main motivation for getting circumcised?

3. Tell us about how you made the decision to get circumcised?
    a. Who did you talk to or consult before coming to the clinic?
    b. What were your information sources?
    c. Were there any specific events/materials/people that influenced your decision?
    d. Comment on barriers you had to overcome if any?

4. Can you describe your experience of getting circumcised?
    a. Explore whether the experience matched their expectations.

5. What kind of information did you need or want before getting circumcised?
    a. Explore both practical, e.g. clinic location, and informational, e.g. benefits and risks of MC

6. Is there anything that you wish you had known before you got circumcised?
    a. How would they have liked to get that information

7. How do you talk to uncircumcised peers about the experience of getting circumcised?
    a. What do you tell them?

8. Specifically, what are your thoughts on receiving SMC information via radio, TV or Print?
    a. Which channels are most suitable?
    b. What type of information would you like on the channels?
    c. Which radio/TV stations are most popular?

D.2 Uncircumcised male FGD Guide (to be pre-tested To start, I'm interested in hearing what you know about male circumcision, especially the kind done in clinics.

    a. How did you get that information?

2. What have you heard about medical circumcision in your community?
    a. Have them describe any SMC interventions they are aware of
    b. Explore whether they trust that information
    c. How much do you listen to this information/these people?

3. If any of you have considered circumcision, what is keeping you from deciding to get circumcised?
    a. Probe for questions they might have, structural barriers (e.g. distance), etc.

4. In general, how do you get information related to your health, especially SMC?
    a. Who do you talk to or consult with?
    b. What do you read, view, etc?

5. What are your thoughts on receiving SMC information via posters, drama, billboards, radio, TV Print or discussion?
    a. Which channels are most suitable?
    b. What type of information would you like on these channels?
    c. Which radio/TV stations are most popular?

Annex 7: FGD Consent Circumcised

Audience Perceptions on Safe Male Circumcision Communication Strategy STUDY Information Sheet and Consent for Focus Group Discussion (Circumcised Males)

1. Introduction

Good Day, my name is Samson Setumo. I am a student/researcher from Wits University in Johannesburg. I would like to invite you to consider volunteering to participate in the above mentioned research study. This study is sponsored by a Botswana Insurance Holding Limited (BIHL) Trust.

Before volunteering to participate in this study, it is important that you read and understand the following explanation of the purpose of the study, the study procedures, benefits, risks, and your right to withdraw from the study at any time.

This information leaflet is to help you decide if you would like to volunteer. You should fully understand what is involved before you agree to take part in this study. If you have any questions, do not hesitate to ask me.

This consent form may contain words that you do not understand. Please ask me or other study staff to explain any words or information that you do not clearly understand. You may take home an unsigned copy of this consent form to think about or discuss with family or friends before making your decision.

If you agree to take part in this study, we will ask you to sign this form to show that you want to take part. We will give you a copy of this form to keep.

It is important that you understand the following:

- Taking part in this study is completely voluntary.
- You may refuse to take part in this study or leave it at any time. By doing so, you will not lose any benefits you receive now or have a right to receive.
- Your decision to leave this study will not affect the medical care you get now or in the future.
- Your decision will not affect your ability to take part in other research studies.

2. Purpose of the Study

We are inviting you to take part in a research study. This research study is about how men decide to access male circumcision services. Male circumcision is the removing of the foreskin of a man's or boy's penis. We are inviting you to take part in this study because you were referred to us by the SMC service provider or someone in your community who is uncircumcised.

This study involves participating in a discussion with between seven to ten other males from the community who are also uncircumcised. In this study, we would like to learn more about you, what you have heard about circumcision (if anything), and your thoughts about how organizations like the SMC service provider in your community can better communicate with uncircumcised males like you. We are mainly interested in this information because we want to learn how we can improve communication about

male circumcision services. In particular, we will be asking you questions about your opinions regarding the various channels and approaches used to publicize and recruit men for circumcision.

