

## A STUDY ON HEALTH CARE OF WOMEN DURING ANTENATAL PERIOD

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### ABSTRACT

*Health care during ante natal period is commonly understood to have beneficial impact on pregnancy and birth outcomes through early diagnosis and treatment of complications as well as promoting the health of the pregnant woman through nutrition. Antenatal care services create the opportunity for service providers to establish contact with the woman to identify and manage current and potential risks and problems during pregnancy. It also creates the opportunity for the woman and her care providers to establish a delivery plan based on her needs, resources and circumstances. The study is aimed to assess antenatal health care among rural women in Rwanda. A sample of 200 respondents was randomly selected from 10 villages. Schedule method was used for data collection and analysis was done through frequency and percentage. The result revealed that majority of respondents (82%) had undergone 3 to 4 ANC visit. It has been observed that 76 percent of the respondents had experienced health problem in pregnancy such as Swelling of hand and feet (39%), severe vomiting (28%) and fever (6%) and Blurred vision (3%). Majority (92%) of them gave birth at government health facilities and those who had complications got treatment at government hospital. It is essential to bring more awareness among rural women about pregnancy related problems and care to be taken during that period .In this paper an attempt has been made to assess the extent of health care during antenatal period among rural women in Ruhango district at Rwanda (East Africa).*

**Key words:** Maternal health, Ante natal care, Pregnancy problems, delivery care.

### Introduction

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Maternal health is the health of women during pregnancy, childbirth, and the postpartum period. It encompasses the health care dimensions of family planning, preconception, prenatal, and postnatal care in order to reduce maternal morbidity and mortality. Therefore, an improvement of maternal health is important global public health goal. In the Millennium Development Goals (MDGs) formulated in 2000 by the members of the United Nations are committed to reduce the maternal mortality ratio (MMR) by three fourths during the period 1990–2015(WHO, 2009).

Rwanda is developing country with a population of over a 11 million and more than 70 percent of them live in rural area and its maternal mortality ratio (MMR) was 486 (maternal death per 100,000 live births) in 2011. The MMR vary across the urban to rural, with the large Rwandan rural contributing a disproportionately-large proportion of deaths. Thus a considerable importance was focused in providing antenatal care. These include determining what kind of care should be offered to all women and what is needed by women with difficulties or complications arising during pregnancy or birth. Other issues include the frequency of visits, what should actually be offered in terms of care for the woman at each visit and what screening tests are necessary.

The antenatal care may be particularly advantageous in resource-poor developing countries, where health seeking behavior is inadequate, access to health services is otherwise limited, and most mothers are poor, illiterate or rural dwellers. With the strong positive association that has been shown to exist between level of care obtained during pregnancy and the use of safe delivery care, antenatal care also stands to contribute indirectly to maternal mortality reduction. Key health-care intervention can largely prevent women from dying of pregnancy-related causes. Attendance of antenatal care, delivery in a medical setting and having a skilled health worker at delivery can improve maternal health. Maternal health-care use is also reported to vary within developing countries, with most findings showing differences between affluent and poor women, and between women living in urban and rural areas. (Bulletin of the World Health Organization, 2007). The United Nation Millennium Development Goals (MDG) on maternal health aims to reduce the number of women dying during pregnancy and childbirth by

three quarters between 1990 and 2015. To achieve this goal, it is estimated that an annual decline in maternal mortality of 5.5% is needed; however, between 1990 and 2010 the annual decline was only 1.7% in the sub-Saharan region, (WHO 2012). Thus many countries in sub-Saharan Africa will not be able to achieve the goal by 2015. One of the strategies aimed at addressing maternal mortality in developing countries is the implementation of focused antenatal care (FANC), which is the care a woman receives throughout her pregnancy (WHO 2002). Trials conducted in Argentina, Cuba, Saudi Arabia, and Thailand proved that FANC was safe and was a more sustainable, comprehensive, and effective antenatal care (ANC) model (WHO 2002). Based on results from trials on FANC, the World Health Organization (WHO) in 2001 issued guidance on this new model of ANC for implementation in developing countries. The new FANC model reduces the number of required antenatal visits to four, and provides focused services shown to improve both maternal and neonatal outcomes. However, many women in Africa, Malawi inclusive, under-utilise FANC services. Usually they come late for the services and make fewer than recommended number of FANC visits. In Niger Delta, 77% of the pregnant women start utilising FANC in the second trimester (Ndidi and Oseremen 2010) while in Kenya 45% in the third trimester (Magadi et al. 1999). In Malawi 48% of the pregnant women start utilising FANC in the second trimester (Malawi Demographic and Health Survey 2010). In terms of number of visits, in developed countries, 97% of the pregnant women make at least one antenatal visit and 99% of these pregnant women deliver with skilled birth attendants (Mrisho et al. 2009). To the contrary, in developing countries, including Malawi, 49% of pregnant women make at least have one FANC visit and oftentimes two thirds of these women deliver with unskilled birth attendants (Mrisho et al. 2009; MDHS 2010). Studies have linked low utilization to poor pregnancy outcomes, which ultimately lead to higher maternal and neonatal morbidity and mortality (Raatikainen et al. 2007).

