

Original Research Article

# Neonatal Risk: Postnatal Mothers' Perceptions and Practices

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## ABSTRACT

**Background:** Early detection of neonatal illness is an important step towards improving newborn survival and generally, reducing neonatal morbidity and mortality requires immediate caregiver's recognition of suggestive danger signs in the neonates.

**Objectives:** The objective of the study was to assess perception and to identify the practices on neonatal risks among postnatal mother.

**Method and Materials:** Descriptive cross-sectional design was used for this study. The population of the study was postnatal mothers having baby from birth to 4 months of age, setting was immunization clinic of Narayani Sub Regional Hospital, Birgunj, Bara and the sample size was 110. Non-probability purposive sampling technique was used for the study. The instrument was semi structured questionnaires, interview schedule was used and data were analyzed as per objectives.

**Results:** Among 110 respondents, 78.2 % of the respondents were between 20 to 35 years of age. More than four fifth that is 81.8% of the respondents from Hindu religion, 74.5% from Madheshi ethnicity, 92.7% were house wife. Among them 49.1% were multipara; 8.2% were grand multi para, male child was 59.1% whereas female child 40.9%, 83.6% was delivered in hospital whereas 16.4% was home, 74.5% was normal delivery whereas 25.5 % was caesarean section

Regarding perception self-verbalization of neonatal risk was measured which listed in interview schedule. Three forth that is 75 % of the respondents verbalized that not feeding since birth or stop feeding is a sign of neonatal risk, 66.7% verbalized fast breathing, 64.8 % verbalized difficulty in breathing. Out of them 88% verbalized fever as neonatal risk, 31.5% said vomiting after every feeding, 74% said excessive crying, 18.5 % of the them verbalized yellowish discoloration as a sign of neonatal risk. Similarly, 11.1% of the respondents said umbilicus infection, 3.7% reported eye infection and 8.3% reported cold body as a neonatal risk. Respondents also verbalized running nose, cold cough, flushed face, pain abdomen, urine stool not passes are also the sign of neonatal risk. Among them nobody cannot be verbalized all sign of neonatal risk according to world Health Organization category.

The study found that only 62.7% of the respondents had fair awareness level whereas 37.3 % of the respondents had poor awareness level. Likewise, none of the respondents had good awareness level.

Regarding practice all most all that is 90.90 % of the respondents had done postnatal dietary restriction in their postnatal period. More than one tenth that is 12.72% of the respondents had given pre-lactal feeding to their neonate. 69.09 % of the respondents had exposed their neonate in morning sun immediately after delivery. 94.54% of respondents had given bath to their neonate in 6/12 days of birth. 36.36 % of the respondents had put oil on neonate's eyes during their neonatal period. More than half that is 59.09 % of the respondents had put oil in neonate's ear, 30 % of the respondents had put oil on neonate's nose, 20.90% of the respondents had put oil on the umbilicus of the neonate during neonatal period. 17.27 % of respondents had already started weaning before 4 months of age of their baby.

Study concluded that perceptions and practices on neonatal risks were poor. Use of traditional harmful practices during sickness of neonate. Thus, need to increased so formal health education on postnatal care that should start from antenatal period help to being a healthy child and decrease morbidity and mortality.

**Key words:** Neonatal risk, Perception, Practice, Postnatal mother

## INTRODUCTION

Early detection of neonatal illness is an important step towards improving newborn survival. [1] Every year an estimated three million children die during their first month of life and about one third of these deaths occur during the first 24 hours. Ninety-nine percent of all neonatal deaths occur in low- and middle-income countries such as the east African nation Uganda, the location of this study. The leading causes are prematurity (35%), severe infections (27.5%), and asphyxia (22.5%). [2] A majority of these newborn deaths occur at home, indicating that few families recognize signs of newborn illness, and/or a majority of the neonates are not taken to health facilities when they are sick. [3] Neonates are more prone to show subtle signs of illness. Listlessness or difficulty feeding are sometimes the only signs present and illness may advance quickly. [4]

