

BARRIERS TO THE UNIVERSAL APPLICATION OF THE PARTOGRAPH FOR LABOUR MANAGEMENT: A REVIEW OF THE ISSUES AND PROPOSED SOLUTIONS

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ABSTRACT:

The Partograph is a simple clinical tool for recording observation in first stage active phase labour aiming to alert staff who provide care in labour to deviation in labour progress as well as in the wellbeing of mother and baby. Due to the devise of the alert and action line and the protocol for the use of the Partograph, there is early alert to complications (alert line) and the eventual treatment (action line), is by the staff with the requisite skill in order to ensure good feto-maternal outcome. This principle of the Partograph has not been clearly understood. The main reason for this misunderstanding is poor knowledge of why and how the Partograph was created. This is why there are the debate and consequent lack of a consensus over several issues like the number of hours of separation between the alert and action lines; use of the alert and action line in a tertiary centre; the time for artificial rupture of fetal membrane and the time for commencement of oxytocin augmentation to correct slow labour. These debates which constitute the barriers are all unnecessary because the facts which should guide opinion are revealed by a revisit to the history of the Partograph which will help to establish the reasons for each actions and procedure for the use of the Partograph. Finally, poor knowledge of how to use the Partograph to conduct labour is the greatest barrier for now. It is concluded that removing the barrier is best by concerted training on how to use the Partograph to all staff cadre involved in labour management.

Keywords: Reducing Barriers to the use of Partograph for labour care.

INTRODUCTION:

Care in spontaneous labour worldwide is now done routinely with the Partograph following W.H.O recommendation (1-2). The Partograph is a clinical tool that displays the details of labour in a pictorial manner and compares them with the ideal labour profile against time, in order to enable easy identification of abnormal labour pattern' as the basis for early intervention and prevention of obstetric complications (3-6). In order to improve wide spread use of the Partograph in all health care settings, W.H.O produced the modified W.H.O Partograph so that all cadre of staff involved in labour care will be able to use the Partograph (7). Indeed, a recent study has confirmed that the modified W.H.O Partograph is more user friendly because it simplified the previous versions and hence will improve the wide spread use of the Partograph in all health care settings (8). In spite of this, the Partograph is not as widely used worldwide as it should be, judging from the potential advantages it has in the management of labour. In this review we examined the evolutionary history of the

Partograph as a way to identify the core content and how the Partograph should be correctly used for labour management. Thereafter, we identified the barriers to the universal use of the Partograph and offer suggestions on how to reduce these barriers.

Evolutionary history of the Partograph

The composite Partograph was first produced by Phillpott and Castle in 1972, as a tool for the supervision of first stage labour in the context of active management of labour (AML) as a strategy to prevent prolonged labour (9-11). The Partograph was produced as a response to the biggest obstetric challenges at the time, which was the prevention of prolonged labour. At that time, active management as enunciated by O'Driscoll 1969 (12-14) had been recognized as the antidote to prolonged labour worldwide and obstetric care was generally geared towards the practice of active management of labour in various units (15-16). The details of the protocol for active management of labour by O'Driscoll

was difficult for most people to implement particularly with reference to the involvement of senior obstetric staff from onset of first stage: active phase one hourly vaginal examination (VE); early artificial rupture of membrane (ARM); one Nurse for every laboring woman and the oxytocin augmentation treatment for failure of the cervical os in active phase labour to dilate at the rate of 1cm per hour with the resultant augmentation rate of 55% (17-20). Only few units in the world, could reproduce the same good labour outcome of 1% prolonged labour rate and 5% caesarean section (c/s) rate with the active management of labour (21-23). Apart from this, the O'Driscoll protocol could only be implemented in a tertiary centre set up or facility with a large compliment of obstetric staff and not in a peripheral unit manned by staff with no obstetric skill.

