

ANTENATAL CARE: IT 'S EARLY INSTITUTION AND OUTCOME OF PREGNANCY**SUSHILA PAHAL^{a1} AND T. BHATTACHARJEE^b**^{ab}Department of Nursing, College of Nursing, NIMS University, Jaipur, Rajasthan, India**ABSTRACT**

Antenatal care (ANC) is type of preventive health care, with the goal of providing regular check-ups that allow doctors or midwives to treat and prevent potential health problems throughout the course of the pregnancy. It is the care given to a pregnant woman from the time that conception is confirmed until the beginning of labour. The motive is progress of pregnancy while promoting healthy lifestyles that benefits both mother and baby. Antenatal visits to midwife and health care provider include a physical examination generally consists of collection of mother's medical history checking mother's blood pressure, mother's height and weight, pelvic examination and analysis of blood and urine samples.

KEYWORDS: ANC, Rh

Pregnancy with gestation period of nine calendar months and subsequently child birth is normal physiological process. The pregnancy may be associated with various ill effects like anemia, gestational diabetes, pregnancy induced hypertension (PIH), pre-eclampsia etc, which may complicate and often lead on to maternal and neonatal death. Other associated abnormalities like placenta previa, breech presentation may complicate the normal course of pregnancy at the onset of delivery. Adverse effects in relation to fetus like abortions, congenital defects, Rh incompatibility and genetic disorders are some factors which may lead on to neonatal mortality and morbidity. Therefore early and proper care should be given to a pregnant woman during antenatal period to reduce these preventable complications. Result from different research studies conducted on antenatal care worldwide show that the timely institution of antenatal care has shown the safer outcome of pregnancy with lesser chances of maternal and neonatal complications. It has been evaluated that maternal and neonatal mortality in developing countries remained significantly high which could be prevented by early institution of proper antenatal care. It is commonly observed that women avail antenatal care very late usually in third trimester of pregnancy. (Mayer L, Harrison A et al., 2003) The woman should make her first visit to antenatal clinic as soon as possible after a missed period.

COEXISTING PROBLEMS WITH PREGNANCY

Medical examination during antenatal visits will also detect any potential concern like anemia, gestational diabetes, pre-eclampsia, intra-uterine growth retardation (IUGR), threatened abortion, congenital

malformations and any mal-presentation of baby e.g. breech presentation. The prompt care of these associated ailments during antenatal visits has given excellent results for conduct safe delivery at later date with healthy baby and the safe mother. The antenatal check-ups by midwives make mother more at ease with the changes going in the body during the pregnancy and more comfortable and confident when she goes into labour.

Anemia

Normal hemoglobin level in blood in developing countries is 12gm% , but during pregnancy its level is found low especially in second trimester, therefore early diagnosis and treatment of anemia during antenatal period by prescribing iron and folic acid tablets has proved beneficial for safe outcome of pregnancy and healthy baby. (Cogswell , Parvanta et al.,2003).

Intra-uterine growth retardation of fetus (IUGR)

It is another major problem and requires early attention during antenatal period so that the baby which is growing inside the uterus can gain adequate weight before the delivery. The low birth weight or pre-mature babies are at risk and require intensive care and sometimes ventilator support. Therefore supply of proper balanced diet and good hygienic conditions in antenatal period has given better results. (Deepak Sharma, Sweta et al.,2016).

Gestational Diabetes

Pregnancy related diabetes is another associated ailment observed very often during antenatal visits and its incidence is on rising scale, therefore early

detection and prompt treatment by using oral hypoglycemic and insulin has shown excellent results and safe outcome. The chances of big babies due to diabetes have been averted with proper anti-diabetic treatment. (O Langer et al., 2005).

Immunization

To prevent tetanus in new born babies two doses of tetanus toxoid injections are recommended as prophylactic immunization. The incidence of neonatal tetanus is on declining scale. Immunization with other vaccine like PregMum, Fansidar and Paludrine are also being used these days. (Blencowe, Lawn et al., 2010).

