Nursing Care Practices at Jimma University Medical Center: A Retrospective Cross-Sectional Study in Ethiopia

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To cite this article: Galane Abdissa, Daniel Geleta, Hiwot Berhanu, Birtukan Edilu. Nursing Care Practices at Jimma University Medical Center: A Retrospective Cross-Sectional Study in Ethiopia. International Journal of Biomedical Engineering and Clinical Science. Vol. 6, No. 1, 2020, pp. 7-11. doi: 10.11648/j.ijbecs.20200601.12

Received: December 4, 2019; Accepted: April 17, 2020; Published: April 23, 2020

Abstract: Nursing care is the gathering of information and prioritizing interventions before providing an appropriate cares using a specified assessment format to intervene the most common problems in Hospitals. Most of the nursing care activities were left undone or poorly assessed in Europe with further disrespect & abuse of women during institutional childbirth services in low-middle-income countries including Ethiopia. The current study focused to determine the status of nursing care practices in the obstetric ward of Jimma University medical center. Wherefore, a retrospective cross-sectional study was conducted from April 16, 2019 to May 15, 2019 with documentary analysis of 344 randomly selected medical records. A semi-structured and pretested questionnaire containing 16 items of nursing diagnoses were used to collect data, which was then analyzed by SPSS version 20 under formal consent of participants. During the process of management, frequencies & percentages were calculated and used to describe the data by tables & figures for ranking among the identified nursing cares. A total of 344 records were reviewed and analyzed by the study making 100% review rate. The study revealed all the nursing cares indicated in the domains were provided to labouring mothers with variable degrees. The most prominent nursing cares in the ward were recognized to be cares related to nausea (95.9%), fatigue (95.1%), acute pain relieve related to uterine contractions (94.8%), avoidance of imbalance nutrition due to poor intake (38.1%), bathing/toileting self-care deficit related to pain (27.6%) and constipation due hemorrhoids (24.4%). The remaining elements were practiced rarely. The care practice of labouring mothers in the study unit was not comprehensive. Therefore, the researchers recommend a comprehensive care approach as much as possible to the study unit and further study on the determinants of variation among the care domains.

Keywords: Laboring Mother, Maternity Ward, Nursing Care

1. Introduction

Nursing care includes the gathering of information and prioritizing interventions before providing an appropriate twenty-four-hour nursing cares [1-4] using a specified assessment format [5-7] to intervene the most common problems in Hospitals [8]. These care practices are prerequisite [9] and more frequent in settings nurses assist deliveries though some were used less frequently during some interventions [10-12]. Particularly, patients from the Obstetrics ward were reported a low level of nursing care as compared to surgical ward patients of similar characteristics [13]. For many women, labour and childbirth are a time of excitement and anticipation alongside uncertainty, anxiety, fear and pain, the memories and experiences of childbirth remain with the woman throughout her life. Clearly, the support and care they receive during this period are critical to avoid traumatic memories [14, 15]. In Europe, most of the nursing care activities were left undone [16] while disrespect
& abuse of women during institutional childbirth services is one of the deterrents in Ethiopia and other low-middle-income countries with higher proportion at Hospital settings than Health center [17-19]. Across European hospitals, the most frequent nursing care activities left undone included ‘comfort/talk with patients’ (53%), ‘developing or updating nursing care plans/care pathways’ (42%) and ‘educating patients and families’ (41%) [20]. In other countries, Brazil, the most common assessed cares in labour were acute pain (62%), fatigue (24.7%), and anxiety (22%) [8]. In India, only 65% of maternity ward patients were moderately satisfied with the provided nursing care [18]. The proportion of mothers who are completely satisfied with health care ranges between 2.4 to 21% in Ethiopian Referral Hospitals with pain control to be the poorest source of satisfaction with 82% reporting dissatisfaction [14]. Here in Ethiopia, women on average received 5.9 (66%) of the nine recommended respectful maternity care (RMC) practices where only 38% reported in hospital [17]. Inadequate information about the drug prescribed (0.7% completely satisfied) and explanation of procedures (0.9% completely satisfied) to be done to the client was found to be lower nursing cares practices to the level of client dissatisfaction in Ethiopia [13]. On the other hand, a study conducted in Bale, Ethiopia, reported the existing nursing care in the maternity ward to be at good status (90.2% patients valued good) [13]. However, there was no study conducted focusing on the level of nursing care practices using Newcastle Experience with Nursing Scales (NENSS) tool in Ethiopia. Therefore, the current study was designed to identify the level and ranks of Nursing Care practices in the study area.

