

## **Correlates of unintended pregnancy among currently pregnant married women in Uganda**

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### **Abstract:**

This paper is an attempt to explore the prevalence and factors which are associated with unintended pregnancy among currently pregnant married women in Uganda. The finding of this study would help programme planners and policy makers to understand various factors influencing unintended pregnancy in Uganda. In Uganda, unintended pregnancy is very common which lead to high levels of unplanned births, unsafe abortion and maternal injury and death. More than four births in 10 births are unplanned and on average women has about two children more than they want (6.2 vs. 4.5) (DHS, 2011). This study uses Uganda Demographic Health Survey data conducted recently in 2011. The study finding shows that, 45.2% of the currently pregnant married women reported their current pregnancies as unintended. Further, study finding suggested that mainly two factors such as media exposure and partner education are important to reduce unintended pregnancy in Uganda.

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## **Background**

The republic of Uganda is located in East Africa. Uganda, a country of nearly 35 million (including 8 million women of reproductive age) has one of the highest rates of population growth in the world (World Bank; UN, 2010; Central Intelligence Agency, 2012).

An unintended pregnancy is a pregnancy that is either unwanted (happened when no more children wanted) or mistimed (happened earlier than desired time). Unintended pregnancy is a worldwide problem that affects women, their families, society and nation. A group of social and psychological factors are responsible for the unintended pregnancy (Santelli et.al, 2003).

The concern of unintended pregnancy is key public health issue in developed and developing countries because of its negative relationship with the social and health outcomes for both mothers and children. Unintended pregnancy can result from contraceptive failure, non-use of contraceptives, and less commonly, rape and it can create serious health consequences for women, children and family. Out of total pregnancy (210 million) that takes place throughout the world each year, about 38 % are unplanned and out of which, 22% end in abortion (Amin, 2009).

In Uganda, unintended pregnancy is very common which lead to high levels of unplanned births, unsafe abortion and maternal injury and death. More than four births in 10 births are unplanned and on average women has about two children more than they want (6.2 vs. 4.5) (DHS, 2011). The issue of unintended pregnancy exists in all socioeconomic and demographic backgrounds in Uganda. However, there is considerable difference between poor and well off women in terms of utilization of health services. Well off women are usually receive abortion services by trained doctors, nurses and clinical officer whereas poor or rural women are often compel to obtain unsafe methods for abortion which is performed by untrained providers, due to their financial constraint and geographical distribution of services (Prada, 2005; Jagwe,2006).

According to Ugandan Ministry of Health (2008) estimate, unsafe abortion is accounted for 26% of the country's maternal deaths. Since most of the unintended pregnancies end in abortion or unwanted and it can be avoided by preventing unintended pregnancies which further help in come down maternal deaths in Uganda (Center for reproductive rights, 2012; Mirembe, 1995).

There is scarce of published research that focus on the determinants of unintended pregnancy in developing countries particular in Uganda. However, there are some studies conducted internationally; show the relationship between unintended pregnancy and socioeconomic and demographic characteristics. Furthermore, there is very little known about unintended pregnancy in cultural contexts.

The underlying cause of high prevalence of unintended pregnancy requires further exploration. To develop effective strategies for the prevention of unintended pregnancies, it is essential to understand the factors affecting unintended pregnancies. It is hypothesize that women and their partner's education, exposure to mass media and ever use of family planning methods are related with unintended pregnancy. This study aims to explore the prevalence and factors which are associated with unintended pregnancy among currently pregnant married women in Uganda. The finding of this study would help programme planners and policy makers to understand various factors influencing unintended pregnancy in Uganda.

## **Data and Methods**

The Demographic Health Surveys (DHS) are nationwide survey conducted with a representative sample of households throughout the country .The present study is based on the data of the Uganda Demographic Health Survey (UDHS-2011). This cross sectional survey was conducted among married women age group between (15-49) years old. The purpose of UDHS is to provide reliable estimates on fertility, marriage, sexual activity, fertility preferences, breast-feeding practices and awareness and use of family planning methods.

Only currently pregnant women were selected for this study. Out of 8674 married women of the reproductive age interviewed, 963 (11.1%) were currently pregnant at the time of survey. In UDHS-2011, women were asked two questions “When you got pregnant, did you want to get pregnant at that time, or did you want to have a baby later on or did you not want aborted, any (more) children ? The three possible options were wanted then (planned), wanted pregnancy later on (mistimed) and did not want at all (unwanted). Those women who reported that their current pregnancy is either mistimed or unwanted were merged into one variable and considered as ‘unintended pregnancy’. Hence this variable has two categories: unintended and intended.

Association between unintended pregnancy and the independent variables was examined by bivariate analysis using Chi-squared test. Further, binary logistic regression analysis was performed to examine the net effect of several independent variables on unintended pregnancy.

