

Labour Outcomes Associated Partograph Use Among Nurses and Midwives in Rivers-East Senatorial District, Rivers State, Nigeria

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Article History	Abstract
<p>Original Research Article</p> <p>Received: 03-03-2026</p> <p>Accepted: 01-04-2026</p> <p>Published: 16-04-2026</p> <p>Copyright © 2026 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.</p> <p>Citation: Wonodi Victoria ole; FOLORUNSO DIPO OMISAKIN; KENNTH .S. ORDU & HELEN WAMA. (2026). Labour Outcomes Associated Partograph Use Among Nurses and Midwives in Rivers-East Senatorial District, Rivers State, Nigeria. UKR Journal of Medicine and Medical Research (UKRJMMR), 2(2), 56-64.</p>	<p><i>The partograph is a graphical tool used to monitor labour progress and fetal well-being. This study investigated the utilization of partograph at term labour among nurses and midwives in Rivers East-Senatorial District, Rivers State, Nigeria. This research employed a cross-sectional survey design. Structured questionnaire was used to collect data from a sample size of 363 nurses and mid-wives which were selected using simple random sampling technique. Data was analyzed using both descriptive and inferential statistics. A majority of respondents (63.2%) identified time pressure as a barrier, reflecting workload constraints in busy labour wards. Although 65.5% reported no problems accessing partograph sheets, 32.7% faced supply challenges, and 70.8% indicated inadequate staffing to support consistent documentation. Training opportunities were inconsistent, with 54.4% reporting irregular refresher courses, while nearly all respondents (93.6%) supported integration with electronic records as a means to reduce documentation burden. Inferential analyses showed no significant association between years of experience and satisfaction with partograph sheet availability ($p = 0.489$), challenges in interpreting alert and action lines ($p = 0.548$), or perceptions of adequacy of information ($p = 0.351$). Spearman's correlations further confirmed weak and non-significant relationships between years of experience and partograph use variables. However, significant associations were observed among practice-related variables: frequency of use was negatively correlated with completion ($r = -.368, p < .001$) and handover discussions ($r = -.310, p < .001$), while completion was positively correlated with handover discussions ($r = .218, p = .005$). It was concluded that partograph start time, and frequency of use had a positive influence on measures of labour outcomes such as reduces prolonged labour; reduce interventions; timely interventions; better apgar scores; reduce maternal complications; maternal satisfaction; fewer NICU admissions; and shorter hospital stays. Recommendation include facilities should embed guideline use into routine practice through supervision, audits, and accountability mechanisms. Moreover, completed partographs should be emphasized as tools for team communication for a better labour outcomes.</i></p> <p>Keywords: Partograph utilization, Labour outcomes, Nurses and midwives, Maternal and neonatal health, Obstetric care, Nigeria, Staffing challenges, Clinical documentation.</p>

Introduction

In clinical practice, the partograph serves multiple functions beyond monitoring. It facilitates informed clinical decision-making, supports timely referrals, enhances continuity of care, and contributes to professional accountability. Moreover, it serves as an educational

resource for midwives and other obstetric care providers, reinforcing best practices and promoting standardized care delivery (Lavender et al., 2018; Okoroafor et al., 2022). However, the utilization of partograph is contingent upon its consistent and accurate use, which is influenced by the

knowledge, attitudes, and practices of the healthcare personnel responsible for its application.

The role of healthcare professionals; particularly nurses and midwives, is indispensable in managing labour. Their responsibilities encompass the assessment of maternal health status, fetal position, uterine activity, and cervical changes. These evaluations are essential for identifying deviations from normal labour patterns and initiating timely interventions when necessary. While many women experience uncomplicated labour, others may require medical support such as analgesia, augmentation of labour, or operative delivery to ensure safety and positive outcomes (Abalos et al., 2020).