2. Methods

A Hospital based retrospective cross-sectional study was conducted in Jimma University Medical center, one of the famous centers in Oromia National regional state. The center found in Jimma town, which is located at 323km southwest of Addis Ababa, the capital city of Ethiopia, and provides service for about 3 million people and 6480 labouring mothers yearly. The study randomly selected & enrolled all documents of mothers who gave birth in the ward in the year 2018. Referred mothers at the early stage of admission to other Health Institution, died at the early stage of labor and registered but gave birth at home were excluded from the study. A single population proportion formula in EPI info software was used for sample size calculation with further correction formula considering the proportion of pain-related care (62%) as estimated from the previous study with confidence level set at 95% ([8] and alpha of 0.05 that finally gave 344 records to be reviewed. Following sample size determination, the number of laboured mothers within the year was proportionately distributed among the months of the year. Data related to socio-demographic factors and domains of nursing cares were collected by five Diploma Nurses who employed from the study area of another ward after ensured an informed consent under close follow-up of two [2] supervisors using structured questionnaires that contain 16 items of nursing diagnoses (adopted from Newcastle Experience with Nursing Scales (NENSS)) [6]. The collected data was edited, coded and entered into SPSS version 20 and analyzed. During the process of management, frequencies & percentages were calculated to describe the data by tables and figures. Finally, comparisons made among different practiced cares and ranking established from the most frequently practiced cares in descending order. For the sleek of data quality the questionnaire was initially prepared in English, translated to local language Afan Oromo, and retranslated to English by another person, who is blind to the original questionnaire, for consistency check. Pre-test of the questionnaire was made on 5% of each category at Shanen Gibe Hospital Obstetric ward (which is out of the study facilities, but share similar socio-demographic characteristics with the study area) and take corrective actions accordingly by Principal Investigator. Following a confirmed quality check of the questionnaire, two days of training was given for five data collectors and two supervisors by Principal Investigator. Completeness, accuracy, clarity and consistency of every filled questionnaire were checked by the supervisors on a daily basis.

3. Results

3.1. Socio-demographic Characteristics of Respondents

A total of 344 records were enrolled in the study making 100% document review rate. Of those enrolled, 195 (56.7%) were found to be rural residents with the remaining portion to be urban dwellers. The mean age of the participant was reported 28.6years with the modal class of 30-34 years (34.88%). Concerning educational status, 77 (22.4%) of respondents did not attend formal education (Illiterate), where 34 (9.9%) participants can only read & write. The remaining 4.1%, 7.8%, 10.2%, and 45.6% were reported to be in the primary cycle, secondary cycle, preparatory and above 12 in respective orders. Occupationally, the majority (40.4%) of the respondents were reported housewives followed by employees (35.5%) with 18.0% merchants and 6.1% students.

3.2. Domains of Nursing Care Practices

The results of the assessment made considering domains of nursing care (containing 16 nursing cares) showed that all the nursing cares indicated in the domains were provided with a very huge difference in the ward as built-in table 1 by frequency of all maternity records. The most prominent nursing cares in the ward were related to the domains comfort, activity & rest, nutrition, and elimination & exchange. Apart from the domains (the elements of the domain) related nausea (95.9%), fatigue (95.1%), acute pain relieve related to uterine contractions (94.8%), avoidance of imbalance nutrition due to poor intake (38.1%), bathing/toileting self-care deficit related to pain (27.6%) and constipation due hemorrhoids (24.4%) were reported to be
the first six commonly practiced cares in the studied intuition unit (table 1).

### Table 1. The descending orders of commonly practiced nursing care in Jimma University Medical center maternity ward, southwestern Ethiopia, 2019

| #  | Categorical elements of nursing care domains                                                                 | Responses (number & %) |
|----|-------------------------------------------------------------------------------------------------------------|------------------------|
| 1  | Any Care given for Nausea related to labour?                                                                | 330 (95.9%)            |
| 2  | Cared for Fatigue related to labour?                                                                       | 327 (95.1%)            |
| 3  | Does care provided to relieve Acute pain related to uterine contractions?                                  | 326 (94.8%)            |
| 4  | Imbalanced nutrition: less than body requirements related to lack of appetite and pain?                    | 131 (38.1%)            |
| 5  | Bathing/Toileting self-care deficit related to pain?                                                       | 95 (27.6%)             |
| 6  | Risk for constipation related to hemorrhoids?                                                              | 84 (24.4%)             |
| 7  | Impaired urinary elimination related to urinary infection?                                                | 83 (24.1%)             |
| 8  | Impaired verbal communication related to labour pain?                                                     | 65 (18.9%)             |
| 9  | Anxiety related to labour?                                                                               | 65 (18.9%)             |
| 10 | Risk for altered breathing pattern related to anxiety?                                                    | 63 (18.3%)             |
| 11 | Risk for infection related to invasive procedures?                                                         | 62 (18.0%)             |
| 12 | Constipation related to pregnancy?                                                                        | 61 (17.7%)             |
| 13 | Impaired skin integrity related to edema?                                                                 | 57 (16.6%)             |
| 14 | Risk of altered parent-child connectedness due to ignorance of the maternity/paternity?                   | 52 (15.1%)             |
| 15 | Disturbed sleep pattern related to physical and emotional alterations?                                    | 34 (9.9%)              |
| 16 | Impaired physical mobility related to discomfort and pain?                                                | 33 (9.6%)              |