This was the prevailing circumstance in which Phillpott and Castle set out to introduce active management of labour in a low resource environment like Harare Zimbabwe with considerable constraints in man power and material resources. Phillpott had few staff with the obstetric skills and knowledge of how to practice A.M.L as by the O'Driscoll version but had several midwives and medical officers with limited obstetric skill who manned the peripheral units which conducted the bulk of the deliveries. The few staff with the obstetric knowledge were only based at the referral hospitals in Harare. There was no way that A.M.L as by the O'Driscoll version that would be introduced at the referral hospital alone could make any impact on obstetric care, when the majority of the deliveries were at the peripheral unit. Thus, the circumstance and local constraints of the practice, were the issues, for which Phillpott and Castle modified the A.M.L protocol by O'Driscoll to suit their setting then, in Harare. As by the setting in Harare, Phillpott and his team could not be involved in the management of all first stage labour from the onset as required by the O'Driscoll protocol because most deliveries were in the peripheral unit in the rural areas. Hence, his attempt to introduce A.M.L had to incorporate the midwives who are involved in the management of first stage labour from the onset and these midwives had to be provided with the strategy to make them recognize abnormal labour early enough for transfer. This strategy relied on

the core principle of A.M.L in which normal labour progress is defined as the cervical os dilatation rate of 1cm per hour in first stage active phase labour, as the safe basis for the management of all women in labour whether at the referral or peripheral unit and deviation from this progress was the basis to seek help or arrange the transfer of the parturient.

The Phillpott composite Partograph

Phillpott designed his own version of active management of labour with the Partograph as the tool for implementing it which involved the midwives and other non obstetric staff at the peripheral unit, from the onset of first stage active phase labour management. The composite Partograph was created as a tool to simplify and standardized obstetric data documentation for all parturients, irrespective of place of the labour management. The Partograph also contained the alert line as a way for easy visual recognition of normal progress at 1cm per hour cervical os dilatation rate which is the main principle of A.M.L of anticipating normal progress at the rate of 1cm per hour cervical os dilatation rate in active phase labour (9). There was also the action line which was drawn 4 hours to the right and parallel to the alert line to visually represent the point of failure to progress at 1cm per hour after 4 hours of delayed progress. The action line was the point to commence actions as intervention to correct the failure of labour to progress at the rate of 1cm per hour (10). The 4hours of delay of action and location of the action line was the estimated time for all the referred parturients to assess the referral central unit from any peripheral unit in Harare. It was never a statistically or clinically derived time interval. Rather, it was derived from the circumstances and exigencies of the practice in Harare.

By the protocol guiding the use of the Partograph, the midwives managed the parturient routinely at the peripheral unit but referred, when the labour progress cross the alert line which implying that labour progress was now less than 1cm per hour cervical os dilatation rate. On arrival at the referral central unit, the labour progress of those not yet delivered, would have crossed the action line; and after assessment by the obstetric staff, actions like

ARM, oxytocin augmentation were instituted in the further management of the cases. Also, routine monitoring with VE was at 4 hourly intervals and not at hourly interval as by the O'Driscoll version. This was the first time AML was being practiced in which labour supervision was based on normal progress at 1cm per hour (by alert line concept) and action or intervention like oxytocin augmentation was delayed for 4 hours and senior obstetric were involved in the labour management much later (as late as 4 hours after progress was less than 1cm per hour) rather than at the onset of active phase labour. The outcome of labour management with the Partograph version of AML, produced good results with reduced prolonged labour and c/s rates and the delivered babies had good apgar scores just as were the results of AML by O'Driscoll protocol though not quite the same (11).