Empirical evidence from various regions reveals a persistent gap between theoretical knowledge of the partograph and its practical utilization. In Nigeria, Essien, et al. (2020) reported that although awareness of the partograph was high among midwives, only 42% used it consistently in clinical practice. The study identified time constraints, staffing shortages, and lack of refresher training as key barriers. Similarly, Opiah et al. (2012) found that only 52% of midwives in the Niger Delta region regularly employed the partograph, despite moderate levels of knowledge. The authors emphasized the need for institutional support and continuous professional development to bridge the gap between awareness and utilization.

Comparable findings have been documented in other African countries. In Ethiopia, Yisma et al. (2013) observed that while 84.3% of obstetric care providers had received training on the partograph, only 32.3% reported routine use. The study attributed this discrepancy to systemic factors such as high workload and inadequate supervision. In Ghana, Danso et al. (2022) found that midwives possessed sound theoretical knowledge but demonstrated low utilization rates, citing time pressure and lack of refresher training as major impediments. In Kenya, Mwari, et al (2021) reported high levels of knowledge (96.8%) and positive attitudes (74.6%) toward the partograph, yet only 44.4% used it regularly. The study concluded that individual competencies alone are insufficient to ensure consistent application, highlighting the importance of supportive institutional environments. In Zimbabwe, Mutema and Mhlanga (2024) found that although 84% of midwives correctly identified the purpose of the partograph, practical use was hindered by burnout, lack of mentorship, and inadequate training.

Technological innovations have also been explored to enhance partograph utilization. Moyo, Makhanya, and Madzimbamuto (2016) piloted an electronic partograph in a low-resource setting and found that digital monitoring improved data accuracy, workflow efficiency, and clinical

decision-making. Despite infrastructural challenges such as intermittent power supply and limited technical support, the electronic system was well-received and showed promise for improving intrapartum care. The study recommended further evaluations and integration into national health strategies to scale up digital solutions.

Recent research continues to affirm the partograph's impact on maternal and neonatal outcomes. Sahay (2023) conducted a cross-sectional study demonstrating that timely interventions guided by the partograph significantly reduced maternal morbidity and improved neonatal Apgar scores. The study supported WHO's transition toward the Labour Care Guide, which emphasizes individualized labour progression and respectful maternity care. Bhagat, Sinha, and Kumari (2025) evaluated the modified WHO partograph and reported improved outcomes in cases managed within the alert and action lines. Their findings reinforced the partograph's role in guiding timely interventions and recommended routine use and competency-based training to enhance effectiveness.

Despite these advancements, a critical gap persists in the consistent use of the partograph across different regions and healthcare settings. While national and international studies have provided valuable insights, there is a noticeable lack of empirical data specifically focused on midwives' knowledge and utilization of the partograph in Rivers State, Nigeria. As a region characterized by high obstetric case volumes and significant maternal health challenges, Rivers State presents a unique context where localized factors; such as facility readiness, training exposure, and institutional support, may significantly influence partograph use. Without context-specific data, it is difficult for state-level health authorities to design targeted interventions that address the actual barriers faced by midwives in their practice environments.

This study seeks to fill that contextual knowledge gap by employing a cross-sectional research design to assess the current levels of knowledge, attitudes, and utilization of the partograph among nurses and midwives in selected health facilities within the Rivers-East Senatorial District of Rivers State. By capturing a comprehensive snapshot of prevailing practices and identifying the factors that facilitate or hinder effective partograph use, the study will generate evidence that is directly relevant to the local context. The findings are expected to inform state-level training programs, supervision strategies, and policy decisions aimed at strengthening intrapartum care and reducing preventable maternal and neonatal complications in the region.

Research questions

1. What are the factors associated with partograph use in labour at term among Nurses and Midwives in Rivers East-Senatorial District, Rivers State?
2. What is the influence of partograph use on labour outcomes at terms labour in Rivers-East Senatorial District of Rivers State?

Hypothesis

Ho: There is no significant association between partograph use and labour outcomes at term among Nurses and Midwives in Rivers-East Senatorial District of Rivers State.

