Knowledge and Practice of Antenatal Care among Chepang Women from Chitwan, Nepal

Ms. Sunita Shrestha¹, Ms Rashmi Shrestha¹, Mr. Tej Kumar Shrestha²*, Prof. Dr. Erene Shrestha³, Prof. Dr. Sarala Joshi⁴, Mr. Ganesh Paudel ⁵

¹Lecturer, Om Health Campus, Kathmandu, Nepal

²Lecturer, Khwopa College, Dekocha, Bhaktapur, Nepal

³Professor, Padma Kanya Campus, Kathmandu, Nepal

⁴Principal, Om Health Campus, Kathmandu, Nepal

⁵Assistant Planning Officer, Department of Forest, Babarmahal, Kathmandu

*Corresponding Author: *Tej Kumar Shrestha, Lecturer, Khwopa College, Dekocha, Bhaktapur, Nepal, Email: tejthaiva@hotmail.com*

Abstract

Introduction: *Chepang are marginalized ethnic people deprived of basic services with poor access to health facilities which makes them vulnerable particularly Chepang women during pregnancy.*

Methods: *This research was conducted in Kalika Municipality of Chitwan district, among reproductive age women of Chepang community with an objective to understand the knowledge and practice of antenatal care.*

Results: *This study shows that their knowledge and practice is directly associated with their education level viz. the number of children, visits to health posts, etc increase and decrease with their education level.*

Conclusion: *With very few populations of this indigenous community scattered in various districts of Nepal, it is important to help them to gain education which can help to reduce the mortality rate of mother and baby and live healthy.*

Keywords: *Chepang, antenatal care, reproductive age, pregnancy.*

1. INTRODUCTION

The Chepang are locally called "Praja" meaning citizen that are Tibeto-Burman indigenous groups in Nepal. The Chepang reside in the steeper slope of the Mahabharat range at elevation of 500 to 1200 mean sea levels (Bista, 1967). They are extremely marginalized ethnic people with own ethnic language. They are also characterized by linguistic, cultural, religious, and economic commonalities (Sharma, 2011). They worship the nature which provides them food, cloth and shelter for their wellbeing. The Chepang community with a population of 68,399 constitutes (0.25%) geographically, 1,655 in urban area and 66,744 in rural area (CBS, 2011). More than 98% of the Chepang live in Chitwan, Makwanpur, Dhading and Gorkha districts and among them, 42% of total Chepang population live in Chitwan alone (NCA, 2009). More than three quarter of the Chepang community are illiterate and although the literacy rate in Nepali is increasing 54.1 % of the population is literate,

only one percent of the Chepang know how to read and write (UNRCHCO, 2012).

Antenatal care is very poor among the low socioeconiomic pregnant women because of their negative life events and these group of women rarely seek for the prenatal care (Maquis & Butler,2001) . It is a periodic and regular supervision including examination and advice of a woman during pregnancy that includes health education, counselling, screening and treatment for better and positive outcome of both mother and baby. (Di Mario et al., 2005). Antenatal care is "a comprehensive antepartum care program that involves a coordinated approach to medical care and psychological support that optimally begins before conception and extends throughout the antenatal care". Early and timely antenatal care reduces the chances of prematurity, intrauterine growth retardation, congenital deformed newborn and prompt treatment of any complications during antenatal periods (Fraser, 2013). Supplements of 400 mg of folic acid per

day at least 4 weeks before pregnancy and 28 days after the conception can reduce the probability of birth defect, particularly neural tube defect (Berry et al.,1999).World Health Organization (WHO) in November 2016 recommended the number of antenatal visit should be at least 8 times during pregnancy, considering that minimum eight contact of antenatal care reduces perinatal mortality up to 8/1000 (0.8%) birth (WHO, 2016) but Government of Nepal is still focused on four antenatal visit.