## **Results**

Among the interviewed married women age group between (15-49) years old, 11.1% out of 8674 women were currently pregnant at the time of the survey. Among these currently married women, almost one third of women reported that they wanted their current pregnancy later on (mistimed, 32.7%) and 12.5% of women mentioned that they did not want their current pregnancy at all (unwanted). So over all, 45.2% of the currently pregnant married women reported their current pregnancies as unintended.

Table 1 described percentage of currently pregnant women aged 15-49 years old by unintended pregnancy according to selected characteristics. As expected, the percentage of women reporting unintended pregnancies increased with age (39.9% of the women aged less than 25 years to 63.0% of the women aged 35 and above years). Similarly, women with higher number of living children reported significantly higher rate of unintended pregnancy.

More than half of the women with primary education (51.1%) had significantly higher incidence of unintended pregnancy compared to their counterparts. Women partner's education was also significantly associated with incidence of unintended pregnancy. In terms of religion, more than fifty percent (52.4%) of other religion women and 45.1% of Christian religion women had reported their current pregnancy as unintended.

The result shows that the exposure to TV is significantly negatively associated with the level of unintended pregnancy. For instance, about 32% of women who were heard about family planning on TV have reported their current pregnancy as unintended while the proportion was more than two-fifth (47.4 %) for those who were not heard about family planning on TV.

Further those respondents who were visited by family planning workers in the last 12 months had slightly lower level of unintended pregnancy (42.2%) compared to those who were not visited by family planning worker (45.6%). Finally, women who have ever used family planning method had significantly lower level of unintended pregnancy (29.2%) than those who have never used family planning method (51.3%) (Table 1).

**Table 1 Percentage of currently pregnant women aged 15-49 years old by unintended pregnancy according to selected characteristics**

	(%)	Experience of unintended pregnancy	Total Number
<b>Demographic characteristics</b>			
<b>Age group***</b>	15-24	39.9	436
	25-34	45.3	400
	35-49	63.0	127
<b>Number of living children***</b>	None	33.7	193
	1	35.8	179
	2	39.9	158
	3	46.4	112
	>3	59.5	321
<b>Socio-economic characteristics</b>			
<b>Education***</b>	No education	30.1	163
	Primary	51.1	577
	Secondary	44.4	180
	Higher education	25.6	43
<b>Partner education***</b>	No education	26.1	111
	Primary	48.5	472
	Secondary	46.4	235
	Higher education	26.0	73
<b>Occupation</b>	Not working	41.6	231
	Professional/ technical/manager/clerical/sales/service	43.7	247
	Agricultural employee & household domestic	47.6	485
<b>Place of residence</b>	Rural	46.5	770
	Urban	39.9	193
<b>Access to health information/services</b>			
<b>Heard family planning on TV***</b>	No	47.4	832
	Yes	31.5	130

<b>Visited by family planning worker</b>	Not visited	45.6	845
	Visited	42.2	116
<b>Socio-cultural factor</b>			
<b>Religion*</b>	Christian	45.1	689
	Muslim	37.2	129
	Others	52.4	145
<b>Pregnancy intention by selected characteristics</b>			
<b>Ever used family planning method***</b>	Never used	51.3	696
	Ever used	29.2	267

Note: \* =  $p < .05$ , \*\* =  $p < .01$  \*\*\* =  $p < .001$

Binary logistic regression model was used to measure the net effect of each of the independent variables on the dependent variable, while controlling for the other variables in the model. Three models have been used in the analysis.

The first model contained the factors such as demographic characteristics, socio-economic factors, and access to health information/services. In the second model, socio-cultural factor were added. In the third model, intervening variable ever use of family planning method was added and the effect of intervening variables and independent variables on unintended pregnancy was observed.

In the first model, women education, partner education, number of living children and heard of family planning on TV had significant impact on unintended pregnancy. Against expectation, result indicated that women with primary, secondary and higher education had a higher odds of having unintended pregnancy, compared with un-educated women. If women partner's having higher education then women had a lower odds of having unintended pregnancy. In terms of number of living children, women with no child or one, two or three living children had a lower odds of having unintended pregnancy, compared to women with four or more living children. Regarding the TV exposure about family planning method, Those women who were heard about family planning on TV had a lower odds of having unintended pregnancy, compared to those women who were not heard about family planning on TV.

In the second model, odds ratio of the variables such as women age, education, partner education, number of living children and heard of family planning on TV after including socio-cultural variable indicated that the socio-cultural factor was also important predictors of unintended pregnancy. Model-2 further explained that Muslim religion women had a significantly lower odds of having unintended pregnancy compared to other religion women.

Model 3 indicated the final results after adding intervening variable in model 2. Even after adding the ever used of family planning method variable in model 3, the five demographic, socio-economic characteristics and access to health information/services and one socio-cultural variable were still statistically significant. Furthermore, intervening variable, ever used family planning method had statistically significant effect on experience of unintended pregnancy. Those women who ever used family planning method had a lower odds of having unintended pregnancy, compared to those who have never used family planning method (Table 2).