3. Length of the Study and Number of Participants

This study is being conducted in Gaborone.

Up to 130 males from age 18 and 49 will take part in these discussions, but there will be no more than 10 males total in the group discussion that you are being invited to join. The males in your group will be a similar age to you and will also be circumcised.

The total amount of time required for your participation in this study is no more than 90 minutes. The group discussion will take place in a private room and is a one-time event. No other visits are required.

4. Study Procedures

If you take part in this study, we will ask you to participate in a group discussion on one occasion. This should take about 90 minutes. There will be a trained group facilitator and a note taker. They will introduce the discussion topics and will ensure that everyone has a chance to speak, but for most of the time the focus of the discussion will be between you and the other males. The discussion topics you will be asked about will be used to help us:

- Learn about how you get information related to SMC
- Learn about how you made the decision to circumcise
- Understand what you know about medical circumcision and how you got that information
- Understand how you feel about medical male circumcision based on what you know
- Learn how to improve communication about male circumcision

While we hope that you will participate actively throughout the discussion, you may skip any questions you don't want to answer.

5. Will any of these Study Procedures Result in Discomfort of Inconvenience?

While the group facilitator is trained, the discussion may raise issues that are personal and of a sensitive nature that may make you feel uncomfortable or upset. While there are not right or wrong answers in this type of discussion, you may disagree with what other people in the group are saying or others may not share your opinions or experiences. You may skip any questions that you don't want to answer or leave the group discussion at any point. Furthermore, as this is a group setting, it is not possible to promise confidentiality. There may be other risks and discomforts that are not known at this time.

6. Benefits

You will not benefit directly from taking part in this study. Information gathered from this study may help us learn more about how to improve male circumcision communication in Botswana.

7. Costs and Reimbursement

There is no cost to you for being part of the study. Food and drinks will be provided at the discussion. You will also receive P20 reimbursement for your transport to and from the interview venue.

8. Right as a Participant in this Study to Refuse to take part

Taking part in the study is your choice. If you decide to take part, you can always change your mind. You can stop taking part at any time.

9. Ethical Approval

This study protocol has been submitted to the University of the Witwatersrand and Ministry of Health (Botswana), Human Research Ethics Committee (HREC) and written approval has been granted by that committee.

10. Confidentiality

We ask that you keep anything that is shared in the discussion confidential. However, as this is a group discussion, we cannot guarantee that other participants in the discussion will keep what is said confidential. However, the research team will make every effort to ensure that your comments are confidential in any reporting on the discussion, as follows:

- We will use a code instead of your name for any quotes transcribed directly from an audio recording.
- Audio recordings and transcripts of the conversations will be stored in locked and/or password protected files and destroyed three years after the study is complete.
- All information obtained during the course of this study, including personal data and research data will be kept strictly confidential. Data that may be reported in scientific journals will not include any information that identifies you as a participant in this study.
- This information will be reviewed by authorised representatives of the study team
- The information might also be inspected by the University of the Witwatersrand, Human Research Ethics Committee (HREC).

11. Sources of Additional Information

If you have any questions about this study, you may contact Mr Samson Setumo(3936132/71445088/73444366), or Ms. Sara Nieuwoudt (Cell: 82 423 4392).

If you have any questions about your rights as a participant, you may contact Prof Peter Cleaton-Jones at the University of the Witwatersrand, Human Research Ethics Committee: Secretariat (11 717 1234)

INFORMED CONSENT:

- I hereby confirm that I have been informed by the study staff (_____) about the nature, conduct, benefits and risks of the target audience perceptions on the implementation of SMC communication strategy Study.
- I have also received, read and understood the above written information (Participant Information Leaflet and Informed Consent) regarding the study.

- I am aware that the results of the study, including any personal details such as those regarding my age and residential area will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by Samson Setumo or on his behalf.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.

