

**A SURVEY OF THE KNOWLEDGE, ATTITUDE AND PRACTICE OF THE LABOUR PARTOGRAMME AMONG HEALTH PERSONNEL IN SEVEN PERIPHERAL HOSPITALS IN YAOUNDE, CAMEROON.**DOHBIT J.S.<sup>1</sup>; NANA N.P.<sup>2</sup>; FOUMANE P.<sup>1</sup>; MBOUDOU E.T.<sup>1</sup>; MBU R.E.<sup>2</sup>; LEKE R.J.I.<sup>2</sup>(Manuscript N°D198. Received 16/04/2010. Accepted in revised form 17/06/2010) **Clin Mother Child Health 2010; Vol 7, N° 1: 1215 - 1219****ABSTRACT**

Late referrals of complicated labour cases and prolonged labour contribute a major part in maternal morbidity and mortality. The labour partogramme has been shown to be an effective instrument in the follow-up of labour cases. The referral maternities of Yaounde still receive delayed and poorly managed cases of labour from the peripheral hospitals. The rationale of this study was to assess the knowledge, attitude and practice of the labour partogramme among the health personnel in the main centers where referrals come from. We interviewed the personnel of those hospitals who accepted to enroll in the study. Students and those who were not willing to participate in the study were excluded, and the study lasted for 3 months from January to March 2006.

Our results showed that the personnel had a good knowledge of the labour partogramme, especially (100%) amongst the doctors. They also had a positive attitude towards the labour partogramme. However, the partogramme was not routinely used, with only 50% of the respondents who accepted using it regularly. Most of them blamed the low rate of use to the unavailability of the partogramme. Despite the very good knowledge of the labour partogramme and the positive attitude towards its use, the rate of use still remains very low. We do recommend that the training of the personnel should be more practical and the labour partogramme made available to both private and public hospitals. An audit system should also be put in place to ensure the effective use of the partogramme.

**KEY WORDS:** Partogramme – Labour – Knowledge – Attitude - Practice.**ENQUÊTE SUR LA CONNAISSANCE, ATTITUDE ET PRATIQUE DU PARTOGRAMME CHEZ LE PERSONNEL DE SANTÉ DANS SEPT HÔPITAUX PÉRIPHÉRIQUES DE YAOUNDÉ, CAMEROUN****RESUME**

Les évacuations tardives et le travail prolongé contribuent pour une grande proportion à la morbidité et la mortalité maternelles. Le partogramme a été démontré très efficace pour le suivi du travail d'accouchement. Les maternités spécialisées de Yaoundé continuent à recevoir les cas de travail prolongé avec prise en charge inadéquate.

L'objectif de ce travail était d'évaluer les connaissances, attitudes et pratiques au sujet du partogramme chez le personnel des salles d'accouchement des structures sanitaires périphériques pourvoyeurs des cas référés. Nous avons interrogé le personnel ayant accepté de faire partie de l'étude. Les étudiants étaient exclus. La période de l'étude s'étalait de Janvier à mars 2006.

Nos résultats ont montré que la plupart du personnel avait une bonne connaissance du partogramme (100% chez les médecins). Les attitudes étaient généralement positives. 50% du personnel interrogé utilisait le partogramme. La non-disponibilité était souvent mise en cause. Malgré le taux élevé de connaissances au sujet du partogramme parmi le personnel interrogé, son taux d'utilisation reste faible. Nous recommandons que la formation du personnel de santé soit plus pratique et que tous les services de santé soit fournis en partogrammes. Un système de suivi et de supervision est nécessaire pour assurer l'emploi de routine du partogramme.

**MOTS CLES:** Partogramme -Travail- Connaissances - Attitude – Pratique.

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**I- INTRODUCTION**

The labour partogramme has been heralded as one of the most important advances in modern obstetric care (safe motherhood launched 1987) [1, 2, 3]. The partogramme has been shown to be an efficacious tool for monitoring labour and

identifying women in need of an obstetric intervention [4]. It has transformed the subjective evaluation and management of labour into a more objective exercise with predictive ability as shown by Drouin et al. and Dujardin et al. [5]. WHO in the safe motherhood programme, showed the partogramme to be effective in reducing prolonged labour, in reducing the rate of labour augmentation, in reducing the rate of emergency caesarean sections and also in reducing the number of still births [3]. National partogrammes have been introduced in many countries supported by guidelines and training workshops but often with little follow-up and supervision. Emphasis must be made on the time of referral.

