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Research Article

Factors Associated with Unplanned Pregnancy Among Youth at a Selected Hospital in Lesotho

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Abstract

Unplanned pregnancy amongst youth is a fundamental health problem that affects both developing and developed countries globally. There are various factors associated with unplanned pregnancy amongst youth and these factors have differing propagators. Unplanned pregnancies account for over half of total pregnancies in Lesotho; youth pregnancies contribute vast percentage overall. This study aimed to assess which factors associated are with unplanned pregnancy among youths who sought antenatal and postnatal care services at a selected government hospital in Lesotho. A descriptive cross-sectional design was used, and data was collected from a sample of 100 participants using a structured questionnaire. The results revealed that unplanned pregnancy among youths was associated with age, unemployment, lack of contraceptive use, sexual abuse, living in rural areas and lack of unplanned pregnancy prevention campaigns. The findings of this study support socio-ecological model which postulates that variety of factors influence health outcomes. We conclude that more needs to be done to improve access to formal education, availability and accessibility of unplanned pregnancy prevention campaigns and sexual and reproductive services. Reduction in unplanned pregnancy has several benefits not only to sexual and reproductive health but to life holistically. Sexual and reproductive health benefits include reduced maternal and neonatal morbidity and mortality and reduced abortions.

Keywords

Unplanned Pregnancy, Youth, Factors, Socio-Ecological Model

1. Introduction

Almost half of the world's annual pregnancies are unplanned, with low- and middle-income countries contributing the largest percentage to the total [34, 38]. Sharma and Sign state that the occurrence of unplanned pregnancies affects all reproductive age groups; however, its effects are more noticeable in youth [26]. According to Moges et. al. penetrative sexual intercourse, either by choice or force without use of contraceptives is the root cause of unplanned pregnancy [21]. Unplanned pregnancies often result in maternal and neonatal morbidity and mortality, abortions, the degradation of economic status, discrimination and stigmatization [3, 35]. Unplanned pregnancies continue to escalate worldwide despite increasing efforts to prevent them and the varying socio-demographic and economic backgrounds of affected

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countries [33].

Evidence of worldwide prevalence of unplanned pregnancies lies in the recent statistics. Guyot and Swahill found that in the United States of America (USA), roughly half of all pregnancies are reported by women as being unplanned; with unmarried women contributing a larger proportion to the total [29, 35]. Additionally, USA is experiencing an increase in unplanned pregnancies, with 40% of them resulting in an abortion. About 5% of women using birth control methods correctly and consistently contribute to unplanned pregnancies in the USA [10, 5]. Similarly, despite Australia's efforts to encourage contraceptives use, over half of all pregnancies are still unplanned [11]. Moreover, the number of unplanned pregnancies continues to rise in Australia despite the decline in the total number of pregnancies reported annually.

In Asia, China has reported that 23% of unplanned pregnancies are among youth and this is a reduction in the incidence because the country has been working hard to reinforce knowledge and skills regarding sexual and reproductive health [33]. Despite the low percentage of unplanned pregnancy in China compared to other countries, there is still a high prevalence of abortion; at almost 90% of all pregnancies. India, Nepal, and Bangladesh were reported to have unplanned pregnancy prevalence of 23%, 26% and 28% respectively, with Pakistan having a lead of 43% [22, 41].

According to the European Society of Human Reproduction and Embryology in Europe, percentages of unplanned pregnancies range from 54% in Eastern region to about 34% in Western region [12]. In the United Kingdom (UK) from 2015 to 2019, there were a total of 1, 150 000 pregnancies reported annually, with 47% being unplanned and 36% of those ending in abortion [24]. The majority of unplanned pregnancies were reported by teens and in 2015, adolescent birth rate was 15.3 per 1000 adolescent girls in the UK. This rate of adolescent birth in the UK was twice as high as the rate of German, 3 times higher than Swedish and 4 times higher than the Netherlands.

The African continent has the highest prevalence of unplanned pregnancy among youth [3]. Northern and Central Africa have had continuous challenges in controlling the number of unplanned pregnancies since the beginning of the twenty-first century. Morna, Rama and Chigorimbo added that, from 2015 to 2019, unplanned pregnancies accounted for 48% and 43% of total pregnancies in Northern and Central Africa respectively [23]. In 2016, Sub-Saharan Africa reported approximately 14 million unplanned pregnancies annually. The prevalence of unplanned pregnancy ranges from 10.8% in Nigeria to around 54.5% in Namibia [30] Additionally, the prevalence of unplanned pregnancies is higher in rural areas compared to urban areas in Sub-Saharan Africa. Unplanned pregnancy is thus a public health concern affecting both developed and developing countries.