Globally more than 7 million infants die each year between births to 12 months. Almost two thirds of infant death occurs in the first month of life. Among those who die in the first month of life, about two thirds die in the first week of life. Among those who die within the first week, two third die in the first 24 hours of life. [5] There are main four direct causes of neonatal death in developing countries: infection [tetanus, sepsis, pneumonia, diarrhea] 32%, birth asphyxia and injuries 29%, complication of prematurity 20%, congenital anomalies 10%. [5]

The Millennium Development Goal for reducing child deaths cannot be met unless we do more to reduce neonatal deaths, especially in Africa and South Asia. [6] It is estimated that 75% of neonatal deaths could be avoided with simple low-cost tools like: antibiotics for pneumonia and sepsis, sterile blades to cut the umbilical cords, and using knit caps and kangaroo care to keep babies warm. [7] This is only possible if mothers' knowledge regarding the above neonatal danger signs is good enough to make decision to seek health service.

Globally, the main direct causes of neonatal death are preterm birth (28%), severe infections (26%), asphyxia (23%), and neonatal tetanus (7%). [8] Information about the causes of neonatal deaths is limited in Nepal. Verbal autopsy findings of newborn deaths in the 2006 Nepal Demographic and Health Survey showed that major causes of death are infections (39%), birth asphyxia/birth injury (33%), congenital anomalies (8%) and pre-maturity or low birth weight (6%). [9] Other Nepalese community- and hospital-based data also suggest infections, birth asphyxia, preterm birth and hypothermia as the most important causes, largely in agreement with the general picture of the developing world. [10]

Nepal is one of the developing countries and the national living standards survey 2003/2004 found that 31% of Nepal's population was below the national poverty line. [11] In Nepal, Neonatal care concept is still new in community and health system. Neonatal danger signs are commonly not recognized. [12] The infant and neonatal mortality rate is very high. Infant mortality rate is 64/1000 and neonatal mortality rate is 33/1000 live births. It is estimated that in Nepal nearly 50,000 children under one year of age die every twelve months. Two thirds of them die within 28 days of age, resulting in over 30,000 deaths per year. The number of neonatal deaths in Nepal is 24,261 in a year, 66 in a day and 3 in an hour. The major causes of neonatal death in Nepal are: serious infection-20.6%, birth injury-18.5%, ARI-18%, birth asphyxia-14.9%, congenital abnormality-8.1%, preterm birth/ low birth weight-5.9%The prevalence of low birth weight is 29%. [12]

Generally, reducing neonatal morbidity and mortality requires immediate caregiver's recognition of suggestive danger signs in the neonates and visiting the nearby clinic. [1]

## MATERIALS AND METHODS

**Study Design:** A descriptive cross-sectional study design was used for study.

**Study Area:** The study setting was the immunization clinic of Narayni Sub Regional Hospital, Birganj, Bara, Nepal. This is government sub regional tertiary level hospital so the patient came from different geographical region with different class of Nepal. So, the patient perspective can be taken from different diversity. It performs two distinct functions. It provides practical field for the academic training programs and renders medical and nursing care to those who need them. The services provided were from basic medical and surgical, obstetrics, gynecology, pediatric problems to intensive care unit. Around 450-500 delivery occur in Labour Room in a month.

**Population:** The population of the study was postnatal mothers having baby from birth to 4 months of age, was included in the study

**Sampling:** Non- probability purposive sampling technique was used for the study. 110 postpartum mothers were taken for the study. Sample size was calculated through prevalence of neonatal mortality rare 33/1000 live birth in Nepal.

**Instrumentation:**

**Neonatal Risk:** it refers to neonatal danger signs as verbalized by postnatal mother which were finally categorized based on World Health Organization.