NASAH et al, in 1979 in Cameroon, showed that the use of the partogramme reduced perinatal mortality by 10 deaths per 1000 births and abnormal labour was detected early enough [6]. DOH et al., 1989 in the same hospital setting like NASAH, found a maternal mortality rate of 33 per 100,000 births over 5 years; that was considered one of the lowest in Africa and they concluded that the use of the partogramme among other factors, greatly contributed to the low rate [7]. The rationale of this study was to find out the use of the partogramme in the peripheral hospitals of Yaounde.

## II- METHODOLOGY

This was a survey study involving health care providers in the peripheral hospitals of Yaounde. The study population was made up of midwives and doctors attending to women in labour in these hospitals of Yaounde. We included every midwife or doctor who attended to labour cases in the selected centers and who accepted to participate in the study. We excluded those who refused to participate and also students on internship.

The study was done in three public-district hospitals (Cité-verte, Biyemassi and Efulan), and in four private health institutions (Etoudi Catholic Health Centre, CASS Nkoldongo Health Centre, the Djoungolo Presbyterian hospital and the AD-Lucem Foundation hospital Obobogo).

We visited each institution after obtaining a prior authorization from the authority in charge. We organized short meetings to explain the study and how the questionnaires should be filled. Each participant was requested to complete and hand the form to the investigator. The questionnaire had French and English versions.

A high response rate was ensured by regular weekly visits to meet the different groups on duty. The sample

size of this study was obtained after collecting all the questionnaires. These centres were chosen because they are the main centres from where the majority of referred cases come. Sampling was simply based on the observation that the major part of referrals came from these institutions.

The institutions were then grouped under private for centres not owned by the state and public for centres owned by the state. The number of respondents per group was then calculated.

## III- RESULTS

The data collected were analyzed and expressed in tables. The professional characteristics of the respondents were studied. Out of a total of 66 respondents, 36 were from the private hospitals and 30 from the public hospitals. The public sector however had a greater proportion of more qualified staff, 4 gynaecologists as opposed to 1 for the private sector. An assessment of the working experience of the respondents from their years of work is shown in the table that follows. The respondents have been subdivided into two groups; doctors and nurses from both the private and public sectors. The proportion of the least experienced is almost equal to that of the most experienced. Twenty five percent of the doctors had worked for less than 5 years and 25% for more than 20 years. As for the nurses, 18% had worked for less than 5 years and 19% for more than 20 years. In the whole, out of the 66 respondents, 27.27% had worked for less than 5 years and 28.79% had worked for more than 20 years. The respondents' knowledge of the partogramme was assessed using a series of short and simple questions. The majority of the respondents had an idea of the partogramme and had been trained to use it. All the doctors admitted having an excellent knowledge of the partogramme as opposed to 27.59% of the nurses. Most of the nurses, 56.9%, declared that their knowledge was average. The remainder 15.51% of nurses with poor knowledge is however not negligible. The doctors showed an excellent 100% knowledge of the partogramme. A few nurses were still having insufficient knowledge of the partogramme.

Two questions were asked to evaluate the practice of the partogramme. Fifty percent of the doctors and 56.9% of nurses admitted to be using the partogramme routinely. This low rate was attributed to little or no knowledge of the partogramme among 12.5% of the doctors and 6.9% of the nurses. The unavailability of the partogramme was given as reason by 25% of the doctors, against 39.66% of the nurses. 10.34% of the

nurses blamed the low rate of use of the partogramme because it entails much details to be filled. Only about half of the population routinely uses the partogramme in both groups. In the group of doctors, 62.5% of them had no reason for not routinely using the partogramme. Forty three percent of the nurses could not explain the inconsistent use. The attitude of the respondents to the partogramme was also assessed. All the doctors (100%) would like to use the partogramme daily. 10.34% of the nurses do not like the routine use of the partogramme. 62.5% of the doctors and 96.55% of the nurses desired further training on the partogramme. The overall attitude is positive and there is a strong desire of the health personnel to pursue further training in the use of the partogramme.