The context of this study is Lesotho, which is reported one of the top two of Eastern and Southern African countries with high rates of unplanned pregnancy among youths. In total, six out of 10 youths are already mothers or are pregnant with their first child [40]. Compared to neighbouring countries, both stigma and discrimination play an immense role in hindering youths from accessing sexual and reproductive services in Lesotho, which leaves them vulnerable to unplanned pregnancies. Moreover, the country's mountainous terrain makes it difficult for youth to access reproductive services. Another key factor is age; younger girls reportedly had little knowledge of sexual and reproductive health, and this led them to make uninformed decisions, and consequently unplanned pregnancies.

The alarming prevalence of unplanned pregnancies in Lesotho accounted for 52% of the total number of pregnancies in 2014. According to United Nations Population Fund Lesotho, unplanned pregnancies roughly doubled between 2004 and 2009, after which the numbers remained relatively constant [36]. Out of the total number of reported unplanned pregnancies in Lesotho, 55% were from the youth population; the number of unplanned pregnancies is highest in the Butha-Buthe district (25%) followed by Thaba-Tseka district (21%) [36, 20]. Several factors play a role in unplanned pregnancy in Lesotho including the rise in transactional relationships, which hinders negotiation of safe sexual intercourse. In his study, Herbet stated that lack of contraceptive awareness campaigns has allowed myths and misconceptions about contraceptives to discourage youth from seeking and maintaining the use of contraceptives [15].

In rural areas in particular, social norms and cultural beliefs promote early marriage and early childbearing which put youths at increased risk of unplanned pregnancy [19]. Furthermore, cultural values often discourage the incorporation of sexual education into formal education, which further adds to a general lack of knowledge about reproductive health propelling the increased risk of unplanned pregnancy. These conditions are worsened by the unavailability of youth-friendly sexual and reproductive health services, which further propagates the extent of the problem in rural districts.

The above data evidences the fact that Lesotho is lagging behind in terms of managing the prevalence of unplanned pregnancies among youth. Therefore, there is a need to assess the range of factors associated with unplanned pregnancy. Knowledge of these factors will inform health policies and practice, hence reduce unplanned pregnancies and mitigate the wide range of individual and societal consequences.

2. Methods

2.1. Research Approach and Design

This study used a descriptive cross-sectional quantitative approach which was appropriate for describing patterns and interrelations of factors associated with unplanned pregnancy among Lesotho's youth at a particular point in time [18, 43].

2.2. Population

The population of the study was youth attending antenatal and postnatal care services at the chosen hospital. The population of the purposively selected hospital was diverse and included both educated and non-educated participants who varied in age and economic background, as well as types of residence [9].

2.3. Sampling Technique

The monthly population of youth attending antenatal and postnatal care services at the selected district hospital was 134. Based on the Raosoft calculator, the recommended sample for this study was 100 participants. Raosoft calculator was used because it allowed for computation of sample size using a 95% confidence level, 5% margin of error and population proportion of 50% which is efficient and effective for health science research [32]. The questionnaire was administered to the conveniently sampled participants; aged between 18 and 25 years who were able to read and write in Sesotho and English.

2.4. Data Collection Instrument

The researchers used existing questionnaires to develop the measuring instrument for this study. The adaptation was guided by contextualization to Lesotho and based on concepts identified in the literature. The questionnaire had a reliability index of 0.89, which is acceptable for a newly adapted tool [32]. Content validity was assured through subject experts' judgement and pilot testing, and the content validity index was 0.92.

2.5. Data Analysis

Answered questionnaires were screened for completion and then coded. Numerical data was summarised through central tendency and variability measures. Moreover, bivariate and multivariate logistic regression analyses were used to assess the association of unplanned pregnancy with independent variables.

2.6. Ethical Considerations

This research received ethical approval from institutional review board of the National University Lesotho and Ministry of Health Lesotho. Participants were fully informed about the research before partaking; those willing to participate, voluntarily signed informed consents.

3. Results

3.1. Socio-Demographics and Factors Associated with Unplanned Pregnancy

Table 1 shows socio-demographics and bivariate analysis results of factors associated with unplanned pregnancy among youth. The response rate was 100% in this study. Out of the 100 participants, 55% of the participants were aged 22-25, 67% were married, 57% had a high school education and 57% had a monthly income of 0-1 999.99 Maluti (Lesotho's currency). Furthermore, 59% were primigravida, 88% were unemployed, 56% resided in rural areas, 69% were from areas that had no unplanned pregnancy prevention campaigns, 58% experienced sexual abuse and 64% had never used contraceptives. There are ten factors associated with unplanned pregnancy with a p-value of $p < 0.05$.

