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#### **Research Article**

# To Study the Knowledge, Attitude and Practices Regarding Antenatal Care among Pregnant Women in Haldwani Block, District Naintal (Uttarakhand) India

Authors

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#### **Abstract**

Appropriate antenatal care (ANC) is one of the pillars of this initiative. Antenatal care is considered as a backbone of obstetrical services of any health of pregnant women and is the way in which maternal and fetal complications are detected and managed. It highlights the care of antenatal mothers as an important element in maternal healthcare as appropriate care will lead to successful pregnancy outcome and healthy babies. Safe motherhood by providing good antenatal care (ANC) is very important to reduce maternal mortality ratio and infant mortality rate and to achieve millennium development goals. Mothers and children comprise approximately 71.14 percent of the population of the developing countries. MMR among Indian women national average of MMR is 212 per 100,000 live births (SRS-2007-2009) which in itself is very high compared to the international scenario. Infant Mortality Rate (IMR) in India is 40.5 deaths/1,000 live births (SRS-2013), In male 39.2 deaths/1,000 live births and in female 41.8 deaths/1,000 live births is compared to the IMR in Uttarakhand is 34 deaths/1,000 live births (SRS, 2012). The World Health Organization (WHO) reported that in 2015 around 830 women died every day from problems in pregnancy and childbirth only 5 of the women who died lived in high income countries, the rest of the women lived in low income countries. The objective of the present study is awareness about the ANC among pregnant women, knowledge and practices regarding elements of ANC care and to give suggestions to improve the maternal health practices. The study area: Haldwani (Nainital), study population: all pregnant women registered in Government hospital in Haldwani, study design: cross sectional study, study period: January, 2017 to February, 2017. Graphical presentation is used to describe the results of the various factors responsible for ANC.

The study shows that ANC women, 15.56 % are illiterate so they are not aware about their health during their pregnancy and health workers don't provide them adequate information about the Government schemes. Maximum number of pregnant women are aware of their health and fetus, visit health centers regularly for their ANC checkups. They are agreed that smoking and alcohol consumption is bad for fetus as it causes growth retardation. Some of the pregnant women are agreed for the IFA tablet supplementation during pregnancy instead of that they are not taking IFA tablets during their pregnancy. Some of the respondents are delivered their baby at home because of their fear of miscarriage or risk at hospital.

Keywords: Antenatal care (ANC), Pregnant women, MMR, WHO, Health.

#### Introduction

Mother and child is one unit. It is because during the antenatal period, the fetus is a part of the mother. The period of development of fetus in mother is about 280 days. During this period the fetus takes all the building materials in oxygen from the mother's blood. A healthy mother brings forth a healthy baby. Child health is exclusive related to mother's health. They have a less chance for pre-mature birth, stillbirth or abortion. After birth the child is completely dependent upon the mother's for feeding. The mental and social development of the child is also dependent upon the mother. The health of the mother affects the overall growth and development of the child. The safe motherhood initiatives, a worldwide effort were launched by the World Health Organization in 1987 which aimed to reduce the number of deaths associated with pregnancy and childbirth. Appropriate antenatal care (ANC) is one of the pillars of this initiative. Antenatal care is considered as a backbone of obstetrical services of any health of pregnant women and is the way in which maternal and fetal complications are detected and managed. It highlights the care of antenatal mothers as an important element in maternal healthcare as appropriate care will lead to successful pregnancy outcome and babies.

The maternal health status of Indian women was noted to be lower as compared to other developed countries. Promotion of maternal and child health has been one of the most important components of Family Welfare Program me of the Government of India. For sustainable growth and development of country, there is a need to improve MCH Care in the country. Safe motherhood by providing good antenatal care (ANC) is very important to reduce maternal mortality ratio and infant mortality rate and to achieve millennium development goals. Mothers and children comprise approximately 71.14 percent of the population of the developing countries. In India, women and child bearing agegroup (15-44 years) constitute 22.2 percent. They problems affecting the health of mother and children are multi-factorial. Despite current efforts, the health of the mother and child still constitutes the maternal health status of Indian women was noted to be lower as compared to other developed countries. Promotion of maternal and child health has been one of the most important components of the Family Welfare Programme of the Government of India. For sustainable growth and development of country, there is a need to improve MCH Care in the country. Safe motherhood by providing good antenatal care (ANC) is very important to reduce maternal mortality ratio and infant mortality rate and to achieve millennium development goals. Mothers and children comprise approximately 71.14 percent of the population of the developing countries. In India, women and child bearing agegroup (15-44 years) constitute 22.2 percent. They problems affecting the health of mother and children are multi-factorial. Despite current efforts, the health of the mother and child still constitutes 22.2 percent. They problems affecting the health of mother and children are multifactorial. Despite current efforts, the health of the mother and child still constitutes one of the most serious health problems affecting the community, particularly in the developing countries.