**Table I**-Professional characteristics of the respondents (N=66).

Rank	Public		Private	
	Frequency	%	Frequency	%
Chief medical officer	1	3,3	0	0
General practitioner	2	6,67	0	0
Gynaecologist	4	13,33	1	2,78
Matron	3	10	3	8,3
Midwife	11	36,67	17	47,22
Nursing sister	4	13,33	12	33,33
Nurse aide	5	16,67	3	8,33
<b>Total</b>	<b>30</b>	<b>100</b>	<b>36</b>	<b>100</b>

**Table II**- Duration of practice.

Years	Doctors		Nurses		Total	
	Number	%	Number	%	Number	%
Less than 5	2	25	16	27.59	18	27.27
5 to10	2	25	9	15.52	11	16.6
10 to15	2	25	6	10.34	8	12.12
15 to20	0	0	10	17.24	10	15.15
More than20	2	25	17	29.31	19	28.79
<b>Total</b>	<b>8</b>	<b>100</b>	<b>58</b>	<b>100</b>	<b>66</b>	<b>100</b>

**Table III**- Respondents' knowledge of the partogramme.

Questions	Doctors		Nurses	
	Frequency	%	Frequency	%
<b>Have you heard of the partogramme?</b>				
Yes	7	87.5	58	100
No	1	12.5	0	0
No answer	0	0	0	0
<b>Total</b>	<b>8</b>	<b>100</b>	<b>58</b>	<b>100</b>
<b>Have you been trained to use the partogramme?</b>				
Yes	8	100	45	77.59
No	0	0	13	22.41
No answer	0	0	0	0
<b>Total</b>	<b>8</b>	<b>100</b>	<b>58</b>	<b>100</b>
<b>Where were you trained?</b>				
In school	8	100	38	65.52
In service	0	0	8	13.79
No answer	0	0	12	20.69
<b>Total</b>	<b>8</b>	<b>100</b>	<b>58</b>	<b>100</b>
<b>How well do you know the partogramme?</b>				
Well	7	87.5	16	27.59
Average	1	12.5	33	56.90
Poor	0	0	9	15.51
No answer	0	0	0	0
<b>Total</b>	<b>8</b>	<b>100</b>	<b>58</b>	<b>100</b>

**Table IV**- Knowledge on the usefulness of the partogramme.

Questions	Doctors		Nurses	
	Frequency	%	Frequency	%
<b>Definition of the partogramme</b>				
Correct	8	100	50	86.21
Incorrect	0	0	7	12.07
No answer	0	0	1	1.72
<b>Total</b>	<b>8</b>	<b>100</b>	<b>58</b>	<b>100</b>
<b>Is the partogramme useful?</b>				
Yes	8	100	55	94.83
No	0	0	2	3.45
No answer	0	0	1	1.72
<b>Total</b>	<b>8</b>	<b>100</b>	<b>58</b>	<b>100</b>
<b>The partogramme prevents prolonged labour</b>				
Yes	8	100	55	94.83
No	0	0	1	1.72
No answer	0	0	2	3.45
<b>Total</b>	<b>8</b>	<b>100</b>	<b>58</b>	<b>100</b>
<b>The partogramme indicates when to refer cases</b>				
Yes	8	100	57	98.28
No	0	0	0	0
No answer	0	0	1	1,72
<b>Total</b>	<b>8</b>	<b>100</b>	<b>58</b>	<b>100</b>

**Table V-** The practice of the partogramme.

Question	Doctors		Nurses	
	Frequency	%	Frequency	%
<b>Do you routinely use the partogramme?</b>				
Yes	4	50	33	56.90
No	4	50	24	41.38
Never used	0	0	0	0
No answer	0	0	0	1.72
<b>Total</b>	<b>8</b>	<b>100</b>	<b>58</b>	<b>100</b>
<b>What disturbs its routine use?</b>				
Little or no knowledge	1	12.5	4	6.90
Not available	2	25	23	39.66
Much details to fill	0	0	6	10.34
No answer	5	62.5	25	43.10
<b>Total</b>	<b>8</b>	<b>100</b>	<b>58</b>	<b>100</b>