**Perception:** It refers to postnatal mother's awareness/ view/ opinion towards neonatal risk.

**Awareness:** it refers to information/ understands of fact related to neonatal risks. It will be measured on the basis of score obtained in awareness based question by respondents. Awareness of respondent is categorized in three levels as follows:

Good: more than 75%

Fair: 50 -75%

Poor: 50% and below [13]

Structured questionnaire was used for data collection. Following the development, content validity of the instrument was established by literature review, seeking opinion from the gynecologist, pediatrician, faculty member

of midwifery & nursing research, review literature. Instrument will be divided into two parts: Part I: Questions related to demographic information, Part II: Questions related to perceptions on neonatal risks and Part III: Questions related to practices on neonatal care.

A pretesting (10% of sample) was done in Narayni Sub Regional Hospital, Bara to screen for potential problems in the questionnaire and to get an idea about responses to questions. Modification in instrument was done according to feedback on pretest.

**Validity and Reliability of Tools:**

Following the development, content validity of the instrument was established by literature review, seeking opinion from the gynecologist, faculty member of midwifery & nursing research, review literature.

Pretesting (10% of sample) was done in Narayni Sub Regional Hospital, Bara. Finding of the study was analyzed and presented among research expert. On the basis of response and feedback, correction was made in questionnaires. Modification in instrument was done according to feedback on pretest. The pretested sample was not included in the study.

**Method of Data Collection and Analysis:**

Informed Consent was taken from subjects after they were explained the purpose and relevancy of the study. Interview was taken to postnatal mother having child from birth to 4 months of age. Assurance with regards to confidentiality was provided. After obtaining informed consent from each respondent face to face interview was used to collect the data. Each respondent was given near about 30 minutes of time to collect the data. Data was collected during February-May, 2016 (Phalgun 2072 to Baishak 2073). Collected data was checked, reviewed and organized daily for its completeness and accuracy. Data was entered in the statistical package for social science (SPSS) version 16. The data was analyzed according to the nature of variables. The descriptive and inferential

statistics was used and all were presented in tables.

## RESULTS

**Table 1. Socio-demographic Profile of Respondents n=110**

| Profile                       | Frequency | Percentage |
|-------------------------------|-----------|------------|
| <b>Age in years</b>           |           |            |
| below 20                      | 21        | 19.1       |
| 20-35                         | 86        | 78.2       |
| 35 and above                  | 3         | 2.7        |
| <b>Religion</b>               |           |            |
| Hindu                         | 90        | 81.8       |
| Buddhist                      | 1         | 0.9        |
| Christian                     | 5         | 4.5        |
| Muslim                        | 14        | 12.7       |
| <b>Ethnicity</b>              |           |            |
| Brahmin                       | 14        | 12.7       |
| Kirat                         | 1         | 0.9        |
| Dalit                         | 13        | 11.8       |
| Madheshi                      | 82        | 74.5       |
| <b>Education</b>              |           |            |
| Cannot able to read and write | 43        | 39.1       |
| Can read and write            | 3         | 2.7        |
| Class 1 to 10                 | 50        | 45.5       |
| College and above             | 14        | 12.7       |
| <b>Occupation</b>             |           |            |
| Housewife                     | 102       | 92.7       |
| Government Employee           | 6         | 5.5        |
| Private Employee              | 2         | 1.8        |

Table 1 provides the information regarding socio-demographic profile of respondents. Regarding age maximum that is 78.2 % of the respondents were between 20 to 35 years of age. Whereas 19.1 % of the respondents were from below 20 years of age. The majority of respondents were from madheshi ethnicity that is 74.5 %.

**Table 2. Obstetric History of Respondents n=110**

| Obstetric History                | Frequency | Percentage |
|----------------------------------|-----------|------------|
| <b>Gravida</b>                   |           |            |
| Primi                            | 47        | 42.7       |
| Multi                            | 54        | 49.1       |
| Grand Multi                      | 9         | 8.2        |
| <b>Sex of Child</b>              |           |            |
| Male                             | 65        | 59.1       |
| Female                           | 45        | 40.9       |
| <b>Place of Delivery</b>         |           |            |
| Home                             | 18        | 16.4       |
| Hospital                         | 92        | 83.6       |
| <b>Assistant during Delivery</b> |           |            |
| Health Person                    | 92        | 83.6       |
| TBA                              | 2         | 1.8        |
| Family member                    | 16        | 14.5       |
| <b>Type of Delivery</b>          |           |            |
| Normal Delivery                  | 82        | 74.5       |
| Caesarean Section                | 27        | 24.5       |
| Vaccum                           | 1         | 0.9        |

