EVALUATION OF THE ROLE OF PARTOGRAPHIC OBSERVATION SHEET IN THE MANAGEMENT OF LABOUR

Thesis

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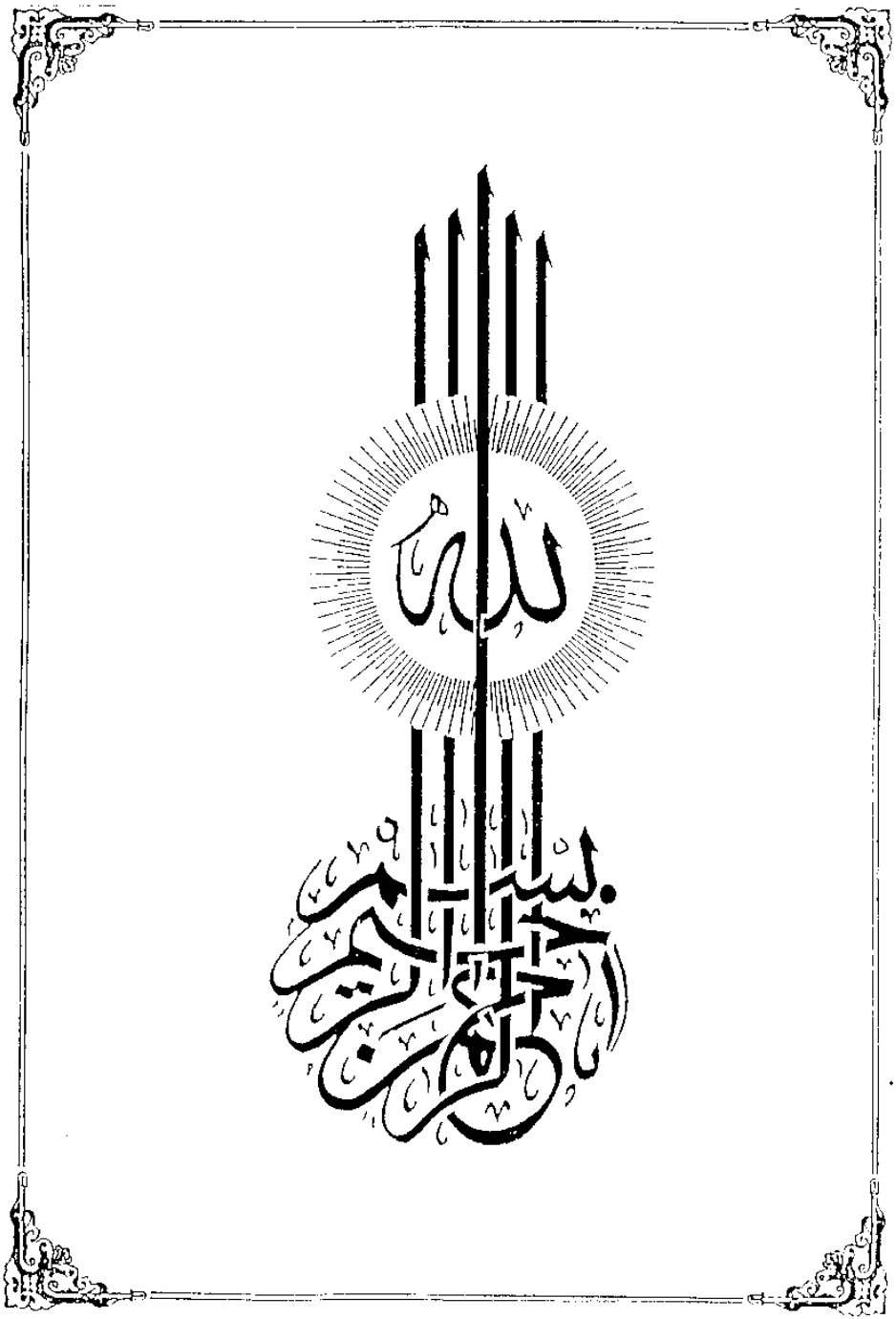

C O N T E N T S

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INTRODUCTION

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The realisation that almost every woman in good health can have a normal labour when there is a constructive plan of action from the time of admission to hospital is new. It is summarised in the phrase "Active Management of Labour".