The factors related to place of residence and socioeconomic status may account for variations in use of maternal health care. These factors include women's age, ethnicity, education, religion, culture, clinical need for care and decision-making power. The costs, location and quality of health services are also important factors which interact in different ways to determine the use of health care. (Lale Say a & Rosalind Raine, 2007).

### Objectives of the study

- To study the socio-economic and demographic status of the respondents
- To assess the extent of health care among women during pregnancy

### Materials and methods

The study was conducted in Ruhango district at Rwanda in 2013, from 10 villages, which were randomly selected. In each selected village, 20 respondents were selected randomly, thus making a sample of 200 respondents. The Data on ante natal health care among rural women were collected using a well designed and structured schedule. The schedule was initially developed in English and then translated to the local language, 'Kinyarwanda'. The data were collected by me and another researcher who had experience in doing research. The information collected were edited and presented in suitable tables and cross tables to draw meaningful conclusions. In this study, statistical tools such as frequency mean and percent were used for analysis of the data.

### Findings and Discussion

The following table shows the classification of respondents on the basis of their social, economic and demographic characteristics.

**Table 1. Distribution of respondents by socio-economic and demographic status**

| Religion              | No of respondents | Percent |
|-----------------------|-------------------|---------|
| Catholic              | 120               | 60      |
| Protestant            | 46                | 23      |
| Adventist             | 34                | 17      |
| Total                 | 200               | 100     |
| Literacy status/Level | No of respondents | Percent |
| Primary               | 124               | 62      |
| Middle                | 52                | 26      |
| secondary             | 24                | 12      |
| Total                 | 200               | 100     |

| <b>Marital status</b>            | <b>No of respondents</b> | <b>Percent</b> |
|----------------------------------|--------------------------|----------------|
| Married                          | 146                      | 73             |
| Widow                            | 22                       | 11             |
| Separated                        | 32                       | 16             |
| Total                            | 200                      | 100            |
| <b>Occupation</b>                | <b>No of respondents</b> | <b>Percent</b> |
| Cultivators                      | 118                      | 59             |
| wage earner                      | 46                       | 23             |
| Small scale business             | 36                       | 18             |
| Total                            | 200                      | 100            |
| <b>Annual income</b>             | <b>No of respondents</b> | <b>Percent</b> |
| Rs.10,001-14,000                 | 108                      | 54             |
| Rs.14,000-18,000                 | 34                       | 17             |
| Rs.18,001-22,000                 | 28                       | 14             |
| Rs.22,001-26,000                 | 30                       | 15             |
| Total                            | 200                      | 100            |
| <b>Current age</b>               | <b>No of respondents</b> | <b>Percent</b> |
| 20-24                            | 18                       | 9              |
| 25-29                            | 46                       | 23             |
| 30-34                            | 76                       | 38             |
| 35-39                            | 60                       | 30             |
| Total                            | 200                      | 100            |
| <b>Age at marriage(in years)</b> | <b>No of respondents</b> | <b>Percent</b> |
| 15-19                            | 74                       | 37             |
| 20-24                            | 80                       | 40             |
| 25-29                            | 36                       | 18             |
| 30-34                            | 10                       | 5              |
| Total                            | 200                      | 100            |
| <b>No. of children ever born</b> | <b>No of respondents</b> | <b>Percent</b> |
| 1&2                              | 81                       | 41             |
| 3&4                              | 96                       | 48             |
| 5&6                              | 22                       | 11             |
| Total                            | 200                      | 100            |

Mean income of respondents =Rs 15,600

Mean age of respondents =31. 4 years

Mean age at marriage= 21. 5 years

Mean children ever born =2. 9 children

It has been observed from the Table.no.1 that 60 percent of respondents were catholic, 23 percent of respondents were protestant whereas 17 of percent of them were Adventist. Regarding educational status and level, it has been observed that 62 percent of the respondents had studied only up to primary level while 26 &12 percent of them had studied up to middle and secondary level respectively. Regarding marital status, it has been observed that majority of the respondents (73%) were married and living with their husband while 11 percent were widow and 16 percent were separated.

Regarding occupation, 59 percent of the respondents were cultivators, 23 percent of respondents were wage earners while 18 percent of them were doing small scale business. Regarding annual family income it has been observed that majority of respondents (54%) had earned the income of Rs.10, 000-14,000 whereas 17 and 14 percent of the respondents had earned the income of Rs.14, 001-18,000 and 18,001-22,000 respectively. The remaining 15 percent had earned Rs 22,001 to 26,000. The annual mean income is Rs.15, 600.

