

Care Received by Women during Labour at a Tertiary Level Hospital, Nepal

* Beduka Pulami¹, Gayatri Rai², Nirmala Pokharel³, Mangala Shrestha³, Kriti Chaudhary⁴

¹Nursing Officer, BPKIHS, Dharan

²Associate Professor, Maternal Health Nursing, CON, BPKIHS, Dharan

³Professor, Maternal Health Nursing, CON, BPKIHS, Dharan

⁴Assistant Professor, Maternal Health Nursing, CON, BPKIHS, Dharan

*Correspondence: beduka2015@gmail.com

ABSTRACT

Introduction: The adequacies of health care services women receive during pregnancy; intra-natal and postnatal periods are crucial for the survival and well-being of the mother and her new-born. The aim of study was to assess care received by women during labour. Care during labour is directed towards achieving the best possible physical, emotional, and psychological outcome for the woman.

Methods: A descriptive observational design was used in the study. Hundred and fifteen women in active labour were selected through non-probability purposive sampling method. Data were collected by using structured observational checklist and entered in SPSS version 16. Data were analysed by using descriptive statistics i.e. frequency, percentage, mean and standard deviation.

Results: Women received adequate care (81.2%) in Infection Prevention (IP), communication, support, and companionship (70.1%), respectful maternity care (79.7%), first stage of labour (62.4%), second stage of labour (56.9%), third stage of labour (98.8%) and recording and reporting (78.2%). But in overall, only few (3.5%) women received adequate care and almost all(96.5%) of women received average care with mean percentage care score $65.32 \pm 4.648SD$.

Conclusion: The study concludes that the highest proportion of women received average care during labour and only few women received adequate care. Minimal or poor care practices were observed in the use of personal protective device and newborn care. The study suggests that equal focus should be given in all domains of maternity care with due respect while caring to the woman during labour.

Keywords: Care, Labour, Quality, Women

INTRODUCTION

In 2016, estimated maternal mortality ratio in Nepal was 239 deaths per 100,000 live births and pregnancy related mortality ratio was 259 for every 100,000 live births. During the 7 years preceding the survey, 57% of deliveries take place in a health facility and among them only 58% percent of deliveries are conducted by skilled birth attendants (Nepal Demographic Health Survey [NDHS], 2016). The presence of skilled birth attendants is important for averting maternal morbidity and mortality. Unfortunately, qualified midwives, nurses and doctors are often not available in the rural areas of many developing countries where

most women are delivered. All the pregnancies and childbirth are at risk and giving birth to a child is not only a strain for the body, but it also puts the woman's health at risk (Holst, 2014). So, all women need pregnancy care, care in childbirth is most important for the survival of pregnant women (Baral et al., 2012). Despite global progress in reducing maternal mortality, immediate action is needed to eliminate preventable maternal mortality (Leontine et al., 2016). Even in health facilities, however, failures in the processes providing quality of care can result in bad obstetric and neonatal outcomes (Sharma et al., 2017). The quality of care offered at maternity facilities not only affects pregnant

women both emotionally and physically but also has an impact on the long-term health and survival of mothers and neonates. An increased focus on care during childbirth can lead to reductions in disability, maternal and neonatal mortality, and stillbirths (Sharma et al., 2017). Enhancing education and introducing quality improvement systems will help to prevent harmful labour and childbirth practices and implement the evidenced-based practices which ultimately improve the maternal health (Ponndara et al; 2012).

The Nepal government has produced 9,000 skilled birth attendants (SBA) by the end of the 2073/2074 (DOHS Annual Report, 2015/16). Unfortunately, majority of SBAs has been limited to the government health facilities. A few numbers of SBAs are found working in private and other facilities, which are insufficient for coverage especially in the private health facilities. In spite of much information exists and emphasis is given in the quality and adequacy of maternity care in Nepal, there are very few researches have been found on the quality and adequacy of care received by women during labour. Hence, the study aimed to assess the care received by women during labour at a tertiary level hospital.

METHODS

Descriptive observational research design was used to assess the level of care received by women during labour. Hundred and fifteen women in active phase of labor were selected through non-probability purposive sampling technique. Self-developed structured observational checklist was used to collect the data based on WHO recommended guidelines for intrapartum care for a positive childbirth experience (WHO, 2016). It consists total 80 items which included infection prevention and control, use of personal protective equipment, communication support and companionship, care during different stages of labour, care of newborn and recording and reporting. Ethical approval was obtained from IRC, BPKIHS, Dharan and informed consent was taken from each woman. Data were collected from 30 December 2018 to 25 January 2019 by researcher herself through non-participatory observation method. Sample size estimation was done based on the prevalence (63%) of previous study on "Assessment of quality of midwifery care in labour

and delivery wards of selected Kordestan Medical Science University, Tehran, Iran," conducted by (Masoumeh et al., 2009). This study considered 95% confidence interval and 80% power to estimate the sample size. For this purpose, the study considered 63% compatibility with desirable midwifery care provided to women in second stage of labour and 15% permissible of error, sample size was calculated 115 by using the following formula $n = \frac{Z^2pq}{e^2}$. Then, adding 15% (i.e., 14) non-responsive in calculated sample size then it became = 115. The collected data were entered in Microsoft excel and transferred into Statistical Package for Social Science (SPSS) version -16 and descriptive statistics i.e. frequency, percentage, mean and standard deviation were used to analyse the data.