The W.H.O Partograph

The World Health Organization (W.H.O) in 1987 adopted the Phillpott Partograph and modified it as the W.H.O Partograph and recommend it and protocol as the alternative and preferred version of AML for use in all settings of health care worldwide (24). The Partograph was a cheaper version of AML to implement than the O'Driscoll protocol in terms of manpower and materials. It involved midwives and doctors in a referral linkage in the management of labour and therefore represents a more comprehensive care of active phase labour that can be used in all levels of health care. The O'Driscoll version of AML, could only be used in a tertiary centre with a large compliment of skilled obstetric staff who had to be involved from the early active phase labour to perform the hourly VE in the labour management. The W.H.O Partograph has gone through several versions and the current version (the modified W.H.O Partograph) is easy and user friendly (8). The recording of the findings in labour begins from the active phase labour which is cervical os dilatation of 4cm in all women irrespective of age and parity. Observations are all at regular intervals but with VE at 4 hourly intervals or earlier if indicated. When labour progress cross the alert line, it is a signal that progress is less than 1cm per hour which is a labour anomaly (slow labour progress). In a peripheral unit, or in a home delivery

arrangement, such a parturient should be transferred for obstetric care in the nearest secondary or tertiary centre but in a secondary or tertiary unit, such a parturient should be brought to the attentions of a more senior obstetric staff to assess the cause and subsequently manage the slow labour progress. When the progress of labour cross the action line, which is located at 4 hours from the alert line on the W.H.O Partograph, this is a signal that the labour progress of less than 1 cm per hour has been sustained for 4 hours and hence requires intervention like oxytocin augmentation etc to correct the substantially delayed progress. If the intervention does not result in delivery within a given period, there may be resort to c/s delivery. In this way, the Partograph is a very effective tool for the efficient conduct of spontaneous labour. It is a tool that makes for easy and early recognition of slow labour progress as a labour anomaly (via the alert line concept) and by the protocol such labour anomaly requires the involvement of the appropriate persons (bstetric staffs) and appropriate intervention (such as oxytocin augmentation) at the right time (not more than 4 hours delayed progress) in labour care for safe delivery outcome. It potentially will allow all parturient worldwide to be managed with the same format and protocol which will make for comparison of results of treatment in all settings of health care. In spite of these benefits from the use of the Partograph, it is not as widely used as it should be because of several barriers to its universal application. It is an established fact that in most parts of the world the Partograph has very restrictive use for labour management.

Barriers to the use of the Partograph

There are several barriers to the use of the Partograph, but we shall critically examine a few important barriers and offer ways to avoid them.

(1) Poor knowledge of how to use the Partograph for labour management

Inspite of what is known about the Partograph and its usefulness for labour management, the knowledge is still very low especially amongst the midwives and other health workers who conduct deliveries especially in several

developing countries. In Nigeria, the knowledge of how to use the Partograph labour supervision is only in teaching hospitals and very little is known of the Partograph for in non teaching hospitals and peripherals centers (25-27). The poor knowledge of how to use the Partograph in labour care in Nigeria is attributed to the fact that when the Partograph was introduced in Nigeria, it was at the teaching hospitals and taught only to doctors to the exclusion of the midwives who are the cadre of staff which the Partograph was designed for, by Phillipott. Overtime, the midwives have come to identify the Partograph as a tool used by the doctors only and for research since it was mainly used in teaching hospitals, for labour management. To that extent, as well, it is seen as a complex tool that requires specialized knowledge to understand the use for routine labour supervision.

The way to solve this problem is to invest on massive teaching of the use of the Partograph to midwives in teaching hospital, federal medical centres, central and specialist hospitals, the big missionary and private hospitals and also at the various schools of midwifery in Nigeria. The midwives at the peripheral units (primary health centres, comprehensive health centres, and health post) could be trained at the nearest secondary or tertiary centres on an in service scheme basis. This training should be back up by massive and sustained supply of the Partograph to maintain the use. This is a more dependable approach to increasing the knowledge and the use of the Partograph for labour care and not the present on and off, almost ad hoc pockets of training workshop on the use of the Partograph. When it is estimated that there is a sufficient spread of the knowledge of how to use the Partograph for labour management, there may then be a national ruling that the Partograph should be used for the conduct of labour in all women in the country.

