

CHAPTER 14

OBSTETRIC POLICIES AND PRACTICES: A SURVEY OF HOSPITALS, MATERNITY UNITS, AND RURAL HEALTH POSTS

14.1 DEVELOPING APPROPRIATE OBSTETRIC CARE.

Hospital birth and the use of birth technologies to deal with risk factors have steadily increased in the last two decades. Obstetric medicine has a deep distrust of the normality of labour and birth and an equally profound reliance on new procedures, new technologies and new drugs. Many of its policies and practices, which it uses because it does not trust the normality of birth, are themselves unevaluated and have often been set in place without recourse to controlled trials. Wagner (1994) argues that hospital-based health care for women has become the norm against which all else is seen to be less efficient or even deficient in what it can offer. Yet what it offers in large measure is a way of thinking about birth that depends on technologies instead of skills. It often requires further technologies to correct the problems created by its practices in the first place. The critical issue is determining what is appropriate practice and what the general principles should be that underpin practice (Wagner, 1994).

The use of inappropriate technology and practice has been seen as an acute one in Latin America. Specific issues which have already generated tremendous controversy in western countries, such as how a woman's body is positioned in labour, the use of artificial rupture of membranes, the routine use of oxytocics in labour, electronic foetal heart monitoring and Caesarean section were all reviewed at the WHO conference on appropriate birth practices in Fortaleza in 1985.

Two Latin American obstetricians in a review paper for that conference argued that

‘for many years, programs of obstetrics in Latin America have been synonymous with new discoveries and applications of new technologies, in spite of clear proof that some technologies that were universally accepted, used and appraised were far from beneficial and causes maternal and fetal damage, obstetricians have an almost mystical faith in each new technology offered’ (Pinotti and Faundes, 1985: 1).

A third argued that these technologies have emerged

'as a seductive standard for most developing countries aspiring to modernisation. Many countries have designed local and national versions of the Western technology for birth that are unmanageable, counter-productive and unacceptable for large segments of the population. In their urge to modernise the national obstetric care system, many health planners in Latin American countries tend to promote certain Western technical practices for which there exists no universal scientific evidence and which contradicts local behaviours grounded in the traditional birthing systems' (Bibeau, 1985: 6).

It is arguable that the expansion of these new technologies in obstetric practice in Latin America has been greatly aided by the lack of a strong corps of professional midwives and nurses trained to handle birth without intervention. It has already been noted that this is a genuine problem in Bolivia (see Chapter 9.3 and Chapter 13.4.3.1. above). There is also a geographical dimension to this problem. In general, the distribution of healthcare staff between professional groups appears to be badly skewed: in the urban areas, there are too many doctors and too few nurses and other workers; in the rural areas there has been a decrease in health care staff overall, with doctors providing only 35% of the cover in local primary health care posts. The shortage of nurses is said to be especially acute with the ratio of nurses to doctors being 1 to 4 (MPSSP, 1989, cited in Young and Simmons, 1995: 26).

In this biomedical model of maternity care, the most highly skilled practitioners are seen as the obstetricians who cluster in major teaching hospitals. Working down through the tiers, there are fewer obstetricians at regional hospital level. At the level of health posts (*postas*) in rural areas, there is a very diminished input by doctors. Indeed there is a dearth of health care workers in general at this level. The 13% increase in health care workers during the last seven years has been for the benefit of the urban population while state health personnel in rural areas has decreased by 1% in that same period (Young and Simmons, 1995: 26). Numbers are just one part of the equation however. Alongside the absence of a midwifery profession in the state health care sector, is the *type* of training for nurses, nurse assistants and paramedics in childbirth management. The training emphasises the risk model, the early transfer of patients to the hospital setting and does not address the development of midwifery skills. It also delegitimises the skills, technologies and practices which are used by the local communities themselves. The combined effects are such that the state medical personnel who are within striking distance of the areas most affected by maternal mortality, are the least skilled.