RESULTS

The majority (89.6%) of the women belonged to the age group (21-34) years. The mean age was 24.67 with ± 4.613 SD. Below half (46.1%) of the women belonged to Janajati and majority (81.7%) of the women were Hindu. Similarly, almost all (97.4%) of the women were literate. Majority (60.0%) of women were primi-gravid (Table 1). Regarding the information received by the care providers, 33.3% were proficiency certificate level nurses and majority (70.8%) had less than five years of work experience. Among them, only few (20.8%) had received maternal and neonatal health related training (Table 2).

Describing the different dimensions of care received by women, adequate care (81.2%) in infection prevention (IP) protocol but provider's performance was poor (42.6%) in use of personal protective equipment (PPE). Similarly, women received average care in communication, support and companionship (70.1%), respectful maternity care during labour (79.1%), during first and second stage of labour 62.4% and 56.9% respectively.

Women received adequate care in third stage (98.8%), fourth stages (84.3%) of labour and in recording and reporting (78.2%) whereas, inadequate (49.5%) newborn care were observed. In overall, the result revealed that almost all (96.5%) women received average care and minimal (3.5%) women received adequate care.

Table 1: Socio-demographic Characteristics of Respondents

(n=115)		
Characteristics	Number	Percentage
Age (years)		
<20	9	7.9
21-34	103	89.6
≥35	3	2.6
Mean age in years ± SD (Min – Max)	24.67±4.613	(16 40)
Ethnicity		
Dalit	8	7.0
Janajati	53	46.1
Madhesi	22	19.1
Muslim	2	1.7
Brahmin/Chhetri	30	26.1
Religion		
Hindu	94	81.7
Kirat	9	7.8
Bauddha	6	5.2
Christian	3	2.6
Islam	3	2.6
Education		
Literate	112	97.4
Illiterate	3	2.6
Gravida		
Primi	69	60.0
Multi	46	40.0

Table 2: Characteristics of Care Providers

(n=24)		
Education Level	Number	Percent
ANM courses	2	3.4
PCL Nursing	8	3.3
Bachelor Nursing	2	8.3
PG Student (Nursing)	4	6.6
PG Student (OB/GYN)	4	16.6
Obstetricians (MD)	4	16.6
Work Experience in related field		
>5 years	7	29.2
<5 years	17	70.8
Training related to Maternal and Newborn Care		
Received	5	20.8
Not Received	19	79.2

Table 3: Overall Care Provision for Women in Different Areas and Stages of Labour

(n=115)

Descriptions	Obtained Score (%)	Total Score
Infection prevention during provision of care	654 (81.2)	805
Use of personal protective devices	245 (42.6)	575
Communication, Support and Companionship	645 (70.1)	920
Respectful Maternity Care during labour	275 (79.7)	345
Care received during first stage of labour	646 (62.4)	1035
Care received during second stage of labour	1244 (56.9)	2185
Care received during third stage of labour	909 (98.8)	920
Care received during fourth stage of labour	582 (84.3)	690
Care provision for newborn	455 (49.5)	920
Recording and Reporting	472 (78.2)	604
Total	6127 (68.08)	8999

Table 4: Level of Care Received by Women during Labour

(n=115)

Level of Care	Number	Percent
Inadequate Care (< 50%)	-	-
Average Care (≥50 – 74%)	111	96.5
Adequate Care (≥75%)	4	3.5

DISCUSSION

The mean percentage care score was 65.32. Almost all of women received average care and very minimal women received adequate care. The study finding shows that adequate care (81.2%) in Infection Prevention (IP) protocol, but provider's performance was poor (42.6%) in use of Personal Protective Equipment (PPE). All care providers had worn sterile gloves in every procedure and hand washing before procedure was poor but most of them clean hand by sensitizer after procedure. (Tabatabaei et al; 2016). A Cross-Sectional study on Infection Control Practices and Program Management in Labour and Delivery Units, Iran showed only 40% hand hygiene maximum score was maintained. Women receive adequate care in communication, Support

and Companionship (70.1%), The similar findings found in the study from Brazil conducted by Marcia Leonardi Baldisserotto et. al., (2016) where 90% of women assessed as excellent of their relationship with the team of caregivers, such as privacy in the birthing place, the empathic support of professionals, clarity of information received, and time to ask the staff questions.

