WOLKITE UNIVERSITY

COLLEGE OF MEDICINE AND HEALTH SCIENCE

DEPARTMENT OF NURSING

ASSESSMENT OF PARTOGRAPH COMPLETION AND HEALTHCARE WORKER PERSPECTIVE ON ITS UTILIZATION IN ATTAT PRIMARY HOSPITAL, SOUTHWEST, ETHIOPIA, 2023

BY: BIRUK GIRMA MUSSA MHSE/62/12

SR. HIRUT PETROS LAMEJO MHSE/133/12

KOKEB MIFTA NURO MHSE/138/12

A RESEARCH TO BE SUBMITTED TO WOLKITE UNIVERSITY COLLEGE OF MEDICINE AND HEALTH SCIENCE DEPARTMENT OF NURSING THE PARTIAL FULFILLMENT OF BACHELOR OF DEGREE IN NURSING

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INVESTIGATORS

BIRUK GIRMA MUSSA MHSE/62/12

SR. HIRUT PETROS LAMEJO MHSE/133/12

KOKEB MIFTA NURO MHSE/138/12

ADVISOR

MR. BISRAT ZELEKE (BScN, MSc.N, Assistant professor)

MR. WEBSHET TESFAYE (BSc, MSc)

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ABBREVIATION

CPD: Cephalo-Pelvic Disproportion

ETB: Ethiopian Birr

MMR: Maternal Mortality Rate

SDG: Sustainable Development Goal

WHO: World Health Organization

ABSTRACT

Background: Partograph is a cost-effective, single sheet of paper that is used to follow maternal and fetal conditions and the progress of labor. The World Health Organization recommends the utilization of partographs for all laboring mothers. The appropriate use of the Partograph allows early identification of labour related complications and prevents deaths. However, several maternal and fetal deaths occur in health facilities due to poor quality of labor follow-up. Therefore, we sought to determine the level of Partograph completion and healthcare worker perspectives towards its utilization in Attat Primary Hospital, Southern Ethiopia.

Objective: To assess partograph completion and healthcare worker perspective on its utilization in Attat primary hospital, southwest, Ethiopia.

Method: From May 25 - June 25, 2023 a hospital-based cross-sectional study was conducted. This study had two components; descriptive chart review at the Attat Primary Hospital, South west, Ethiopia and a qualitative study involving interview with ward nurses, and midwives. A total of 347 sampled obstetric chart were randomly selected. A semi-structured questioner was used to collect data. SPSS version 22 was used to analyze it. The quantitative data were summarized using descriptive statistical analysis, means and proportions. Data from the interview were analyzed using thematic content analysis in Open Code software.

Results: Among the 347 Partographs charts reviewed, 34.8% only had full documentation of the partograph components. In about 55.4%, the specific parameters for fetal monitoring, 56.2% maternal monitoring and 65.2% labour progress were incomplete. From the interview, the healthcare workers reported being unable to complete the Partographs due to the overwhelming numbers of expectant mothers and other staff responsibilities. Congestion in the maternity ward reduced the Partograph completion rates. The limitation in skills, the state of the mother at the presentation to the hospital all made Partograph use and completion challenging.

Conclusions: The majority of Partographs started by health workers were incomplete. The time required to document, health system challenges, status of mother at presentation, and the high workload undermined completion of the Partograph at this high volume facility.

Keywords: partograph, health care perspectives

CHAPTER ONE

1. INTRODUCTION

1.1.Background

Partograph is a low-cost, reduced tool that provides a continuous graphical overview of labor progress to avoid prolonged and blocked labor. It is a tool for monitoring labor and avoiding prolonged and obstructed labor by focusing on maternal, fetal, and labor progress observations. Its purpose is to improve labor outcomes, forecast labor progress, and enable timely and effective intervention [4], [5].

WHO modified the partograph in 2000, focusing on labor progress, including cervical dilation, head descent, and contractions. The fetal condition is assessed by heart rate, amniotic fluid color, and fetal skull molding. Maternal condition is monitored by vital signs, urine output, urine tests for protein and acetone, drugs, IV fluids, and oxytocin administered during labor [3].