(2) Lack of supply of the Partograph as a stationery for use in labour ward

In most parts of the world the Partograph is now a standard stationery for use in labour wards. In most teaching hospitals in Nigeria, where the Partograph is used for routine labour supervision, the Partograph is commonly available as a stationary. It is not available in other hospitals. However, attempt to improve the use of the Partograph has led to several training workshops for various cadre of health workers who on return to their institution are unable to use the Partograph because of lack of supply as reported by some previous studies (28-29). At the moment, the supply of the Partograph as a stationery for use in labour ward in most hospital in Nigeria is uncommon because of high level of ignorance of the Partograph. It is hoped that when knowledge of how to use the Partograph improves, the supply of Partograph as a standard stationery for use in labour ward will become routine. As for now, the unavailability of the Partograph for use in labour wards is part of the barrier to the universal application of the Partograph.

(3) Resistance to the use of the Partograph

A major barrier to the universal application of the Partograph is resistance to the use of the tool. At the onset of the introduction of the Partograph for labour care, its use was not popular in Europe because it was seen as a tool for those in the developing countries to learn ideal obstetric care. Also, since the data used for the construction of the Partograph were derived from African women it was thought that it would not be applicable to non-African women for labour care (30). However, events have now proved that the Partograph is a tool for labour management in all mankind (31). In the USA, fear of litigation was the reason for the resistant to the use of the Partograph because the Partograph is an

incontrovertible proof of how well or badly the course of labour has been managed.

On the other hand, there is resistance on the part of the midwives to the use of the Partograph, on the ground that the Partograph is restrictive and erodes the autonomy of the midwives to manage labour in totality (32-33). The Partograph is a tool that presents labour course as pure midwifery for progress within the alert line when the cervical os dilatation rate is 1cm per hour or more for which labour course and delivery is completely managed by the midwives. However, when the labour progress cross the alert line and definitely the action line, such labour anomaly is no longer midwifery and the midwife is mandated to hand over the care of such cases to the obstetrician with the requisite knowledge, to handle such cases. This is the restriction that is resisted by the midwives who believe that their mandate for labour care include managing progress that has crossed the alert and action lines.

The beauty of the Partograph is that it is a tool that makes for easy separation and recognition of midwifery cases in the course of labour supervision via the alert line system and therefore involves the appropriate person who will invoke the appropriate intervention at the appropriate time for safe labour outcome. The appropriate cadre of staff to manage labour course anomaly such as crossing the alert line on the Partograph (slow labour progress) is the obstetric and not the midwifery team for safe motherhood. This is how the Partograph is a tool that facilitates a team work approach to the supervision of normal labour in which the midwives manage the normal progress till delivery but the obstetric team handles those with labour anomaly for subsequent obstetric care till delivery

(4) Lack of a uniform protocol for the use of the Partograph in tertiary level labour care

The Partograph is used for labour care in most teaching hospitals but they all use different protocols. The difference in the protocol reflects the view of the staff at the centre on various aspect of the W.H.O. protocol for the use of the Partograph. The issues are the 2 hours or 4 hours between the alert and action lines, the use of the alert and action line in tertiary centre labour ward; the time to perform ARM for women in active phase labour and when to commence oxytocin augmentation for those with uterine inertia, manifesting as slow labour progress without cephalo pelvic disproportion (C.P.D).

(a) Separation between the alert and action line

This has remained a point of controversy till date. The WHO Partograph retained the 4 hours between the alert and action lines as in the original Phillpott Partograph even though it was not derived from any clinical or statistical studies. This was to confirm that the outcome of the labour managed with A.M.L. intervention like oxytocin augmentation delayed for 4 hours from alert line, was good enough for current day obstetric practice. The 4 hours also will avoid the unnecessary augmentation of some women who may not progress at 1cm per hour uniformly throughout labour but will end with normal delivery within 12 hours active phase (1).