It is true that in *Plan Vida*, the National Secretariat of Health has stated explicitly that no oxytocics are to be used to stimulate labour but that oxytocics for atonic uterus, manual extraction of the placenta, and parenteric administration of fluids —essential aspects of emergency treatment in the case of haemorrhage and shock— and that these treatments as well as local anaesthetic and repair of tears, as well as on site treatment for sepsis, must all be available at primary care level (*Ministerio de Desarrollo Humano*, 1994: 31). There is much more that could be added in to that package to protect women if there were agreement on appropriate practices, including traditional practices.

There are some essential obstetric functions which can only be provided in a hospital setting, such as anaesthesia, blood transfusion, and operative midwifery. But there are many emergency functions which can be part of people's training and not merely the preserve of medical doctors. In this respect, Kwast (1995) has pointed out the dangers of neglecting to develop midwifery functions at all levels of what the WHO terms the maternity care pyramid. This is really what is at stake in reviewing obstetric practices, the effort to ensure that the best package possible is part of training and teaching syllabi and is also part of the policies and practices at all levels of state health care provision for women.

14.2 SURVEYING MATERNITY UNITS

Plan Vida states as an objective the standardisation of health care functions and competencies in dealing with maternal health. This also includes the development of criteria on risk and criteria about specific policies, such as the acceptable rate of Caesarean sections (*Ministerio de Desarrollo Humano*, 1994: ix; 20).

With the background of knowledge from the qualitative phase of the project, and the sharply focused awareness of why women do not want to avail themselves of state health care provision, the project decided to administer a brief semi-structured questionnaire concerning policies and practices to relevant medical personnel in hospitals, clinics and *postas*. These were the same sites where women whom the researchers were also interviewing as part of the quantitative phase, might attend for care during pregnancy and birth.

The four maternity units in Sucre which handle public patients were surveyed: *Hospital de la Mujer; Lajastambo Hospital; Dispensario San José de Poconas; Sa Grada Familia, Católico Dispensario*. Five units were surveyed in El Alto: *Clínica Corazón de Jesús; Centros de Salud de Alto Lima (dependientes de PROSALUD);*

Clínica del CIES (El Alto); *Centro de Salud Hospital de Villa Adela*, and *Hospital Los Andes*. In La Paz, one hospital was surveyed: the *Hospital de la Mujer de La Paz*. The rural second-level hospital of Ocurí was surveyed and also the very small hospital centres in Colquechaca and Macha in northern Chayanta province and the auxiliary medical personnel in the *postas* of Pampa Colorada and Castilla Uma. Finally, another small rural dispensary 'Caritas' Trinidad was also surveyed. Additional information about hospital policies and privatised services and how they are being promulgated in the teaching of medical students was gained from a series of eleven taped interviews (10 of these on tape) with medical and nursing staff in the four centres providing maternity care in Sucre as well as with medical and ancillary teaching staff in the medical faculty of the University of San Francisco Xavier.

The results are presented as a progression of stages, in line with the hospital processing of labour which typifies the biomedical model.

14.3 ROUTINE PRACTICES OF SHAVING, ENEMA AND VAGINAL EXAMINATIONS

Details about routine procedures when women are first admitted to hospital were sought in taped interviews with medical personnel from the maternity units in Sucre only. In the *Hospital de la Mujer* in Sucre (the principal teaching hospital attached to the university medical faculty), women are partially shaved around the vaginal and perineal area and an enema is given. This is also the practice in the other hospitals although there are various cut-off points in terms of dilatation as to whether the enema is given or not.

The argument about the need for routine shaving is based on the assumption that it will counteract the risk of infection. This view has been challenged in controlled trials which have been run as early as 1922. The contrary appears to be the case, that is, an increase in morbidity in women who are shaved. It also leads to discomfort for the woman when the hair is growing back as well as to minor abrasions through the shaving itself. The procedure is listed in the Cochrane database as one which is either ineffective or harmful for women (Enkin et al., 1995: 200-1, 410).