According to the WHO, partograph is the most well-known and commonly utilized in underdeveloped countries to reduce feto-maternal morbidity and death [6]. Despite the partograph being used for 40 years, the persistence of mortality resulting from obstructed labor has raised concerns that the partograph is not reaching its potential in enabling the detection of deviations from normal labor and timely intervention [6].

Several research studies have been conducted in our nation to provide evidence regarding the utilization and challenges associated with partograph practices in Ethiopia. The findings of the studies revealed that most healthcare providers possessed average to good knowledge regarding the partograph. However, their implementation of partograph practices was found to be insufficient [7-9].

Seventy percent of obstetric care providers were aware of the partograph and had a good overall understanding of it, although this was well below expectations. They also lacked an in-depth understanding of the components [8].

Therefore, this study aims to conduct a comprehensive review to assess partograph completion and healthcare worker perspective on its utilization in Attat primary hospital. It intends to serve as a guiding source for healthcare providers, with the goal of enhancing intrapartum monitoring using partographs to effectively save the lives of the mother and fetus.

1.2.Statement 0f the problem

Globally, from 2000 to 2020 maternal mortality ratio (MMR) declined by 34 percent from 342 deaths to 223 deaths per 100,000 live births, according to UN interagency estimates. Ninety-four percent of maternal deaths occur in lower and middle-income countries. Sub-Saharan Africa and Southern Asia alone account for 86% of global maternal deaths [3]. In the year 2020, about 223,000 women died during and following pregnancy and childbirth. Nearly 95 percent of all maternal deaths took place in low- and low-income countries of Africa and southern Asia countries, with 70 percent of maternal deaths around 202,000 accounted in sub-Saharan African countries alone [1].

The maternal death rate (MMR) in Ethiopia was 294 per 100,000 live births in 2019, according to the Ethiopian Demography and Health Survey. However, it decreased somehow to 348/100,000, 312/100,000, and 294/100,000 live birth in 2017, 2018, and 2019 respectively. Despite still being very high to achieve the sustainable development goal (SDG) which was reducing the global MMR to less than 70 per 100,000 births [2]. According to a 2023 World Health Organization (WHO) assessment every day in 2020, almost 800 women died from preventable causes related to pregnancy and childbirth [3]. This could be prevented by utilizing cost-effective and affordable health intervention competent like partograph drawing during the course of labor.

The partograph was mostly used in Ethiopian public health facilities, where it was discovered not effectively used. This demonstrated a lack of monitoring of laboring mothers, resulting in a poor labor outcome [11], [12]. Complicated deliveries are more damaging as they cause severe psychological and physical harm to women, serious economic and social change as well as adverse maternal and fetal outcomes. Managing complications is expensive for both the mother and the institution. This is not exceptional for Ethiopia evidenced by the high maternal and prenatal mortality rate those Preventable deaths [5]. Even though the partograph is vital for making prompt clinical judgments when issues develop during normal birth, obstetric caregivers are not completely utilizing the tool [4].

Studies show that there is no regular use of the partograph during labor in Ethiopia. Only 40.2 percent of obstetric care providers in North Shoa, Central Ethiopia, used the instrument regularly, and its use was strongly linked to midwifery, on-the-job training, knowledge, and the

attitude of the obstetric caregivers [13]. According to research conducted in Addis Ababa, Ethiopia, 57.3 percent of obstetric care professionals at public health facilities used the partograph to monitor mothers in labor. The tool's use was found to be strongly linked with and greater among obstetric care providers working in health centers than in hospitals [16]. Documentation of the modified WHO partograph during labor was low in the public health facilities of Bale Zone, Ethiopia [11].

Poor labor and delivery of care are the leading causes of maternal and newborn morbidity and mortality in Ethiopia. The partograph, on the other hand, is utilized for early identification and prevention of maternal and fetal problems, although the elements that contribute to this are not well understood. As a result of this, the goal of this study was to investigate the quality of partograph completion and the perspective of its utilization in Attat Primary Hospital Gurage zone southwest Ethiopia in 2023.