PARTICIPANT*:*

Printed Name	Signature / Mark or Thumbprint	Date and Time

I, _____ herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

STUDY STAFF:

Printed Name	Signature	Date and Time

Annex 8: FGD Consent Uncircumcised

Audience Perceptions on Safe Male Circumcision Communication Strategy STUDY Information Sheet and Consent for Focus Group Discussion (Uncircumcised Males)

1. Introduction

Good Day, my name is Samson Setumo. I am a student/researcher from Wits University in Johannesburg. I would like to invite you to consider volunteering to participate in the above mentioned research study. This study is sponsored by a Botswana Insurance Holding Limited (BIHL) Trust.

Before volunteering to participate in this study, it is important that you read and understand the following explanation of the purpose of the study, the study procedures, benefits, risks, and your right to withdraw from the study at any time.

This information leaflet is to help you decide if you would like to volunteer. You should fully understand what is involved before you agree to take part in this study. If you have any questions, do not hesitate to ask me.

This consent form may contain words that you do not understand. Please ask me or other study staff to explain any words or information that you do not clearly understand. You may take home an unsigned copy of this consent form to think about or discuss with family or friends before making your decision.

If you agree to take part in this study, we will ask you to sign this form to show that you want to take part. We will give you a copy of this form to keep.

It is important that you understand the following:

- Taking part in this study is completely voluntary.
- You may refuse to take part in this study or leave it at any time. By doing so, you will not lose any benefits you receive now or have a right to receive.
- Your decision to leave this study will not affect the medical care you get now or in the future.
- Your decision will not affect your ability to take part in other research studies.

2. Purpose of the Study

We are inviting you to take part in a research study. This research study is about how men decide to access male circumcision services. Male circumcision is the removing of the foreskin of a man's or boy's penis. We are inviting you to take part in this study because you were referred to us by the SMC service provider or someone in your community who is uncircumcised.

This study involves participating in a discussion with between seven to ten other males from the community who are also uncircumcised. In this study, we would like to learn more about you, what you have heard about circumcision (if anything), and your thoughts about how organizations like the SMC service provider in your community can better communicate with uncircumcised males like you. We are mainly interested in this information because we want to learn how we can improve communication about

male circumcision services. In particular, we will be asking you questions about your opinions regarding the various channels and approaches used to publicize and recruit men for circumcision.

3. Length of the Study and Number of Participants

This study is being conducted in Gaborone.

Up to 130 males from age 18 and 49 will take part in these discussions, but there will be no more than 10 males total in the group discussion that you are being invited to join. The males in your group will be a similar age to you and will also be uncircumcised.

The total amount of time required for your participation in this study is no more than 90 minutes. The group discussion will take place in a private room and is a one-time event. No other visits are required.

4. Study Procedures

If you take part in this study, we will ask you to participate in a group discussion on one occasion. This should take about 90 minutes. There will be a trained group facilitator and a note taker. They will introduce the discussion topics and will ensure that everyone has a chance to speak, but for most of the time the focus of the discussion will be between you and the other males. The discussion topics you will be asked about will be used to help us:

- Learn about how you get information related to SMC
- Understand what you know about medical circumcision and how you got that information
- Understand how you feel about medical male circumcision based on what you know
- Learn how to improve communication about male circumcision

While we hope that you will participate actively throughout the discussion, you may skip any questions you don't want to answer.

5. Will any of these Study Procedures Result in Discomfort of Inconvenience?

While the group facilitator is trained, the discussion may raise issues that are personal and of a sensitive nature that may make you feel uncomfortable or upset. While there are not right or wrong answers in this type of discussion, you may disagree with what other people in the group are saying or others may not share your opinions or experiences. You may skip any questions that you don't want to answer or leave the group discussion at any point. Furthermore, as this is a group setting, it is not possible to promise confidentiality. There may be other risks and discomforts that are not known at this time.

6. Benefits

You will not benefit directly from taking part in this study. Information gathered from this study may help us learn more about how to improve male circumcision communication in Botswana.

