Correlates of dual method contraception among adolescent girls in Ratlou Local Municipality, South Africa

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Abstract

South Africa, compared to other countries in sub-Saharan Africa, has done remarkably well in reducing the total fertility rate. The change in population indicators, such as fertility and mortality, ultimately affects development planning. The sexual and reproductive behaviour of adolescents plays an important role. The alarming increase in the rate of adolescent pregnancy in Ratlou Local Municipality prompted the study. A cross-sectional study was conducted among 462 adolescent girls irrespective of their school attendance status. The study used multistage sampling procedures. A structured questionnaire was used for the collection of data and Stata version 16 was used for analysis purposes. The findings revealed that the age of the respondent, contraceptive use at first sex, ever having been pregnant and village of residence were significant predictors of the use of dual method contraception. The study calls for a multisectoral collaboration in advocating for the use of dual method contraception.

Introduction

The World Health Organization (2018a) gives an encompassing definition of adolescents as persons in the age cohort of between 10 and 19 years. This age group is usually characterized by the transition from childhood to adulthood, which involves developmental changes in body structure and brain function which, in turn, causes the desire for starting relationships and engaging in sexual activities. Consequently, this group of individuals make decisions that have a long-term impact on their sexual and reproductive health (UNICEF, 2016). Adolescents account for 16% (1.2 billion) of the global population, with the highest percentage (23%) representation in the sub-Saharan African region (UNICEF, 2018). Furthermore, UNFPA (2018) provided evidence that 20, 000 girls younger than 18 years of age, give birth every day in developing countries, adding to the annual births of 7.3 million. Adolescents' perceptions and attitudinal dispositions towards the use of contraceptives have remained a global challenge. However, developing nations, particularly those in sub-Saharan Africa, are the most vulnerable (Darroch, 2016).

Evidence abounds that 23 million adolescent girls between the ages of 15 and 19 years, who are sexually active and want to delay childbearing by at least two years, indicated that they were not using any modern contraceptives (Darroch, 2016). This implies that the developing regions, especially in Africa, are still faced with the challenge of having an unmet need for contraception, which will consequently lead to unintended pregnancy and an increased risk of contracting STIs. In South Africa, about 51% of female adolescents (15–19 years) reported an unmet need for contraception (Chersich *et al.,* 2017).

According to Statistics South Africa (2017), 28% of girls aged 19 years had begun childbearing, and 9.3% of these girls had not completed their primary education. The 2016 community survey results indicated that 437 teenagers aged 12 years had given birth to at least one child (Statistics South Africa, 2017). Ratlou Local Municipality was trending on media in 2016 due to the increasing rates of adolescent pregnancy. In Mareetsane, Setlagole, Madibogo and other villages of Ratlou Local Municipality, 1800 girls younger than 18 years of age were mothers or were pregnant (UNFPA, 2016). Although it may be conceded that this outcome may be expected from sexually active adolescents because they tend to indulge in sexually risky behaviour, the risk of unexpected outcomes, such as unintended pregnancy, may have been significantly reduced with the use of contraceptives.

The study adopted the Theory of Planned Behaviour (TPB), proposed by Ajzen and Fishbein (1980). The TPB stipulates that attitude toward the behaviour, subjective norms, and perceived behavioural control interact to influence an individual's behavioural intentions and actual behaviour. In other words, the behaviour is influenced by beliefs, motivation, and social norms prevalent in an individual's social environment (Ajzen & Fishbein, 1980).

Behavioural beliefs or attitude relates to the extent to which a behavioural outcome is favourably evaluated. If an expected outcome is deemed favourable, then the attitude towards that behaviour would be positive (Ajzen & Fishbein,1980). Subjective norm, according to Ajzen and Fishbein (1980), focuses on people's perception and the value they places on the behavioural expectations of significant others in their lives, or people to whom they relate. People subscribe to social or customary codes of behaviour in a group or cultural context. The extent to which a person defers to subjective norms significantly influences the person's behaviour. If an adolescent female values her mother's views about responsible sexual behaviour, then the likelihood that she will act responsibly in a sexual matter is significantly higher than the adolescent who does not value her mother's views.

Related to this, Ajzen and Fishbein (1980) indicated that perceived behavioural control relates to controlling factors that can significantly impact the performance of a behaviour. It is the perception of the degree of difficulty associated with the performance of the desired behaviour. These control factors are regarded as perceived power factors because they can encourage or discourage the performance of a behaviour of interest. One control factor against pregnancy is enforcement of a school's policy towards teen pregnancy. In a school setting, a policy is perceived to be a controlling factor if it can punish a pregnant learner to deter others from such behaviour in the future. The last key concept in the theory is intention that explains whether a behaviour will be performed or not. The stronger the motivational factor(s), the greater the likelihood the behaviour will be performed (Ajzen & Fishbein, 1980).

Methodology

The study was conducted in Ratlou Local Municipality, Northwest Province, South Africa. The municipality is one of the five local municipalities in Ngaka Modiri Molema District. Others are Tswaing, Ditsobotla, Ramotshere Moilwa, and Mafikeng. In 2016, Ratlou Local Municipality was classified as a category B municipality. According to Pycroft (2000), category B municipalities are local authorities within the boundaries of district municipalities. Ratlou Local Municipality has an area size of 14618km2, 14 Wards, and 26 villages (Ratlou Local Municipality, 2016:10).

A cross-sectional research design was adopted in the study. The study used multistage sampling procedures; simple random sampling was used in the first stage to select 7 Wards within the local municipality. Stratified, proportional to size, sampling was used to select 10 villages out of 21 within the seven (7) selected Wards. The last sampling technique used was systematic, to list households with adolescent girls. 530 respondents were sampled; however, the completed questionnaires were from 462 respondents, yielding an 87.2% response rate. The major challenge in not realising the full sample size during data collection was the issues related to the national restrictions implemented because of the COVID epidemic during 2020 – 2021.

Three stages of analysis were undertaken: univariate, bivariate, and multivariate. The bivariate analysis gives the summary of descriptive statistics, namely cross-tabulation and Pearson's chi-square. To achieve the objective of this paper, the study used a binary logistic regression model to examine the relationship between the use of DMC and selected independent variables namely age group, school attendance, Christian denomination, has a boyfriend, age at first sex, village, ever fallen pregnant before, sex of the household head, employment status of the household head, and alcohol consumption.
The regression equation applied to this study is expressed as follows:

$$\ln\left(\frac{p}{1-p}\right) = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \cdots + \beta_i x_i$$

This regression model is represented by more than one outcome variable, that is, either binary, ordinal, nominal, etc. In this study, the three dependent variables (contraceptive usage at first

sex, knowledge of DMC, and use of DMC) are all represented by this model and are each examined individually ($\frac{p}{1-p}$). When all other variables (x_i) are held constant, the regression coefficient ($\beta_i x_i$) raises the natural logarithm (log-odds) for a one-unit increase in the predictor variable (x_i). The regression model evaluates how closely (x_i) and natural logarithm (log-odds) are related after adjusting for all other (x_i) variables.

Results