Table 1. *Factors associated with unplanned pregnancy.*

Variable	Total (%)	Chi-square	df	p-value
Age				
18-21	45	5.360	1	.021
22-25	55			
Marital status				
Married	31			
Single	67	11.148	0	.001
Separated	2			
Educational level				
None	5			
Primary	13	3.045	4	.030
Secondary	19			

Variable	Total (%)	Chi-square	df	p-value
High School	57			
Tertiary	6			
Family Monthly Income				
0-1999	57			
2000-3999	32			
4000-5999	8	9.278	4	.044
6000-7999	2			
8000-9999	1			
Parity				
Primigravida	59			
Once	30	8.832	3	.032
Twice	10			
Three times	1			
Employment status				
Yes	12	3.406	3	.011
No	88			
Residence				
Urban	44	17.819	16	.015
Rural	56			
Availability of unplanned pregnancy prevention campaigns				
Yes	31	29.643	12	.003
No	69			
Experience of sexual abuse				
Yes	58	4.406	2	.013
No	42			
Ever used a contraceptive				
Yes	36	7.721	5	.005
No	64			

3.2. Multivariate Analysis of Factors Associated with Unplanned Pregnancy Among Youth

The variables that were statistically significant ($p < 0.05$) in bivariate analysis were further analysed through multivariate logistic regression analysis to examine correlates of unplanned pregnancy. Youth aged 18-21 were 2.7 times more likely to have an unplanned pregnancy than the other group (AOR: 2.679, 95% CI [1.151, 6.233]), married youth were 8 times more likely to experience unplanned pregnancy than their equals (AOR: 8.449, 95% [3.559, 20.056]) and youth with no education were 5.7 times more likely to have unplanned compared to their counterparts (AOR: 5.691, 95% CI [0.590, 2.071]).

Unemployed participants were 2.4 times more likely to experience unplanned than their equivalents (AOR: 2.423, 95% CI [0.486, 8.068]), participants who resided in rural areas were 1.5 times more likely to have unplanned pregnancy than those residing in urban areas (AOR: 1.514, 95% CI [0.893, 1.491]) and participants who resided where unplanned pregnancy campaigns are unavailable were 1.8 times likely to experience unplanned pregnancy than their equals (AOR: 1.818, 95%, CI [0.667, 4.959]). Moreover, participants who

experienced sexual abuse were 2.6 times more likely to experience unplanned pregnancy than their equivalents (AOR: 2.587, 95% CI [1.018, 4.280]) and participants who have never used a contraceptive were 3 times more likely to experience unplanned pregnancy than their counterparts (AOR: 3.176, 95% CI [0.888, 11.363]).

4. Discussion

The results of the study showed that the younger age group was more likely to experience unplanned pregnancy than the older group. These results concur with a Gambian study that revealed that the odds of unplanned pregnancy reduced with increasing age [7]. Similarly, the results of a study by Ameyaw conducted in selected sub-Saharan African countries showed younger people were more vulnerable to unplanned pregnancy [6]. The underlying reason may include that younger people are more likely to have limited knowledge pertaining to sexual and reproductive health hence fail to make informed decisions. Additionally, younger people may be more influenced by peer pressure to engage in risky sexual behaviours. They may also fail to have effective communication about safe sex. Subsequently, these behaviours provide a loophole to the occurrence of unplanned pregnancies among this age group.

Study's results showed that married youth were more likely to experience unplanned pregnancies than their equivalents. This finding is in keeping with results of studies in other parts of Africa which showed that married women were more likely to experience unplanned pregnancies [42, 2]. Although there are some studies with contradictory findings, according to Sarvestani et al. married women in the African context face various barriers to accessing family planning resources including spousal rejection of contraceptives [25]. Also, married women in African context are often under constant societal and cultural pressure to have children, which can make it difficult for them to make their reproductive health a priority. Consequently, these factors may lead to limited or failed family planning hence unplanned pregnancies. However, single females may be promiscuous resulting in an increased chance of having an unplanned pregnancy.

