Understanding Multifaceted Determinants of Contraceptive Utilization among Adolescent Females: Insights from Wakiso District, Uganda

Katete James

Faculty of Clinical Medicine and Dentistry Medicine and Surgery of Kampala International University

ABSTRACT
Despite global efforts to enhance contraceptive utilization, adolescent females in Uganda face persistent challenges accessing and utilizing modern contraceptive methods, resulting in high fertility rates and maternal mortality. This cross-sectional study investigated the intricate factors influencing contraceptive usage among adolescent females attending Kasangati Health Center IV in Wakiso District, Uganda. Employing questionnaire-based surveys, the study targeted adolescent females attending the health center, utilizing simple random sampling to select 220 participants, as determined by Fisher’s formula. Data analysis was conducted using Microsoft Excel and SPSS version 20, presenting comprehensive findings through tables, pie-charts, bar graphs, and narratives. The study uncovered a concerning contraceptive prevalence rate (CPR) of 19% among adolescent females, despite existing awareness of family planning methods. Key determinants of contraceptive usage included limited knowledge about contraception, constrained access to services, entrenched societal norms, and gender dynamics. The findings highlight the urgent need to address these multifaceted barriers to enhance contraceptive utilization and mitigate unmet needs among adolescent females. The study's recommendations encompass targeted educational campaigns, improved accessibility of family planning services, and fostering the engagement of both genders in reproductive health decision-making processes. Ethical considerations were meticulously observed, with informed consent obtained from participants and ethical approval secured from relevant authorities. This study contributes seminal insights into the complex landscape of contraceptive utilization among adolescent females in Uganda, offering critical guidance for policy formulation and programmatic interventions aimed at improving reproductive health outcomes and curtailing maternal mortality rates.

Keywords: Contraceptive utilization, Adolescent females, Reproductive health, Family planning, Wakiso District and Uganda

INTRODUCTION
Globally, modern contraceptive utilization has increased in the recent past – from 54% in 2000 to 57% in 2015, [1, 2]. However, the estimates in Africa remain persistently low at 23% and 24%, respectively [2]. The estimates among countries in the Sub-Saharan region are much lower than the aforementioned figures, [3]. This has been attributed - among other factors - to shortfalls in health infrastructure and transport facilities, [4]. It would not be unexpected given the estimated 140 million teenage adolescents in underdeveloped countries in sub-Saharan Africa who want to avoid becoming pregnant but do not have access to contemporary contraceptive techniques [4]. This situation normally results in high fertility which in turn is associated with high levels of maternal mortality especially among the poorest women,[1, 5]. Romania and Bulgaria have some of the lowest teenage contraceptive use rates in Europe with a rate of 6.3 and 9.7 teenage births per 1,000 women respectively[6]. Uganda has a high total fertility rate (TFR), at 6.2 children per woman [1, 7]. With a young population (52% are below age 15, and 17% are age 15–24) and this large cohort of young people enters the childbearing years, their reproductive behavior will determine the growth and size of Uganda’s population for decades to come, [8]. Uganda still struggles with a low contraceptive prevalence rate (CPR) of 19% among its adolescent teenagers, which is lower than that of her neighbors, Kenya, Rwanda, and Tanzania, which had a CPR of 26%,
y calculated that the population. Globally according to e and effective
other interesting statistics
ny teenage
in any medium, provided the original work is properly cited
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited
Inclusion criteria
Adolescents who consented participated in the study were recruited. For adolescents below 13 years, their consent was obtained through their care givers or their parents.

Exclusion criteria
Adolescents who were sick or were in need urgent medical care were excluded.

Sample size determination
Sample size was determined by using fisher formula[18]:

\[ s = \frac{Z^2 \cdot PQ}{d^2} \]

Where:
- S= Sample size
- Z= standard Deviation at required degree of accuracy which at 90% which gives 1.96
- P= proportion of population with desired characteristics.
- Q= 1- P
- \( d \) = degree of error you are able to accept.

\[ s = \frac{(1.96)^2 \cdot 0.5(1 - 0.5)}{0.09^2} \]

S = 220

Sampling technique
This study population employed the simple random sampling technique in which all teenage adolescents who come to the hospital was given an opportunity to participate in the study.

Data collection method
The data was collected using questionnaire with close ended questions the data was collected by the principle investigator herself and three trained research assistants and the respondents provided the needed information.

Data analysis
Then collected data was then analyzed using computer programs such as Microsoft excels and SPSS version 20 Data analysis was made in line with the study objectives so as to achieve the purpose of the study and was presented inform of tables, pie-charts, bar-graph, and narratives depending on the data that was analysed.