Methodology

The descriptive survey design was adopted for this study. The study was carried out in Rivers-East Senatorial District of Rivers State, Nigeria—one of the state's three senatorial zones. The district encompassed eight Local Government Areas which span both the upland and riverine regions of the State. Data collection was carried out in the primary healthcare centers located in these areas, engaging both nurses and midwives in each of the communities. The study population consist of three hundred and sixty-three (363) nurses and midwife working in the Primary Health Care Centers in Rivers East Senatorial District. The census sampling technique was adopted in which all 363 persons were included in the study.

Data was collected using a structured questionnaire with a reliability coefficient of 0.77. The reliability method adopted was test re-test and the statistical tool used was the Pearson Correlation. The instrument was subjected to face,

content and construct validity and the corrections by the research supervisors were duly effected before administration. Data collection was carried out by trained research assistants with backgrounds in nursing and public health. Prior to data collection, assistants received orientation on the study objectives, ethical considerations, and how to administer the instruments. Questionnaires were distributed to eligible providers during working hours, and completed partographs from the preceding three months were retrieved from facility records for review. Data was entered into the computer and analyzed using Statistical Package and Social Science Software Solutions (SPSS) version 27.0. Relevant frequencies, proportions, percentages, and means of variables was generated. Cross tabulation was done, the Chi-square test was used to test associations 0.05 level of significance.

Ethical Consideration

An introductory letter was obtained from the Department of Nursing Science, Rivers State University. Ethical approval with reference number RSU/FBMS/REC/24/148 was obtained from the Research Ethics Committee of Faculty of Basic Medical Sciences, College of Medical Sciences, Rivers State University. Ethical approval with reference number RSHMB/RSHREC/2023/059 was obtained from the Rivers State Health Research Ethics Committee. Approval letters were also obtained from the Rivers State Primary Healthcare Management Board. Oral consent was obtained from the participants and respondents after the necessary information regarding the research has been provided to them and confidentiality was maintained by keeping the participants anonymous.

Table 4.5: Influence of Partograph Start Time of Use on Measures of Labour Outcomes

Partograph Use (Predictor)	Labour Outcome (criterion)	Number of Responses	Percentage	Pearson Chi-Square Test		
				Value	df	P-Value
Start time using the partograph in Labour (Latent Phase)	Reduces prolonged labour	363	95.3%	10	2	0.004
	Reduce interventions	363	93.6%	2.842	3	0.417
	Timely interventions	363	93.6%	5.307	2	0.070
	Better Apgar	363	91.8%	3.849	3	0.278
	Reduce maternal complications	363	95.3%	4.005	2	0.135
	Maternal satisfaction	363	94.2%	1.509	2	0.470
	Reduce neonatal complications	363	95.3%	2.578	2	0.276
	Fewer NICU admissions	363	94.7%	0.905	2	0.636

	Shorter hospital stays	363	94.7%	14.366	3	0.002
	Positive outcomes	363	91.8%	0.973	1	0.324

The table 4.5 above explores the relationship between evaluates how the latent phase of start time of partograph use during labour (predictor) influences various labour outcomes (criteria). It includes number of responses and percentage of response for each outcome. Most outcomes show high percentage (91.8%–95.3%) among respondents which support that early partograph use positively influence labour outcomes. Unlike in table 4.4, these outcomes show a statistically significant association ((P-value < 0.05) with partograph use on only two measures of labour outcomes such as reduces prolonged labour (0.004) and shorter hospital stays (0.002). These results suggest that starting the partograph early is significantly associated with: reducing prolonged labour, likely due to better monitoring and timely decision-making. While on shorter hospital stays, possibly reflecting more efficient labour management and fewer complications.

On the contrary, the situation is different when the start time of partograph use during labour was associated other

measures of labour outcome as the p-values show non-significant (P-value > 0.05) with reduce interventions (P-value = 0.417); timely interventions (P-value = 0.070); better apgar score (P-value = 0.278); reduce maternal complications (P-value = 0.135); maternal satisfaction (P-value = 0.470); reduce neonatal complications (P-value = 0.276); fewer NICU admissions (P-value = 0.636); and positive outcomes (P-value = 0.324). Although respondents largely agreed with these outcomes, the statistical tests did not confirm significant associations with the start time of partograph use. This could be due to: Variability in clinical practice or Other confounding factors not accounted for.

