

The correlates and consequences of unmet need for contraception among adolescents in Zambia

Introduction

National surveys have continued to prove that a significant proportion of women of reproductive age in developing countries have unmet need for contraception (unmet need). The concept of unmet need refers to fecund women's non-use of contraceptives despite being sexually active and having an expressed desire not to want any more children or want to delay the birth of the next child (Westoff 2006; United Nations {UN}, Department of Economic and Social Affairs, Population Division 2011). Useful critiques, better data collection and changing thinking have led to the revision of the concept of unmet need for contraception (Ravindran and Mishra 2001; Shah, Shah, Chowdhurya and Menon 2004). Notable among them is the inclusion of unmarried women and young people Dixion-Mueller and Germain 1992; DeGraff and de Silva 1996; Becker 1999). The reason for this expansion is that sexually active unmarried women and young people are also exposed to the risk of pregnancy.

It is estimated that 200 million women of childbearing age (17%) in developing countries have unmet need (Barot 2008; Singh, Darroch, Vlassoff and Nadeau 2009). Sub-Saharan Africa's level is the highest among the various regions of the developing countries (Ross and Winfrey 2002; Ashford 2003). The 2013-14 Zambia Demographic and Health Survey {ZDHS} estimated the level of unmet need for currently married women in Zambia at 27%.

Unmet need is associated with unintended pregnancies. It is estimated that between 14 and 15 million adolescents get pregnant annually with most (85%) of these pregnancies being unplanned and unwanted (UN 2001; German Foundation for World Population 2008. Unintended pregnancies increase the risk of morbidity, mortality and unsafe abortions (Barosso 2010). MacDonald (2010); WHO (2007a) contended that though the risk applies to all women in the reproductive ages, it is higher among young women. The age group 10–19 (adolescents) is reported to have the highest level of unmet need (Haque 2010, Pasha et al. 2015). This in turn increases the chances of their children dying at an early age (Donovan & Wulf 2002). In addition, adolescents are 2-5 times more likely to die of pregnancy related complications compared to women aged 20 and above (Smith, Ashford, Gribble and Clifton 2009). Furthermore, Bearinger et al. (2007); Barosso (2010) reported that 2.5 million teenagers in developing countries undergo unsafe abortions annually. On the continental level Shah and Ahman (2004) and WHO (2007b) noted that young women accounted for more than half (60%) of unsafe abortions cases in Africa.

Never before has the world had such a large number of young people. According to (UNFPA 2011) 1.8 billion (20%) of the world's total population are young people, aged 10-24. Bayer (2002) pointed out the significance of meeting young people's reproductive health issues by arguing that "if today's young women ... delay childbearing by two and a half years beyond the current average age at first birth, population in 2100 would be ten percent lower". In addition Barosso (2010) gave a rationale for prioritising needs of young people. Among the reasons given for the need to prioritise young women needs are that it has not been easy to fulfil their needs and that young women have been denied their sexual rights. The latter is said to have been the

cause of unintended pregnancies. The aforementioned facts call for priority to be given to adolescents. Unfortunately, often times they tend to be ignored.

Previous research on unmet need in Zambia has provided useful information on correlates of unmet need among married women in Zambia (Mushinge and Kurz 1998; Ikamari and Lwaanga 2000). No study has specifically examined factors underlying unmet need among adolescents in Zambia. Thus the objectives of this paper are to: (a) compare the level of unmet need among married and unmarried adolescents in Zambia; (b) examine the association between unmet need and selected reproductive health problems among adolescents in Zambia; (d) determine factors underlying unmet need among adolescents in Zambia.

Data Source and Methods

Methods

Data for this cross-sectional study was drawn from the 2013-14 ZDHS. This is a nationally representative sample survey of women and men of reproductive age. Its main objective was to provide information on levels and trends in fertility and use of family planning methods among other things. The sampling frame was adopted from the 2010 Census of Population and Housing of the Republic of Zambia (CPH). The frame consisted of 25,631 standard enumeration areas (SEAs) created for the 2010 CPH. The survey was based on a systematic, two stage stratified sample design of the ten provinces in Zambia. The survey covered 18,052 households where 16,411 women aged 15-49 and 14,773 men aged 15-59 were interviewed. The sample for this study was 3,625 adolescents aged 15-19.

Ethical Considerations

The study was based on secondary analysis of data from the 2013-14 ZDHS which had no participant identifiers. The study did not need any ethical approval. The authors just needed permission to use the data set. This was obtained from MEASURE DHS, ICF International.