**Table 2: Estimated odds ratios for having unintended pregnancy among currently pregnant married women by selected predictors**

	<b>Model 1 Odds Ratio</b>	<b>Model 2 Odds Ratio</b>	<b>Model 3 Odds Ratio</b>
<b>Age group ( Ref. 15-24 years)</b>			
25-34 years	0.67	0.63	0.62*
35-49 years	1.09	1.08	1.03
<b>Number of living children ( Ref. &gt;=4 )</b>			
None	0.23***	0.21***	0.22***
1	0.28***	0.27***	0.27***
2	0.38***	0.37***	0.37***
3	0.59*	0.59*	0.60*
<b>Education (Ref. No education)</b>			
Primary	3.72***	3.81***	3.22***
Secondary	4.17***	4.46***	3.87***
Higher education	3.32*	3.27*	2.91*
<b>Partner education (Ref. No education)</b>			

Primary	0.70	0.66*	0.61*
Secondary	0.73	0.71	0.68
Higher education	0.33**	0.31**	0.29**
<b>Occupation (Ref. Not working)</b>			
Professional/ technical/manager/clerical/sales/service	1.18	1.14	1.23
Agri- employee & household domestic	1.05	1.02	1.02
<b>Place of residence ( Ref. Rural)</b>			
Urban	0.94	0.85	0.71
<b>Heard family planning on TV (Ref. No)</b>			
Yes	0.57*	0.52**	0.48**
<b>Visited by family planning worker (Ref. Not visited)</b>			
Yes	0.97	1.00	1.03
<b>Religion ( Ref. Other)</b>			
Christian		0.68	0.68
Muslim		0.40**	0.39**
<b>Ever used family planning method ( No)</b>			
Yes			0.48***

Note: \* = p < .05, \*\* = p < .01 \*\*\* = p < .001



## **Discussion**

This study is an attempt to investigate the influencing factors such as demographic, socioeconomic, socio-cultural, access to health information/services and ever use of family planning method on unintended pregnancy. The study result showed that unintended pregnancy is common among Uganda women. It revealed that higher demand for family planning program. The result of this study suggests that all women, regardless of age, socioeconomic, or socio-cultural status, would benefit from increased efforts to ensure that pregnancies are intended.

The bivariate analysis result indicated that the variables such as age, number of living children, education, partner's education, heard family planning on TV, religion and ever used family planning method are important in explaining unintended pregnancy. The multivariate analysis supported some of the findings of the bivariate analysis and showed a different pattern of effect for few other variables. In the multivariate analysis, age of women ( 25-34), number of living children, education(primary and secondary), partner's education (primary and higher education), heard family planning on TV , religion ( Muslim) and ever used family planning methods were found to have statistically significant influence on unintended pregnancy.

The results from logistic regression indicated that in Uganda, women age group between 15-24 years old had significantly higher unintended pregnancy, compared with women age group between 25-34 years. The finding is not consistent with other studies conducted among currently married pregnant women in Iran and all women of reproductive age in Nigeria. The possible reason for this opposite trend was due to early age at marriage, higher fertility rate and low use of contraception methods in Uganda (DHS, 2011). Further, results indicated that those women who had heard about family planning on TV were less likely to report unintended pregnancy compared to those who have not heard about family planning on TV. It shows that in Uganda, mass media can play a pivotal role in reducing unintended pregnancy because it's gives wide range of knowledge not only to women but also partner and whole family (Flora, 1990; Oni, 1990) and leads to adopt contraception and sensitizes couple about the family norms so that they have low parity and low unintended pregnancy (Westoff, 1995; Odimeqwu, 1999). A

contradictory result was noticed from the logistic regression regarding the association of education on an unintended pregnancy. Women with primary, secondary and higher education were more likely to report unintended pregnancy compared with un-educated women whereas those women whose partner has higher education were less likely to report unintended pregnancy. Women's occupation was not significantly related with unintended pregnancy as like study found in Iran (Abbasi, 2004).

Those women who have ever used family planning method were less likely to report unintended pregnancy. Current use of family planning methods is very low among Uganda women. This is because of patriarchal society; women are often given less opportunity to be self-supportive. Male partners discourage women from practicing contraception. One qualitative study among males indicated that contraceptives can cause health problems such as permanent infertility, cancer and also contraception use might cause women to have extramarital affairs (Kaye, 2006).

## **Conclusion**

There are many factors accounted for the high rates of unintended pregnancy. However, study findings suggested that mainly two factors such as media exposure and partner education are important to reduce unintended pregnancy in Uganda. In short, it can be concluded that a program should aim to reduce unintended pregnancy by focusing on these two factors so that maternal mortality and morbidity as well as the need for abortion is decreased and current use of family planning can be increased in Uganda.

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