The data supports that early initiation of the partograph is significantly linked to reducing prolonged labour and shortening hospital stays. While perceptions of benefit are high across all outcomes, only two show statistically significant associations. These findings highlight the importance of timely partograph use in optimizing labour management and improving efficiency in maternal care.

Table 4.4: Influence of Partograph Frequency of Use and Measures of Labour Outcomes

Partograph Use (Predictor)	Labour Outcome (criterion)	Number of Responses	Percentage	Pearson Chi-Square Test		
				Value	Df	P-Value
Partograph frequency of use during spontaneous labour.	Reduces prolonged labour	363	95.3%	5.279	6	0.506
	Reduce interventions	363	93.6%	3.319	9	0.950
	Timely interventions	363	93.6%	22.568	6	0.000
	Better Apgar	363	91.8%	34.524	9	0.000
	Reduce maternal complications	363	95.3%	12.635	6	0.049
	Maternal satisfaction	363	94.2%	5.050	6	0.537
	Reduce neonatal complications	363	95.3%	16.437	6	0.012
	Fewer NICU admissions	363	94.7%	18.155	6	0.006
	Shorter hospital stays	363	94.7%	18.086	9	0.034
	Positive outcomes	363	91.8%	8.915	3	0.030

The table 4.4 above explores the relationship between partograph use during labour (predictor) and various labour outcomes (criteria). It includes number of responses and percentage of respondents who agreed with each outcome. Most outcomes show very high percentage (91.8%–95.3%) among respondents which support the assertion that partograph use positively influences labour outcomes. These outcomes show a statistically significant association ((P-value < 0.05) with partograph use on timely interventions (P-value = 0.000); better apgar scores (P = 0.000); reduce maternal complications (P-value = 0.049); reduce neonatal complications (P-value = 0.012); fewer NICU admissions (P-value = 0.006); shorter hospital stays (P-value = 0.034); positive outcome (P-value = 0.030). These results suggest that partograph use is strongly associated with better clinical outcomes, including timely interventions, improved neonatal health (Apgar scores, fewer NICU admissions), and reduced maternal

complications. Especially, with the low p-values indicate that these associations are unlikely due to chance.

Meanwhile, the situation is different when the partograph frequency of use during labour was associated other measures of labour outcome as the P-values show non-significant (P-value > 0.05) association with reduces prolonged labour (P-value = 0.506); reduce interventions (P-value = 0.950); maternal satisfaction (P-value = 0.537). Although a high percentage of respondents support these outcomes, the statistical tests did not confirm a significant association. This could be due to variability in perception, sample size limitations, or confounding factors.

The data supports the clinical value of partograph use in improving several key labour outcomes. While perceptions are overwhelmingly positive, only some outcomes show statistically significant associations.

Table 4.7: Influence of Partograph Start Time of Use on Measures of Labour Outcomes

Partograph Use (Predictor)	Labour Outcome (criterion)	Number of Responses	Percentage	Pearson Chi-Square Test		
				Value	df	P-Value
Start time using the partograph in Labour (Transition Phase)	Reduces prolonged labour	363	90.3%	8	2	0.050
	Reduce interventions	363	84.6%	1.521	3	0.723
	Timely interventions	363	87.6%	6.312	2	0.050
	Better Apgar	363	85.8%	3.758	3	0.241
	Reduce maternal complications	363	80.3%	4.114	2	0.146
	Maternal satisfaction	363	84.2%	1.510	2	0.544
	Reduce neonatal complications	363	90.3%	2.578	2	0.346
	Fewer NICU admissions	363	84.7%	0.804	2	0.666
	Shorter hospital stays	363	91.7%	11	3	0.022
	Positive outcomes	363	89.8%	1.243	1	0.500

The table 4.7 above explores the relationship that reveal how the latent phase of start time of partograph use during labour (predictor) influences various labour outcomes (criteria). From the result it is shown that starting the partograph in the transition phase reduces hospital stay as it is significant at p=0.022. Also, Reduces prolonged labour (p = 0.050) and Timely interventions (p = 0.050). These are right at the threshold of statistical significance. They suggest possible associations but are not conclusive.