Pregnancy Induced Hypertension (PIH)

Very often pregnancy is accompanied with high blood pressure which has deleterious effect on both mother and fetus, if it is not treated may lead on to eclampsia i.e. generalized convulsions. It is frequently observed in primigravida. The prompt use of anti-hypertensive (methyl dopa and hydralazine) in antenatal period have shown excellent results and safe outcome. (Monica Muti et al., 2015).

Threatened and Habitual Abortions

Expulsion of product of conception before 30 weeks of gestation is known as abortion. This can be prevented by providing proper antenatal care, bed rest, and uterine relaxants and putting of Mc Donald's stitch on uterine cervix in habitual abortion due to incompetent cervical os. (Mabel, Stephen et al., 2008).

Proper Nutrition

Balanced and nutritious diet is essential for expecting mother and growing baby in the womb. Midwives provide an opportunity and recommended dietary intake for the next nine months, including what the woman should not eat. For singleton baby mother need about 300 extra calories per day. (B S Payghan, Swapna et al., 2014).

Syphilis

Sexually transmitted disease can affect the pregnancy severely and can lead on to spontaneous abortions, stillbirth, poor fetal growth and fetal death. Screening for it and VDRL test is built into antenatal program. The infecting organism can pass through the placenta or can infect the baby at the time of childbirth. The use of Penicillin has markedly reduced this

problem. Anti-retroviral treatment reduces the chances of passing it to the newborn. (D. Cal Ham et al., 2015).

Amniocentesis

A diagnostic test carried during second trimester of antenatal period to detect genetic abnormalities such as Down Syndrome, potential uterine infection and baby's health if Rh sensitization is suspected. (Zarko Alfirevic et al., 2003).

Place of conduct of Delivery

Whether hospital or home delivery, proper management is important. Keeping the observed note of associated problems in mind encountered during the antenatal check-ups is the main deciding factor. Some of complicated pregnancies require hospital deliveries with added risks of caesarean sections and intensive care for the newborn. (Yibeltal Tebekaw et al., 2015).

LIMITATION

The concept of instituting antenatal care at every level seems to be a very revolutionary one, but there are multiple hurdles which need to be solved. First and foremost problem is remote settlement of population from health centre, the difficult geographical terrain like hilly or desert landscape (Mathole T, Lindmark G, et al., 2004) is great obstruction to access and avail the health facilities. Socio-economic status of a family of pregnant woman also is second deciding factor, usually poor back ground of a family, devoid her to avail the proper antenatal care. Literacy level of pregnant couple is the third major factor to avail the health benefits. It has also been observed that families with low educational qualification are deprived of antenatal care and it is very difficult to motivate them. Fourthly the ethnic customs (Sarah Corbett, Carol Chelimo et al., 2014) prevent the radical society not to avail the benefits of modern health facilities.

CURRENT STATUS

Although the institution of early antenatal care to every pregnant woman is top priority of every country by the existing governments especially in rural and developing areas but there exists lots of hurdles to make it success. Many programs are being launched to provide free health services to pregnant women like free medical checkups, investigations and medicines. Free transport facilities to health centre are made available to a pregnant woman at time of delivery to make her

comfortable at this difficult time. Even then a large number of pregnant women are deprived of antenatal care especially in slum (N. Nisar, E White et al., 2003) and rural areas (Mumbrane, Rege et al., 2011) where people are ignorant of this health facility. Low literacy, poor socio-economic conditions and physical distance from the hospital (Rajender Raj Wagle et al., 2004) are other contributing factors for high mortality, complication and morbidity. Contrary to it the families in urban settlements who are well educated and economically sound are availing the benefits of antenatal care facilities with lesser rate of complication and better results. Pregnant women who are covered and registered in antenatal clinics are well aware and prepared for the delivery of baby.

