

Effectiveness of Structure Teaching Programme on Knowledge and Practice of Partograph Among Staff Nurses

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Abstract

Introduction: Partogram is widely used under resourced setting as a simple and affordable tool to monitor labor. The partograph is legal records and may be examined by any court up to a period of twenty five years and is developed for uses in hospital setting. The use of partograph by the WHO significantly improves the maternal and neonatal outcome of labor and is therefore recommended worldwide. Structure teaching programme used to teach the staff nurses regarding partograph. *Aim:* The aim of this narrative review is to find information on the effectiveness of structure teaching programme on knowledge and practice of partograph among staff nurses working in maternity unit at. *Methodology:* Types of studies- Pre-experimental design- one group pre test post test design, Retrospective Review, Types of participants- staff nurses working in maternity unit. *Setting:* Maternity unit of sharda hospital. *Outcome:* This narrative review result shows that structured teaching programme on knowledge and practice regarding partograph increase the level of knowledge and practice of staff nurses.

Keywords: Knowledge and practice; Partograph; and Staff nurses.

Introduction

Partographs were reviewed to identify abnormal labour cases based on pre-defined indications. All referred cases were ascertained from the case records in the referral registers. Five health workers were interviewed to assess their knowledge, attitude and experience in partograph use and to

explore the challenges for referral decision making associated with the tool. A total of 1,198 deliveries were managed at the study sites, of which 663 presented with cervical dilatation of 8 cm or less. Partographs were initiated in 98% of these cases. Indication of abnormal labour was found in 71 partographs (11%) and among them, only 1 was referred to a higher-level facility. Foetal heart

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rate and cervical dilatation were appropriately recorded in 61% and 70% of the partographs, respectively. Interviews with health workers revealed poor interpretation of referral indications from the partographs. Limited accessibility to the nearest EmOC facility, inadequate time for referral, and non-compliance to referral by clients were identified by the interviewed health workers as the key barriers for referral decision making. (Khan ANS, Billah SM, 2018).

Partograph is one of the best effective obstetric tools used to monitoring labor and prevent prolonged or obstructed labor which accounts for about 22% of maternal deaths in Ethiopia. This study was aimed to assess partograph utilization and associated factors among obstetric care givers. Facility based cross sectional study was used in the randomly selected health facilities. Total 220 obstetric care givers were selected using simple random sampling technique. Data were entered and analyzed using SPSS version 22.0. Bivariate and multivariate logistic regression analysis was used to identify the associations of each explanatory variable with the outcome variable. Finally, odds ratio with its 95% confidence interval and p-value of 0.05 was used to identify significant variables. Result Out of 198 obstetric care providers, 73.3% used partograph to monitor progress of labor. Those who were diploma holders (AOR = 3.8, CI = 2.2–6.2), receiving basic emergency obstetrics and new born care training (AOR = 5.6, CI 1.1–28.5), age between 20 and 29 years-old (AOR = 0.1, CI = 0.01–0.50), and male health care providers (AOR = 0.37, CI = 0.44–0.95) were factors significantly associated with partograph utilization. Partograph utilization in this study was below the WHO recommendation. Especial emphasizes and interventions should be given to increase partograph utilization (Hailu T, Nigus K, 2018).

An institution based cross-sectional quantitative study was carried out among health professionals who were working in public health institutions. Multistage sampling with proportional to size allocation was used to recruit a total of 441 study participants. Self-administered questionnaire was used to collect data in this study. Eight midwives were recruited and trained to facilitate the data collection activities. Data were entered into Epi data software and exported into SPSS (22.0) for analysis. Descriptive statistics, bivariate and multiple logistic regression were computed to determine proportions and significant association with knowledge and use of the partograph among health professionals (Haymanot Mezmur, 2017).

Using a self-administered structured questionnaire, a cross-sectional study was conducted from January 4th-March 25th 2016 among non-physician obstetric care providers (OCPs) across urban public health institutions in these regions. Logistic regression models were used to identify factors associated with good knowledge and routine utilization of the partograph, 79 eligible participants, 71(89.9%) took part in the study. The mean age of the respondents was 37.9 ± 10.0 years with majority being female (85.9%). Less than one-third (29.6%) of the respondents had good knowledge on the partograph and only 23(32.4%) routinely used it in monitoring labour. OCPs working in Maternal and Infant Welfare Clinics were about 4 times more likely than those working in Regional/District Hospitals to have good knowledge on the partograph [AOR = 3.88 (95% CI:1.07-14.04)], $p = 0.04$. Little or no knowledge of the partograph and poor staff strength in the study centres were factors militating against its routine use (Sama CB, Takah NF, 2017).