Table 2 provides the information regarding obstetric profile of respondents. Only 8.2 % was grand multi whereas 49.1 % of the respondents were multi. More than half that is 59.1 % of the respondent's child

sex is male whereas 40.9 % were female. 83.6 % of the respondents had done delivery in hospital whereas 16.4 % of the respondents had done home delivery in last pregnancy. 74.5% had normal vaginal delivery whereas one third that is 25 % respondents had instrumental delivery.

**Table 3. Distributions of Respondents according to Identification of Neonatal Risk n=110**

| Name of Neonatal Risk                | Frequency | Percent |
|--------------------------------------|-----------|---------|
| Not feeding since birth/stop feeding | 81        | 75.0%   |
| Fast breathing                       | 72        | 66.7%   |
| Cold body                            | 9         | 8.3%    |
| Only moves when stimulated           | 23        | 21.3%   |
| Yellow soles/signs of jaundice       | 20        | 18.5%   |
| Skins boils                          | 1         | 0.9%    |
| Diarrhea                             | 48        | 44.4%   |
| Excessive crying                     | 80        | 74.1%   |
| Convulsion                           | 14        | 13.0%   |
| Difficulty in breathing              | 70        | 64.8%   |
| Fever                                | 95        | 88.0%   |
| Umbilicus redness/pus                | 12        | 11.1%   |
| Sign of eye infection                | 4         | 3.7%    |
| Vomiting after every feeding         | 34        | 31.5%   |

This table provides the information about respondents' self-verbalization of neonatal risk. Three forth that is 75 % of the respondents verbalized that not feeding since birth or stop feeding is a sign of neonatal risk, 66.7% verbalized fast breathing, 64.8 % verbalized difficulty in breathing. Out of them 88% verbalized fever as neonatal risk, 31.5% said vomiting after every feeding, 74% said excessive crying, 18.5 % of the them verbalized yellowish discoloration as a sign of neonatal risk. Respondents also verbalized running nose, cold cough, flushed face, pain abdomen, urine stool not passes are also the sign of neonatal risk.

According to this table 80.90% of the respondents use home remedies and 71.81% follow the traditional healer for the management of neonatal risk. Whereas 100 % of the respondent used medicine for the management of neonatal risk. The reason behind the using home remedies is trust (chalan) verbalized by 80.90 % of the respondents. 71.81 % of the respondents used traditional healer for the purpose of oust evil eyes (najarutarna/man shantaparna). Regarding health care provider 98.2 % responses were doctor,

71.81 % were traditional healer. 96.4% of the respondents said the causes of neonatal risk was poor sanitation, 92.7% verbalized lack of care cause neonatal risk, 90 % of

them said organism caused neonatal risk. Whereas 49.1% verbalized neonatal risk is caused by angry god, and 46.4 % said evil spirit may cause neonatal risk.

**Table 4: Perception on Management during Neonatal Risk** n=110

| Perception on risk Management  | Frequency | Percentage |
|--|-----------|------------|
| <b>Measures</b>  |           |            |
| Home remedies  | 89        | 80.90      |
| Traditional Healers  | 79        | 71.81      |
| Medicine   | 110       | 100        |
| <b>Rationale of used measure</b>   |           |            |
| Home remedies- Trust (Biswas, Chalan, )  | 89        | 80.90      |
| Traditional Healers- Trust, Psychological Support, Oust evil eyes (Man Shanta Parna, NajarUtarna ) | 79        | 71.81      |
| Medicine- Healing  | 110       | 100        |
| <b>Health care provider</b>  |           |            |
| Doctor   | 108       | 98.2       |
| Medicine Shopkeeper  | 28        | 25.5       |
| Health person  | 38        | 34.5       |
| Traditional Healers  | 79        | 71.81      |
| <b>Reason of neonatal risk</b>   |           |            |
| Evil spirit  | 51        | 46.4%      |
| Organism   | 99        | 90.0%      |
| Lack of care   | 102       | 92.7%      |
| Angry god  | 54        | 49.1%      |
| Poor sanitation/hygiene  | 106       | 96.4%      |

