



Parent-Child Communication and Family Income as Predictors of Reproductive Health Service Utilization Among Adolescents in Akwa Ibom North-East Senatorial District

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Abstract

The study examined the relationship between parent-child communication and family income as predictors of the utilization of reproductive health services among adolescents in Akwa Ibom North-East Senatorial District, Nigeria. A descriptive survey design was adopted, and a total of 500 adolescents constituted the sample, selected using a cluster random sampling technique. Two validated instruments Family Variables Questionnaire and Utilization of Reproductive Health Services among Adolescents Questionnaire were used for data collection. The reliability coefficients of the instruments were 0.82 and 0.75, respectively. Data collected were analyzed using the Pearson Product Moment Correlation (PPMC) statistical technique at a 0.05 level of significance. Findings revealed a very weak negative relationship between parent-child communication and utilization of reproductive health services ($r = -0.11$, $p = 0.061$), as well as between family income and utilization of reproductive health services ($r = -0.11$, $p = 0.061$). These results indicate that neither parent-child communication nor family income significantly influences adolescents' use of reproductive health services in the study area. The null hypotheses were therefore accepted. The study concluded that variations in parent-child communication and family income do not significantly predict the utilization of reproductive health services among adolescents. It recommended strengthening parent-adolescent communication programs through workshops and counseling, promoting family-based and school-based interventions, subsidizing adolescent reproductive health services, and integrating socioeconomic and cultural considerations into public health policies. Further research was suggested to explore other social, cultural, and structural factors influencing adolescents' access to reproductive health services.

Keywords: Parent-child communication, family income, adolescents, reproductive health services, Akwa Ibom North-East Senatorial District

Introduction

Parent-child communication is the verbal and nonverbal interaction between a parent and child within a family system. Parents are biological and non-biological caregivers (e.g., adoptive parents or stepparents) and parent-child communication takes place throughout the child's ages and developmental stage. Effective communication with the children is one of the fundamental responsibilities of the family. Ajike and Mbegbu (2016) supported this reality as the author explains that communication within the family system affects the sexual behaviour of the child given the fact that communication about sexual behaviour and general reproductive health issues within the family is crucial during the adolescent years. Parent-adolescent communication is defined as a fundamental process through which parents convey ideas, values, beliefs, expectations, information, and knowledge to their children. The frequency of parent-adolescent communication about sexual issues is the most common concept used to study parental impact on adolescent sexual attitude and behaviour. For example, the more parents discuss topics such as sexual relationship, pregnancy, and sexually transmitted infections (STI) including acquired immune deficiency syndrome (AIDS) with their adolescents, the less likely the adolescents will be engaged in risky sexual behaviour, and the more likely they will delay their first sexual act (Kinario et al., 2019). Also, most youth do not feel comfortable in discussing

reproductive health issues with their parents and as such cannot also use or utilized the reproductive services (Ayehu et al., 2016). Parents' income is the total compensation received by parents. Compensation may include wages, social security, child support, pensions, capital gains, and dividends. Money is the main resource of parent's income and determines the volume of expenditure per time. As part of home financial management, efficient and effective management of money resources goes a long way to achieve the diverse family goals. Ovansa (2017) averred that parents' income is classified into three types: Money Income, Real Income and Psychic Income. Money Income is the purchasing power during a given period of time. Money income is one of the important material resources of the family. In some of the families, either or none of the parents may be earning income sufficient enough to sustain the family and the students faced with malnutrition and other emotional and psychological effects, the mental development and performance of the students would be greatly affected both academically and otherwise. Low-income families with plenty of feeding, accommodation and health problems may produce students whose physical and mental development pose real challenges to the school's effort at optimum development and academic performance of the students.

Parent-child Communication and Utilization of Reproductive Health Services among Adolescents

Parents are in a unique position to influence their children's health, personal development and transition into adult life (WHO, 2017). Family-level factors, such as socialization patterns, the extent to which these are gendered and connectedness and communication between parents and children may influence significantly the nature of young people's transition to adulthood. Globally, there have been only few interventions that have focused on building parenting skills to narrow the schism between parents and children.

These interventions aimed to build parental awareness of adolescent health and development, enhance gender-egalitarian socialization of sons and daughters and enable parents to communicate better with their adolescent children, particularly about sexual and reproductive matters. The notable interventions among these are the which was designed for implementation, but has been adapted for adolescents in rural areas as well (Yohannes, 2016), and improving the communication between parents and adolescents in reproductive health and HIV/AIDS implemented. Evaluations of these interventions suggest that exposure to the interventions had positive effects on parent-child communication, such as the ability to discuss sensitive matters and the quality of such interaction, and on sexual and reproductive health (SRH) outcomes for children (Diop and Diagne, 2018).