A hospital-based descriptive study involving retrospective review of partographs for births that occurred in 2016 was conducted in Malawi's South-West zone. A total of 1070 partographs that were used to monitor labour in two public hospitals were reviewed to determine the documentation of the parameters of partographs and descriptive statistics were computed using statistical package for the social science software version 22.0. Of the total 1070 partographs reviewed, 58.6% ($n = 627$) of the partographs had no recording of maternal blood pressure and 65.3% ($n = 699$) of the partographs had no temperature documentation. Moulding was not recorded in 25.4% ($n = 272$) of the partographs, foetal heart rate was not recorded in 14.9% ($n = 159$) of the partographs and descent of the foetal head was not recorded in 12.0% ($n = 128$) of the partographs. (Mandiwa C, Zamawe C, 2017).

A cross-sectional quantitative study assessed knowledge and utilization of partograph among obstetric care givers in public health institutions of AddisAbaba, Ethiopia using a structured interviewer administered questionnaire. The collected data was analyzed using SPSS version 16.0. Logistic regression analysis was used to identify factors associated with knowledge and use of partograph among obstetric care givers. Result Knowledge about the partograph was fair: 189(96.6%) of all the respondents correctly mentioned at least one component of the partograph, 104(53.3%) correctly explained the function of alert line and 161(82.6%) correctly explained the function of action line.

The study showed that 112(57.3%) of the obstetric care givers at public health institutions reportedly utilized partograph to monitor mothers in labour. The utilization of the partograph was significantly higher among obstetric care givers working in health centres (67.9%) compared to those working

in hospitals (34.4%) [Adjusted OR = 3.63(95%CI: 1.81, 7.28) (Yisma E, Dessalegn B, 2013).