The results show that participants without formal education were more likely to experience unplanned pregnancies. This result seems to echo previous studies such as those in Iran and Kenya, which revealed that the incidence of unplanned pregnancy varied inversely with educational level [25, 14]. Youth without education are likely to experience unplanned pregnancies because they may have limited knowledge of sexual and reproductive health. Furthermore, limited knowledge of family planning options may result in their opting to cease utilisation if they experience negative effects. Moreover, participants without education may have limited financial resources and inadequate access to health facilities, making it more difficult to prevent unplanned pregnancies.

Youth from rural areas were more likely to have unplanned pregnancies. In line with the results of this study, Sutton, Litcher and Sassler in their study conducted in the USA found that unplanned pregnancies were higher among females from rural regions [28]. However, contrasting results have also been found from a study in Ghana which showed that women from the urban region were more likely to experience unplanned pregnancies [4, 8]. Lesotho's mountainous terrain makes the accessibility of reproductive services difficult, which may explain the increased unplanned pregnancies in rural areas. Moreover, social norms and beliefs in rural areas discourage youth from using contraceptives and promote early marriage and childbearing, which may increase their risk of unplanned pregnancy. Despite this trend in rural areas, peer pressure and media may also influence females in urban areas to engage in risky sexual behaviours regardless of the availability and accessibility of reproductive health services.

The results of this study further revealed that being in a sexually abusive relationship increased youth's risk of unplanned pregnancy. Results from studies in Africa and Nepal had similar results; those in sexually abusive relationships had increased odds of unplanned pregnancy [1, 31]. Globally, too, survivors of sexual abuse are twice likely to experience unplanned pregnancy than those who have not experienced sexual abuse [37]. The link between sexual abuse and increased risk of unplanned pregnancy could be explained by the difficulty that many victims experience with reporting instances of sexual abuse as well as the fact that many victims were not pre-emptively using contraceptives.

The results also indicated that no or poor use of contraceptives were associated with unplanned pregnancies. This study's findings are in line with World Health Organization's report which stated that gaps in the use of contraceptives significantly add to escalating incidence of unplanned pregnancies [39]. Additionally, studies conducted in Ghana (Accra) and eSwatini revealed that women who had either never or irregularly used contraceptives were more likely to experience unplanned pregnancies [13, 16]. A lack of knowledge about contraceptives and available options may be a barrier to their use. Similarly, misinformation and discrimination around contraceptive use can make it difficult for women to make informed decisions about their reproductive health, leaving them vulnerable to unplanned pregnancies.

Finally, the results from this study revealed that females from areas without unplanned pregnancy prevention campaigns were more likely to experience unplanned pregnancies. Studies conducted in South Africa concur with this finding and report that the lack of unplanned pregnancy prevention campaigns exacerbates the occurrence of unplanned pregnancies [17, 27]. The absence of such prevention campaigns implies that there is little to no awareness of pregnancy prevention, contraceptive options, proper use, and how to access contraceptives. Without pregnancy prevention campaigns, misconceptions or myths pertaining to sexual and reproductive health services will be left unaddressed in such areas.. A lack of educational and awareness campaigns is likely lead to

the ever-escalating prevalence of unplanned pregnancy.

5. Conclusion

The results of this study showed that factors such as age, marital status, educational level, employment status, type of residence, the availability of sexual education and awareness campaigns, sexual abuse, and poor or lack of contraceptive use are associated with unplanned pregnancies among youth in Lesotho. The findings of this study suggest that more needs to be done to improve access to formal education, to expand the availability and accessibility of unplanned pregnancy prevention campaigns, and to improve access to sexual and reproductive services. Moreover, there is a necessity to provide comprehensive sexual and reproductive services to youth and to address the issue of sexual abuse which impacts the prevalence of unplanned pregnancies. Future researchers can identify sources of bias in this research and minimise them in order to improve the outcomes. Also, future researchers can expand this research at a national level to allow for a more comprehensive understanding of the problem.

Abbreviations

BBGH	Butha-Buthe Government Hospital
CDCP	Centre for Diseases Control and Prevention
LDHS	Lesotho Demographic Health Survey
MOH	Ministry of Health
SRHR	Sexual and Reproductive Health Rights
UNFPA	United Nations Population Fund
WHO	World Health Organization
UNICEF	United Nations International Children's Emergency Fund

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Author Contributions

Tseko Maselinyane: Conceptualization, Data curation, Formal Analysis, Methodology, Resources, Writing – original draft, Writing – review & editing

Isabel Nyangu: Conceptualization, Supervision, Writing – original draft, Writing – review & editing

Champion Nyoni: Formal Analysis, Methodology, Resources, Writing – original draft, Writing – review & editing

Conflicts of Interest

The authors declare no conflicts of interests.

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