It was reported that the maternal mortality ratio (MMR) in India has been maintained at a higher level since long. It was reported that the MMR among Indian women national average of MMR is 212 per 100,000 live births (SRS-2007-2009) which in itself is very high compared to the international scenario. Infant Mortality Rate (IMR) in India is 40.5 deaths/1,000 live births (SRS-2013), In male 39.2 deaths/1,000 live births and in female 41.8 deaths/1,000 live births is compared to the IMR in Uttarakhand is 34 deaths/1,000 live births (SRS, 2012).

The health status of women has improved over the years due to concentrated efforts of Government of India, it is still not at par with the international benchmark and is unacceptably high. Health outcome goals established in the 12<sup>th</sup> 5- year plan

are to reduce infant mortality rate to 25 per 1000 live births, to reduce maternal mortality ratio to 100 per 100,000 live births by 2017. To improve maternal health, barriers that limit access to quality maternal health services must be identified and addressed at all levels of the health system. Health knowledge is an important element to enable women to be aware of their health status and the importance of the awareness about their own health during pregnancy.

The World Health Organization (WHO) reported that in 2015 around 830 women died every day from problems in pregnancy and childbirth only 5 of the women who died lived in high income countries, the rest of the women lived in low income countries.

#### **Objectives of the Study**

- 1. To study the awareness about the ANC among pregnant women.
- 2. To study the knowledge and practices regarding elements of ANC care
- 3. To give suggestions to improve the maternal health practices.

# Age wise distribution of the sample respondents Below 20 20-25 25-30 30-35 35 Above 3,7% 2,4% 18,40%

Graph (a) age wise distribution of pregnant women

According to graph (a) shows that maximum number of pregnant women (40.00%) lying between 20 to 25 years age group followed by 25 to 30 year age group (37.77%).

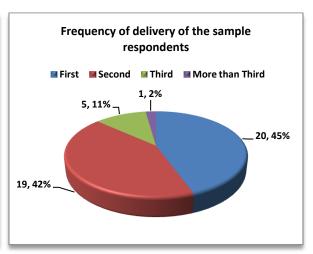
#### Methodology

A Cross-sectional study was undertaken to access the knowledge, attitude and practices regarding antenatal care among pregnant women in Haldwani block. The data is collected by using Simple Random Sampling. The study population comprised of all the pregnant women in the reproductive age-group (15-45 yrs) any of the trimester (1, 2, 3). Ethical approval for conducting the study from the Ethical committee institutional. Written informed consent was obtained from each subject. Confidentiality is maintained.

The data was collected by interviewing all the eligible subjects willing to participants in the study. Predesigned, pre-tested questionnaire was used. An open and closed ended questionnaire was prepared to serve the purpose which contained 40 questions in all. Statistical analysis was performed using appropriate software.

#### **Data Analysis & Interpretation**

The study was conducted on the sample drawn from the respondents in Haldwani block of Nainital district, Uttarakhand. The investigator visited the various health centers in Haldwani block of Nainital district. A random sample of 45 respondents has been collected.

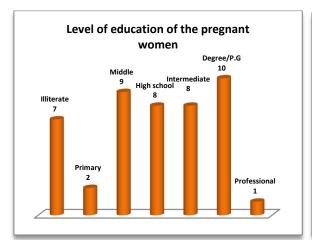


Graph (b) Frequency of delivery of the respondents

According to graph (b) shows that maximum no. of pregnant women (44.44%) possess their first pregnancy, 42.22% pregnant women are those who possess second pregnancy, 11.11% pregnant

women are those who possess their third pregnancy and 2.22% pregnant women are those

who possess more than third pregnancy.