Materials and Methods

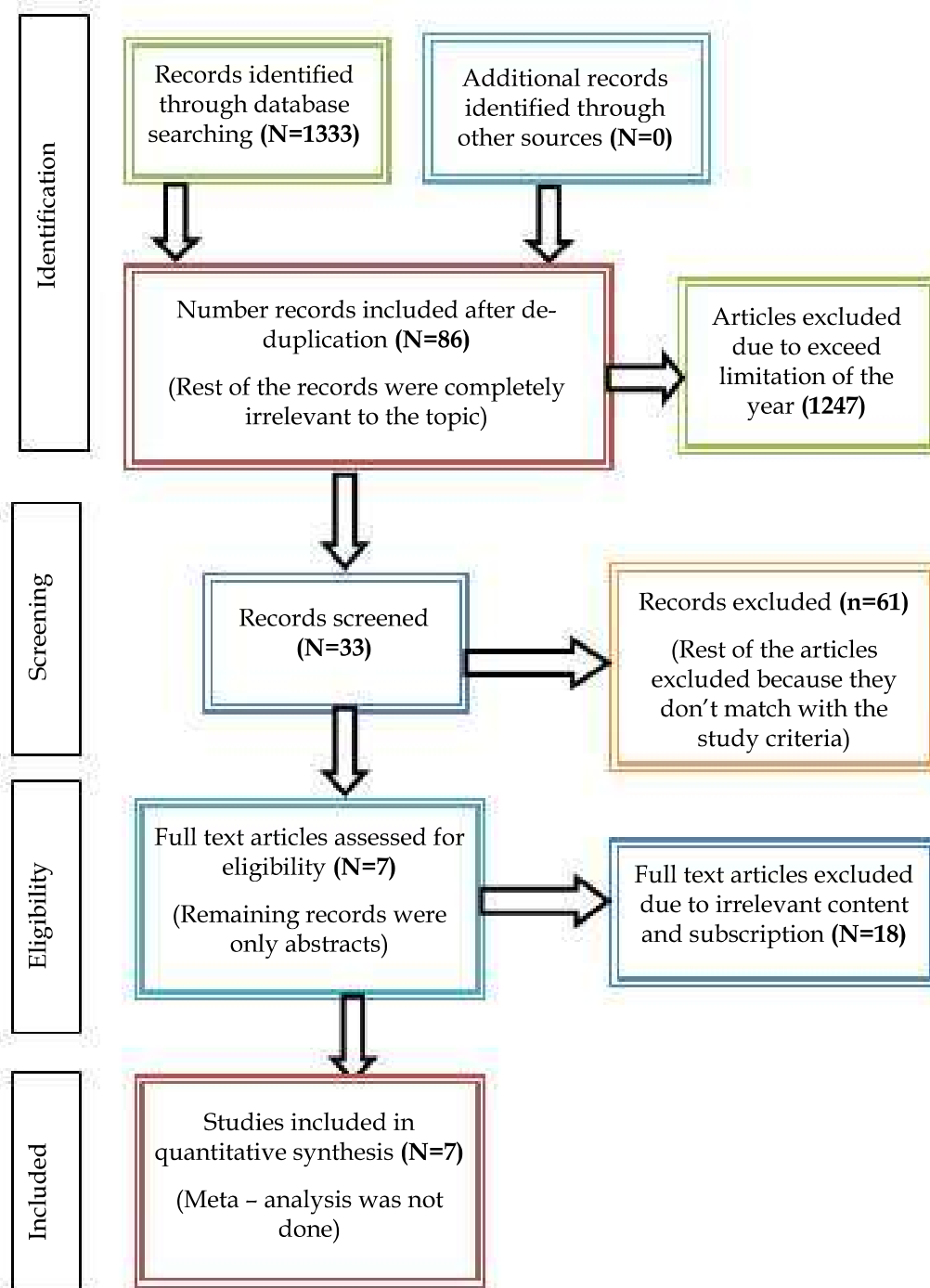


Fig. 1: Prisma flow diagram of narrative review

This cross-sectional study assessed knowledge and utilization of the partograph among health care workers in southwestern Nigeria. Respondents were selected by multi-stage sampling method from primary, secondary and tertiary levels of care. 719 respondents comprising of CHEWS--110 (15.3%), Auxiliary Nurses-148 (20.60%), Nurse/Midwives-365 (50.6%), Physicians-96 (13.4%) were selected from primary (38.2%), secondary (39.1%) and tertiary levels (22.7%). Only 32.3% used the partograph to monitor women in labour. Partograph use was reported significantly more frequently by respondents in tertiary level compared with respondents from primary/secondary levels of care (82.4% vs. 19.3%; $\chi^2 = 214.6$, $p < 0.0001$). Only 37.3% of respondents who were predominantly from the tertiary level of care could correctly mention at least one component of the partograph ($\chi^2 = 139.1$, $p < 0.0001$). The partograph is utilized mainly in tertiary health facilities; knowledge about the partograph is poor. Though affordable, the partograph is commonly not used to monitor the Nigerian woman in labour (Fawole AO, Hunyinbo KL, 2008).

Results

The systematic search was done by formulating the terms knowledge and practice, partograph and staff nurses in relation to the integrative with all its synonyms and also according to search database. A manual PUBMED and Google scholar searches was done through Google search engine. An addition of articles were found in the database. Initial search recovers 1233 articles over which 1247 articles were rejected due to irrelevancy. 86 articles were selected manually and 51 articles were rejected as a result of replication in the database. Replication was removed and reviewed 33 articles for acceptability. 18 more studies were rejected because of unreachable of the full text. Hence, 7 articles were screened which includes comparative study.

Discussion

These findings are supported by a study conducted by O.T Oladapo as pre-experimental study. It was reported that majority of the personnel were nurses/midwives (45.5%) and community health extension workers (CHEW) (42.7%). Of the 216 personnel (54.5%) who were aware of the partograph, 36(16.7%), 119(55.5%) and 61(28.2%) demonstrated poor, fair and good levels of knowledge, respectively. No junior CHEW had

a satisfactory knowledge of the partograph. Only 39(9.8%) of all the personnel routinely employed the partograph for labour management and almost half of these individuals had a poor level of knowledge.

Conclusion

There was a significant difference between knowledge and practice regarding partograph among the staff nurses. Therefore, structured teaching programme should be encouraged to increase the knowledge and practice of staff nurses regarding partograph.

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Ethical Clearance

- Prior permission was obtained from the internal ethical committee of Sharda University.
- Informed written consent was taken from each participant under the study. Objective of the study was maintained with honesty, privacy confidentiality and anonymity.

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