**Table 5. Home Remedies Used by the Respondents during Neonatal Risk** n=110

| Home Remedies  | Frequency | Percentage |
|--|-----------|------------|
| Cold Sponge during Fever   | 89        | 80.90      |
| Massage by oil, ghee, vix incase of cold & cough   | 89        | 80.90      |
| Stem of plain water, vix, nim, tulsi in case of cold & cough,  | 89        | 80.90      |
| Soup of home indagriends (Tulsi , jwano, honey, dalchini pakaera khuwane) in case of cough                         | 89        | 80.90      |
| Make warm by leaf (Pan ko leaf le sekne) in case of pneumonia  | 15        |            |
| Apply paste of thyme on mother breast (Jwano chapaera mother ko breast ma lagaune) – Oust evil eyes (Najar Utatna) | 79        | 71.81      |
| Spray water (Pani phukera chharkena) –Sato Bolauna   | 79        | 71.81      |
| Smoke of home indagriends (Sarsu, salt, Besar, chilli, lasun ago ma rakhnera stem line)- Sato Bolauna              | 89        | 80.90      |

**Table 6. Distribution of Respondents according to Perception on Newborn Care** n=110

| Newborn Care             | Frequency | Percentage |
|--------------------------|-----------|------------|
| <b>Prelactal feeding</b> |           |            |
| Needed                   | 14        | 12.72      |
| Not needed               | 96        | 87.27      |
| <b>Sun exposure</b>      |           |            |
| Needed immediately       | 104       | 94.54      |
| Not needed               | 6         | 5.45       |
| <b>Bathing</b>           |           |            |
| Immediate after delivery | 0         | 0          |
| After 24 hours           | 110       | 100        |
| <b>Oil on eyes</b>       |           |            |
| Oil needed for eyes      | 47        | 42.72      |
| Not needed               | 63        | 57.27      |
| <b>Oil on ears</b>       |           |            |
| Oil needed for Ears      | 69        | 62.72      |
| Not needed               | 41        | 37.27      |
| <b>Oil on nose</b>       |           |            |
| Oil needed for nose      | 39        | 35.45      |
| Not needed               | 71        | 64.54      |
| <b>Oil on umbilicus</b>  |           |            |
| Oil needed for umbilicus | 27        | 24.54      |
| Not needed               | 83        | 75.45      |
| <b>Weaning</b>           |           |            |
| Below 6 months           | 16        | 14.54      |
| At 6 months              | 90        | 81.81      |
| After 6 months           | 4         | 3.63       |

This table tells that 80.90 % of the respondents used cold sponge during fever, 80.90 % also used massage by oil; ghee; vix in case of cold and cough.

Among them 71.81 % of the respondents applied paste of thyme on mother breast (jwano chapaera mother ko breast ma lagaune) for the purpose ofoust evil eyes(najar utarna), likewise 80.90 % of the respondents used smoke of home indagriends (sarsu; salt; besar; lasun; ago ma rakhne ra stem line) for the purpose of sato bolauna.

According to this table 87.27% of the respondents said that prelactal feeding is harmful for neonate. Out of them more than one tenth that 12.72% of the respondents said prelactal feed is necessary for all neonate. Among them 94.54 % said morning sun exposure is needed for all

neonate immediately after delivery. 100% said neonatal bathing should be done after 24 hours of delivery. Less than half that is 47.72 % of the respondents said that oil must be put on neonate's eyes. 24.54 % of the respondents' said that oil should be put on umbilicus of neonate.