Family Income of the respondent

5,000-10,000

15

10,000-15,000

20,000-25,000

4

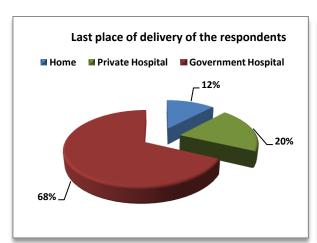
25,000 Above
2

Graph (c) Level of education of the pregnant women

Graph (d) Family income of the respondent

According to graph (c), maximum no. of respondents (22.22%) are well educated having Post Graduate Degree, 20.00% respondents are those who have middle education, 17.78% respondents are those who have educational qualification till High School and 17.78%

respondents are those who have qualification till intermediate, 15.56% respondents are illiterate, 4.44% respondents are those who are primarily educated and only 2.22% respondents are those who have professional qualification.





Graph (e): Last place of delivery of the respondents

Graph (f): Reason of place of last delivery at hospital

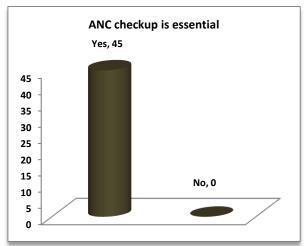
According to graph (d), maximum no. of respondents (33.33%) are those whose monthly family income is lying between 5,000-10,000 Rs., 24.44% respondents are those who are lying between 10,000-15,000 Rs. of their monthly family income, 15.56 % respondents are those whose monthly family income is lying below 5,000 Rs., 13.33% respondents have their monthly family income between 20,000-25,000 Rs., 8.89% respondents are those who possess the monthly

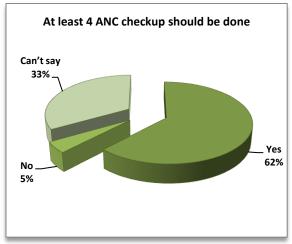
family income between 15,000-20,000 Rs. and only 4.44 % respondents are those whose monthly family income is lying above Rs. 25,000.

According to graph (e), maximum no. of respondents (68.00%) are those who gave birth her last baby at government hospital i.e. they had institutional delivery and 20.00% respondents are those who those who gave birth her last baby at private hospital and only 12.00 % respondents are those who gave birth to their last baby at home.

According to graph (f), maximum no. of respondents (48.00%) are those who have made their last delivery at hospital and health centers because of getting good services, 16.00% respondents stated that they have made their last delivery at hospital due to free care, 16.00% respondents are those who stated that they have

made their last delivery at hospital because of safe delivery, 4.00% respondents have made their last delivery at hospital because of monetary benefit and only 4.00% respondents stated that they have made their last delivery at hospital but they feel that they didn't get any benefit from there.



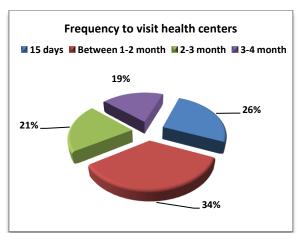


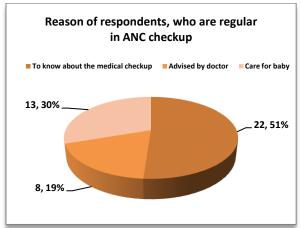
Graph (g): ANC checkup is essential as told by respondent According to above graph (g), 100% respondents are those who are agreed that the ANC checkup is necessary for pregnant women for safe and healthy delivery.

According to graph (h), maximum no. of respondents (62.22%) are those who thought that at least 4 ANC checkup should be done during pregnancy, 4.44% respondents are those who are

Graph (h): At least 4 ANC checkup should be done not in favor of ANC checkup during pregnancy and 33.33% respondents are those.

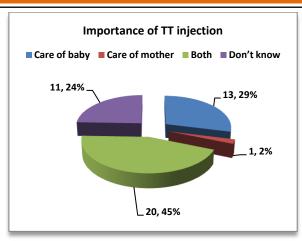
According to graph (i), maximum no. of respondents (95.55%) are those pregnant women who are regular in ANC checkups during their pregnancy and only 4.44% respondents are those who are not regular in ANC checkups during their pregnancy.

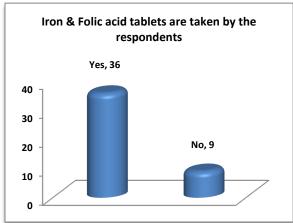




Graph (i): Frequency to visit health centers
According to above graph (j), maximum no. of
respondents (48.88%) are those who are regular in
ANC checkup to know about the medical
checkup, 28.88% respondents are those who are

Graph (j): Reason of respondents, who are regular in ANC checkup regular in ANC checkup for taking care for their baby and only 17.77% respondents are those who are regular in ANC checkup for getting advise by the doctor.