The issue is, when to begin oxytocin augmentation which has several points of view. One such view is if actions like oxytocin augmentation as a treatment for slow labour progress, is to be standardized for commencement at the action line, then waiting for 4 hours is too long, for a tertiary level care ward, when the man power and materials for such intervention are available. A tertiary level labour ward has rich obstetric man power unlike the situation in Harare then, where the peripheral units for which the Partograph use was designed, lacked

obstetric staff to institute oxytocin augmentation, hence the 4 hours delay. Another strong point of view is that, such delayed action for 4 hours, might not any longer completely, reverse the initial cause of the delayed progress and thus prolonged labour may still occur with such delayed augmentation. This is the basis for the controversy, which has not even been resolved by several randomized controlled studies which presented conflicting results in studies comparing augmentation at 2 hours versus 4 hours (34-36).

This controversy reveals that the issue of separation between the alert and action lines have been completely misunderstood. In order to have a proper understanding, a historical recall of the origin of the 4hours action line and the personnel involved in conducting the treatment will help resolve the controversy. The alert and action line were derived for use in the context of AML which was enunciated by O'Driscoll. This AML rely on identifying slow progress (which is the earliest 1st stage anomaly) for treatment as the strategy to prevent prolonged labour. Active management of labour by the O'Driscoll protocol emphasized early involvement of senior obstetric staff with labour management, who performed hourly VE in order to achieve early diagnosis and instant treatment of slow labour with oxytocin augmentation. Phillpott and Castle did not have the obstetric staff available at the peripheral units where most of the women delivered and hence could not (like several other) implement AML with this O'Driscoll protocol at the peripheral unit where the initial labour management began.

He therefore designed a labour management protocol that incorporated the midwives at the peripheral unit in a labour management that made them easily identify slow labour progress. He produced the Partograph and constructed the alert line to enable the midwife recognize slow progress at the various

peripheral units. Women with slow progress when diagnosed with the aid of the alert line at the peripheral units, had to be referred to the central unit where there were the obstetric staff to institute the augmentation to treat the uterine inertia or other causes of the slow progress which was 4 hours later. However, when the cases arrived after 4 hours which is marked by the action line, it is the senior obstetric staff with the appropriate skill not midwife or other non-obstetric staff who conducted the subsequent management until delivery.

Thus both O'Driscoll and Phillpott in the use of AML to conduct labour, relied on the diagnosis of slow progress which was by senior obstetric staff in the O'Driscoll protocol but in the Phillpott protocol, this was by the midwives or non obstetric staff in the periphery using the alert line system and referred. The action to correct the slow progress was immediate by senior obstetric staff who made the diagnosis in the O'Driscoll protocol. The action to treat the slow progress by Phillpott Partograph and protocol was also senior obstetric staff but after 4 hours delay because of the constraint of unavailable staff with the skill for the appropriate action at the point when the diagnosis was made with the aid of the alert line. Thus, the delay was inevitable and not derived from any study or intended for any study. The outcome of the Phillpott protocol inspite of the delay was as good as for O'Driscoll's regimen.

Surprisingly, this delay before the treatment of the slow progress was taken as the reason for the good outcome of the Phillpott protocol using the Partograph with 4 hours action line. Others hence attempted with 2 and 3 hours and had equally good results and then the debate arose which will produce the better outcome between the delay when at 2, 3 or 4 hours. These debates did not recognize that in AML what make for the good result, is recognizing slow labour progress and ensuring appropriate identification of the cause and knowledgeable treatment by the staff with the skill. As long as the

treatment of the slow progress was by an appropriate staff with the requisite skill for whatever appropriate action was taken, the outcome will be good whether or not there were delays. This is why randomized studies of action line placement at 2, 3 or 4 hours in a tertiary centre produce good outcome with negligible difference because the actions were conducted by the appropriately trained personnel with the skill to identify and treat whatever is the cause of the slow progress. The outcome of treating slow labour after 4 hours of delay by Phillpott produced results which were deemed as good as those of O'Driscoll hence the universal acceptance. Therefore the treatment of the slow progress earlier than 4 hours will produce equally good results but in a tertiary level care where the treatment at the action line whether at 2, 3 or 4 hours will be by an appropriately trained staff, the difference in outcome will be negligible. This exemplified by randomized studies on the Partograph from developed countries of 2, 3 or 4 hours action line placement with no difference in outcome (34-35).