Chepang community is deprived of the basic human needs such as food and shelter. Low literacy rate with approximately 23% of the total population, little knowledge on health issues such as Safe Motherhood and early marriage has made them more prone to poor health. Data shows that only 40% Chepang have access to primary health care services while only 25% receives basic health services from the health posts (NCA, 2009). This study seeks to assess the condition of antenatal care among the reproductive age women in Chepang community and determine the knowledge and practices of antenatal care in this target group.

Approximately entire world's (99%) maternal death is recorded in developing countries, making maternal mortality the health statistics with largest disparity between developed and developing countries (WHO, 2011). In global context, each year there are at least 3.2 million still born babies, 4 million neonatal deaths and more than 0.5 million maternal deaths. A key reason for this situation is the gap between what is needed and what exists in terms of skills and geographical availability of human resources at local, national and international levels (WHO, 2011). A study conducted in 2000 in Africa, showed that annually 150,000 African women died due to pregnancy and child bearing complications. The main cause of this problem was delay in arrival to hospital, low quality hospital and lack of Traditional Birth Attendants (Luck, 2000). In sub-Saharan Africa, around 900,000 babies die as still birth in last trimester of the pregnancy. It is estimated that two third of the still births are recorded before the onset of labour, antepartum period. Mortality rates remained high in all African countries more than 22 /1000 (2.2%) births (Lincetto, WHO). The maternal mortality in the third world countries like Ethiopia has 673/100,000 (0.673%) and infant mortality rate of 77/1000 (7.7%) in 2005 (EDHS, 2005).

According to trends of Maternal Mortality Ratio (MMR) in Nepal there was 281/100,000 (0.28 %) in 2006 that reduced to 170/100,000 (0.17 %) in 2011, however it raised to 239/100,000 (0.239%) in 2016 and target for 2017 and 2020 are 151/100,000 (0.15 %) and 127/100,000 (0.127 %) respectively. Similarly, Neonatal Mortality Rate (NMR) was 33/1000 (3.3 %) live births in 2006 (DHS, 2011) that reduced to 23/1000 (2.3 %) in 2014, 21/1000 (2.1%) in 2016 and target for 2017 and 2020 are 17/1000 (1.7 %) and 14/1000 (1.4 %) respectively (NHSP-IP,2016-2021).

2. MATERIALS AND METHODS

2.1. Study Site

This research was conducted in Samfrang, Darbetar, Dogra, Kuwapani villages (formerly Shaktikhor VDC) of Kalika Municipality of Chitwan district. Chitwan district is approximately 110 km from Kathmandu via road. The study site is situated on the northern part of the Chitwan district which is approximately 30 km from district headquarter Bharatpur and 17 km from the East West highway.

2.2. Data Collection and Analysis

This research is based on the primary data information collected among the reproductive age women of Chepang community using semi structured questionnaire. Data from field was collected between April 2016 and January 2017. 100 respondents were selected using purposive sampling methods among the target women from the site. Field data were entered using SPSS 20 version for data analysis. Chi-square test was conducted to assess the association between different variables and ANC.

3. RESULTS

This paper solely focuses on the knowledge of the targeted community about antenatal care. Study came up with information regarding knowledge about consultation during pregnancy period, importance of antenatal care, frequency of visits to the health care, types of complication during pregnancy, awareness on anemia and their precautions, restriction and rest during pregnancy and smoking and drinking alcohol effects.

3.1. Importance of Antenatal Care

More than half (52 %) of this community did not know the importance of the antenatal care. One third (31%) of this group informed that antenatal care would be helpful for monitoring the health of both mother and baby. 10% told that this

would maintain and monitor the health condition of mother while 7 % told this would monitor the fetal condition during pregnancy.

3.2. Number of Children Against Literacy

Most (82.34 %) of the literate group of this community had up to 2 children with rest (17.64 %) 3-5 children. In contrast few (30.30 %) of the illiterate group had up to 2 children while most (69.70%) had either 3-5 (43.95%) or more than 6 (25.75%) children. The association between the literacy and number of children was found significant (P=0.000, df= 2, α =0 .05). This shows that the number of children is dependent on the literacy level viz it is uncovered that illiterate women have more number of children than the literate women.