O'Driscoll *et al.*, (1969), have introduced the concept of an active approach to the management of labour. The main emphasis was on early delivery.

Duignan (1985), documented that the active management of labour presents a complete break with the traditional attitudes of watchful expectancy and is based on the promise that the main problems and discomfort of labour are directly related to the duration of exposure, particularly when this exceeds 12 hours.

O'Driscoll, Stronge (1973), have shown that the active management of labour has been developed to the extent that an assurance is given to every woman who attends labour that her first baby will be born within 12 hours.

Active management is directed at the great majority of women who suffer no medical disease or complication of pregnancy, who consequently have received little care during labour, and thus were complicated by prolonged labour.

Boyle, Ritchie (1980), have shown that this prolonged labour resulted in mothers becoming dehydrated, ketotic, demoralized, sometimes infected and often disoriented due to narcotic analgesia. Traumatic delivery was frequently the end result and this together with hypoxia and infection put its toll upon the infant.

O'Driscoll, John (1969), have shown that in a study of 1000 consecutive primigravidae, only one patient was in labour for longer than 24 hours, when they followed the active approach to labour.

Philpott and Castle (1972), have claimed that incidence of prolonged labour have been reduced from 13% in (1966) before the introduction of active management in labour to 0.6% in (1972) after its introduction.

O'Driscoll, John (1975), have shown that in practice, prolonged labour most commonly occurred in primigravidae, in spontaneous labour. Thus, primigravidae must be considered separately from multigravidae and induction must not be confused with acceleration of labour which has already started.

O'Driscoll, Minogue (1973), documented that the most frequent objection to the policy of active management in labour is the possibility of cephalo-pelvic disproportion.

But active management has shown that most cases diagnosed as cephalo-pelvic disproportion are in fact cases of inefficient uterine action, since the functional capacity of a pelvis can only be tested by efficient labour and this requires oxytocin.

Duignan (1985), has stressed that it is important to make a clear distinction between primigravidae and multigravidae in applying the active approach in labour. Prolonged and difficult labour is a common-place in primigravidae who are most in need of active management. Furthermore, the capacity of the primigravid pelvis is untried, and thus the question of possible cephalo-pelvic disproportion exists.

O'Driscoll and John (1975), have claimed that the primigravid uterus is almost immune to rupture and this is a point of crucial importance to gain the confidence required to follow up the policy of active management effectively. On the other hand, labour in multigravidae is rarely prolonged because the uterus contracts efficiently and the functional capacity of the pelvis has already been proven.

O'Driscoll, Meagher (1980) documented that prolonged labour in multigravida when it occurs, is likely to be fetal in origin which is due to malpresentation or

obstruction. This in contrast to prolonged labour in primigravida which is usually due to inefficient uterine action or the possibility of cephalo-pelvic disproportion and lastly mal-presentation of the fetal head, most commonly occipito-posterior.

O'Driscoll, John (1975), have shown the difference between acceleration of spontanous labour and the induction of labour. Acceleration of labour is necessary only when normal progress is not being achieved. But induction of labour is potentially dangerous because of increased possibility of infection which leads to many un-necessary caesarean sections. In addition both mother and child are subjected to stress from the time an induction is started and the total exposure to stress is greatly extended. This is in direct conflict with the aim of active management of labour, a primary purpose of which is to reduce stress. But acceleration of labour restricts the duration of exposure to stress and reduces the incidence of caesarean section.

Ideals of Active Management:

(1) Antenatal education:

Tacchi (1971) claimed that women react to pregnancy

in a variety of ways, but most are apprehensive, largely about the actual having of the baby. Ante-partum preparation and education has done much to allay this anxiety.

The active management of labour is concerned primarily with improving the emotional state of the mother. Proper antenatal education should ensure that each mother has been adequately prepared emotionally to cope the stress of labour.

Duignan (1985), has shown that a mother who has a short, uncomplicated labour and delivery in her first pregnancy is unlikely to suffer apprehension about subsequent labours. All mothers in their first pregnancy are anxious about labour and antenatal education provides one of the best methods of controlling anxiety and reducing the sensation of pain.

Support, care and assistance, all, which give confidence to the mother and make her feel that childbirth is natural and normal.