Majority (79.7%) of women in labour receives Respectful Maternity Care (RMC) during labour. Verbal abuse observed as unsocial language and physical abuses were ranges from pushing, pinching to slapping on the woman's thigh during second stage of labour (19.1%). The result is consistent with another study Sharma G., et. al., (2019) on "an investigation into mistreatment of women during

labour and childbirth in maternity care facilities in Uttar Pradesh, India: showed physical abuse ranged from slapping the pregnant woman, to hitting and pinching her thighs or restraining forcefully. Verbal abuse ranged from talking down to the pregnant woman, using foul language and threatening women to do caesarean sections, if they did not stop shouting or crying. The result also shows that there was poor or no provision for maintaining privacy (99.1%) study done by Marie Hoftun Jaeger and Fredrik Skar (2017) on “Quality of Care in the maternal and delivery ward in rural Nepal,” had shown that greatest breach of privacy was that there were no curtains between the two beds that were only a meter apart.

The total care percentage was (62.4%), (56.9%), (98.8%) during first, second and third stage of labour respectively and inadequate care (49.5%) observed in new-born care. Vital signs assessment and recording was the neglected areas of care and recording and reporting of labour events were adequate in majority (78.2%) of the respondents except the incompleteness of partograph.

CONCLUSION

The study concludes that almost all the women in labour received average care and only few women received adequate care during labour. Minimal or poor care practices were observed in the use of personal protective device and newborn care. Hence, the study recommend tha tequal focus should be given in all domains of maternity care with due respect while caring to the woman during labour.

ACKNOWLEDGEMENT

The authors acknowledge B.P. Koirala Institute of Health Sciences, Dharan for providing opportunity to conduct this study and extend heartfelt thanks to all faculties of other departments, statisticians, College of Nursing for their continuous support.

REFERENCES

- Alkema, L., Chou, D., Hogan, D., Zhang, S., Moller, A., Gemmill A, et al. (2015). Global, Regional, and National Levels and Trends in Maternal Mortality between 1990 and 2015, with Scenario Based Projections to 2030: A Systematic Analysis by The UN Maternal Mortality Estimation Inter Agency Group, 6736(15),1–13. <https://doi.org/10.1097/01.aoa.0000504718.91214.7d>
- Baldisserotto, M.L. Miranda, M., Filha, T., & Granado, S., (2016). Good practices according to WHO’ s recommendation for normal labor and birth and women’s assessment of the care received : the “ birth in Brazil ” national research study , 2011 / 2012. *Reproductive Health*; 13(Suppl 3). <https://doi.org/10.1186/s12978-016-0233-x>
- Baral, Y.R., Lyons, K., Skinner, J., & Van, Teijlingen, E.R. (2010). Determinants of skilled birth attendants for delivery in Nepal. *Kathmandu Univ Med J.* 8(31), 325–32. <https://doi.org/10.3126/kumj.v8i3.6223>
- Department Of Health Services, 2015/2016. Annual Report.
- Hoftun, M., S.K. F., Supervisor, O., & Sundby, J. (2017). Quality of Care in the maternal and delivery ward in rural Nepal.
- Holst, C., (2014). Use of skilled birth attendants in Nepal strategies and interventions.
- Ministry Of Health and Population. (2016). New ERA and ICF DHS Program. *Nepal Demographic and Health Survey 2016.* 2017;222–38.
- Ponndara, I., Angela, D., & Caroline., H. (2012). Quality of maternity care practices of skilled birth attendants in Cambodia. *International Journal of Evidence-Based Healthcare*; 10(1)60-67. <https://doi.org/10.1111/j.1744-1609.2012.00254.x>
- Sharma, G., Powell-Jackson, T., Halder, K., Bradley, J., & Filippi, V. (2017). Quality of routine essential care during childbirth: clinical observations of uncomplicated births in

- Uttar Pradesh, India. *Bull World Health Organization*;95(6), 419–29. <https://doi.org/10.2471/blt.16.179291>
- Sharma, G., Penn-kekana, L., Halder, K., & Filippi, V.(2019). An investigation into mistreatment of women during labour and childbirth in maternity care facilities in Uttar Pradesh, India : a mixed methods study. *Journal of Reproductive Health*, 1–16. <https://doi.org/10.1186/s12978-019-0668-y>
- Shrestha, M., Singh, R. & Upreti, D. (2009).Quality of care provided to newborns by nursing personnel at BP Koirala Institute of Health Sciences. *Kathmandu University Medical Journal*; Vol. 7, No. 3, Issue 27, 231-237. <https://doi.org/10.3126/kumj.v7i3.2729>
- Simbar, M., Ghafari, F., Zahrani, S.T., & Majd, H.A. (2009). Assessment of quality of midwifery care in labour and delivery wards of selected kordestan Medical Science University hospitals. *International Journal of Health Care Quality Assurance*;22(3), 266-277. <https://doi.org/10.1108/09526860910953539>
- Tabatabaei, S.M., Pour, F.B. & Azadeh, H. (2016). Infection Control Practices and Program Management in Labor and Delivery Units : A Cross-Sectional Study From Iran. *Int J Infect. April*; 3(2), e32788. <https://doi.org/10.17795/iji-32788>
- World Health Organization (Goal & Strategy, 2016) recommendations Intrapartum care for a positive childbirth experience Transforming care of women and babies for improved health and well-being Executive summary.