Young people aged 10-24 years face multiple challenges during their transition to adulthood. Even though the transition from childhood to adulthood lasts about 5 years, many young people could acquire significant preventable health problems before reaching adulthood. Most of those problems could persist throughout their adult life. One of the reasons for this problem is lack of adequate and accurate knowledge about sexual matters. Consequently, risky sexual behaviours such as unprotected sex, multiple sexual partnerships, and transactional sex are common among young people (Zolten & Long, 2016). These behaviors predispose young people to the triple tragedy of sexually transmitted infections, including HIV/AIDS, unwanted teenage pregnancy and unsafe induced abortion. Parents play a critical role in the growth, development and sexual socialization of their children. Parental involvement through parent-child sexual communication (PCSC) presents it sex and reproductive health to young people.

In parent-child sexual communication, parents transmit sexual values, beliefs, information and expectations to their children with the aim of influencing sexual behaviors, attitudes and decision-making of their children. Therefore, parental sexual communication to empower young people to manage the many challenges associated with youthfulness cannot be underestimated. There is evidence that young people prefer to receive sexual information from their parents, yet only a few obtain such information from them Research by Jejeebhoy and Santhya (2017) suggested that sexuality communication can be a very useful intervention that encourages sexual responsibility among young people when the message is properly and comprehensively delivered

Positive parent-child communication can help young people to establish individual values and make healthy decisions Studies show that young people who feel a lack of parental warmth, love or care are more likely to report emotional distress, school problems, drug use and sexual risk behaviours. Parent-child communication 1egarding sexuality has many positive effects for adolescents, including better contraception use and healthier sexual behaviours. A large number of studies, mainly from developed countries such as Ovefara (2015): Rumun (2014) have examined the effect of parental communication on adolescent sexual behaviour. The adolescents who had a healthy discussion with parents in the last year about sex, birth control and the dangers of sexually transmitted infections (STI) were significantly

more likely to use condoms the last time they had sex than adolescents who did not talk to their parents as often. Adolescents whose mothers discussed condom use before they initiated sexual intercourse were significantly more likely to use condoms than those whose mothers never discussed condoms or did so only after they had become sexually active. Furthermore, adolescents who used a condom at first intercourse were 19 times more likely to use them regularly and nine times more likely to use a condom at the most recent sexual activity. African American adolescents who reported discussing sexuality with their parents were more likely to talk to their partners about sexual issues than those who did not communicate with their parents (Rogers, 2016). Also, when parents make consistent efforts to know their teens' friends, young people report fewer sexual partners, fewer coital acts, and more use of condoms and contraceptives (Bilal et al., 2015).

Family Income and Utilization of Reproductive Health Services among Adolescents

Money measurement concept stipulates that every transaction is measured in the unit of money denomination. Money measures the value through price. The value of money (the purchasing power) is the quantity of goods and services it can afford per time. Money is the main resource of family income and determines the volume of expenditure per time. As part of home financial management, efficient and effective management of money resources goes a long way to achieve the diverse family goals. Family periodic budget is a key to prudent home financial management. Family income is the total compensation received by all family members (adolescents) or older living in the same household. Compensation may include wages, social security, child support, pensions, capital gains, and dividends. Adolescents in North East Senatorial District of Akwa Ibom State bear a huge and disproportionate burden of poor sexual and reproductive health (SRH) outcomes. The Senatorial District accounts for the highest burden of adolescent HIV globally, and adolescent girls, in particular, are disproportionately affected. The prevalence of adolescent pregnancy, unsafe abortion, child marriage, sexual and gender-based violence (SGBV) and female genital mutilation (FGM) is also substantially higher in North East Senatorial District of Akwa Ibom State compared with other regions of the world (Douglas, 2017). Research has shown that pregnancy-related complications and HIV/AIDs are the leading causes of death among adolescents.