7. Costs and Reimbursement

There is no cost to you for being part of the study. Food and drinks will be provided at the discussion. You will also receive P20 reimbursement for your transport to and from the interview venue.

8. Right as a Participant in this Study to refuse to take part

Taking part in the study is your choice. If you decide to take part, you can always change your mind. You can stop taking part at any time.

9. Ethical Approval

This study protocol has been submitted to the University of the Witwatersrand and Ministry of Health (Botswana), Human Research Ethics Committee (HREC) and written approval has been granted by that committee.

10. Confidentiality

We ask that you keep anything that is shared in the discussion confidential. However, as this is a group discussion, we cannot guarantee that other participants in the discussion will keep what is said confidential. However, the research team will make every effort to ensure that your comments are confidential in any reporting on the discussion, as follows:

- We will use a code instead of your name for any quotes transcribed directly from an audio recording.
- Audio recordings and transcripts of the conversations will be stored in locked and/or password protected files and destroyed three years after the study is complete.
- All information obtained during the course of this study, including personal data and research data will be kept strictly confidential. Data that may be reported in scientific journals will not include any information that identifies you as a participant in this study.
- This information will be reviewed by authorised representatives of the study team
- The information might also be inspected by the University of the Witwatersrand, Human Research Ethics Committee (HREC).

11. Sources of Additional Information

If you have any questions about this study, you may contact Mr Samson Setumo(3936132/71445088/73444366), or Ms. Sara Nieuwoudt (Cell: 82 423 4392).

If you have any questions about your rights as a participant, you may contact Prof Peter Cleaton-Jones at the University of the Witwatersrand, Human Research Ethics Committee: Secretariat (11 717 1234)

INFORMED CONSENT:

- I hereby confirm that I have been informed by the study staff (_____) about the nature, conduct, benefits and risks of the target audience perceptions on the implementation of SMC communication strategy Study.
- I have also received, read and understood the above written information (Participant Information Leaflet and Informed Consent) regarding the study.
- I am aware that the results of the study, including any personal details such as those regarding my age and residential area will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by Samson Setumo or on his behalf.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.

***PARTICIPANT**:*

Printed Name	Signature / Mark or Thumbprint	Date and Time

I, _____ herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

STUDY STAFF:

Printed Name	Signature	Date and Time

Annex 9: Audio-recording Consent Form – Focus Group Discussion

The reason for audio-recording the discussion has been explained to me.

I am aware that I may choose whether to participate or not to participate in the discussion and to be recorded.

I am aware that I may leave the discussion at any point.

The researcher will take measures to make sure that the recording is kept confidential and safe.

I consent to having the discussion audio recorded.

Interviewee:

Name: _____

Signature: _____

Date:_____

Researcher

Name: _____

Signature:_____

Date:_____

Annex 10: HREC Certificate

R14/49 Mr Samson Setumo

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

CLEARANCE CERTIFICATE NO. M131158

NAME: (Principal Investigator)	Mr Samson Setumo
DEPARTMENT:	School of Public Health Division of Social and Behaviour Change Communication Gaborone, Botswana
PROJECT TITLE:	Adult Male Perceptions on the Implementation of the Safe Male Circumcision Communication Strategy (2009-2012) in Gaborone, Botswana
DATE CONSIDERED:	29/11/2013
DECISION:	Approved unconditionally
CONDITIONS:	
SUPERVISOR:	Mrs S Nieuwoudt
APPROVED BY:	pp Professor PE Cleaton-Jones, Chairperson, HREC (Medical)
DATE OF APPROVAL:	11/12/2013

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 Secretary in Room 10004, 10th floor, Senate House, University.

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**.