Following the aforementioned elements, impaired urinary elimination related to urinary infection (24.1%), impaired verbal communication related to labour pain (18.9%), anxiety related to labour (18.9%), risk for altered breathing pattern related to anxiety (18.3%), risk for infection related to invasive procedures (18.0%) and constipation related to pregnancy (17.7%) were areas identified to receive infrequent cares. Compared to the others stated before, impaired skin integrity related to edema (16.6%), risk of altered parent-child connectedness due to ignorance of the maternity/paternity (15.1%), disturbed sleep pattern related to physical & emotional alterations (9.9%) and impaired physical mobility related to discomfort & pain (9.6%) were recognized as of the current study to be the elements of nursing care domains to be cared least in the study unit (table 1).

### 4. Discussion

In the current study, we have included the level of nursing cares provided for the patient or health care consumer through the determination of the proportion of labouring mothers who received the intended cares in labour ward. Accordingly, any care given to nausea related to labour was identified to be the most common care in the study area (95.9% of the study participants) and is better than other countries hospitals based care where the reports showed the majority of the consumers to be dissatisfied due to poor care [19]. Fatigue, an element of activity & rest domain, related to labor is the second most problem (95.1%) to receive attention from Hospital-based care providers. The result indicated that Jimma medical center maternity ward is providing nursing care against fatigue due to labour more than other countries hospital ward like Brazil where only 24.7% were reported to receive care [8]. The study result also identified that the higher proportion (94.8%) of mothers to receive acute pain control cares related to labour during in the ward. This care is much better than the care reported by study results reported in Brazil where only third or 31.3% of women received acute pain relief in the national-based study [10] & 62% at a maternity Hospital, Paraiba [8] and Egypt [21]. It was also better than study reports in other hospitals of Ethiopia, Debre Berhan, where pain control was the poorest source of satisfaction in 82% of care consumers causing dissatisfaction [14]. The difference among these study results could particularly arise from differences within hospitals regarding the level of nursing staffs, staffing, and availability of different supplies & strategies in hospital care system. Whereas in general view, this could be from an approach to labor pain management (relatively cheap) that includes a broad range of pharmacologic and non-pharmacologic intervention strategies. Further, loboring mothers most of the time comes with complain of pain and discomfort that can be anticipated because the eventual outcome of pregnancy is labor and birth for which any care provider gets ready to manage or due to wider information on the association of labor physiologic process with nausea, fatigue, pain and discomfort [22]. Imbalanced nutrition or less than body requirements related to lack of appetite and pain (38.1%), Bathing/Toileting self-care deficit related to pain (27.6%) and risk for constipation related to hemorrhoids (24.4%) were the other areas of nursing care in the ward to receive attention next to the aforementioned elements. This looks worse than the care where nursing activities were called left undone being 53% across European Hospitals [16]. Finally, the remaining 11 elements of intended nursing cares such as cares for impaired urinary elimination related to urinary infection (24.1%), impaired verbal communication related to labour pain (18.9%), anxiety related to labour (18.9%), risk for altered breathing pattern related to anxiety (18.3%), risk for infection related to invasive procedures (18.0%), constipation related to pregnancy (17.7%), impaired skin integrity related to edema (16.6%) and risk of altered parent-child connectedness due to ignorance of the maternity/paternity (15.1%) were all provided to lower proportions. Whereas, cares for disturbed sleep pattern...
related to physical and emotional alterations (9.9%) and impaired physical mobility related to discomfort and pain (9.6%) were rarely practiced in the current study Unit. This result was found to be lower than any other study results conducted at different areas; risk of infection (81.8%), anxiety (22%) were cared for almost all mothers where some were not. The percentage variation of the care ranges from 9.6 to 95% as provided for almost all mothers where some were not. Differences among facilities could also be from an instrument of great utility that facilitates nursing care practice performance and documenting.

5. Conclusions

The current study showed that the domains of nursing care for laboring mothers are not in practice as recommended by WHO. Some of the nursing cares were provided for almost all mothers where some were not. The percentage variation of the care ranges from 9.6 to 95% as evaluated by NENSSs. Care providers focus most of the time on Nausea related to labour with least attention to impaired physical mobility related to discomfort and pain. Therefore, the researchers recommend Jimma university medical center labor ward to make their care approach as comprehensive as possible and we also call an interested researchers for further study on the determinants of variation among the care domains.

Conflict of Interest

None.

Acknowledgements

Foremost, we want to express our gratitude to Jimma University for sponsorship and cooperation of study participants. Secondly, our appreciation goes to medical center staffs for helping the study on what matters related to the data.

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