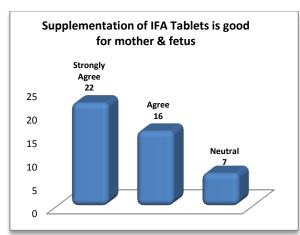
Graph(k): Importance of TT injection

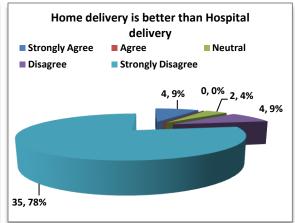
Graph(1): Iron & Folic acid tablets are taken by the respondents

According to above graph (k), maximum no. of respondents (44.44%) are those who thought that during pregnancy the TT injection given to pregnant women is very important for care of both mother and baby, 28.88% respondents are those who stated that the TT injection given to pregnant women is very important for care of baby, 24.44% respondents don't know anything about

importance of TT vaccination and only 2.22% respondents stated that the TT vaccine given to pregnant women is very important for mother.

According to above graph (l), maximum no. of respondents (80%) are take iron and folic acid tablets during pregnancy and 20% respondents do not take iron and folic acid tablets during pregnancy.



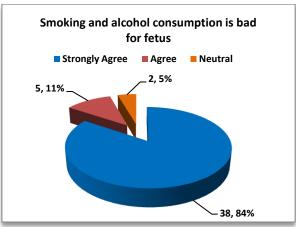


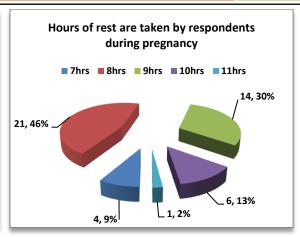
Graph (m): Supplementation of IFA Tablets is good for mother & fetus Grap

Graph (n): Home delivery is better than Hospital delivery

According to above graph (m), maximum no. of respondents (48.88%) are those who are strongly agree about the supplementation of IFA tablets is good for mother & fetus, 35.55% respondents are those who are agree about the supplementation of IFA tablets is good for mother & fetus and only 15.55% respondents are those who are neutral about the supplementation of IFA tablets is good for mother & fetus.

According to graph (n), 78% of respondents strongly disagrees that home delivery is better than hospital delivery followed by 9% respondents disagrees/strongly agrees that home delivery is better than hospital delivery respectively and neutral response by 4% respondents.

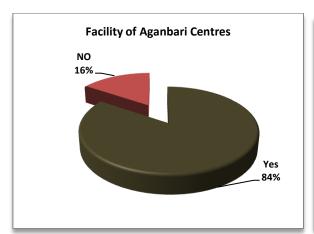




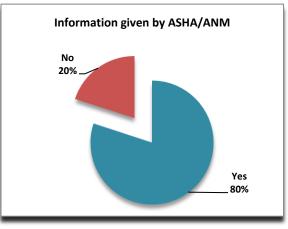
Graph (o): Smoking and alcohol consumption is bad for fetus Gra According to graph (o), 84% of respondents strongly agree that smoking & Alcohol consumption is bad for fetus followed by 11% respondents agree and neutral response by 5 % respondents.

According to graph (p), 46% of respondents take 8 hours rest during pregnancy followed by strongly

Graph (p): Hours of rest are taken by respondents during pregnancy disagrees that home delivery is better than hospital delivery followed by 30% respondents take 9 hrs rest, 13% respondents take 10 hrs rest, 9% respondents take 7 hrs rest and 2% respondents take 11 hrs rest during pregnancy.



Graph (q): Facility of Aganwari Centres



Graph (r): Information given by ASHA/ANM

According to graph (q), 84% of respondents get facility of Aganwari nearby their residence followed by 16% respondents not getting facility of Aganwari.

According to graph (r), 80% of respondents agrees that ASHA/ANM give information about all programs of government hospitals and 20% respondents not agrees on the above.

#### **Findings**

1. 40% of pregnant women lying between 20 to 25 years age group followed by 25 to 30 year age group (37.77%).