Principal Investigator Signature _____ Date _____

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

Annex 11: Study Permit (Health Research and Development-Botswana)

TELEPHONE: 363 2766
FAX: 391 0647
TELEGRAMS: RABONGAKA
TELEX: 2818 CARE BD

Republic of Botswana

MINISTRY OF HEALTH
PRIVATE BAG 0038
GABORONE

REFERENCE NO: PPME 13/18/1VII (268) 23 January 2014

Health Research and Development Division

Notification of IRB Review: New application

Samson Setumo
P.O. Box 290
Gaborone

Protocol Title:	**ADULT MALE PERCEPTIONS ON THE IMPLEMENTATION OF THE SAFE MALE CIRCUMCISION COMMUNICATION STRATEGY (2009-2012) IN GABORONE**
HRU Effective Date:	23 January 2014
HRU Expiration Date:	23 January 2015
HRU Review Type:	HRU reviewed
HRU Review Determination:	Approved
Risk Determination:	Minimal risk

Dear Sir/Madam

Thank you for submitting new application for the above referenced protocol. The permission is granted to conduct the study.

This permit does not however give you authority to collect data from the selected sites without prior approval from the management. Consent from the identified individuals should be obtained at all times.

The research should be conducted as outlined in the approved proposal. Any changes to the approved proposal must be submitted to the Health Research and Development Division in the Ministry of Health for consideration and approval.

Furthermore, you are requested to submit at least one hardcopy and an electronic copy of the report to the Health Research, Ministry of Health within 3 months of completion of the study. Approval is for academic fulfillment only. Copies should also be submitted to all other relevant authorities.

1

Continuing Review
In order to continue work on this study (including data analysis) beyond the expiry date, submit a Continuing Review Form for Approval at least three (3) months prior to the protocol's expiration date. The Continuing Review Form can be obtained from the Health Research Division Office (HRDD), Office No. 9A 11 or Ministry of Health website: www.moh.gov.bw or can be requested via e-mail from Mr. Kgomotso Motlhanka, e-mail address: kgmmotlhanka@gov.bw As a courtesy, the HRDD will send you a reminder email about eight (8) weeks before the lapse date, but failure to receive it does not affect your responsibility to submit a timely Continuing Report form

Amendments
During the approval period, if you propose any change to the protocol such as its funding source, recruiting materials, or consent documents, you must seek HRDC approval before implementing it. Please summarize the proposed change and the rationale for it in the amendment form available from the Health Research Division Office (HRDD), Office No. 7A 7 or Ministry of Health website: www.moh.gov.bw or can be requested via e- mail from Mr. Kgomotso Motlhanka, e-mail address: kgmotlhanka@gov.bw . In addition submit three copies of an updated version of your original protocol application showing all proposed changes in bold or "track changes".

Reporting
Other events which must be reported promptly in writing to the HRDC include:
- Suspension or termination of the protocol by you or the grantor
- Unexpected problems involving risk to subjects or others
- Adverse events, including unanticipated or anticipated but severe physical harm to subjects.

If you have any questions please do not hesitate to contact Mr. P. Khulumani at pkhulumani@gov.bw, Tel +267-3914467 or Lemphi Moremi at lamoremi@gov.bw or Tel: +267-3632754. Thank you for your cooperation and your commitment to the protection of human subjects in research.

Yours faithfully



P. Khulumani
For Permanent Secretary

References

AUVERT, B., TALJAARD, D. & LAGAARD, E. 2005. Randomised controlled intervention of male circumcision for reduction of HIV infection risk. *Plos Med,* 2**,** 298.

BAILEY, C., MOSES, S. & PARKER, C. 2007. Male circumcision for HIV prevention in young men in Kisumi, Kenya: a randomised controlled trial. *Lancet,* 369**,** 643-56.

BANDURA, A. 1997. Self Efficacy, The Exercise of Control. New York: W.H Freeman.

BERTRAND, J., CADIZ, M., HOSEIN , E., BARUA, M., MATHIAS, L., PARKS, W., RAIZADA, V., SCANDLEN, G., SHRESTHA, R. & SINGHAL, A. 2004. Strategic Communication for behaviour & social change in south Asia. *UNICEF*.