Morbidity and disabilities from unsafe abortion birth complications, SGBV and FGM not only threaten adolescents immediate physical and mental health but also have adverse long term health and socioeconomic consequences. For instance, child marriage and early childbearing are known drivers of poverty and gender inequalities in economic and educational outcomes. Thandiwe, (2013) stated that early and unintended pregnancy often disrupts girls education, with most pregnant and parenting adolescents dropping out of school and rarely returning, with long-term impacts on skills building, livelihood opportunities and earning potential. Adolescent pregnancies also have adverse implications for child health. Babies born to adolescent mothers face a higher risk of being born preterm, underweight and of dying before their fifth birthday (Smith, 2011). Children of adolescent mothers are also more likely to have behavioural problems, have lower educational achievement and become adolescent parents themselves. These disadvantages, exacerbated by their parents' poor socioeconomic status, may become more pronounced as they grow older, making them susceptible to poor health and socioeconomic outcomes, and increasing the likelihood of a multi-generational cycle of increased risk for adverse outcomes.

The barriers that heighten adolescents' vulnerability to poor SRH outcomes in SSA are complex and multifaceted. At the individual level, barriers include a lack of knowledge of and negative attitudes to contraceptives. At the family level, lack of parental support, care and attention can lead to poor SRH outcomes. Unequal gender norms, harmful traditional practices, poverty, violence, exclusion from SRH services and information, and lack of progressive SRH policies are some of the structural factors that heighten adolescents' risk for poor SRH.

Statement of the Problem

In Nigeria adolescents tend to be less informed, less experienced and less comfortable in accessing reproductive health services than adults. Adolescents seem to lack basic reproductive health knowledge and access to affordable and confidential health services. Also, most adolescents do not feel comfortable in discussing reproductive health issues with their parents and as such cannot also use or utilize the available reproductive services. However, it has been observed by the researcher that, parents, teachers and health personnel indicated that they are unprepared to discuss sexuality with adolescents, often because they feel uncomfortable or overworked, or because they disapprove of young people who express an interest in sexuality. Parents and guardians tend to be lenient in their role play. Despite many

combined partnership efforts, most African countries especially in Nigeria are still facing significant lack of awareness towards utilization of reproductive health services as a result of long queues, unfavorable working hours; the school going youths and lack of money. This thereby, affects utilization of reproductive health services by adolescents.

Aim and Objectives of the Study

The aim of the study was to examine the relationship between parent-child communication and family income as predictors utilization of reproductive health services among adolescents in Akwa Ibom North East Senatorial District. Specifically, the study seeks to determine:

1. The relationship between parent-child communication and utilization of Reproductive Health Services among adolescents in Akwa Ibom North East Senatorial District
2. The relationship between family income and utilization of reproductive health services among adolescents in Akwa Ibom North East Senatorial District.

Research Questions

The following research questions were posed to guide the study:

1. What is the relationship between parent-child communication and utilization reproductive health services among adolescents?
2. What is the relationship between family income and utilization of reproductive health services among adolescents?

Hypotheses

The following hypotheses were tested at a 0.05 level of significance:

1. Parent-child communication does not significantly relate to utilization of reproductive health services among adolescents.
2. Family income does not significantly relate to utilization of reproductive health services among adolescents.

Methodology

The study adopted descriptive survey research design. This design is deemed appropriate for this study due to its ability to elicit a wide range of baseline information. A survey a method of collecting information by interviewing or administering a questionnaire to a sample of individuals. It also ensures rapid data collection with minimal expenditure of efforts, time and money. Descriptive studies may often result in the formulation of importance principles of knowledge and solution of significant problems. The population of the study consist of all the 500 adolescents who have registered for their National Identity Card in the nine local government areas in the North East Senatorial District of Akwa Ibom State (National Identity Management Commission, 2022). The sample size for the study comprised 500 adolescents. The sample size was selected using Cluster random sampling technique. Five out of nine local government areas were selected to represent the population. A simple random sampling technique was employed and 100 adolescents were chosen from five local government areas each, making a total of 500 adolescents using balloting system of Yes and No, adolescent who pick yes were used for the study.

The instruments Family Variables Questionnaire (FVQ) and 'Utilization of Reproductive Health Services among Adolescents Questionnaire (URHSAQ) were subjected to face validation by three experts in research, all in the Faculty of Education, University of Uyo. The experts were requested to assess the content coverage; the suitability of the items, language used, and item arrangement in logical sequence. The expert's comments and inputs were incorporated and used for modification of the final copy of the instrument. The essence of the validation was ascertain the appropriateness of the instrument for the study.

