ORIGINAL ARTICLE

Antenatal Care & Tetanus Toxoid Coverage in Pregnant Women in Semi-Urban Settings of Taluka Hala District Matiari

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ABSTRACT

Objective: To assess and correlate the Antenatal care and Tetanus Toxoid vaccine coverage in Pregnant Women in Semi-Urban Settings of Taluka Hala, District Matiari.

Study Design: Cross Sectional Study.

and Pearson correlation tests.

Place & Duration: Department of Community Medicine PUMHS Nawabshah (SBA). Data was collected at semi-urban settings of Hala New District Matiari Sindh from August to September, 2014. **Material & Methods:** 320 women were selected by simple randomized sampling method of semi-urban setting of Hala New. The participants were questioned regarding their Antenatal seeking behavior of their last pregnancy and Tetanus Toxoid Vaccine. Data was analyzed by frequency tables, charts, 95% CI

Results: Study results show that 81.25% of women received antenatal care from a skilled health provider. Meanwhile 36.15% of women seek Antenatal Care from Lady Doctor, 33.85% by Lady Health Visitor & 30% by Midwives. 44.62% women have = four Antenatal Care visits in their last pregnancy. About 82.5% of women believe that ANC is essential for pregnancy. 74.37% women have two doses of Tetanus Toxoid vaccination in their last pregnancy. 48.12% pregnant women delivered at Hospital, while 51.87% delivered at home. The study results show a significant correlation (association) between the number of ANC visits paid by women and education, occupational Status of women & her husband (p=0.001) and monthly Income/Economical Status of the family (p=0.004).

Conclusion: The research study results conclude that with the passage of time ANC and Tetanus Toxoid Vaccination coverage has increased but current study is highlighting the need of universal coverage of ANC & T.T Vaccine. This would ensure the provision of basic health services to the women; it will ultimately help to achieve Millennium Development Goals (MDGs) 4 and 5. Considering this necessitate, there is also necessary to increase the literacy level and empowerment of women in country. **Key Words:** Estimation, Antenatal Care, Tetanus Toxoid Vaccine, Coverage, Pregnant women. Education.

INTRODUCTION:

A safe motherhood is a worldwide initiative to reduce maternal mortality and morbidity. One of the important components of Safe Motherhood is the provision of high standard

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<u>Correspondence to:</u> Dr. Jawaid Hussain Lighari Assistant Professor Community Medicine Department PUMHS Nawabshah (SBA) Email: jawaid.lighari@gmail.com antenatal care to all pregnant women. Antenatal care is the care that a pregnant woman seeks from well structured health care services. Antenatal care is dealing with prevention and early detection of pregnancy disorders. It is basic women right & key to essential obstetrics care. Antenatal care is an important indicator of maternal mortality on which the life of mothers and newborn depend. Antenatal Care is well recognized, which improves maternal, Perinatal and neonatal outcomes.¹

World Health Organization defines antenatal care as an important variable, having one or more visits to a qualified person during the pregnancy. WHO recommends at least four

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Antenatal visits of every pregnant woman from a Health Care Provider, at primary health care level, from screening to emergency obstetric care and life support during pregnancy and up to delivery. Objective of Antenatal care is to promote high quality maternal and foetal health and to recognize danger factors for adverse pregnancy outcomes in an attempt to manage without delay and resolve them.²

Most of maternal deaths occur in developing countries. Many women die, because they do not receive the precise medical care especially antenatal care. Good percentages of mothers die because they do not get that care fast enough. Many studies have observed into the causes of maternal mortality frequently in under developing countries; which illustrate a major correlation with lack of antenatal care.³

According to the current estimates, 81% of pregnant women in the under-developing countries seek antenatal care from a skilled health professional at least once a time during pregnancy. Regional percentages range from a low of 71% in South Asian countries to a high of 95% in Central and Eastern Europe/Commonwealth States. Antenatal Coverage is also high in East Asia and the Pacific countries, where 90% of pregnant women receive antenatal care from a skilled provider at least once. About half of all pregnant women in developing countries receive the minimum recommended four antenatal visits.⁴

Risk of Maternal deaths in Pakistan ranges one in every 89 women and one out of every ten children born in Pakistan dies before the age of five. Current estimates of Maternal Mortality in Pakistan suggests as high as 266 per 100,000 live births and is accredited mostly to low skilled birth attendance rate, high fertility, insufficient access to emergency obstetric health care services and malnutrition. Antenatal Care has shown some progress in Pakistan over the passage of time but huge disparities are present in urban-rural setting.⁵

Provincial Health Development Centre (PHDC) Sindh conducted a research in 2012; results showed that 79% mothers contacted a Skilled health professional (Doctor/LHV/Nurse/ Midwife) for Antenatal Care during their most recent pregnancy. About 48% mothers received four or more ANC visits. 78% mothers received two or more doses of Tetanus Toxoid vaccination. Delivery of 69% mothers were conducted by a Skilled Birth Attendant.⁶

Results from the Pakistan Demographic and Health Survey (PDHS) 2012-13 shows that 73% women are consulting a skilled health provider at least once time for antenatal care for their most recent pregnancy. Urban areas overage is much higher (88%) than in rural areas (67%), having lowest in Balochistan (31%) than in Punjab and Sindh (78%). Tetanus Toxoid coverage is still very far from universal coverage among pregnant women in Pakistan. 64% women in their last pregnancy were protected against neonatal tetanus. Mothers of 20-34 years age are more likely to be protected against neonatal tetanus (67%) than other children. Highest coverage is in urban areas 75% than rural settings 59%.⁷