The routine application of enemas is also contra-indicated. The rationale for enemas is to reduce contamination during delivery and therefore reduce the risk of infection. According to the Cochrane database, controlled trials have indicated that the rate of faecal soiling is not affected by enemas during the first stage of labour although it does reduce soiling during delivery. The soiling that does take place however is only very slight. There are no effects on the duration of labour or on neonatal infection nor on infection of any perineal wound. There are risks to the woman: irritation, colitis,

gangrene and anaphylactic shock. (Enkin et al., 1995: 200-201, 410). It is unnecessary in any case as the physiological beginning of labour is very often to open the bowels spontaneously (Inch, 1989).

The WHO Fortaleza Declaration states that there is no indication for pubic shaving or a predelivery enema (WHO, 1985b)

The rationale for rectal or vaginal examinations is to measure cervical dilatation. The rate of infection is the same whichever is used although controlled trials in western countries indicate that if women have to have any examination, they prefer vaginal examinations (Enkin et al., 1995: 223).

In the *Hospital de la Mujer* in Sucre, vaginal examinations are done every two hours from 1 to 7 cms. dilatation and then every half-hour. Only doctors conduct these examinations; nurses are not permitted to do so. Doctors reported that they must approach rural and migrant women with great patience on this issue. They explain to the woman how necessary it is and, at first they use just one finger until the woman gets used to this procedure. When the dilatation is far enough on, the women accept this as a necessity. If an electronic foetal heart monitor is used, vaginal examinations are abandoned but the monitor is only being used in cases of induction and acceleration.

Amongst the problems this policy creates is that of women being examined by male doctors. The number of vaginal examinations which are seen as necessary increases in relation to the use of the partogram (Inch, 1989). For this system to work, it is necessary to have the rates of dilatation measured on a regular basis. However, there are difficulties both with the accuracy of measuring dilatation and the criteria over how frequent they should be. Frequent vaginal examinations in labour are unlikely to be beneficial (Enkin et al., 1995: 223-4, 408). There are alternative ways to judge the progress of a labour and therefore a consequent reduction of vaginal examinations within a physiological model of labour (Gaskin, 1977). There is the 'red line' experienced midwives speak about: as women progress through labour, a line between the anus and the top of the cleft between the buttocks, a distance that measures approximately 10 centimetres. As the cervix dilates the line reddens centimetre by centimetre which enables midwives to assess progress without internal examination (Personal communication, Cecily Begley). There are also other empirical practices used by parteras which are non-invasive.

14.4 WALKING DURING LABOUR

There was only data available on this issue from the maternity units in Sucre. In the Hospital de la Mujer in Sucre, allowing women to walk in labour is perceived by doctors as a purely psychological measure, part of the package of '*parto humanizado*', in which the woman chooses what is best and most comfortable for her. Other units see the practice as helpful because it helps the baby descend more readily and is a natural process. However, there is limited room in three of the four units for any woman to walk during labour and most women seen during fieldwork in the hospital units were confined to bed.

Putting women to bed during labour has always been the practice in western biomedicine. However, a shift in thinking, permitting women in hospitalised birth to walk during labour, gradually gained prominence in the late 1970s and 1980s. The notion that the foetal head exerted greater pressure on the cervix when a woman in labour was standing rather than lying down, thus increasing the effectiveness of contractions (Inch, 1989:50) was validated by an important study in Latin America in the mid-1970's which covered eleven maternity hospitals in several countries. Walking during labour rather than remaining lying in bed resulted in less pain and more comfort. The other physiological benefits were extensive: in 85% of the labours, the membranes did not rupture spontaneously until 9 cm. or more of dilatation (the pressure of the unruptured membranes helps speed dilatation); with first-time mothers, the median length of labour was 36% shorter in the 'vertical' group. For all women, the time of labour was 25% shorter (Schwarcz et al, 1976). The results of this early study have been born out by other studies. It has also been found that women walking in labour require less augmentation with oxytocin. On the other hand, lying down in labour reduces the intensity and effectiveness of contractions. The supine position is also thought to adversely affect the condition of the foetus and the progress of labour by interrupting the blood supply (Enkin et al., 1995: 204-5).

The WHO Fortaleza Declaration states that women should be encouraged to walk during labour (WHO, 1985b).