What is important to emphasize is whether or not the slow progress was identified in the first instant and thereafter if the treatment was by a staff with the cognate skill. This is what account for the good fetomaternal outcome in the use of the Partograph inspite of whatever delay there may have been before starting the treatment. Therefore the separation of the alert and action line should not be an issue or any barrier to universal application of the Partograph. The separation is not what makes for the efficacy and effectiveness of the Partograph when it is used to manage active phase labour (37). It is once again emphasized that it is the issue of the staff with the knowledge and skill who conduct the treatment of the slow progress once it has crossed the action line. Differences in opinion as for 2 and 4 hours should not be barrier to the evolution of a uniform protocol for Partograph use for

labour management in tertiary care labour ward.

(b) The use of the alert and action lines in tertiary level care labour ward

By the original concept of Phillpott and Castle, the Partograph was designed for use by midwives and other non obstetric staff conducting deliveries at the peripheral unit. The alert line was inserted for easy recognition of progress less than 1cm per hour for transfer to the bigger units for further care. At the action lines, AML intervention like augmentation etc are commenced (10). At the tertiary centre where the parturient are not being transferred anywhere else, the use of the alert and action lines has remained unclear. While some workers suggested that the alert line has no use whatsoever in a tertiary level labour care and should not be used, others believe that only the action line has any usefulness in tertiary level care in helping to pinpoint when interventions should begin (38). By the protocol by O'Driscoll, AML was meant only for tertiary level centres because it required a large number of obstetric staff and hence the Partograph in the concept of O'Driscoll should have only the alert line, such that progress crossing the alert line is the signal for intervention and hence there is no need for the action line to be separately located from the alert line (39). These conflicting views constitute significant barrier and confusion even to the extent that some even use the Partograph without the alert and action lines in some tertiary centres.

In current obstetric practice the use of the alert line in a tertiary centre should be the same as in a peripheral unit which is the transfer of cases crossing the alert line to the care of the obstetric team in the same labour ward. Unlike the O'Driscoll protocol for AML, the protocol for the use of the Partograph for AML entails the midwives managing the initial aspect of labour whether at the peripheral or tertiary centre. However when progress in labour

cross the alert line, this implies there is an obstetric anomaly (slow labour progress) and hence further care should involve the obstetric team which in a tertiary centre is available at the same labour ward to jointly thereafter manage the parturient. Thus in a tertiary centre, the alert line is a hallmark for the need for the midwives to transfer further care to the obstetric team to now manage the obstetric anomaly for which labour progress has crossed the alert line (40).

Similarly the action line in a tertiary centre is the signal for interventions like oxytocin augmentation to improve the labour progress and achieve vaginal delivery. Beyond this, the action line is the signal for the more senior obstetric staff to take over the further management of such cases who are high risk for prolonged labour, cephalo pelvic disproportion (C.P.D.) and obstructed labour and its sequelae. Thus, the action line in a tertiary centre, apart from being the signal for the commencement of oxytocin augmentation (in those in whom C.P.D. has been excluded) is also as well, a signal for the intra-professional transfer of the subsequent care of such women on oxytocin augmentation to the more senior obstetric staff who have the knowledge to manage these often longer staying parturients in labour ward. By this arrangement, junior obstetric staff (S.H.O.; Junior Registrar) will involve the senior obstetric staff (Registrars, Senior Registrars and Consultants) in the decision to institute oxytocin augmentation and the subsequent supervision of such augmented labour until delivery. This means the alert and action lines on the Partograph in a tertiary centre have utility as hallmark for inter professional (from midwives to the obstetric team) and intra professional (from the junior to the senior obstetric staff) transfer of the care of the parturient for efficient labour management (41).