Many studies have proved that wealth and education is directly proportional to antenatal care in Pakistan. In underprivileged poor rural women are less likely to use antenatal care than women in rich and upper class households. Women with secondary education are twice to thrice more likely to have antenatal care than women with no education.⁸ According to results of a survey conducted in 2006-07; women's wealth and status was found to be one of the determinants of seeking skilled care. Women belonging to poor families had five times less access to skilled health care compared to their richest one.⁹

MATERIAL & METHODS:

This cross-sectional study conducted at semi-urban settings of Taluka Hala District Matiari from August to September, 2014. 320 women who have recently delivered a child whose age at the time of survey was from day 1 to 28 days; in which we have assessed the antenatal care seeking behavior of women & Tetanus Toxoid Vaccination coverage. Sample was selected by Simple Randomized (Probability) Sampling. It has two sets of variables; one set related with demographic variables of the participant (age, sex, number of children, Educational status of women

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& her husband & Socioeconomic status); while other set of variables related to Antenatal Care & Tetanus Toxoid Vaccination (ANC visits, Skill Birth Attendance, Place of delivery, Mode of delivery) along with inclusion & exclusion criteria.

Data was collected on pre-tested structured questionnaire based on variables described above. It took about a month to complete the collection of data through interviewing the respondent women. All data was entered in SPSS 22 version. Data analysis was done to produce frequencies and percentages of different variables. Data is presented by frequency tables and charts. Certain variables of interest were compared through application of other non-parametric tests i.e. Pearson's Correlation.

RESULTS:

Result Part-A:

Study found that 76.57% women are literate having primary, secondary, graduates and masters mean while 23.43% of women were illiterate; in comparison to women's husbands 83.44% were literate having primary, secondary, graduates and masters mean while 16.56 % were illiterate.

About 42.18% of women were housewife, 31.56% percent women were government employee and 26.25% of women were private employee. In comparison to women, 3.12% husbands were farmers and 14.06% were labourer, 29.68% private employee and 14.06% self employed.

Antenatal Care:

Study findings show that 81.25% of women received antenatal care from a skilled birth attendant.





Fig 2: Number of ANC Visits Paid



Fig 3: Antenatal Care Performed by



Fig 4: Antenatal Care is Important



Fig 5: Place of Delivery

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Fig 6: Mode of Delivery %

Immunization: Study findings show that 74.37% of women received Tetanus Toxoid Vaccination during pregnancy



Fig 7: T.T Vaccine in Last Pregnancy

Result Part-B: Significant Correlation:

The study results by Person's correlations show that there is significant correlation (association) between the number of ANC visits paid by women and education, occupational Status of women & her husband (p=0.001) and monthly Income/ Economical Status of the family/ household (p=0.004).

DISCUSSION:

There are many health-care challenges and issues in developing countries including Pakistan. There is a shortage of the basic health-care services, insufficient infrastructure, incompetent health system, lack of education. Very minimum per capita income is used for public health sector, poor health status indicators, inadequate budgets and reliable funding; ineffective implementation due to lack of technical skills; poor understanding of correlation between health, poverty and economic growth. The key health indicators of the people of Pakistan are well underneath the averages for all neighboring countries especially maternal health regarding Antenatal Care resulting to unfavorable outcomes for both women and newborns babies. Antenatal care is major component of the Safe Motherhood; its importance cannot be denied. The rural pregnant women receive less antenatal care, while women belonging to urban settings (major cities) are able to take advantage of these services.¹⁰

According to the current estimates, 81% of women belonging to under developing countries receive antenatal care from a skilled health provider at least once during pregnancy.¹¹

This research study results that 81.25% of women received antenatal care from a skilled health provider. Mean while 36.15% of women received Antenatal Care from Lady Doctor, 33.85% by Lady Health Visitor and 30% by Midwives. About 44.62% women have four Antenatal Care visits in their last pregnancy.

According to PDHS 2012-13, 64% women were protected against neonatal tetanus at their last birth. Highest in urban areas 75% than rural areas 59%.⁷ Tetanus Toxoid coverage is very low and far from universal coverage amongst pregnant women in Pakistan. This research study results show comparable results 74.37% women have received two doses of Tetanus Toxoid vaccination to prevent neonatal tetanus.

As the Hala comes in Semi-Urban Region, so results of this study are very much comparable with PDHS 2012-13 in both Antenatal & Tetanus Toxoid Vaccination coverage.

This study results shows significant correlations (association) between the number of ANC visits paid by women and Education Status of Women and her husband P-Value (P=0.001). Women with secondary education have twice times more likely to have antenatal care than illiterate one. Women belonging to poor and underprivileged households are less likely to utilize antenatal care than women in well-off families.

Results of this study are also expressing significant correlation between the number of ANC visits paid by woman and Occupational Status and Monthly Income/ Economical Status of the family or household (P=0.004).

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CONCLUSION:

This research study results conclude that with the passage of time ANC and Tetanus Toxoid Vaccination coverage has increased but current study is highlighting the need of universal coverage of ANC & T.T Vaccine. This would ensure the provision of basic health services to the women; it will ultimately help to achieve Millennium Development Goals (MDGs) 4 and 5. Considering this necessitate, there is also necessary to increase the literacy level and empowerment of women in country.

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