14.5 INDUCTION OF LABOUR

In Sucre, there was no clearcut policy on induction of labour in any of the institutes surveyed with the exception of the *Hospital de la Mujer*, in Sucre, where the indicators for induction hang on the wall of the labour room to remind doctors of

when they can and cannot safely induce women. The doctors in the *Hospital de la Mujer* state that a decision for induction depends on 'individual circumstances'. Neither their statistics nor those of the other two hospitals have a separate category for induction as such. CIES found variable policies in the group of institutions they surveyed in El Alto, one with a policy of no induction, one with a reported rate of 25% (CIES, 1995b: 18). The doctor in Macha said that he will induce after forty weeks' pregnancy in the case of illness (Arancibia, Platt et al., 1995: 51).

Because the level of antenatal checks is generally low, it is a safe assumption that the rates of induction on the basis of a presumed overdue pregnancy are not a significant trend. The 25% rate reported by CIES may be in a situation where there is a decisively higher level of antenatal control since the decision to induce must be based on an examination in the last weeks or days of pregnancy. It may also include rates for acceleration.

In the early 1970s, rates of induction in western hospitals rose to very high levels. Many English hospitals in that period had rates of up to 40% induction of all births (Oakley, 1980). The rationale was that a pregnancy that went over forty weeks endangered the baby. The forty week figure is derived from the assumption that every woman always has a menstrual cycle 28 days long and therefore that the period of gestation can be calculated as extending from the first day of the last menstrual cycle, on this basis reaching the figure of 280 days or forty weeks as the end of pregnancy. This mode of thought was superseded by the Friedman curve which moved the emphasis from the overall length of pregnancy to the overall length of labour in determining risks to foetal well-being.

Current criteria for induction are limited to serious problems of premature rupture of membranes, whether at term or with a pre-term pregnancy, bleeding of uncertain origin, foetal death, gestational diabetes and placental abruption. Induction for postmaturity is not recommended before 41 weeks of pregnancy (Enkin et al., 1995: 392).

The WHO Fortaleza Declaration states that the induction of labour should be reserved for specific medical indications and that no geographic region should have rates of induction over 10% (WHO, 1985b).

14.6 ACCELERATION OF LABOUR

Acceleration of labour with oxytocic infusion is a central component of the system known as active management of labour. The premiss on which this system of hospital births is based is that any labour which is prolonged or indicating slow progress, either in the initial stages of dilatation or in the active phase of labour, holds risks of increased perinatal morbidity and mortality. Therefore, no labour should be allowed to last longer than 12 hours (O'Driscoll and Meagher, 1986). Active management has generated intense controversy, not least because of the claim of how long a labour should last before it becomes risky.

The system has depended on two technical developments which occurred in the 1960s and 1970s. The first was the development of the so-called titration method of administering oxytocic drugs which could automatically adjust the rate of infusion. The second was a statistical measurement of the average rates of dilatation, known as the Friedman curve, which resulted in the design of the partogram to measure labour progress (Friedman, 1973; 1977).

A partial explanation for dysfunctional or prolonged labour is found in the work of Schwarcz (1976) and Caldeyro-Barcia: it is related to the importance of a vertical position to shorten labour and produce the most effective contractions (Caldeyro-Barcia et al., 1960). Another explanation or aspect of prolonged labour comes from studies on the impact of social support during labour. Studies indicate a need for fewer interventions to speed labour up, independent of place of birth with adequate social support (Enkin et al., 1995:196). However, these have not been centre stage in debates about dealing with prolonged labour. Instead, active management has won out on the basis of uncontrolled trials which claim that the system produces lower rates of perinatal morbidity and mortality and a lower rate of Caesarean sections. On the basis of the partogram, in hospitals where the system is fully established, acceleration to correct prolonged or inefficient labour contractions has affected up to 40% of first-time mothers (O'Driscoll and Meagher, 1986; O'Driscoll, Meagher and Boylan, 1993).¹

