

ABSTRACT

CONTEXT: South African adolescents and young adults are persistently engaging in risky sexual behaviour by way of early initiation of unprotected sexual activity leading to stubbornly high prevalence of Sexually-Transmitted Infections (STIs) including Human Immuno-deficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS), and other social problem such as teenage pregnancy, despite the efforts of South African governments at various levels and that of the civil society organisations at preventing such unsafe sexual behaviours. Also, many of the studies on young people's sexual and reproductive behaviours in South Africa have concentrated on the individual-level factors to the detriment of the community-level or institutional (contextual) factors, and are cross-sectional in design with the limitation of no theoretical basis for analysis. Moreover, many of the intervention programmes in South Africa lacked theoretical basis for implementation, hence, their failure.

However, intervention programmes designed based on Social Cognitive Theory have been found to be effective and successful in other western settings, while the applicability of such a theory in a middle-income country such as South Africa needs empirical testing. As a result, this study identifies the levels and patterns of sexual and contraceptive behaviours of young people living in Cape Town; investigates the trends or changes in their sexual and contraceptive practices; determine the factors predicting their sexual and contraceptive behaviours and at the same time examines the associated social contextual factors, using panel data collected between 2002 and 2005.

METHODS: The Cape Area Panel Study data were analysed to identify the factors associated with the reporting of risky sexual behaviours among 3,210 selected adolescents and young adults who participated in the three waves of data collection between 2002 and 2005. The statistical methods used were simple descriptive statistics, chi-square test of association, correlation, stepwise regression, multi-level logistic regression and Cox proportional hazard regression models together with their associated estimators. The secondary quantitative analysis was done using Stata/SE version 12 with Generalised Linear Latent And Mixed Model (GLLAMM) for multi-level modelling and Microsoft Excel analytical package.

RESULTS: The median age at first sexual intercourse in the study area remains 16 years during the study period between 2002 and 2005 with a difference of one year in favour of females only at the third wave of data collection. Most of the respondents had their first sexual experience with their girlfriend/boyfriend, a term that has sexual connotation in South African context, with many staying in that sexual relationships for more than one year, while others experienced it with a casual friend, casual acquaintance, relative or sex worker. Male respondents are prone to having their first sexual experience with a younger female while female respondents tend to have their first sexual experience with older males, and the virgins differ from the sexually active respondents when examined according to the constructs within the Social Cognitive Theory. The significant predictors of timing of first sexual intercourse between 2002 and 2005 using the Cox proportional hazards regression model were age, sex, population group, educational level, degree of happiness as a measure of self-efficacy, type of family structure, school attendance, childhood place of residence, peer sexual characteristics (whether peers were sexually active), educational aspiration, neighbourhood type and participation in prosocial activities.

The practice of current multiple sexual partnerships declined from 29 percent in 2002 to 16 percent in 2005 with a concomitant increase in the adoption and practice of safe sexual relations from 71 percent at the baseline to 84 percent in 2005. Using a multi-level logistic regression model and controlling for all the variables in the study, the predictors of multiple sexual partnerships between 2002 and 2005 were sex of the respondents, population group, educational level, rating of opportunity in life, degree of happiness, alcohol/drug use, participation in prosocial activities and early sexual activity.

Those who used contraceptives at the first sexual intercourse increased from 53 percent in 2002 to 59 percent at the third wave in 2005. With respect to the multi-level modelling, the predictors of use of contraceptives at the event of first sexual intercourse when all the variables are controlled for were age of the respondents, degree of happiness, HIV-risk assessment and belief about the preventability of HIV/AIDS as measures of outcome expectancies, religious affiliation, school attendance, alcohol/drug use, type of family structure, childhood place of residence and circumstance of first sexual intercourse (whether willing or forced).

The proportion of those currently using contraceptives increased slightly from 71 percent at the baseline to 74 percent at the third wave in 2005. The predictors of use of contraceptives at the event of most-recent sexual intercourse at the baseline when all the variables are included were sex of the respondents, population group, school attendance, type of neighbourhood racial concentration, religious affiliation and contraceptive use at first sexual intercourse. At the second and third wave, contraceptive use at first sexual intercourse, expectation to live long and school

attendance significantly predict current use of contraceptives (used at most-recent sexual intercourse).