1.3.Significance of study

According to the World Health Organization, the use of partograph can help to prevent delivery problems. As a result, the findings of the study will focus on partograph utilization in the management of labor to suggest the quality of partograph use to improve maternal health by providing high-quality care to pregnant women during delivery. By minimizing maternal mortality, which is one of the strategies to improve maternal and fetal outcomes by taking action, the study could have an impact on the national agenda. It will help the organization to recognize the quality of partograph utilization. It will also help our university where on to overview partograph teaching method. Finally, the healthcare workforce will be better positioned to monitor the health of both the mother and the baby It might potentially form the basis of a healthcare delivery system aimed at enhancing the quality of care in labor and delivery units. Furthermore, the findings of this study could be used as input for future research on the use of partographs and quality care in labor.

CHAPTER TWO

2. LITERATURE REVIEW

2.1. Partograph

The partograph is an effective tool for monitoring labor, and when used effectively, it prevents obstructed labor, which accounts for about 8% of maternal deaths worldwide. Thus, it serves as an 'early warning system' and assists in early decisions on transfer, intervention decisions in hospitals, and ongoing evaluation of the effectiveness of interventions.

Partograph has been promoted by the World Health Organization as the "gold" standard for assessing progress in labor in most low-resource countries like Ethiopia. Approximately 300,000 maternal deaths occurred globally in 2013, of which 98% occurred in developing countries. On average 230 women die per every 100,000 live births every year in developing countries. The burden of maternal death is not uniformly distributed throughout the world.

Obstetric risk is by far the highest in sub-Saharan Africa. In 2015, the MMR for sub-Saharan Africa was estimated to be nearly 546 per 100,000 live births, three times higher than that of South Asia (182 per 100,000), eight times higher than in Latin America and the Caribbean (68 per 100,000), and more than 30 times higher than in industrialized countries (16 per 100,000).

In Ethiopia, maternal death is still high. It is estimated that 412 per 100,000 live births. However, Eighty-five percent of deaths can be prevented with cost-effective interventions like partograph during labor and delivery. Even though, prolonged labor is the most common cause of death among mothers and newborns in a developing country that in turn, leads the woman to face serious complications related to obstructed labor, dehydration, exhaustion, or rupture of the uterus and infection. Obstructed labor is also the other most common cause of maternal death in the developing world.

World Health Organization recommends the universal utilization of the partograph during labor and routine use of the partograph is helpful to make better decisions for the diagnosis and management of prolonged and obstructed labor [9]. Studies showed that prevention of prolonged and obstructed labor by using a partograph during labor is a key intervention in the reduction of maternal and perinatal morbidity and mortality [17]. Evidence from developing countries

including Ethiopia demonstrated that the utilization of partographs is poor despite preparing a tool that is simple and inexpensive for intrapartum monitoring of labor [18], [19].

In Ethiopia, since the major sources of maternal and neonatal morbidity and mortality are related to poor labor and delivery care. Even though partograph is a tool that helps manage obstructed labor and prevent prolonged labor with its complications, the level of utilization and factors affecting use among obstetric care providers have not yet been studied in the study area. Therefore, in this study, we aimed to determine the level of partograph use and identify the factors associated with its use among obstetric caregivers in the central zone of Tigray, northern Ethiopia.

2.2. Partograph utilization

Every day, approximately 1000 women die from preventable causes related to pregnancy and childbirth, with 99% of these maternal deaths occurring in low and middle-income countries [1]. The highest burden is in the regions of Sub-Saharan Africa and parts of Asia [2, 3]. In Uganda, estimated maternal mortality ratio in 2016 was 336 per 100,000 live births (a decrease from 438/100,000 in 2011) with a Ugandan women's lifetime risk of maternal death standing now at 1 in 53 [4–6]. According to World Health Organization (WHO), one of the key important requirement for averting these deaths is the provision of care by a skilled birth attendant before, during and after childbirth [7].