Data quality control
Pre-test of the questioner for relevance was done. To ensure quality control, the researcher prior to the exercise conducted a two days training for three research assistants.

Ethical considerations
An introductory letter was obtained from university administration which was presented to the medical superintendent of Kasangati health center IV so as to allow me collect data. Before collecting data, an informed consent form was sought from the participants who gave their consent after full complete and truthful information is given.

RESULTS

Prevalence of contraception among adolescents
The table 1 above shows the prevalence of contraceptives among adolescents, in which 180 (81.8%) had ever used a type of contraception method, while at least 40 (18.2%) had never used any given contraception method.

Table 1: Showing the prevalence of contraception among adolescents

<table>
<thead>
<tr>
<th>Contraception use</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Cumulative frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using contraception</td>
<td>180</td>
<td>81.8</td>
<td>180</td>
</tr>
<tr>
<td>Not using contraception</td>
<td>40</td>
<td>18.2</td>
<td>220</td>
</tr>
</tbody>
</table>

Demographic characteristics of contraception used
Table 2 above shows the association between social demographic characteristics and contraceptive use among adolescents, in which the majority (104, or 57.8%) of the adolescents who had used contraceptive methods were aged between 22 and 24 years, while at least 44 (60%) of those who had not used a contraceptive method were aged between 13 and 21. the study shows that age between 22 and 24 was significantly associated with contraceptive use at an odds ratio of 0.36 (0.12-3.86) and a p-value of 0.036.

The study also showed that the majority, 96 (51.1%) of the adolescents who had used contraceptive methods, had a post-primary level of education, while 32 (80%) of those who had not used contraceptives had a primary level of education. The study shows that a post-primary level of education was significantly associated with contraceptive use among adolescents at an odds ratio of 0.62 (0.44-7.12).
These results present findings from a study examining the prevalence of contraceptive use among adolescents and its association with various socio-demographic factors: Table 1 indicates that the majority (81.8%) of adolescents had used some form of contraception, while a significant portion (18.2%) had never used any contraceptive method. Table 2 highlights associations between contraceptive use and socio-demographic factors such as age and education level.

Among adolescents who had used contraceptive methods, a majority (57.8%) fell within the age range of 22-24 years, whereas a significant proportion (60%) of those who had not used contraceptives were aged between 13 and 21 years. The study found a statistically significant association between the age group of 22-24 years and contraceptive use, with an odds ratio of 0.36 and a p-value of 0.036. An odds ratio less than 1 suggests a decreased likelihood of contraceptive use in this age group compared to the reference group[19]. Regarding education level, the majority (51.1%) of contraceptive users had a post-primary education level, while a larger proportion (80%) of non-users had only primary education. The study also found a significant association between post-primary education level and contraceptive use among adolescents, with an odds ratio of 0.62. The findings suggest that older adolescents (age 22-24) are more likely to use contraceptives compared to younger ones (age 13-21). Similarly, adolescents with higher education levels (post-primary) are more inclined to use contraceptives compared to those with lower education levels (primary)[20, 21]. However, it's worth noting that while significant associations were found between age and education level with contraceptive use, the odds ratios are quite low (0.36 and 0.62, respectively), indicating relatively modest effects. The study's results imply that efforts to promote contraceptive use among adolescents might benefit from targeting younger age groups and those with lower levels of education.

Further research could emphasize other factors influencing contraceptive use among adolescents, such as access to healthcare services, socioeconomic status, cultural beliefs, and peer influence[9, 22]. In sum, the study provides valuable insights into the prevalence of contraceptive use among adolescents and its association with age and education level, suggesting potential avenues for intervention and further research in adolescent reproductive health.

**DISCUSSION**

The research looked at the relationship between teenage contraceptive usage and sociodemographic characteristics. 18.2% of teenagers had not used contraception, compared to 81.8% who had. The usage of contraceptives was significantly correlated with age and educational attainment. Adolescents who were older (ages 22 to 24) and had completed post-school had greater rates of contraceptive usage. Odds ratios for the effects were 0.36 and 0.62, respectively, indicating some modesty. Promoting the use of contraceptives may be helped by focusing on younger age groups and those with lower educational attainment levels. Additional aspects such as peer influence, socioeconomic position, cultural attitudes, and healthcare accessibility should be investigated in future studies. All things considered, the study sheds light on the usage of contraceptives by adolescents and recommends topics for further research and intervention in the field of adolescent reproductive health.

**REFERENCES**

2. Ouma, S., Turyasima, M., Acca, H., Nabbale, F., Obita, K.O., Rama, M., Adong, C.C.,

---

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.


