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## **Pregnancy Intention Status and Maternal Health Care Utilization in Zimbabwe**

### **Extended Abstract**

Maternity is often usually a positive and fulfilling experience but it is associated with suffering, morbidity and death for many women across the world (Kongnyuy, 2014). There is a crisis in Zimbabwe regarding maternal mortality. The report of 2010/11 ZDHS indicates a maternal mortality ratio of 960 per 100,000 live births in Zimbabwe (ZIMSTAT and ICF International, 2012). This ratio is three times higher than the global average of 270 deaths per 100 000 live births and nearly double the sub Saharan Africa average (United Nations Population Fund (UNFPA), 2013).

Unintended pregnancies are another public health concern in Zimbabwe with 25 percent of women in ZDHS 2010/11 reporting that their last births were mistimed and 7 percent reporting that they were never wanted (ZIMSTAT and ICF International, 2012). Studies in America have found that pregnancy intention is associated with late initiation of ANC visits because women with unintended pregnancies might discover their pregnancy later as well as because of fear of stigma (Orr et al 2008, Cheng et al 2009)

Maternal deaths and disability can be prevented by maternal health seeking behaviour by attending ante natal care (ANC), skilled delivery in a health facility and post natal care (PNC) (Tey& Lai, 2013). World Health Organisation (WHO) recommends that a pregnant woman should attend at least four antenatal care visits with a skilled health worker during pregnancy (Pell et al, 2013). However in Zimbabwe only 65 percent of women have utilized the four recommended antenatal care visits. The possible reason why only 65 percent of women utilize antenatal care in Zimbabwe is the social stigma attached to unintended pregnancies among women (Mathole et al 2005). Given that both unintended pregnancies and poor maternal health seeking behaviour are two public health concerns in Zimbabwe this study seeks to examine whether pregnancy intention status significantly influence maternal health care.

Studies in the developed countries have found that pregnancy intention status influences maternal health seeking behaviour (Orr et al 2008, Cheng et al 2009, Kost et al 1998, Delgado-Rodríguez et al 1997). Little attention has been given to this association in Zimbabwe. Studies that have been done in sub Saharan Africa regarding the association between pregnancy intention status and maternal health care utilization have not shown consistent results thus there is inconclusive evidence regarding the association between pregnancy intention status and maternal health seeking behaviour. A study in Kenya showed that unwanted pregnancies were associated with late or insufficient antenatal care (Magadi et al 2000, Marston & Cleland 2003). In

Namibia pregnancy intention status was not associated with timing of ANC (Gage, 1998). The inconclusiveness of the findings of similar studies conducted in other countries in sub-Saharan Africa thus underscores the need to conduct this research in Zimbabwe.

This study is guided by both the reviewed literature and the Andersen (1995) framework for Behavioural Model of Health Service Use. The conceptual framework used in this study was adapted from this model. The framework is suitable for this study because it studies factors that influence health service utilization.

Using the cross sectional data from Zimbabwe Demographic and Health Survey (ZDHS 2010/11) data of 3,985 women aged 15-49 who had at least a live birth five years before the survey, this study investigates if there is a significant association between pregnancy intention status and uptake of antenatal care among women in Zimbabwe. The dependent variable was current number of antenatal care visits use coded as 0 for less than 4 and 1 for 4 visits or more. The key independent variable is pregnancy intention status (wanted, mistimed, and never wanted). The study controlled for maternal age at last birth, distance to health care facility, religion, marital status, level of education, wealth, partner’s education, place of residence, region of residence and need of money for medical help. Descriptive statistics using cross tabulations to show frequency distribution of maternal health care utilization was conducted. Bivariate analysis using chi square was used since all variables are categorical Multivariate analysis using binary logistic regression was used given that the outcome variable is dichotomous.

### Levels of antenatal care visits

Sixty-six percent of the women had recommended 4 visits or more whereas 34% had less than 4 visits.

### Logistic Regression Results

| MAIN INDEPENDENT VARIABLE         | Model 1    |             | Model 2    |             |
|-----------------------------------|------------|-------------|------------|-------------|
|                                   | Odds Ratio | [95%CI]     | Odds Ratio | [95%CI]     |
| <b>Pregnancy intention status</b> |            |             |            |             |
| Wanted (REF)                      | 1          |             | 1          |             |
| Mistimed                          | 0.64*      | (0.56-0.74) | 0.67*      | 0.580-0.821 |
| Never wanted                      | 0.63*      | (0.48-0.82) | 0.64*      | 0.465-0.949 |
| <b>DEMOGRAPHIC</b>                |            |             |            |             |
| <b>Maternal age at birth</b>      |            |             |            |             |

|  |        |  |        |             |
|--|--------|--|--------|-------------|
| <20 (REF)  |        |  | 1      |             |
| 20-34  |        |  | 1.27*  | 1.03-1.69   |
| 35+  |        |  | 1.71*  | 1.20-2.61   |
| <b>SOCIO ECONOMIC VARIABLES</b>                                  |        |  |        |             |
| <b>Education</b>   |        |  |        |             |
| No/ primary  |        |  |        |             |
| Secondary  |        |  | 1.30   | 111-1.53    |
| Tertiary   |        |  | 2.26   | 1.38-3.69   |
| <b>Religion</b>  |        |  |        |             |
| Apostolic/ Traditional   |        |  | 1      |             |
| Other  |        |  | 1.37*  | 0.554-0.803 |
| <b>Getting money for medical help</b>                            |        |  |        |             |
| Big problem  |        |  | 1      |             |
| Not a big problem  |        |  | 1.24*  | 1.034-1.495 |
| Prob > F   | 0.0000 |  | 0.0000 |             |
| 1.00=Reference Category (RC), CI: Confidence Interval; *= P<0.05 |        |  |        |             |

Results revealed that women who had mistimed and never wanted births were 0.33 and 0.36 respectively less likely to attend 4 or more ANC visits compared to women who wanted their last birth. Women aged 20-34 and 35 and above were 1.3 and 1.7 times respectively more likely to attend 4 or more antenatal care visits than women less than 20 years at the time they gave birth. As expected, women with secondary and tertiary education were significantly more likely to have four or more ANC visits (1.30times and 2.26 times more likely respectively) compared to those with no education/primary education.

Religion was significantly associated with antennal care utilization with women affiliated with the other religions 1.37 times more likely to attend 4 or more antenatal care visits in relation to women from Apostolic religion. Furthermore, women who reported not to have big problems in getting money for medical help were 1.2 times more likely to attend 4 of more ANC visits. In conclusion pregnancy intention status significantly influences number of antenatal care visits a woman attends.

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