(c) **The time to perform fore water artificial rupture of fetal membrane (ARM)**

In the protocol for AML by O'Driscoll,

ARM was performed in early active phase labour as a strategy to facilitate labour progress at the cervical dilatation rate of 1cm per hour (11,12). This is because intact membranes in active phase prevent the cervical os from dilating at the rate of 1cm per hour. However, in the protocol for the use of the Partograph for AML, ARM in some instance may be performed at the alert or even action line particularly when the initial labour supervision has been by staff with little or no obstetric knowledge and skill to perform ARM. This has resulted in some controversy in which early and late ARM has been made an issue even to the extent of subjecting this to randomized controlled trials (42-45).

It should be recalled that in the original Phillpott protocol from where WHO derived this, the ARM was performed at the action line of women who were transferred from the peripheral unit for lack of obstetric knowledge to manage the problem of slow labour progress at the peripheral unit. Thus, keeping the membranes intact was not deliberate but due to the constraints of insufficient obstetric staff with the competence to perform the ARM at an earlier stage in labour. It is not an issue that should become a controversy and a barrier when viewed in the context of its evolution. Several studies have confirmed the advantage of ARM in early active phase labour in facilitating labour progress. For the current practice in a tertiary centre, ARM should be performed as soon as active phase labour is confirmed (unless there are contradictions) and not to wait until progress cross the alert or action line (14). In most tertiary centre labour ward, although the midwives receive and initiate the labour care, they often involve the obstetric team to assist with ARM when a case is found difficult for their competence.

(d) **The time to commence oxytocin augmentation for uterine inertia**

This is one area of great difference from one tertiary centre to another in Nigeria. In

Phillpott protocol, oxytocin augmentation was instituted for women on arrival at the referral centre for women whose progress had crossed the action line at 4 hours separation from the alert line in whom CPD had been excluded. The intervention could not have been earlier, because the women were transferred in from another unit hence this was again a situation that was dictated by the circumstance of Phillpott's environment. In a tertiary centre, women who require this intervention may only have been supervised by the midwives in the same labour ward but were not transferred from another unit. In tertiary centres in Nigeria who utilized alert line that is only 2 hours from the action line, oxytocin augmentation is begun usually when progress cross the action line after excluding CPD. When the separation of alert and action line is 4 hours, as in some tertiary centres, oxytocin augmentation is begun sometime between the alert and action lines but also sometimes at the action line without standardization. In keeping with the old tradition, it is better and recommended that intervention with oxytocin augmentation should be when the labour progress cross the action line so as to make it easy to compare results of such intervention from whatever part of the world. It is suggested that as a way to standardize this intervention, with oxytocin augmentation, tertiary care level ward should institute it only for those women whose progress have crossed the action lines, whether at 2 or 4 hours. This will allow the comparison of results of oxytocin augmentation outcome.

CONCLUSION

Active management of labour remain today the standard strategy for labour care worldwide to prevent prolonged labour and its sequelae. The protocol was first proposed by O'Driscoll 1969 from Durbin Ireland mainly for use in tertiary centres but the details were rather difficult to reproduce in several unit, worldwide to achieve the same results. Phillpott and Castle in an attempt

to adapt the protocol for AML to suit his locality with so much of constraints, produced a composite Partograph and a simple protocol to implement the rudiments of AML which involved the midwives, in the initial aspect of the labour care. The outcome was as good fetomaternal outcome as the O'Driscoll protocol. The W.H.O eventually adapted this Phillpott version of AML and protocol to produce the present day Modified W.H.O Partograph because the Phillpott version could be used in all levels of healthcare delivery system and involved the midwives and doctors in a team work approach for the care in labour for all parturients. It is unlike the O'Driscoll version which can only be used in a tertiary centre and is expensive in term of man power and materials.

An initial barrier to the universal application of the Partograph was failure to understand that the Partograph and protocol for its use to management labour was an alternate version of AML but this has now been resolved. On the whole, virtually all the important barriers already discussed have no rational basis when viewed against the evolutionary history of the Partograph and present day knowledge of labour management. Hence the only actual subsisting barrier to the universal application of the Partograph is the poor knowledge of how to use it for labour management. Therefore there should be concerted efforts by all to seek the knowledge of how to use the Partograph to management labour correctly because of the great advantage it has for safe motherhood.

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