With regard to the consistency of condom use, those adolescents and young adults who always used condoms decreased from a high of 69 percent at the baseline in 2002 to 47 percent at the third wave in 2005, while inconsistent users of condom at their most-recent sexual intercourse increased from 31 percent at the baseline to 53 percent in 2005. Examining the predictors of consistency of using condoms with most-recent sexual partner at the baseline, self-efficacy of using condom at the first sexual intercourse, positive school attitude and participation in prosocial activities increased the odds of consistently using condom at the event of most-recent sexual intercourse in the study area, while childhood place of residence being rural reduces the odds of consistently using condom at the event of most-recent sexual intercourse.

However, condom use at first sexual intercourse was more important for males in particular, while positive school attitude and monetary support was relevant for the female adolescents and young adults. At the second wave of data collection in 2003/2004, those out of school were significantly less likely to consistently use condoms at the most-recent sexual intercourse (OR: 0.90; $p < 0.05$) while at the third wave of data collection in 2005, age, sex, population group, degree of happiness, expectation to live long and school attendance predicted condom use consistency. Those adolescents who used condom at their first sexual intercourse, those who believed in condom as a way of protecting against HIV/AIDS, those who were Christians and those with external monetary support were significantly more likely to consistently use condom at their last sexual intercourse in 2005.

CONCLUSIONS: This study, using a longitudinal dataset, concluded that arrays of individual and social/contextual factors were independently influencing the sexual and contraceptive behaviours of young people in the Cape Area of South Africa between 2002 and 2005. While there seems to be a positive change with regard to current multiple sexual partnerships, intervention and programme efforts need to be geared up to encourage young people to use condoms consistently as a modern method of contraception because of its dual advantage.

Although Bandura's Social Cognitive Theory has not been frequently applied to African settings, this theory has been found to be relevant to adolescent sexuality and sexual behavioural research in South Africa, as shown in this study, the framework has much to offer regarding the design and implementation of programmes addressing young people's sexual behaviour.

Specifically, with respect to the timing of first sex, the socio-demographic factors- age, sex, racial group, and educational level; the self-efficacy factor measured through degree of happiness; and the socio-structural factors of not attending school, having low educational aspirations and type of family structure must be the focus of intervention programmes if age at first sexual intercourse is to be raised, risky sexual behaviours prevented and the upcoming generation protected, in the study area in particular, and South Africa in general.

The contribution of this study to knowledge is strengthened because of the longitudinal data used and analytical methods employed. Scholars investigating similar phenomena in South Africa or

in the study area in the future should pay attention to both individual-level and neighbourhood contextual factors, and policy-makers should come up with policies and intervention programmes that take into consideration the individual-level and neighbourhood contextual factors found to be significant in this study.

For instance, with respect to the timing of first sex, the socio-demographic factors of being older, being a female, being of the Coloured or White racial group, having at least secondary level education, and the contextual factors of not attending school and having low educational aspiration seem to significantly associate with increased survival in the study area between 2002 and 2005, while the degree of happiness (a measure of self-esteem/self-efficacy) and the contextual factors of living in a single-parent family as opposed to being complete orphans seem to be associated with decreased survival, raising the question of positive role models in the family. It appears that the presence of parents is becoming irrelevant in South Africa as far as transition to sexual activity among youths is concerned, and interventions that restore sanity and parental influence to the family would not be out of place. With respect to MSPs, the following variables are relevant: sex, racial group, self-efficacy of ratings of opportunity in life (marginally), using alcohol/drugs, academic aspirations and early age at first sex.

For contraceptive use at first sexual intercourse, the individual factors of age and educational level; self-efficacy of degree of happiness in life; the outcome expectancies of HIV-risk assessment and belief in the preventability of HIV/AIDS; and the socio-structural factors of religious affiliation, current school attendance, circumstances of first sexual intercourse (forced or not), participation in prosocial activities, and to a lesser extent type of family structure and

childhood place of residence are the significant factors to be reckoned with. With respect to contraceptive use at the most-recent sexual intercourse, the individual factors of sex and to a lesser extent racial group; the goal factor of not being sure whether they will live long to old age; and the socio-structural factors of use of contraceptives at first sexual intercourse, current school status and to a lesser extent religious affiliation and living in predominantly Coloured or White neighbourhoods exerted significant influence in the study during the reference period.

Lastly, with respect to consistency of condom use with the most-recent sexual partner, the individual factors of age and racial group to a lesser extent, sex of the respondents being female; self-efficacy factors of degree of happiness and using condom at the event of first sexual activity; the outcome expectancy of believing in condoms as a way of protecting against HIV; the goal factor of being unsure about living long up to old age (marginally) and socio-structural factors of being out of school as a measure of current school attendance, being Christian, having external monetary support and, marginally, childhood rural place of residence, having a positive attitude toward school/education and participation in prosocial activities are significant.