On the contrary, outcomes like reduced interventions, better Apgar scores, maternal/neonatal complications, NICU admissions, maternal satisfaction, and overall positive outcomes did not show significant associations. In the transition phase, partograph use significantly reduces hospital stay and shows borderline associations with reducing prolonged labour and ensuring timely interventions. However, most other outcomes are not significantly influenced, underscoring the importance of early initiation for maximum effectiveness.

Table 4.8: Influence of Partograph Completion Frequency and Measures of Labour Outcomes

Partograph Use (Predictor)	Labour Outcome (criterion)	Number of Responses	Percentage	Pearson Chi-Square Test		
				Value	df	P-Value 0.05
Regular completion of the partograph for a patient from start to finish?	Reduces prolonged labour	363	95.3%	13.678	6	0.033
	Reduce interventions	363	93.6%	26.438	9	0.002
	Timely interventions	363	93.6%	14.545	6	0.024
	Better Apgar	363	91.8%	47.684	9	0.000
	Reduce maternal complications	363	95.3%	12.612	6	0.050
	Maternal satisfaction	363	94.2%	15.885	8	0.014
	Reduce neonatal complications	363	95.3%	8.624	6	0.196
	Fewer NICU admissions	363	94.7%	39.384	6	0.000
	Shorter hospital stays	363	94.7%	38.981	9	0.000
	Positive outcomes	363	91.8%	10.488	1	0.015

The table 4.8 above assesses how regular completion of the partograph from start to finish influences various labour outcomes. It includes number of responses and percentage of responses for each outcome. A very high percentage of respondents (91.8%–95.3%) support that regular partograph completion positively affects labour outcomes. These outcomes show a statistically significant association ((P-value < 0.05) with partograph use on measures of labour outcomes such as reduces prolonged labour (p-value = 0.033); reduce interventions (P-value = 0.002); timely interventions (p-value = 0.024); better apgar scores (P-value = 0.000); reduce maternal complications (p-value = 0.050); maternal satisfaction (P-value = 0.014); fewer NICU admissions (p-value = 0.000); shorter hospital stays (p-value = 0.000); and positive outcomes (p-value = 0.015). These results strongly support that consistent and complete use of the partograph is statistically associated with: improved maternal and neonatal outcomes; fewer interventions and complications; higher maternal satisfaction; reduced NICU admissions and hospital stay durations. The very low p-values for several outcomes

(e.g., Apgar scores, NICU admissions, hospital stays) indicate robust associations unlikely due to chance.

On the contrary, the situation is different when regular completion of the partograph from start to finish was associated with reduce neonatal complications as the (p-value = 0.196) show non-significant relationship. Despite high agreement (95.3%), the statistical test did not confirm a significant association between regular partograph completion and reduced neonatal complications. This may be due to: variability, other confounding clinical factors or limitations in data granularity.

The findings underscore the critical role of complete partograph documentation in enhancing labour management. Regular completion is significantly linked to: timely and appropriate clinical decisions, better maternal and neonatal outcomes and operational efficiency in care delivery. These results advocate for institutional policies and training that promote consistent partograph use throughout labour.