- 2. 44.44% of pregnant women possess their first pregnancy, 42.22% pregnant women are those who possess second pregnancy, 11.11% pregnant women are those who possess their third pregnancy and 2.22% pregnant women are those who posses more than third pregnancy.
- 3. 22.22% of respondents are well educated having Post Graduate Degree, 20.00% respondents are those who have middle education, 17.78% respondents are those who have educational qualification till High School and 17.78% respondents

- are those who have qualification till intermediate, 15.56% respondents are illiterate, 4.44% respondents are those who are primarily educated and only 2.22% respondents are those who have professional qualification.
- 4. 33.33% of respondents are those whose monthly family income is lying 5,000-10,000 between Rs.. 24.44% respondents are those who are lying between 10,000-15,000 Rs. of their family 15.56 monthly income, respondents are those whose monthly family income is lying below 5,000 Rs., 13.33% respondents have their monthly family income between 20,000-25,000 Rs., 8.89% respondents are those who possess the monthly family income between 15,000-20,000 Rs. and only 4.44 % respondents are those whose monthly family income is lying above Rs. 25,000.
- 5. 68% of respondents are those who gave birth her last baby at government hospital i.e. they had institutional delivery and 20.00% respondents are those who those who gave birth her last baby at private hospital and only 12.00% respondents are those who gave birth to their last baby at home.
- 6. 48% of respondents are those who have made their last delivery at hospital health centers because of getting good services,16.00% respondents statedthat they have made their last delivery at hospital due to free care, 16.00% respondents are those who stated that they have made their last delivery at hospital safe delivery, 4.00% because of respondents have made their last delivery at hospital because of monetary benefit and only 4.00% respondents stated that they have made their last delivery at hospital but they feel that they didn't get any benefit from there. 100% pregnant

- women are those who are agreed that the ANC checkup is necessary for pregnant women for safe and healthy delivery.
- 7. 100% respondents are those who are agreed that the ANC checkup is necessary for pregnant women for safe and healthy delivery.
- 8. 62.22% of respondents are those who thought that at least 4 ANC checkup should be done during pregnancy, 4.44% respondents are those who are not in favor of ANC checkup during pregnancy and 33.33% respondents are those.
- 9. 44.44% of respondents are those who visit health centre between 1-2 month, 33.33% respondents are those who visit health centre within 15 days, 26.66% respondents are those who visit health centre between 2-3 months and 24.44% respondents visit health centre between 3-4 months and only 8.88% respondents are those who can't say anything about visiting health centre.
- 10. 48.88% of respondents are those who are regular in ANC checkup to know about the medical checkup, 28.88% respondents are those who are regular in ANC checkup for taking care for their baby and only 17.77% respondents are those who are regular in ANC checkup for getting advise by the doctor.
- 11. 44.44% of pregnant women (44.44%) are those who thought that during pregnancy the TT injection given to pregnant women is very important for care of both mother and baby, 28.88% pregnant women are those who stated that the TT injection given to pregnant women is very important for care of baby, 24.44% pregnant about women don't know anything importance of TT vaccination and only 2.22% pregnant women stated that the TT vaccine given to pregnant women is very important for mother.
- 12. 80% of respondents are take iron and folic acid tablets during pregnancy and 20%

- respondents do not take iron and folic acid tablets during pregnancy.
- 13. 48.88% of respondents are those who are strongly agree about the supplementation of IFA tablets is good for mother & fetus, 35.55% respondents are those who are agree about the supplementation of IFA tablets is good for mother & fetus and only 15.55% respondents are those who are neutral about the supplementation of IFA tablets is good for mother & fetus.
- 14. 78% of respondents strongly disagrees that home delivery is better than hospital delivery followed by 9% respondents disagrees/strongly agrees that home delivery is better than hospital delivery respectively and neutral response by 4 % respondents.
- 15. 84% of respondents strongly agree that smoking & Alcohol consumption is bad for fetus followed by 11% respondents agree and neutral response by 5 % respondents.
- 16. 46% of respondents take 8 hours rest during pregnancy followed by strongly disagrees that home delivery is better than hospital delivery followed by 30% respondents take 9 hrs rest, 13% respondents take 10 hrs rest, 9% respondents take 7 hrs rest and 2% respondents take 11 hrs rest during pregnancy.
- 17. 84% of respondents get facility of Aganwari nearby their residence followed by 16% respondents not getting facility of Aganwari.
- 18. 80% of respondents agrees that ASHA/ANM give information about all programs of government hospitals and 20% respondents not agrees on the above.