BOULWARE, L., COOPER, L., RATNER, L., LAVEIST T & POWE, N. 2003. Race and Trust in the Health Care System. *Public Health Reports,* 118.

BUSCHER, D. 2005. Masculanities: Male Roles and Male Involvement in the Promotion of Gender Equality. New York: Women's Commission for Refugee Women and Children.

COFFMAN, J. & HENRY, G. 2003. Lessons in evaluating communications campaigns. *In:* PROJECT, H. F. R. (ed.). Cambrige: Havard.

CORNISH, P., LINDLEY-FRENCH, J. & YORKE, C. 2011. Strategic Communication and National Strategy.

CUEVAS, R. 1999. Immunisation activities: are they effective in encouraging Mothers to Immunize thier children? Available: http://origin-cdn.els.com [Accessed 25 August 2014].

DELATE, R. 2013. Impact of Brothers for Life on Intention for Medical Male Circumcision. Capetown: John Hopkins Blooberg.

DOMINO, T. & HOLTZHAUSEN, D. 2002. *Toward An Intergrated Communication Theory for Celebrity Endorsement in Fund Raising.* University of Florida.

GALUKANDE, M., SAKAVUNGU, D., DUFFY, K., WOODING, N., RACKARA, S., NAKAGGWA, F. & NAGGADYA, T. 2012. Mass safe male circumcision: early lessons from Ugandan urban site-case study. *African Medical Jornal*.

GOATLEY, T., MHLINZA, C. & JOHN, I. 2013. Public engagement with HIV in a rural South African context:an analysis of a small-media, taxi-based edutainment model applied in jiving with Science. *Critical Arts Projects & UNISA,* vol 27(1)**,** 112-126.

GRAY, H., KIGOSI, G. & SERWADDA, D. 2007. Male circumcision for HIV prevention in young men in Rakai. *A randomized,controlled trial.* Uganda.

HATZOLD, K., MAVHU, W., JASI, P., CHATORA, K., COWAN, F., NJEUHMELI, E., TARUBEREKERA, N., MUGURUNGI, O. & AHANDA, K. 2014. Barriers & motivators to voluntory medical male circumcision uptake amoung different age groups of men in Zimbabwe:Results from a mixed methods study. *Plos One,* 9.

HEKLER, E. B., KLASNJA, P., FROEHLICH, J. E. & BUMAN, M. P. 2013. Mind the theoretical gap:interpreting,using, and developing behavioral theory in HCI research. 3307-3316.

HERMAN-ROLOFF, A., LLEWELLYN, E., OBIERO, W., AGOT, K., NDINYA-ACHOLA, J., MURAGURI, N. & BAILEY, R. 2011. Implementing Voluntary Medical Male Circumcision for HIV Preventing in Nyanza Province,Kenya. *Plos Med,* vol 6**,** 10.1371.

ICRW 2013. Positive Masculinity: An approach for the Angola context. USA: Iinternational Centre for Research on Women.

JANZ, K., CHAMPION, V. & STRECHER, V. 2002. *Health Behavior and Health Education*, Wiley,John & Sons,incorporated.

KHUMALO, B. 2010. Medical Male Circumcision Campaign. South Africa: Sonke Gender Networks.

LANGENI, T., WEISS, H., QUIGLEY, M., HAYERS, R., HUSSAIN, L., LENNER, T. & THOMAS, S. 2012. Draft report on the evaluation of the safe Male Circumcision short term communication strategy. *In:* CIRCUMCISION, S. M. (ed.).

MACINTYRE, K., ANDRINOPOULOS, K., MOSES, N., BORNSTEIN, M., OCHIENG, A., HASKINS, C., FORSYTHC, S., NJCUHMELI, E., HERMAN-ROLOFF, A., OTIENO, N., AGOT, K., NDINYA-ACHOLA, J., BAILEY, R., WESTERCAMP, N. & BAILEY, R. 2014. Attitudes, Percertions & Pontential uptake of Male Circumcision amoung older men in Turkana County, Kenya using qualitative methods. *PLos One,* 9.