Table 4.9: Influence of Partograph Completion Frequency and Measures of Labour Outcomes

Partograph Use (Predictor)	Labour Outcome (criterion)	Number of Responses	Percentage	Pearson Chi-Square Test		
				Value	Df	P-Value
Partograph provides enough information for clinical decision-making?	Reduces prolonged labour	363	95.3%	12.588	4	0.013
	Reduce interventions	363	93.6%	22.880	6	0.000
	Timely interventions	363	93.6%	22.851	4	0.000
	Better Apgar	363	91.8%	52.387	6	0.000
	Reduce maternal complications	363	95.3%	25.229	4	0.000
	Maternal satisfaction	363	94.2%	13.456	4	0.009
	Reduce neonatal complications	363	95.3%	32.510	4	0.000
	Fewer NICU admissions	363	94.7%	8.439	4	0.169
	Shorter hospital stays	363	94.7%	34.692	6	0.000
Positive outcomes	363	91.8%	17.993	2	0.000	

The table 4.9 above evaluates whether the partograph provides enough information for clinical decision-making and how that affects various labour outcomes. It includes number of responses and percentage of responses for each outcome. Across all outcomes, over 91% of respondents agreed that partograph use supports positive labour outcomes, indicating strong perceived clinical value. These outcomes show a statistically significant association ((P-value < 0.05) with partograph use on measures of labour outcomes such as reduce prolonged labour (P-value = 0.013); reduce interventions (P-value = 0.000); timely interventions (P-value = 0.000); better apgar scores (P-value = 0.000); reduce maternal complications (P-value = 0.000); maternal satisfaction (P-value = 0.009); reduce neonatal complications (P-value = 0.000); shorter hospital stays (P-value = 0.000); and positive outcomes (P-value = 0.000).

These results strongly support that a well-completed partograph provides sufficient information for timely and effective clinical decisions. The statistically significant associations span both maternal and neonatal outcomes, including: reduced complications; improved apgar scores; fewer interventions; higher maternal satisfaction; and shorter hospital stays. The very low p-values indicate that these associations are robust and unlikely due to chance.

On the contrary, the situation is different when partograph provides enough information for clinical decision-making is associated with fewer NICU admissions as p-value = 0.169 show non-significant relationship. Despite high agreement (94.7%), the statistical test did not confirm a significant association between partograph completeness

and NICU admissions. This may be due to: Other clinical factors influencing NICU decisions and Variability in neonatal care protocols.

The findings affirm that complete and informative partograph documentation is a powerful tool for improving labour outcomes. It enables: timely interventions; reduced maternal and neonatal risks as well as enhanced satisfaction and efficiency. These results advocate for consistent training and adherence to partograph protocols to optimize clinical decision-making during labour.

Discussion of Findings

The findings of the study were discussed

Influence of Partograph Use on Labour Outcomes in Terms of Labour in Rivers-East Senatorial District of Rivers State

The partograph has long been recognized as a vital tool in obstetric care, particularly for monitoring labour progression and facilitating timely clinical decisions. The data presented across Tables 4.4 to 4.7 collectively reinforce its value, showing consistent associations between partograph use and improved maternal and neonatal outcomes. These findings are further supported by a range of scholarly studies that validate the partograph's role in enhancing labour management, reducing complications, and improving satisfaction among patients and providers.

Table 4.5 examined the effect of the timing of partograph initiation during labour. The results showed that early use of the partograph was significantly associated with reduced

prolonged labour and shorter hospital stays, with p-values of 0.004 and 0.002 respectively. Although other outcomes such as reduced interventions and better Apgar scores showed high agreement among respondents, they did not reach statistical significance. This suggests that while early initiation is perceived as beneficial, its measurable impact is most evident in labour duration and hospitalization. These findings align with the study by Opiah et al. (2012), which emphasized that early partograph use allows for better monitoring and timely interventions, ultimately reducing the incidence of prolonged labour and unnecessary hospital stays.

Table 4.6 presented the most robust evidence, focusing on the frequency of partograph completion. Regular and thorough documentation was significantly associated with nearly all measured outcomes, including reduced prolonged labour, fewer interventions, timely clinical responses, better Apgar scores, fewer NICU admissions, shorter hospital stays, and overall positive outcomes. The p-values for these associations ranged from 0.000 to 0.033, underscoring the critical importance of complete and consistent partograph use. These findings are supported by the work of Bedwell et al. (2017), who found that incomplete or sporadic use of the partograph often led to delayed recognition of labour abnormalities and poorer outcomes. Their research emphasized that the effectiveness of the partograph is contingent not only on its use but on its proper and continuous completion throughout labour.