**Table 7. Distribution of Respondents according to Perception on Postpartum Mother Care n=110**

| Postpartum Mother Care     | Frequency | Percentage |
|----------------------------|-----------|------------|
| <b>Dietary restriction</b> |           |            |
| Needed                     | 100       | 90.90      |
| Not needed                 | 10        | 9.09       |
| <b>Bathing</b>             |           |            |
| Immediate                  | 5         | 4.54       |
| Late Bathing               | 105       | 95.45      |
| <b>Antenatal check up</b>  |           |            |
| Yes                        | 106       | 96.4       |
| No                         | 4         | 3.6        |
| <b>Postnatal check up</b>  |           |            |
| Yes                        | 37        | 33.6       |
| No                         | 73        | 66.4       |

Table 6 displays that 90.90 % respondents verbalized postpartum dietary restriction is needed for the both mother and baby health. Only 4.45 % of the respondents' verbalized immediate postpartum bathing is necessary for hygienic purpose whereas 95.45 % said for delay bathing. Only 33.6% respondents verbalized that postnatal checkup is necessary for mother and neonate whereas 66.4% of the respondents verbalized that postnatal checkup is not necessary for mother and neonate in normal condition.

**Table 8. Distributions of Respondents according to Awareness Level on Neonatal Risk**

| Awareness Level | Frequency | Percent |
|-----------------|-----------|---------|
| Good            | 0         | 0       |
| Fair            | 69        | 62.7    |
| Poor            | 41        | 37.3    |
| Total           | 110       | 100     |

This table provides the information that 62.7% of the respondents had fair awareness level whereas 37.3 % of the respondents had poor awareness level. Likewise, none of the respondents had good awareness level.

### Practice on Neonatal Risk

This table provides the information about faced neonatal risk among 110 respondents. Among them 45 respondents

faced neonatal risk during their postnatal period. 42.2 % faced fever, 24.4% faced not feeding well as a neonatal risk. Whereas 22.2 % faced difficulty in breathing, 11.1% faced vomiting after feeding as a neonatal risk. Likewise, 6.7% faced umbilical infection and 4.4% faced eye infection.

**Table 9. Distribution of Respondents according to Presence of Neonatal Risk n=45**

| Presence of Neonatal Risk              | Frequency | Percentage |
|--|-----------|------------|
| Not feeding since birth/stop feeding   | 11        | 24.4%      |
| Fast breathing/Difficulty in breathing | 10        | 22.2%      |
| Yellow soles/signs of jaundice         | 3         | 6.7%       |
| Diarrhea                               | 5         | 11.1%      |
| Excessive crying                       | 5         | 11.1%      |
| Fever                                  | 19        | 42.2%      |
| Umbilicus redness/pus                  | 3         | 6.7%       |
| Sign of eye infection                  | 2         | 4.4%       |
| Vomiting after every feeding           | 5         | 11.1%      |

**Table 10. Distribution of Respondents according to Neonatal Care Practices n=110**

| Neonatal care practices  | Frequency | Percentage |
|--------------------------|-----------|------------|
| <b>Prelactal feeding</b> |           |            |
| Prelactal feed given     | 14        | 12.72      |
| Not given                | 96        | 87.27      |
| <b>Sun exposure</b>      |           |            |
| Immediate                | 76        | 69.09      |
| Late Exposure            | 34        | 30.09      |
| <b>Bathing</b>           |           |            |
| After 24 hours           | 2         | 1.81       |
| 3 days                   | 4         | 3.63       |
| 6 days & 12 days         | 104       | 94.54      |
| <b>Oil on eyes</b>       |           |            |
| Oil put on eyes          | 40        | 36.36      |
| Oil not put on eyes      | 70        | 63.63      |
| <b>Oil on ears</b>       |           |            |
| Oil put on ears          | 65        | 59.09      |
| Oil not put on ears      | 45        | 40.90      |
| <b>Oil on nose</b>       |           |            |
| Oil put on nose          | 33        | 30         |
| Oil not put on nose      | 77        | 70         |
| <b>Oil on umbilicus</b>  |           |            |
| Oil put on umbilicus     | 23        | 20.90      |
| Oil not put on umbilicus | 87        | 79.09      |
| <b>Weaning</b>           |           |            |
| Below 4 months           | 19        | 17.27      |
| Not started yet          | 91        | 82.72      |
| Put Gajal on eyes-       | 110       | 100        |