Skilled birth attendant care needs to be available across all levels of the health system in order to reduce the delays for a referral to a higher care level if problems are expected to arise or do arise during labour. The Partograph is also used in conjunction with this intervention. The Partograph is a graphical record of the progress of labour relevant details of the mother and the fetus [8]. It has action and alert lines to stimulate commencement of additional interventions by a skilled birth attendant monitoring the progress of labour [9].

The Partograph is recommended by the WHO as a means to monitor and record maternal and fetal well-being as it can identify maternal or fetal distress, and abnormalities in the progress of labour that require further action, including referral [10–13]. The appropriate utilization of the Partograph is one of the core skills of a trained birth attendant [9]. This can reduce complications from prolonged labour for the mother: female genital fistula, postpartum hemorrhage, sepsis, uterine rupture and its sequelae; and for the infant: death, anoxia, and infections. Despite

documentation of the benefits of Partograph completion, challenges to the adoption of this labour tool have been recognized in low and middle-income countries [14].

In Uganda, the Ministry of Health introduced the use of the Partograph in managing labour in the early 1990s although its utilization has been low with reported rates of 69.9 and 15.7% in Rujumbura health sub-district and Bwera hospital respectively [15, 16]. A number of factors contributed to the low Partograph utilization and completion according to recent studies. These include the large numbers of deliveries made without skilled and trained personnel [17]; lack of knowledge about proper Partograph utilization, unavailability of the Partographs and absence of on the job training [12, 15, 18]. However, most of these studies were restricted to rural health facilities, with few highly skilled healthcare personnel which might have biased Partograph use estimates and overlooked health worker perceptions.

World Health Organization (WHO) recommends the partograph to be used for monitoring all laboring mothers. It is still not broadly used in the developing world due to different factors such as lack of human resources, time pressure, stock-outs of partograph paper, and inadequate monitoring of maternal and fetal key indicators. WHO conducted a prospective non-randomized study in Southeast Asia and concluded that the partograph was a necessary tool in the management of labor.

Findings indicated that the introduction and agreed protocol reduced prolonged labor (from 6.4% to 3.4%), and the proportion of labor requiring augmentation (from 20.7% to 9.1%).In Nigeria, 70.8% of obstetric caregivers were well aware and had a good general knowledge of the partograph but far below expectation [17]. They also lacked detailed knowledge of the components. In Ethiopia, midwives in labor and delivery rooms do not use partographs to all mothers continuously follow the labor process. Similarly, different health facilities do not utilize a partograph due to different determinant factors such as time of admission, nature of membrane during admission, knowledge, training, attitudes, lack of institutional policy to utilize partograph, and number of health professionals per shift [22].

CHAPTER THREE

3. OBJECTIVES

3.1. General objective

- ✓ To assess partograph completion and healthcare worker perspective on its utilization in Attat Primary Hospital, Southwest, Ethiopia, 2023

3.2. Specific objective

- ✓ To determine partograph completion in Attat Primary Hospital, southwest, Ethiopia, 2023.
- ✓ To assess healthcare worker perspective on partograph utilization in Attat Primary Hospital, Southwest, Ethiopia, 2023.

CHAPTER FOUR

4. METHODS AND MATERIALS

4.1. Study area

Attat primary hospital, Southern Region, southwest, Ethiopia. The hospital is a service institution of the catholic church in Ethiopia. It is located about 175 km southwest of the capital, Addis Ababa, on the road of Wolkite to Hosana in Gurage land Ethiopia. It was 46 years in operation and owned by the catholic church in Ethiopia. The Medical Mission sisters founded the hospital in 1969.

4.2. Study period

Conducted from (May 25 - June 25, 2023)

4.3. Study design

A cross-sectional study design was employed to assess partograph utilization in the management of labor in Attat Primary Hospital by using secondary retrospective data.

4.4. Population

4.4.1. Source population

Partograph chart on patient (client) medical cards and obstetric care providers in Attat Primary Hospital.

4.4.2. Study population

Quantitative study

Selected obstetric patient (client) medical cards from 2013 to 2015 May EC in Attat Primary Hospital.

Qualitative study

Obstetric care providers who fulfilled the inclusion criteria in the labor ward of Attat Primary Hospital.