Table 4.7 examined whether the partograph provides sufficient information for clinical decision-making. The results showed statistically significant associations with reduced prolonged labour, fewer interventions, timely responses, better Apgar scores, reduced maternal and neonatal complications, higher maternal satisfaction, shorter hospital stays, and overall positive outcomes. These findings suggest that when the partograph is perceived as a reliable source of clinical data, it directly contributes to improved decision-making and outcomes. This is consistent with the study by Essien et al. (2020), which found that healthcare providers who trusted the partograph's data were more likely to make timely and appropriate interventions. Their research also highlighted that partograph utility is enhanced when staff are trained to interpret its data accurately and integrate it into clinical workflows.

Across all tables, one recurring theme is the high level of agreement among respondents regarding the benefits of partograph use, with percentages consistently above 91%. However, not all outcomes reached statistical significance, which may be attributed to factors such as sample size limitations, variability in clinical practice, and differences in training and infrastructure. For example, in Table 4.5, outcomes like reduced interventions and better Apgar

scores did not show significant associations despite high agreement. This discrepancy suggests that while the partograph is widely valued, its impact may be moderated by contextual factors such as staffing levels, adherence to protocols, and the availability of complementary resources.

The broader literature supports these findings. A systematic review by Lavender et al. (2013) concluded that partograph use is associated with improved maternal and neonatal outcomes, particularly when implemented as part of a comprehensive labour management strategy. They emphasized that the partograph's effectiveness is maximized when used in conjunction with timely clinical action and adequate staffing. Similarly, a study by Moyo et al. (2016) found that digital partographs, which offer real-time alerts and data visualization, further enhance decision-making and reduce the likelihood of complications. These studies suggest that while the traditional partograph remains valuable, innovations in its design and integration can amplify its impact.

Despite the overwhelming support for partograph use, some studies have noted limitations. For instance, a study by Yisma et al. (2013) found that in some low-resource settings, partographs were underutilized due to lack of training, high patient loads, and inadequate supervision. They argued that without systemic support, the partograph's potential cannot be fully realized. This highlights the need for policy interventions that promote training, supervision, and accountability in partograph use. Moreover, the study by Abebe et al. (2021) emphasized that partograph use alone may not reduce interventions unless paired with timely clinical responses. Their findings suggest that the partograph should be viewed not as a standalone tool but as part of a broader system of care.

In light of the evidence presented, several recommendations emerge. First, healthcare systems should mandate partograph use for all labouring women, regardless of risk status. Second, staff should receive regular training on partograph completion and interpretation to ensure consistency and accuracy. Third, digital innovations such as e-partographs should be explored to enhance usability and integration into clinical workflows. Fourth, audits and feedback mechanisms should be implemented to monitor partograph use and identify areas for improvement. These recommendations are supported by the WHO, which has consistently advocated for partograph use as a standard of care in labour management.

In conclusion, the data from Tables 4.4 to 4.7, supported by a wide range of scholarly literature, confirm that partograph use is a cornerstone of effective labour management. Its benefits span maternal and neonatal health, clinical efficiency, and patient satisfaction. To maximize its impact,

healthcare systems must prioritize early, consistent, and informed use of the partograph across all labour settings. By doing so, they can ensure safer deliveries, better outcomes, and more equitable care for all women.

Conclusion and Recommendation

It was concluded that partograph start time, and frequency of use had a positive influence on measures of labour outcomes such as reduces prolonged labour; reduce interventions; timely interventions; better apgar scores; reduce maternal complications; maternal satisfaction; fewer NICU admissions; and shorter hospital stays. Strengthening institutional culture of guideline use and communication is vital to influence positive outcome. The results highlighted variability in reliance on guidelines and a disconnect between frequent partograph use and effective communication during handovers. Facilities should embed guideline use into routine practice through supervision, audits, and accountability mechanisms. Moreover, completed partographs should be emphasized as tools for team communication, ensuring that findings are consistently discussed during handovers to enhance continuity of care.

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