3.3. Number of Antenatal Visit Against Literacy

In regard to the antenatal visit by both literate and illiterate group, more than half of the literate group of targeted community (61.8%) had more than 4 antenatal visits while only less than one third (31.8%) of the illiterate had less than 4 antenatal visit. There was significant association between the literacy and number of antenatal visit (P=0.014, df=3, α=0.05). This shows that the number of antenatal visit is dependent on the literacy level which means that literate women have more antenatal visits compared to illiterate women.

3.4. Complication During Pregnancy

Table1. *Complications, consultation and complication types*

Complication arises during pregnancy	Frequency	Percent
Yes	37	37%
No	63	63%
If yes, consulting person during complications (Multiple response)		
Local healers	60	59.4%
Families and Friends	27	26.7%
Health personnel	14	13.9%
Types of complication faced during pregnancy (Multiple response)		
Edema on hand, face and feet	31	48.4%
Severe Headache	21	32.8%
Blurred vision	1	1.6%
Per vaginal bleeding	2	3.1%
Seizures	2	3.1%
Loss of fetal movements	7	10.9%

Types of complications and consultations by the respondents during pregnancy period were uncovered in this part of study. About 37 % of the respondents accepted that they suffered from complications while 67 % did not suffer from such complications. Most of those (59.4%) consulted with the local healers, while 26.7 % and 13.9% consulted with families, friends and health personnel respectively. Most of complications were edema on hand, face and feet (48.4%), severe headache (32.8%), loss of fetal movements (10.9%). Table 1 has detail on the complications.

3.5. Number of Antenatal Visit

42 % visited to antenatal clinic for 4 to 5 times while only 7 % visited antenatal clinic 1 time. More than one third respondents (39%) did not visit antennal clinic at all. The mean of the antenatal visit is 2.22 and standard deviation is 1.30, it means there is little variance in the times of antenatal visit

3.6. Knowledge on Restricted Activities During Pregnancy

Restricted activities during pregnancy	Frequency	%
Yes	54	54
No	46	46
If yes, (Multiple response)	100	
Avoid heavy lifting	37	43.5
Avoid prolong standing	12	14.1
Avoid heavy alcohol drinking and smoking	36	42.4

54 % of the Chepang knew that there are restrictions to some activities during pregnancy. 43.5% of target group knew that there should be avoidance on heavy lifting, followed by 42.4 % avoiding heavy alcohol drinking and smoking and 14.1% avoiding prolong standing. 46 % of this group did not know that any restriction should be made during pregnancy.

3.7. Rest and Sleep According to the Education Level

Education status	Rest and sleep during pregnancy		Total
	Yes	No	
Literate	19 (55%)	15 (45%)	34
Illiterate	20 (30%)	46 (70%)	66
Total	39	61	100

Among the literate respondents, more than half of the respondents (55%) took rest and sleep against 45% not taking rest, while 70% of illiterate did not take any rest with only 30 % taking rest during pregnancy. The more number of literate respondents took rest and sleep during pregnancy thus there was an association between literacy rate and rest during the pregnancy. (P=0.01, df= 1, α=0.05).

3.8. Intake of Iron and Folic acid Against education

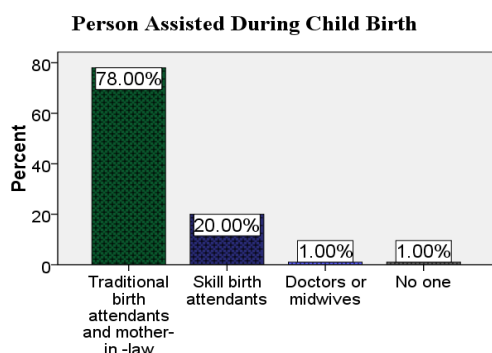| Education level	Intake of Iron and folic acid (IFA) during pregnancy		Total
	Yes	No	
Literate	25 (73.5%)	9 (26.5%)	34
Illiterate	26 (39.4%)	40 (60.6%)	66
Total	51	49	100

The above table shows that almost two third of literate respondents (73.5%) consumed IFA during pregnancy while only one third of the illiterate respondents (39.4%) consumed IFA. Regarding not taking IFA, only one fourth of literate participants (26.5%) did not consumed IFA whereas more than half of illiterate respondents (60.6%) did not take IFA during pregnancy. Literate respondents consumed larger percentage of IFA so there is association between literacy and intake of IFA (P=0.001, df=1, α=0.05).