Variables Measurement

The outcome variable was unmet need. This was based on a DHS constructed variable. Fecund currently married and sexually active unmarried woman who reported not wanting any more children or wanting to wait for at least 2 years before having the next child, but not using any contraceptives had unmet need. A pregnant woman whose pregnancy was mistimed or unwanted due to non-use of contraceptives at the time she became pregnant was also considered to have an unmet need for contraception (spacing and limiting, respectively). The same applies to an amenorrhoeic woman whose last birth was mistimed or unwanted. Unmet need is expressed as a percentage based on the total number of adolescents.

The independent variables were marital status, number of living children, place of residence, region, education, occupation, wealth index and exposure to family planning messages on media.

Statistical analysis

The data was analysed at three levels. The first level of analysis is the univariate one. This level included the computation of unmet need and describing the demographic and socioeconomic characteristics of the sample. The bivariate level examined relationships between unmet need and the independent variables. At the multivariate level, binary logistic regression models were

employed to explore factors related to total unmet need. This is because there were fewer adolescents with unmet need for limiting.

The independent variables are marital status, number of living children, place of residence, region, education, occupation, wealth index and exposure to family planning on media. Stata 12.0 was used to analyze the data.

Preliminary Results

Unmet need for spacing among currently married women was 24.2% and unmet need for limiting was 1.1%. Thus total unmet need among them was 25.3%. On the other hand, unmet need for spacing among unmarried young women was 9.9% and unmet need for limiting was 0.2%. Thus total unmet need among them was 10.1%

The mean age of the young women was 17.0 years. More than three quarters (83%) of the adolescents were currently married whereas 17% were unmarried. More than half of the adolescents had secondary education (60%) and only 2% of them had no education. There were fewer adolescents (29%) with exposure to family planning messages on media than those without exposure (71%). The highest percentage of adolescents with unmet need for spacing had no children whereas for those with unmet need for limiting it was those with 1-2 children. Adolescents who resided in rural areas had a higher proportion of unmet need for spacing (72%) whereas those in urban areas had more unmet need for limiting (68%).

Results also show that though the likelihood of having a terminated pregnancy was higher among adolescents with unmet need (1.1 times) compared to those who had no unmet need, the association was not significant. In addition, the odds of adolescents with unmet need to have their under five children die were higher (1.2) but not significant.

Results of the multivariate analysis revealed that currently married adolescents were 2.6 times more likely to have unmet need than those who were unmarried. Unmet need reduced with the increase in the number of children. Education was negatively associated with unmet need. Moreover, adolescents residing in urban areas were 55% less likely to have unmet need.

Conclusion

The levels of unmet need among currently married adolescents in Zambia and their unmarried counterparts were compared and the correlates of unmet need were examined. Results revealed unmet need among currently married adolescents is higher (25.3%) than that among the unmarried (10.1%). In both cases, unmet need for spacing was higher than unmet need for limiting. Marital status, number of living children, education and place of residence were most important determinant of unmet There is need for concerted efforts to help reduce the high levels of unmet need among adolescents, especially married ones and those living in rural areas.

Table 1: Distribution of adolescents according to selected background characteristics and unmet need, Zambia DHS 2013-14

Selected characteristics	All adolescents		Unmet need Spacing	Unmet Limiting	P-value
	n	%	%		
<i>Marital status</i>					0.0001

Married	3,013	83.1	57.8	24.4	
Unmarried	612	16.9	42.2	75.6	
No. of living children					0.000
0	2,814	77.6	63.5	29.6	
1-2	803	22.1	36.1	70.4	
3-4	8	0.3	0.4	0.0	
Highest education					0.149
No education	68	1.9	3.0	0.0	
Primary	1,395	38.5	49.0	38.3	
Secondary/Higher	2,159	59.6	48.0	61.7	
Occupation					0.665
Not working	2,832	78.4	62.8	59.3	
Professional/clerical	11	0.3	0.9	7.8	
Sales/service	219	6.0	10.3	0.0	
Agriculture	545	15.1	25.7	32.9	
Manual	7	0.2	0.3	0.0	
Wealth					0.351
Poor	1,136	31.3	42.5	28.3	
Middle	677	18.7	28.1	33.7	
Rich	1,812	50.0	29.4	38.0	
Residence					0.005
Rural	1,886	52.0	72.3	62.0	
Urban	1,739	48.0	27.7	68.0	
Region					0.203
Central	341	9.4	10.2	0.0	
Copperbelt	677	18.7	12.6	27.0	
Eastern	431	11.9	13.8	0.0	
Luapula	189	5.2	7.1	10.6	
Lusaka	724	20.0	11.7	32.7	
Muchinga	194	5.4	3.7	5.2	
Northern	258	7.1	6.3	0.0	
North western	166	4.6	7.2	6.7	
Southern	434	12.0	19.7	17.8	
Western	208	5.8	7.7	0.0	
Exposure to family planning messages through media					0.316
No	2,565	70.8	74.9	93.3	
Yes	1060	29.2	25.1	6.7	