The validated instruments were administered to 30 adolescents who were not part of the main study. The 30 adolescents were drawn from the remaining Local Government Areas that were not taken in the study. Test retest reliability technique was utilized to collate data for the reliability test. Pearson Product Moment Correlation (PPMC) was used to determine the reliability coefficient of the instrument. The instruments were adequate for use in the study; since their respective reliability coefficients which was established at .82 and .75 exceed or is equal to .70. The researcher with two well-briefed research assistants visited all the five Local Government Areas and administered copies of questionnaire to the adolescents. The respondents were given instructions on how to complete the questionnaire. Completed copies of questionnaire (288) were collected (100%) and collated for analysis. Pearson

Product Moment Correlation was used to answer the research questions and to test the null hypotheses at .05 level of significance.

Results

Research Question 1: What is the relationship between parent-child communication and utilization of reproductive health services among adolescents in Akwa Ibom North-East Senatorial District?

1. Parent-child communication does not significantly relate to utilization of reproductive health services among adolescents in Akwa Ibom North-East Senatorial District.

Table 1: Summary of Pearson's Product-Moment Correlation on the Parent-child communication does not significantly relate to utilization of reproductive health services among adolescents in Akwa Ibom North-East Senatorial District.

		Parent Child Communication	Utilization
Parent	Pearson Correlation	1	-0.11
Child	Sig. (2-tailed)		0.061
Communication			
	N	288	288
Utilization	Pearson Correlation	-0.11	1
	Sig. (2-tailed)	0.061	

**. Correlation is significant at the 0.05 level (2-tailed).

The results from Table 1 shows the relationship between parent-child communication and utilization of reproductive health services among adolescents in Akwa Ibom North-East Senatorial District ($r = -0.11$). This correlation value indicates a very low negative relationship between the two variables. The result further shows that there is no significant relationship between parent-child communication and utilization of reproductive health services among adolescents in Akwa Ibom North-East Senatorial District ($r = -0.11, p = 0.061$), since the p-value is greater than the 0.05 alpha level. This implies that variations in parent-child communication do not have any measurable or predictable effect on the utilization of reproductive health services among adolescents in Akwa Ibom North-East Senatorial District. Therefore, the null hypothesis is accepted at the 0.05 level of significance, meaning the study fails to provide sufficient evidence to reject the claim that parent-child communication has a significant relationship with the utilization of reproductive health services among adolescents in Akwa Ibom North-East Senatorial District.

Research Question 2: What is the relationship between family income and utilization of reproductive health services among adolescents?

2. Family income does not significantly relate to utilization of reproductive health services among adolescents.

Table 2: Summary of Pearson's Product-Moment Correlation on the family income does not significantly relate to utilization of reproductive health services among adolescents.

		Parent Child Communication	Utilization
Parent	Pearson Correlation	1	-0.11
Child	Sig. (2-tailed)		0.061
Communication			
	N	288	288
Utilization	Pearson Correlation	-0.11	1
	Sig. (2-tailed)	0.061	

**. Correlation is significant at the 0.05 level (2-tailed).

The result from Table 2 shows the relationship between family income and utilization of reproductive health services among adolescents ($r = -0.11$). This correlation value indicates a very low negative relationship between the two variables. The result further shows that there is no significant relationship between family income and utilization of reproductive health services among adolescents ($r = -0.11, p = 0.061$), since the p-value is greater than the 0.05 alpha level. This implies that variations in family income do not have any measurable or predictable effect on the utilization of reproductive health services among adolescents. Therefore, the null hypothesis is accepted at the 0.05 level of significance, meaning the study fails to provide sufficient evidence to reject the claim that family income has a significant relationship with the utilization of reproductive health services among adolescents.

Discussion

The correlation coefficient of -0.11 between parent-child communication and adolescents' utilisation of reproductive health services suggests a very weak negative relationship, and the p-value of 0.061 indicates that this finding is not statistically significant at the 0.05 level. In other words, within this study the extent of communication between parents and adolescents does not appear to meaningfully predict whether adolescents access reproductive health services. One possible interpretation is that simply having conversations about reproductive health with parents may not, on its own, translate into service uptake; other factors may exert stronger influence on adolescents' decisions to use such services. A second observation is that the lack of a measurable effect aligns with research showing low levels of effective communication, even when parental knowledge is high. For example, in a study conducted among adolescents and their parents in Ibadan, although both groups had good knowledge of adolescent reproductive health, the prevalence of parent-adolescent discussions was low and the quality of communication was poor (Titiloye & Ajuwon, 2017). This suggests that communication may be present in name, but may lack depth, openness or relevance needed to engage adolescents toward utilisation of services.