Regarding current age of women, it has been observed that 38 percent and 30 percent of the respondents were in the age group of 30-34 and 35 to 39 respectively, while 23 and 9 percent of respondents were in the age group of 25-29 years and 20 to24 years respectively. The mean age of respondents is found to be 31 years. Regarding age at marriage, it has been observed that 40 and 37 percent of respondents had got married in the age group of 20-24 and 15-19 years respectively whereas 18 percent of them got married in the age group of 25-29 years. The remaining 5 percent had got married in 30 to 34 years. The mean age at marriage of women is found to be 22 years. Regarding children ever born, it is evident from the table that 49 percent and 36 percent of respondents had borne 3 to 4 children and 1 to 2 children respectively while 15 percent of them had borne 5 to 6 children. The mean children ever born is found to be 3 .

Table 2: Distribution of respondents by health care during pregnancy and health problems

| No. of ANC visit          | No. of respondents | Percent |
|---------------------------|--------------------|---------|
| 2 times                   | 36                 | 18      |
| 3times                    | 76                 | 38      |
| 4times                    | 88                 | 44      |
| Total                     | 200                | 100     |
| Starting of ANC visit     | No. of respondents | Percent |
| 1-3 months                | 114                | 57      |
| 4-6 months                | 66                 | 33      |
| 7-9 months                | 20                 | 10      |
| Total                     | 200                | 100     |
| Place of ANC visit        | No. of respondents | Percent |
| Hospital                  | 22                 | 11      |
| Dispensary                | 178                | 89      |
| Total                     | 200                | 100     |
| TT injection taken        | No. of respondents | Percent |
| Yes                       | 182                | 91      |
| No                        | 18                 | 9       |
| Total                     | 200                | 100     |
| IFA tablets taken         | No. of respondents | Percent |
| Yes                       | 170                | 85      |
| No                        | 30                 | 15      |
| Total                     | 200                | 100     |
| De-worming drug           | No. of respondents | Percent |
| Yes                       | 144                | 72      |
| No                        | 56                 | 28      |
| Total                     | 200                | 100     |
| Test done                 | No. of respondents | Percent |
| HIV                       | 70                 | 35      |
| STD                       | 130                | 65      |
| Total                     | 200                | 100     |
| Problems during pregnancy | No. of respondents | Percent |

|                          |                           |                |
|--------------------------|---------------------------|----------------|
| Swelling of hand, feet   | 78                        | 39             |
| Blurred vision           | 06                        | 3              |
| Severe vomiting          | 56                        | 28             |
| Fever                    | 12                        | 6              |
| Nil                      | 48                        | 24             |
| Total                    | 200                       | 100            |
| <b>Place of delivery</b> | <b>No. of respondents</b> | <b>Percent</b> |
| Home                     | 16                        | 8              |
| Dispensary               | 136                       | 68             |
| Hospital                 | 48                        | 24             |
| Total                    | 200                       | 100            |
| <b>Type of delivery</b>  | <b>No. of respondents</b> | <b>Percent</b> |
| Normal                   | 168                       | 84             |
| Cesarean                 | 32                        | 16             |
| Total                    | 200                       | 100            |

Regarding health care during pregnancy, it has been observed from the above table (No.2) that higher proportion (82%) of respondents had undergone ANC visit for 3 to 4 times at health facility, whereas 18 percent of the respondents had undergone ANC visit for 2 times at health facility. The results show that majority of 57 percent of the respondents sought their first ANC visit during 1-3 months of pregnancy, while 33 percent of them sought their first ANC visit during 4 to 6 months. The remaining 10 percent had undergone first ANC visit only during 7 to 9 months of pregnancy. Majority of the respondents (89 percent) had gone to dispensary while only 11 percent of them went to the hospital for antenatal care. It should be noted that 91 percent of respondents had taken tetanus toxoid injections during pregnancy for their most recent birth whereas 6 percent of them had not taken this. The majority of mothers (85 percent) had consumed Iron & Folic Acid during pregnancy period. Higher proportion of (72%) of the respondents took de-worming drug during their pregnancy whereas 28 percent didn't take it. Among the respondents, 65 percent had undergone STD test whereas 35 percent had undergone HIV test.



Regarding health problems during pregnancy, it has been observed that 76 percent of women had experienced complications such as swelling of hand and feet (39%), Severe vomiting (28%), fever (6%), Blurred vision (3%) whereas 24 percent of respondents had not experienced any problem during pregnancy. All those who experienced health problems had taken treatment at health facility. Regarding delivery it has been observed that majority (92%) of women had gone to health facility for delivery whereas only for 8 percent of them delivery occurred at home. Majority of women had experienced normal delivery (84%) whereas 16 percent of them had experienced delivery through cesarean.

### Conclusion

From the above analysis it has been concluded that majority of the respondents had undergone antenatal check up for 3 to 4 times (82%) at health facility and higher proportion of women had utilized health care services such as Tetanus Toxoid injection(91%), Iron &Folic Acid (85%), and de-worming drug(72%) during pregnancy. Majority of the respondents had experienced simple health problems such as swelling of hands and feet and severe vomiting and those who had experienced problems got treatment at health facility. It has been realized that since majority of women utilised proper health care services during pregnancy, they had experienced simple health problems during the antenatal period and also majority of them had experienced normal delivery. Anyhow it becomes necessary to increase the age at marriage to bring about reduction in fertility and also in maternal morbidity and mortality.

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