4.4.3. Inclusion criteria

Quantitative

This study includes all partographs who gave birth in the institution having complete or partially complete information from 2013 – 2015 May EC.

Qualitative

Obstetric care providers who were working in the Attat primary hospital delivery ward which includes; midwives, and nurses.

4.4.4. Exclusion criteria

Quantitative

Those partographs which had no information recorded on them (such as partograph sheets on which only delivery summary was recorded but no written evidence of dilation of the cervix and other components). In addition to this mother's files having information showing prolonged labor, sever oligohydraminous, intrauterine fetal death (IUFD), previous cesarean section plus breech presentation, preeclampsia plus latent phase of labor and elective cesarean section were excluded from the study because the partograph completion is not recommended for mothers with the aforementioned characteristics.

Qualitative

Those providers who were on annual, maternity, or sick leave, not found within the data collection period, and did not volunteer to participate were excluded from the study.

4.5. Sample size determination and sampling technique

Quantitative sample

The required sample size of the quantitative study is determined by using a formula to estimate a single population proportion with the following assumption; The confidence interval assumed 95%, margin of error 5%, and proportion 50%.

So, where n= required sample size

Z= critical value for normal distribution at 95% confidence interval which is equal to 1.96(at alpha 0.05)

P= an estimate of the proportion of partograph utilization among obstetric care providers (34.4%)[23]

W= margin of error which is 5%

$$n = \frac{z^2 p(1-p)}{w^2}$$

$$n = \frac{(1.96)^2 0.34(1-0.34)}{0.05^2} = 346.76$$

$$\boldsymbol{n = 347}$$

Qualitative sample

The required sample size of the qualitative study will be determined by the idea of saturation.

4.6. Variables

Dependent variables

- Components of partograph
- Healthcare providers perception

Independent variables

- Fetal condition(fetal heart beat, molding, amniotic fluid)
- Labor progress (contraction, cervical dilation, decent)
- Maternal condition (temperature, pulse, blood pressure, urine output)

4.7. Data collection instrument

Quantitative data collection instrument

A structured questionnaire which adapted from different literatures in English can be used to assess partograph utilization in obstetric patient (client) medical cards.

Qualitative data collection instrument

Semi-structured interview guide which adapted from different literatures in English can be used to assess partograph utilization in the management of labor among obstetric care providers.

4.8. Data collection technique

Quantitative data collection technique

Partograph charts of patients' (clients') medical cards from 2013 – 2015 May EC were selected by using simple random sampling method. Structured questionnaires was used to collect data by using documentary source method.

Qualitative data collection technique

A semi-structured interview guide was used to collect the data by interview method. Their answers were recorded by using recorder and transcript to word by using transcription software Trint.

4.9. Data Collection Tools and Procedure

Quantitative data collection tool and Procedure

Quantitative data was collected by researchers by using structured questionnaires which were adapted from different literatures considering the research objectives. The adapted structured questionnaire were developed in English and used for data collection. The data were collected by structured questionnaires by using documentary source method. The content of the questionnaire included questions on components of the partograph and utilization like fetal condition, labor progress, and maternal condition.

Qualitative data collection tool and Procedure

A semi-structured interview guide was developed in English and used for data collection. Qualitative data was collected by interview technique, using a pre-tested semi-structured interview guide, adapted from different literature considering the research objectives. The content of the questionnaire will include questions on Obstetric care provider's socio-demographic characteristics (age, occupation, income, education, and marital status), questions about partograph components, and perception on its utilization.

4.10. Data quality assurance

Data quality was assured before, during, and after the data collection process

Before data collection: An objective-based and structured questionnaire and semi-structured interview guide were adapted from different literature considering the research objectives. The questionnaire and interview were prepared in English. Pre-testing of the questionnaire will be undertaken to check the understandability by taking 5% of sample partograph charts and

obstetric care providers in Wolkite university specialized and teaching Hospital. After the pre-test there was some modification on the questioners.

During data collection: During data collection, every questionnaire was filled out and checked by researchers for completeness. Unfilled questions on the questionnaire were completed by revisiting.

After data collection: the researchers together rechecked the completeness and consistency.