This table gives the information that more than one tenth that is 12.72% of the respondents had given prelactal feeding to their neonate. 69.09 % of the respondents had exposed their neonate in morning sun immediately after delivery. Regarding practice on neonatal bathing, 94.54% of respondents had given bathe to their neonate in 6/12 days of birth. 36.36 % of the respondents had put oil on neonate's eyes during their neonatal period. More than half

that is 59.09 % of the respondents had put oil in neonate's ear. 20.90% of the respondents had put oil on the umbilicus of the respondents

**Table. 11 Care Practices of Postnatal Mother**

| Practices                             | Frequency | Percentage |
|---------------------------------------|-----------|------------|
| <b>Postpartum dietary restriction</b> |           |            |
| Restriction done                      | 100       | 90.90      |
| Not done                              | 10        | 9.09       |
| <b>Bathing</b>                        |           |            |
| Immediate                             | 5         | 4.54       |
| 3 days after delivery                 | 4         | 3.63       |
| 6/12 days after delivery              | 101       | 91.81      |
| <b>Antenatal checkup</b>              |           |            |
| <4                                    | 39        | 35.45      |
| >_4                                   | 71        | 64.54      |
| <b>Postnatal checkup</b>              |           |            |
| <3                                    | 35        | 31.81      |
| >_3                                   | 0         | 0          |
| Not done                              | 75        | 68.18      |

This table provides the information that nine tenth that is 90.90 % of the respondents had done postnatal dietary restriction in their postnatal period. 91.81 % of the respondents bathed in 6/12 days during their postpartum period. 68.18% of the respondents had not done postnatal checkup for mother & neonate during their postnatal period whereas only 31.81% of the respondents had done less than three times postnatal checkup during their postnatal period.

## DISCUSSION

This study revealed that 62.7% of the respondents had fair awareness level whereas 37.3 % of the respondents had poor awareness level on neonatal risk. Likewise, none of the respondents had good awareness level on neonatal risk. This finding is supported by a study done in Northern Ghana reveal that 77.2% (312) of respondents were aware of one to three newborn danger signs but 20.3% (82) representing less than a quarter of the women were aware of at least four danger signs while only 2.5% (10) of the mothers were not aware of any of the danger signs in the newborn. [14] This findings is also supported by a study done in North West of Ethiopia found that mothers who had knowledge of three or more neonatal danger signs (good knowledge) were found to be

18.2% (95% CI 15.1, 21.3%). Maternal knowledge about neonatal danger signs was low. [15] This finding is also supported by a study done in Enugu state, South-East Nigeria revealed that Knowledge of more than three of the nine WHO recognized danger sign was poor (0.0-30.3%). Majority of the mothers had knowledge of one (i.e. fever) WHO recognized danger sign (95.2%). [16]

## CONCLUSION

The study concluded that more than half of the respondents had fairly perceived whereas more than one third of the respondents had poorly perceived neonatal risk. Likewise, none of the respondents had good perception on neonatal risk. One fifth of delivery takes at home, practice of postnatal dietary restriction, prelactal feeding practices, delayed bathing for mother and baby, Put oil on eye; ear, nose; umbilicus on neonate. Not focus on postnatal checkup and tradition belief on causes of neonatal sickness.

## Recommendations

Formal health education on postnatal care should start from antenatal period. Awareness program for the reduction of teen age and above 35 years pregnancy. Compulsory postnatal checkup and formal health education in each visit about postnatal care.

## Ethical Consideration:

Written permission was taken from Research Division; Rector Office; Tribhuvan University; Kirtipur, Nursing Campus Maharajgunj, Nursing Campus Birgunj, Narayni Sub Regional Hospital; Birgunj; Bara. All the participants were informed about the objective and relevance of the study. Privacy and comfort was maintained while collecting information. Verbal permission was granted from participants as well as assure for privacy and confidentiality and interview was taken for about 30 minutes.

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