**Table VI.** The attitude of the respondents to the partogramme.

Questions	Doctors		Nurses	
	Frequency	%	Frequency	%
<b>Would you like to use the partogramme in your daily practice?</b>				
Yes	8	100	51	87.94
No	0	0	6	10.34
No answer	0	0	1	1.72
<b>Total</b>	<b>8</b>	<b>100</b>	<b>58</b>	<b>100</b>
<b>Do you desire training on the partogramme?</b>				
Yes	5	62.5	56	96.55
No	3	37.5	2	3.45
No answer	0	0	0	0
<b>Total</b>	<b>8</b>	<b>100</b>	<b>58</b>	<b>100</b>

#### IV- DISCUSSION

Our results show an almost equal proportion between the least experienced and the most experienced. UMEZULIKE et al, in their series found a higher percentage of the least experienced, 65% were of the junior rank and 77% had worked for 10 years or less. In their series the personnel's knowledge about the partogramme was very superficial [8]. Our results show a very high level of the personnel's knowledge about the partogramme. All our doctors could correctly define the partogramme as compared to 57% reported by UMEZULIKE et al and only 12.07% of the nurses gave an incorrect definition of the partogramme compared to 74.1% in the other series.

All the doctors and more than 94% of the nurses admitted that the partogramme was useful and could prevent prolonged labour and facilitate early referral to

specialized centers. This falls in line with the finding that the partogramme has been shown to be an efficacious tool for monitoring labour and identifying women in need of an obstetric intervention [4].

WHO in the safe motherhood programme, showed the partogramme to be effective in reducing prolonged labour, in reducing the rate of labour augmentation, in reducing the rate of emergency caesarean sections and also in reducing the number of still births [3].

Despite the recognition of the importance of the partogramme, the rate of its routine use was still not very satisfactory; 50% among the doctors and 56.9% among the nurses. This rate was however higher than the 25% found by UMEZULIKE et al [8]. This low rate of use of the partogramme in the peripheral hospitals of Yaounde is a contrary of what is done in the specialized hospitals in Yaounde. DOH et al., 1989 in the same hospital setting like NASAH, found a maternal mortality rate of 33 per 100,000 births over 5 years; that was considered one of the lowest in Africa and they concluded that the use of the partogramme among other factors, greatly contributed to the low rate [7]. The unanswered question is why the rate of use of the partogramme remains unsatisfactory and the majority of the respondents gave no answer for it. The partogramme was routinely used by 43.33% of the respondents from the public institutions and by 66.66% of those in the private institutions. This difference is probably due to the fact that health care delivery is more organized in the private and especially in the religious denominations.

Another interesting finding was the wish of all the doctors and 87.94% of the nurses to use the partogramme routinely even though no reason was given for the current low rate of implementation.

The high proportion of doctors, 62.5% and 96.55% of nurses expressing the need for more training could explain the low rate of implementation. Their theoretical background could be strong enough even though the practical aspects may still be lacking.

The partogramme was accepted by all the participants of the study to be an important tool in the monitoring of labour. The low rate of implementation is an important indicator that needs to be investigated and strategies put in place to improve upon. In so doing, the incidence of prolong labour will reduce. A reduction in prolong labour cases will mean reduced maternal and fetal morbidity and mortality.

It is known that many factors come into play as far as maternal mortality is concerned. The factor related to the quality of health care cannot be over emphasized.

The early referral of cases requiring specialist care will improve on the situation. That can be possible in a low resource setting like our own if and only if an adequate follow up of labour is done. The most appropriate tool for this is the proper use of the partogramme. Emphasis has to be put on routine training of the personnel and by making sure that every case that requires a partogramme be subjected to it. As such, less and less uterine ruptures, cases of obstructed labour and other complications shall be received from the periphery.

#### **V- CONCLUSION AND RECOMMENDATIONS**

The results of our survey show a satisfactory qualification of the staff that takes care of women in labour in the peripheral health institutions. Their theoretical background is also satisfactory and more than 83% desire training in the use of the partogramme. The rate of implementation of the partogramme is not yet satisfactory and this could explain late referrals observed in the specialized maternity services of Yaounde. ■

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