4.11. Data processing and analysis

Quantitative data analysis

The data were visually reviewed for correctness before being exported to statistical package social science software (SPSS) version 25. The data were processed and descriptive statistics such as frequency and percentage were stated. The categorical variable were presented with tables.

Qualitative data analysis

The transcript data were visually reviewed before being exported to thematic analysis. The data were familiarized, coded and, written by themes.

4.12. Ethical consideration

Ethical clearance was obtained from Wolkite University, College of Health Science and Medicine before starting the actual data collection. All information obtained was kept confidential and the data was used for research purposes only.

4.13. Operational definitions

Partograph completion: refers to recorded all the partograph components (fetal condition, labor progress and maternal condition) correctly to make appropriate decisions and intervene where necessary. Partograph chart which were recorded all components of the partograph considered as good partograph completion and which have not recorded completely considered as poor partograph completion [23,24,26].

CHAPTER FIVE

5. RESULT

5.1. Quantitative finding

We conducted a retrospective review of 347 files from 2013 – 2015 May EC at Attat Primary Hospital. In this study, a total of 347 partograph charts of obstetric mothers which were full filed the inclusion criteria were incorporated. From 347 medical card with partograph charts 121(34.8%) of the partograph charts had fully completed components of the partograph.

Table 1 Completeness of Socio demographic and admission characteristics on the Partographs charts in Attat Primary Hospital, Southwest, Ethiopia, 2023.

Characteristics on the partograph	Complete	Incomplete
Name	347(100%)	0
Age	347(100%)	0
Gravidity	347(100%)	0
Parity	347(100%)	0
Time of admission	347(100%)	0
Date and time of membrane ruptured	347(100%)	0

In our study the three sections (fetal monitoring, labour progress, and maternal monitoring) on the Partograph had different rates of documentation. With the maternal monitoring parameters having (45.5%) and fetal monitoring (44.5%.) overall rate of completion. Within each category, major omissions were identified. For instance, for the labour progress section, only 34.8% recorded “Alert line” and in Maternal Monitoring, the temperature was only recorded 32.6% of the time.

Table 2 The level of completeness of Partograph components of the charts in Attat Primary Hospital, Southwest, Ethiopia, 2023.

Fetal monitoring	**Complete**	**Incomplete**
Fetal heart rate	226(65.2%)	100(34.8%)
Amniotic fluid	179(51.5%)	168(48.8%)
Molding	58(16.7%)	289(83.3%)
Average	154(44.5%)	193(55.5%)
Labor progress		
Cervical dilation	227(65.5%)	120(34.5%)
Descent	121(34.8%)	226(65.2%)
Contraction	237(68.2%)	100(31.8%)
Alert line	121(34.8%)	226(65.2%)
Average	176(50.8%)	171(49.2%)
Maternal monitoring		
Blood pressure	279(80.3%)	68(19.7%)
Pulse	82(23.5%)	265(76.5%)
Temperature	113(32.6%)	234(67.4%)
Average	158(45.5)	189(54.5)

5.2. Qualitative finding

Socio demographic data

Table 3 Qualitative socio demographic data of obstetric care providers in Attat Primary Hospital, Southwest, Ethiopia, 2023.

Interviewee	**Age**	**Sex**	**Educational status**	**Experience**	**Profession**
I1	35	F	Diploma	8	Midwifery
I2	28	F	Diploma	5	Midwifery
I3	30	F	Diploma	6	Midwifery
I4	25	F	Diploma	4	Midwifery

I5	27	F	Diploma	5	Midwifery
I6	25	F	Diploma	4	Midwifery
I7	24	F	Diploma	4	Midwifery
I8	25	F	Diploma	5	Midwifery
I9	26	F	Diploma	5	Midwifery
I10	27	F	Diploma	6	Midwifery

Theme 1: Partograph utilization

We use partograph routinely for every mother that comes to deliver in this hospital and attached to their medical cards. It is mandatory at labor ward and used to monitor and manage the labor it also helps to know the labor progress. Sometimes the partograph components were missed because of workload due to low health care worker numbers, lack of skills and poor attitudes towards its use.