Tacchi (1971) has shown that prepared patients usually begin their labour well, but unless constant attention and support are provided, the good morale is quickly lost as labour advances.

O'Driscoll, Meagher (1980) stressed the importance of

personal attention for each mother during labour. Each midwife or doctor should strive to establish a strong rapport with their patients. They should ensure that the mother understands clearly the purpose of every medical procedure and the results of every examination performed. She should also keep the patient informed of the progress with regular updating of the time at which her baby is expected to be born.

Sosa et al., (1980), showed the importance of human companionship during labour and at delivery. The labour appeared to be shorter and incidence of complications reduced.

(2) Diagnosis and Assessment of Progress:

O'Driscoll, Stronge (1973), have stressed that the most important decision in labour is the decision that labour has started. Diagnosis of labour and subsequent management present no problem when the cervix is dilated. The difficulties arise only when the cervix is not dilated. In their study done (1973), the patient was mistaken in 6% of cases to be in labour while she was not and subsequently allowed home. In the same study 4% of cases were readmitted to the delivery unit within 24 hours due to failure to diagnose labour in the first admission. When there is

objective evidence in the form of a show or ruptured membrane, to support the diagnosis, rapid progress can be anticipated especially if progress is accelerated soon after admission.

Hendericks et al., (1970), studied the pattern of cervical dilatation in late pregnancy and labour and found that the cervix began to dilate several weeks before the onset of spontaneous labour and suggested that the duration of labour should be calculated from the time of admission.

Duignan, Murphy (1985) found the cervix to dilate at 1.3 cm/h between 1 and 5 cm and at 2.5 cm/h between 5-10 cm dilatation.

The active management of labour is intended only to augment labours which are not progressing at this normal rate. Therefore, the first step in the evolution of active management was the description of a simple method of demonstrating progress in labour which is the partogram. By performing regular examination and plotting cervical dilatation on the partographic sheet, the progress of labour can be clearly seen and abnormal labour is highlighted at an early stage (Ledger, 1969).

(3) Correction of Abnormal Progress:

The graphic recording of labour with dilatation in centimetresplotted against time in hours after admission highlight the occurrence of abnormal labour and facilitate the introduction of early corrective management of dysfunctional labour (Ledger, 1969).

Various criteria for commencing active management were adopted once slow progress was diagnosed.

Philpott and Castle (1972) allowed a 4-hours delay before starting treatment, the time was signified by the action line which is 4-hours to the right of the alert line.

Studd (1973) began stimulation if the cervical dilatation rate strayed 2-hours to the right of the appropriate normogram.

O'Driscoll et al., (1983) recommended treatment if the cervical dilatation was more slowly than 1 cm/hour.

Early intervention overcomes the common problem of inefficient uterine action and did not allow time for the complications associated with prolonged labour to occur.

The Benefits of Active Management of Labour:

1- Prolonged labour is less frequent:

O'Driscoll et al., (1969) provided the evidence that prolonged labour is reduced by early intervention with active management. In his study of 1000 primigravid deliveries, there was only one woman in labour for more than 24 hours.

William, Ledger (1969) studied 1000 cases, 500 primigravidae and 500 multigravidas. Only in eight primigravidae and one multigravida, the labour lasted longer than 24 hours, an incidence of less than 1% of the labours analyzed.

Tacchi (1971), in his study of 2288 deliveries, found the incidence of prolonged labour to be 1.8%.

Philpott and Castle (1972) supported this view since the incidence of prolonged labour has been reduced from 13% to 0.6% by the introduction of active management of labour.

2- Maternal stress is reduced:

Tacchi (1971) documented that active management of labour restricts the duration of exposure to stress by shortening of labour in all three stages. It has long been

taught that the average duration of labour for a primigravida was 12-16 hours and for a multigravida 8-12 hours. In his study the mean duration of labour was eight hours. Also, he has shown that the incidence of caesarean section was 2.7%.

Philpott and Castle (1972) have shown that the incidence of caesarean section in (1966) was 9.9% and it is reduced in (1972) to 2.6% by applying the active approach to labour.

3- Improving fetal outcome:

Active management of labour reduces the duration of labour and the incidence of caesarean section and both improve the fetal outcome.

O'Driscoll et al., (1969, 1973) have shown the perinatal death to be 2.5% by using the active approach to labour.