CONCLUSION

Antenatal care is an umbrella term used to describe the medical procedures and care that are provided to a pregnant woman. Early institution of antenatal care to every pregnant woman at national level should be encouraged. The motive is to get rid of from the associated ailments which may complicate the normal course of childbirth. It is beneficial to eliminate the all associated problems timely otherwise these will be encountered at later stage. To make it a success, it is essential to minimize the problems faced by pregnant woman to avail the health facilities. She should be motivated for antenatal checkups and advised for future course of delivery. Health care provider should also make a door to door visit in remote areas and guide them about proper health care. Low socio-economic status, poor literacy and religious customs are other negative factors. Aim of antenatal care is an effective strategy in reducing the high mortality worldwide, group discussion with pregnant women on awareness of birth preparedness has played a significant role to achieve the goal. To conclude labour and delivery is the end of pregnancy and beginning of new life, therefore regular antenatal checkups and motivation help in physical and mental preparation of women to relax during those last months, it also prepare them physically and mentally fit for labour, delivery and in the postpartum period.

REFERENCES

Blencowe H., Lawn J., Roper M. and Cousens S., 2010. Tetanus toxoid immunization to reduce

mortality from neonatal tetanus, *International journal of Epidemiology*, **39**:102-109.

Payghan B.S. and Kadam S.S., 2014. A comparative study of Nutritional Awareness among urban and rural pregnant mothers; *Research and Reviews: Journal of Medical and Health Sciences*, <http://www.rroj.com>.

Cogswell M.E., Parvanta I., Ickes L., Yip R., et al., 2003. Iron supplementation during pregnancy, anemia, and birth weight: A randomized controlled trial, *American Journal of Clinical Nutrition*, **78**:773-781.

Ham D.C., Lin C., Newman L., et al., 2015. Improving global estimate of Syphilis in Pregnancy by diagnostic test type: A systemic review and meta analysis; *Internayional Journal ofGynaecology & Obstetrics*, **130**:10-14.

Sharama D., Shastri S., et al., 2016. Intrauterine growth restriction: Antenatal and Postnatal Aspects, *Clin Med Insights Pediatr*, **10**:67-83.

Lie L.S.M., Roboson S.C. and May C.R., 2008. Experiences of abortions: A narrative review of qualitative studies, *BMC Health serv Res.*, **8**:150.

Mathole T., Lindmark G., Majoko et al., 2004. A qualitative study of women's prospective of antenatal care in rural areas of Zimbabwe. *Midwifery*, **20**(2):122-132.

Muti M., Tshimanga M., et al., 2015. Prevalence of pregnancy induced hypertension and pregnancy outcomes among women seeking maternity services in Harare Zimbabwe. *BMC Cardiovascular Disorder*, **15**:111.

Mumbare S.S. and Rege R., 2011. Antenatal care services utilization, delivery practices and factors affecting them in tribal areas of north Maharastra. *Indian Journal Community Medicine*, **36**:287-90.

Myer L. and Harrison A., 2003. Why do women seek antenatal care late? Prospective from rural South Africa; *Journal of Midwifery & Women's Health*, **48**:268-272.

Nisar N., White E., et al., 2003. Factors affecting utilization of antenatal care among

reproductive age group women in an urban squatter settlement of Karachi. Journal of Pakistan Medical Association.

Langer O., Yogeve Y., Most O. and Xenakis E.M.J., 2005. Gestational diabetes: the consequences of not treating, American Journal of Obstetrics and Gynaecology, **192**(4):989-997.

Wagle R.R., Sabroe S. and Nielsen B.B., 2004. Socioeconomic and physical distance to hospital as predictors for place of delivery; an observation study from Nepal BMC Pregnancy and Childbirth, **4**:8.

Corbett S., Chelimo C. and Okesene-Gafa K., 2014. Barriers to early utilization of antenatal care in multi-ethnic sample in south Auckland New Zealand. The New Zealand Medical Journal, **127**:1404.

Tebekaw Y., Mashala Y.J., et al., 2015. Factors influencing Women's Preferences for Places to give Birth in Addis Ababa, Ethiopia; Obstetrics and Gynecology International, Article ID 439748, 7pages.

Alfirevic Z., Mujezinovic F. and Sundbg K., 2003. Aminocentesis and chronic villus sampling of prenatal diagnosis, Cochrane Database Syst Rev., (3): CDOO3252.