On the other hand, the literature also reports that parent-adolescent communication can support adolescents' reproductive health outcomes under certain conditions. A review of qualitative studies across sub-Saharan Africa found that open, comfortable communication can influence adolescents towards safer sexual behaviours, though it identified many barriers to achieving such communication (Usonwu et al., 2021). The present finding of no significant relationship might therefore reflect a context in which communication is weak, constrained culturally or lacking in linkages to action and services, rather than a conclusion that communication will never matter. In sum, the result suggests that in this context variations in parent-child communication do not predict utilisation of reproductive health services. That absence of effect does not necessarily mean that parent-child communication is unimportant, but rather that as operationalised in this study it did not function in a way that contributed to service utilisation. Interventions might need to move beyond simply encouraging communication to improving the quality, relevance and linkage of those communications to accessible services for adolescents.

The observed correlation of -0.11 between family income and adolescents' utilisation of reproductive health services suggests a very weak negative relationship, and the non-significant p-value ($p = 0.061$) means that the result cannot be considered statistically meaningful. In other words, in this study the level of family income does not appear to predict whether adolescents access reproductive health services. This finding indicates that variations in family income, as measured in this context, do not have a measurable effect on service utilisation. One possible interpretation is that for adolescents, income may not be the main barrier to utilisation of reproductive health services in this context. For example, qualitative research in north-western Nigeria identified financial constraints among several social factors limiting adolescent access, but placed them alongside issues such as parental influence, community norms and health-system barriers (Nmadu et al., 2020). While this suggests income can matter, the weak relationship in your data may reflect that income alone is insufficient to drive utilisation without other enabling conditions.

A second point is that other socioeconomic measures may play a stronger role than simple family income in influencing reproductive health service use. A study of female adolescents in urban slums in Nigeria found evidence of socioeconomic inequalities in family-planning utilisation: adolescents from the highest social-status and higher-education groups used services more than those with least social status, even though income per se was not the only driver (Akinyemi, et al., 2022). This suggests that while family income may be relevant, its direct association with utilisation may be diluted if other factors (social status, education, service awareness) intervene. Thus, the result of no significant relationship between family income and utilisation of reproductive health services may reflect a scenario in which income is not a sufficient or dominant factor on its own. It may also point to measurement and

contextual issues: for instance, family income may not vary enough, or adolescents may access services through alternative means (school-based, peer support) that reduce reliance on direct parental income. In conclusion, while your data fail to show a measurable income-utilisation link at the 0.05 level, the broader evidence does not negate the potential role of socioeconomic conditions: it highlights that interventions may need to look beyond income alone to include education, service availability, awareness and social support.

Conclusion

The study investigated the relationship between parent-child communication, family income, and the utilization of reproductive health services among adolescents in Akwa Ibom North-East Senatorial District. The findings reveal that both parent-child communication ($r = -0.11, p = 0.061$) and family income ($r = -0.11, p = 0.061$) have very low negative correlations with the utilization of reproductive health services, and neither relationship was statistically significant at the 0.05 alpha level. This indicates that variations in parent-child communication and family income do not have a measurable or predictable effect on adolescents' use of reproductive health services in the study area. Consequently, the study accepts the null hypotheses for both variables, suggesting that neither parent-child communication nor family income significantly influences the utilization of reproductive health services among adolescents. These findings highlight the need to explore other social, cultural, or structural factors that may better explain adolescents' access to and use of reproductive health services in the region.

Recommendations

Based on the findings of the study, it was recommended that:

1. Parent-Adolescent communication programs must be strengthened by organizing workshops, seminars, and counseling sessions to equip parents with effective communication skills for discussing reproductive health issues with their children.
2. Promote family-based interventions by integrating family-focused strategies into public health programs that encourage open dialogue on reproductive health matters between parents and adolescents.
3. Enhance peer education and school initiatives by supporting peer-led reproductive health education and school-based programs to complement parental guidance and ensure adolescents receive accurate information.
4. Increase awareness campaigns for parents by designing community and media campaigns to raise parental awareness of the importance of discussing reproductive health issues with adolescents.
5. Subsidize adolescent reproductive health services by providing free or low-cost services through government and non-governmental initiatives to reduce financial barriers for adolescents.
6. Implement school-based health services by establishing reproductive health clinics, counseling, or referral services in schools to increase accessibility for adolescents regardless of family income.
7. Advocate for local government and community-based funding to support adolescent reproductive health programs and services by Encouraging community health funding.
8. Integrating socioeconomic considerations in policy by making sure policymakers consider other socioeconomic or environmental factors that may influence adolescents' utilization of reproductive health services beyond family income.

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