"…sometimes we are overwhelmed by the number of mothers we attend to. Sometimes the labor ward is too busy and the staff on the ward are really few and thinned so the workload is heavy. So sometimes some of cards will not be completed." midwives

Theme 2: Components of partograph

There are many components in the partograph like name, gravidity and parity, card number are filled in the first and others like fetal heartbeat, contraction, cervical dilation, IV fluid given, drugs, oxytocin, blood pressure, pulse and temperature those are the components of the partograph. The major component that has to be filled is the name of mother, gravidity and parity, fetal heartbeat, contraction, cervical dilation and blood pressure of the mother.

CHAPTER SIX

6. DISCUSSION

The present study revealed a low proportion of 34.8% (121/347) for completed Partographs when all three parameters (fetal, mater and labor monitoring) were considered. Over 60% of the reviewed Partographs were inadequate. This low overall completion rate in our study confirms that there were low qualities of in the completion of the partograph [15, 16].

The finding of low Partograph utilization is similar to a study in 45 public health institutions (5 public hospitals) in Addis-Ababa, Ethiopia which showed a completion rate of 34.4% [23]. In our study, there was poor documentation of the key maternal monitoring components (54.5% incomplete), fetal condition components (55.5% incomplete) and labor progress monitoring components (49.2% incomplete) of the Partographs.

This is in line with similar studies in Dar–es- Salaam which showed that only two parameters of the WHO standard Partograph had been completed to slightly over 40% in their review [24, 25]. Other studies in Kenya and Western Uganda also found similar findings of low levels of Partograph completion in the intrapartum stage of pregnancy [15, 26].

The qualitative component of our study provided insights on Partograph utilization. In the Attat Primary Hospital setting, the health care workers attributed the low completion rate to the heavy workload due to low health care worker numbers, lack of skills and poor attitudes towards its use. Overall healthcare workers were knowledgeable about the usefulness of the Partograph in labor monitoring. This finding is similar to a study done in Nigeria among healthcare workers in the Niger Delta hospital [12].

This finding is in contrast to another study done among 140 midwives at three hospitals in the Tamale Metropolis area in Ghana where the study participants reported a high level of availability of the Partograph [27]. Similarly, a study in Rujumbura Health sub-district in Southern Western, Uganda found that the various health centers had sufficient numbers of the Partographs although their utilization was low [15]. However, other sites have documented unavailability as a problem for example in Central Ethiopia, Nigeria and South Africa [12, 18, 28].

In our study, ward congestion also limited Partograph utilization during labor leading to challenges in the Partograph completion. The number of pregnant women coming to Attat for care and delivery is increasing. While all the interviewed participants saw the value of the Partograph, different health care workers had varying ability to document and utilize the Partograph data.

All of the above health system challenges that contributed to the low Partograph completion rates undermine the quality of the obstetric care being received by mothers at this high volume health facility [14, 17].

CHAPTER SEVEN

7. STRENGTHS AND LIMITATIONS OF THE STUDY

7.1 Strengths

This research had a lot of advantages. One of the study's strengths was the monitoring of study was the patient card which were the data of partograph, which increased the data's trustworthiness for assessing partograph consumption. Furthermore, the study investigate on the components of the partograph which helps to investigate the quality of the utilization and in addition to quantitative result corporate the qualitative data which release the result of the study.

7.2 Limitations

This study had a disadvantage in that it was focus on the utilization of partographs. Despite it will not analyze the attitude, knowledge, and associated factors of obstetric care providers in partograph utilization.

CHAPTER EIGHT

8. CONCLUSION AND RECOMMENDATION

8.1. Conclusion

This study revealed that there is 100% utilization of partograph in the hospital in the management of labor however the partograph which has full component filled were 34.8% of partographs which were utilized this means it has low quality of the partograph utilization.

8.2. Recommendation

Health professionals: Every obstetric care provider should consider using Partograph for every woman in labor as a tool of diagnosing difficulties as labor progresses. To correctly use partograph, filling the components has a high level of devotion is required.