3.9. Effects of Smoking and Alcohol Drinking During Pregnancy

Effects of smoking & drinking	%
Harms health of the baby	17
Harms health of the mother	21
No harm to health of baby and mother	36
Do not know	26
Total	100

The table shows that less than one fifth (17%) of the respondents responded that smoking and drinking can harm the health of the fetus and about one fifth of the respondents replied that they can harm the health of mother. More than one third of the respondents (36%) said they cause no harm to both mother and baby. One quarter of respondents (26%) did not know about the consequences of the smoking and drinking to during pregnancy.

Delivery of the Chepang women are mostly (78%) assisted by traditional birth attendants and mother in law. They are also benefitted by significant number of skill birth attendants (20%) and low (1%) of Doctors And Midwives While Few (1%) Of Them Are Not Assisted At All.

Person Assisted During Child Birth

4. DISCUSSION

The numbe of Chepang pregnant women with knowledge bout importance of antenatal care is almost half 48%) considerably less than Shafqat et al., 2015 suggesting 82.81% of women are aware of antenatal care. Chepang women knew that the antenatal care would be helpful for both mother and baby. Literacy was found to be significant factor associated with number of birth. Illiterate Chepang women have up to 6 children compared to the literate women having 2 children. Research shows that women under high school level has average of 2.56 birth while those who completed high school and appeared college has only 1.88 and 1.99 birth respectively (Wetzstein, 2011). Number of antenatal visit was also significantly associated with the literacy level and thus literate women had more antenatal visits compared to illiterate women. Considerably few number of Chepang's knew and suffered with complications during pregnancy. It is to be notable that the complications for that community would be either with high risk or the death. This is due to their lack of awareness and education level who neglected low complications during pregnancy. Most (86%) of them consulted still consulted with the local healers and their close ones, while only 14% consult with the health personnel. Literacy was also the significant factors for restriction activities during the pregnancy where almost half of the target women were not aware about the restrictions and 70% of illiterate women avoided taking rest during pregnancy.

This can be one of the crucial issues which can harm pregnant women and their baby during birth. Similarly, significant women from this community confirmed any harms to mother and baby due to smoking and drinking during pregnancy, which can affect negatively to this community due to lack of their understanding this finding is very similar to alcohol used during pregnancy in safe level is uncertain teratogenic risk on fetus while heavy binge drinking can harm the fetus (Gladstone et al.,1996). NMCTH report indicates that 87% of the pregnant mother in Nepal attends antenatal visits more than 4 times which in contrast is seen in the case of Chepang women. There is relation between distance of the available facilities and the NMCTH report shows that women far away more than 6 km are less likely to visit antenatal care. Chepang women are mostly assisted by traditional birth attendants and mother in law with only 20% assisted by skill birth attendants and only 1% by doctors or midwives. This study

is very similar to the study conducted among the socio-demographic factors associated with home delivery assisted by untrained traditional birth attendants in rural Bangladesh in 2013, where 795 of the women have delivered at home by untrained traditional birth attendants (Choudhary et al., 2013)

5. CONCLUSION

To conclude this research finding shows that poverty, high illiteracy, inaccessible to the health centers, traditional culture and practices are the main reason for the incidents of child and maternal mortality rate. Study also shows an association between education and their practices related to ANC in this community. Education for this target group can be very much helpful for the protection of mother and baby and thus reduce the mortality rate of mother and baby that will be one of the important tools to achieve the sustainable development goal and Government of Nepal.

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