#### Conclusion

The women who are attempting for second or more than second pregnancy, they have more awareness & knowledge about ANC checkups during pregnancy. According to data 15.56 %

respondents are illiterate so they are not aware about their health during their pregnancy and ASHA workers don't provide them information properly about the government schemes running for pregnant women. On the other hand near about 85% respondents are literate and they are also aware of their health and fetus and they also get benefit from the government schemes and they also visit health centers regularly for their ANC checkups. Some of the pregnant women are agreed for the IFA tablet Supplementation during pregnancy, instead of that they are not taking IFA tablets during their pregnancy. Some of the respondents are delivered their baby at home because of own fair of miscarriage or risk at hospital.

The women who are attempting for II<sup>nd</sup> or more than II<sup>nd</sup> pregnancy, they have more awareness & knowledge about ANC checkups during pregnancy. According to study of ANC women, 15.56 % respondents are illiterate so they are not aware about their health during their pregnancy and health workers don't provide them adequate information about the Government schemes for pregnant women.

On the other hand, near about 85% respondents are literate and aware of their health and fetus and they also get benefit from the government schemes. Maximum of pregnant women visit health centers regularly for their ANC checkups. Some of the pregnant women are agreed for the IFA tablet Supplementation during pregnancy, instead of that they are not taking IFA tablets during their pregnancy. Some of the respondents are delivered their baby at home because of their fear of miscarriage or risk at hospital. Maximum number of pregnant women are agreed that smoking and alcohol consumption is bad for fetus as it causes growth retardation.

#### **Suggestions**

1) Family and community involvement is crucial for healthy home behaviors during pregnancy and has been shown to be a major determinant of use of antenatal care

- services. Establishing links between the community and the facility can increase utilization of services, including ANC, and impact maternal and neonatal mortality as well as stillbirths.
- Family members support can help the woman follow the ANC recommendations, encourage shared decision making, and improve the health for both mother and newborn.
- 3) Community interventions to help people change their behavior can also play a part.
- 4) Government should more trained to health workers in rural areas i.e., ASHA/Aganwari more of ANC care. Health workers i.e., ASHA/Aganwari should educate pregnant women for current government schemes like JSY, JSSK, NSSK etc to make the maternal health programmes more successful.
- 5) ASHA workers should provide properly information about the running government programmes to the pregnant women.
- 6) There should be a counseling facility for the pregnant women and their family to remove the fare of institutional delivery.
- 7) The pregnant women should take at least 8 hrs rest in night and 2hr at day time.
- 8) The pregnant women who are of traditional thought and have more than two children; they should also be get awarded and informed about family planning by the ASHA workers because it is harmful for their health.

#### References

- 1. Henok Andualem, Worku Hamelmal, Getachew Hana, and Workiye Haile, (2015), "Knowledge, Attitude & practice of Antenatal Care service among married women of reproductive age group in Mizan health center, South West Ethiopia", Vol.(16)
- 2. Kishk N,(2002)," Knowledge, Attitude & Practices of Women towards Antenatal

- care :Rural-Urban Comparison", J Egypt Public Health Association.
- 3. Patel B.Barun, Gurmeet Prenaya, Sinalkar R. Dattreya, Pandya H Kapil, Singh Neha and A Mahen,(2016),"Knowledge & Practices of Antenatal care among Pregnant women attending Antenatal clinic at a Tertiary care Hospital of Pune, Maharashtra"
- 4. Pruthi Neha, Bacchani S, and V Singh, S(2016) "Knowledge, Attitude & practice regarding Antenatal Care among husbands attending Antenatal clinic in a Tertiary Care hospital", J Community Med Public Health.
- Govt. of India, MCH Division, (1994)
   "National Child Survival & Safe Motherhood Programm
- 6. Agarwal P, Singh MM, Garg S. (2007) " Maternal health-care utilization among women in an urban slum in Delhi".Indian J Community Med.
- 7. Al-Shammari SA, Khoja T, Jarallah JS.(1994), "The pattern of antenatal visits with emphasis on gestational age at booking in RiyadhHealth Centres. J R Soc Health.
- 8. United Nations. The Millennium Development Goals Report 2011. New York: United Nations.
- 9. World Bank. Safe Motherhood, A Review. The Safe Motherhood Initiatives, (1987-2005) World Bank Report. New York.
- 10. Planning Commission, Government of India. Twelfth Five Year Plan (2012–2017). New Delhi. SAGE Publications, India Pvt Ltd. 2013.