MAGAGULA, D., NQEKETO, A., DLAMINI, M., DENNIS, F., GREEN, J., MALAZA, M., NKAMBULE, M., LUSWETI, DLAMINI, T., DLAMINI, F. & SCALWAY, T. 2013. Male Circumcision Communication Strategy. *In:* HEALTH, M. O. (ed.). Swaziland.

MANNCOURT, M. & CHRIS S 2000. Involving People, Evolving Behavior.

MEEKERS, D., ROSSEM, R., ZELLNER, S. & BERG, R. 2004. Using Behavior Change Communication to overcome Social Marketing Sales Plateaus: Case Studies in Nigeria and India. USAID.

MELANIE, A., WAKEFIELD, M., LOKEN, B. & HORNIK, R. 2010. Use of mass media to change health behavior. *Lancet***,** 1261-1271.

MINISTRY OF FINANCE AND DEVELOPMENT PLANNING 2011. Population Census. *In:* STATISTICS, C. (ed.).

MINISTRY OF HEALTH 2008. Botswana Safe Male Circumcision Strategy; Add -on strategy for HIV Prevention.

MWANSA, D. 2004. Theatre for Development. *A Multiform Approach to Behaviour Change and Empowerment in the fight Against Spread of HIV/AIDS in Defense Forces.* Zambian Open University.

NWADIGWE, C. 2012. Theatre for Development:Alternative Programme for Reproductive Health Communication in Urban Nigeria. 16**,** 102-118.

PERLMAN, H. 2013. Edutainment: Using stories and media for social action and bahavior change. South Africa: Soul City Institute.

PRICE, J., PHIR, L., MULENGA, D., HEWETT, P., TOPP, S., SHILIYA, N. & HATZOLD, K. 2014. Behavior change parthways to voluntary medical male circumcision:Narrative interviews with circumcision clients in Zambia. *PLos One,* 9(11).

SKOLNIK, L., TSUI, S., ASHENGO, T., KIKAYA, V. & LUKOBO, D. 2014. A cross-sectional study describing motivations and barriers to volontary medical male circumcision in Lesotho. Baltimore, USA: John Hopkins Bloomberg School of Public Health.

SKOVDAL, M., CAMPBEL, C., MANANHIRE, T., MUPAMBIZEYI, Z., NYAMUKAPA, C. & GREGSON, S. 2011. Masculanity as a barrier to men's use of HIV Serices in Zimbabwe. *Globalisation and Health,* 7:13.

SPRATT, K. & KUNDU, K. 2011. PRASIT: Using Strategic Behavioral Communication to Change Gender Norms in Cambodia. Alington, USA: John Snow Inc.

STATISTICS BOTSWANA 2013a. Botswana Aids Impact Survey IV. 2013/28.

STATISTICS BOTSWANA 2013b. Preliminary Results Botswana AIDS Impact Survey iv. Gaborone, Botswana.

TEWELDEMEDHIN, K. 2004. *Edutainment Communication Strategies against HIV/AIDS through radio: Case study of Radio Ukhozi and Radio Dimsti-Hafash.* Kwazulu Natal.

ULIN, P. 2004. Collecting qualitative data: The science and the art. *In:* SONS, J. (ed.) *Qualitative Methods in Public Health.* Wiley: P. Ulin, E.Robinson & E Trolley.

WAKEFIELD, M., LOKEN, B. & HORNIK, R. 2010. Use of mass media campaigns to change health behavior *NIH*.

WHITEHEAD, J. 2004. Communication Theory.

WILLIAMS, I. 2008. An Assessment of HIV & AIDS Radio Campaign Messages in Botswana. *SIDA*.
WORATANARAT, T. 2014. Jornal of Educational Evaluation for Health Professions. *CrossMark*.