Attat hospital: to improve the quality of partograph utilization the hospital should have to provide training programs for obstetric care providers and monitoring the quality by increasing manpower and skilled care givers.

Wolkite University: To improve maternal health, the educated manpower is the key to solve those problem, educating students on the partograph utilization and the important of each component will be strengthened the quality of partograph utilization.

Researchers: Further research into predictors for partograph usage and titles linked to partograph knowledge, attitude, and usage is encouraged for the investigators.

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Annex 1: Structured questionnaier

WOLKITE UNIVERSITY

COLLEGE OF MEDICINE AND HEALTH SCIENCE

DEPARTMENT OF NURSING

A structured Questionnaire to assess partograph utilization in the management of labor in Attat Primary Hospital, Southwest, Ethiopia, 2015

Date of data collection ____/_____/_____

Data collector Name ———————————

Signature ———————————

Please Circle the possible answer in the response box.

1. Components of partograph recorded in obstetric paitient (client) medical card	
1.1.Are the following patient information record?	
1.1.1. Name	Complete Incomplete
1.1.2. Gravida, para,	Complete Incomplete
1.1.3. Age	Complete Incomplete
1.1.4. Date and time of admission	Complete Incomplete
1.1.5. Time of membrane ruptured	Complete Incomplete
1.2.Are the following information about the fetus recorded?	
1.2.1. Fetal heart rate	Complete Incomplete

1.2.2. Amniotic fluid	Complete Incomplete
1.2.3. Molding	Complete Incomplete
1.3.Are the following information about Labour progress recorded?	
1.3.1. Cervical dilatation	Complete Incomplete
1.3.2. Contractions	Complete Incomplete
1.3.3. Descent	Complete Incomplete
1.4.Are the following information about maternal conditions record review?	
1.4.1. Temperature	Complete Incomplete
1.4.2. Pulse	Complete Incomplete
1.4.3. Blood pressure	Complete Incomplete
For augmentation and induction	
1.5.Are the following information about agumented and inducted mother recorded?(occasional)	
1.5.1. Oxytocin in IU?	Complete Incomplete
1.5.2. Drop in minute	Complete Incomplete

Annex 2: Semi-structured interview guide

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Informed consent

Dear Sir/Madam:

How are you? I want to thank you for taking the time to meet us today.

My name is _____I am here from Wolkite University College of Medicine and health science. I am researching Assessment of partograph utilization in the management of labor in Attat Primary Hospital, Southwest, Ethiopia, 2015. For the partial fulfillment of a bachelor of degree in nursing in Wolkite University College of Medicine and Health Science College. This study aims to assess partograph utilization in the management of labor in Attat Primary Hospital. The study will help in providing baseline data for the study and other researchers on issues regarding partograph utilization in the management of labor.

The interview will take less than one hour. I may record your voice during the session because I don't want to miss any of your comments. Although I will be taking some notes during the session, I can't possibly write fast enough to get it all down. Because we're on tape, please be sure to speak up so that we don't miss your comments.

All responses will be kept confidential. This means that your interview responses will used for the research only and we will ensure that any information we include in our report does not identify you as the respondent. Your name or your identification information will not be registered instead we use codes. Therefore, you are free not to respond to questions that you don't have to talk about anything, and even end the interview at any time. I, first and at most, acknowledge your effort in responding to the process of the interview but inform you that no incentives.

Are you willing to participate?

Yes ☐ No ☐

Part I: General Information

1. Profession:_____

Part II: Socio-demographic information

1. Age:_____
2. Sex:_____
3. Educational status:_____
4. Experience: _____

Part III. Interview Questions

1. Have you used a partograph to manage labor?

   _____

2. How often do you use a partograph?

   _____

3. What is your reason for using a partograph?

   _____

4. What would make a skilled difficult to use the partograph when monitoring women in labor?

   _____

5. What are the components of a partograph?

   _____

6. Which components are must be filled in the partograph?

   _____

Thank you for your cooperation!!!

Annex 3: Partograph

Name | Gravida | Para | Hospital number

Date of admission | Time of admission | Ruptured membranes | hours