¹ This rate of 40% exists alongside O'Driscoll's claim to offer social support to women in labour with an individual nurse midwife in attendance. It would appear that the logic of the partogram wins out over the value of the social support being offered, resulting in this high rate of augmentation. The prominence given to O'Driscoll's system of active management has obscured non-interventionist approaches being used in some hospital settings where emphasis has instead been laid on the social model of birth. The Semmelweis Clinic in Vienna has presented statistics on both maternal mortality and perinatal mortality from 1966 to 1985 in the context of the hospital's commitment to non-intervention (Rockenschaub, 1987: 977). The infant mortality rate between 1976-85 was 2.8 per thousand in the hospital compared with 5.2 per thousand in Vienna overall. In 42,500 births, there was a Caesarean section rate under 2%. The hospital has used extremely strict criteria for Caesarean section, minimum

The Friedman curve is a schematic representation of the dilatation of the cervix, measured against hours in labour. It is argued that dilatation advances in even stages of no less than 0.5 cms. per hour, though the more usually quoted figure is 1cm. per hour. This is an 'arbitrarily defined "normal" rate of dilatation' (Enkin et al., 1995: 263). It leads to rapid intervention with what are seen to be abnormal or inefficient contractions with oxytocic augmentation to hasten labour along. This is despite the fact that the range of time for safe labours is simply not known (Wagner, 1994).

Diagnosing the abnormal labour is nonetheless a very important part of obstetric teaching in Bolivia, as elsewhere. Standardised partogram sheets, based on the 12-hour rule, are meant to be the main clinical record, again following the practice in developed countries and indeed the recommendations of the WHO on the use of the partograph (WHO, 1988). According to one Bolivian professor of obstetrics and gynaecology:

'all over Latin America we are using the same model to diagnose and control labour, the partogram. If it [a woman's labour] doesn't conform to this model, something is wrong and you must do a Caesarean section .. the partogram produces the position of the baby. Students are being taught how to use a partogram' (quoted in Murphy-Lawless, 1995:4).

In practice, there are two options currently used in the maternity units we surveyed to deal with what doctors see as prolonged labour, acceleration and Caesarean section. In Sucre, the policy in the *Hospital de la Mujer* is that a lack of contractions or of efficient contractions, as measured by the partogram, is indication for acceleration of labour. But the policy and practice are not necessarily the same. Cumulative statistics for 1994 would seem to indicate a rate of acceleration of 8% of total births. It is not clear whether these statistics include prior measures of injections to relax rigid uterine muscles as part of the overall statistics on acceleration. In the small hospital sample of 28 births in the *Hospital de la Mujer*, selected for interview strictly on the basis of the women's status as migrants, not as problematic cases of labour, 11 women had medical intervention for inefficient uterine action, 7 having injections, 4 having intravenous drips (Murphy-Lawless and Ramos, 1995). A similar policy of injections and also acceleration with oxytocin is in use in the *Dispensario San Jose*, in Poconas. In Lajastambo Hospital, one consultant has an estimated rate of perhaps 10-15%

interference in labour, intensive preparation for childbirth and an education programme which Rockenschaub argues has contributed to this very low rate of Caesarean section. O'Driscoll has argued that 'active management' keeps the Caesarean section rate between 5% and 10% (O'Driscoll et al, 1993:191).

induction/acceleration. The second consultant uses a series of contra-indications when making a decision to intervene: women with a previous Caesarean section, multiparous women, and those instances where the uterus is 'fatigued' are not candidates for acceleration. This consultant prefers to use Caesarean section rather than acceleration. The fourth unit in Sucre does not handle any medicalised birth or any abnormality.

In El Alto, acceleration is used in all the units surveyed; in one unit the rate is reported as high as 80% (CIES, 1995b: 18). The *Hospital de la Mujer* in La Paz uses acceleration for 'irregular labour' (ILCA, 1995b). The IPTK hospital in Ocurí uses oxytocin for what they see as prolonged labour, with an estimated 30-40% of women who give birth there having oxytocic intervention (Aguilar and Bradby, 1995: 37). Reports from the very small dispensaries and *postas* indicate somewhat confused notions about acceleration. On the one hand, doctors reported that women from the countryside do not need oxytocin to accelerate their labours (ILCA, 1995b; Arancibia, Platt et al., 1995: 51). On the other hand, two doctors in Macha and Colquechaca spoke of using oxytocin in labours if the woman has been dilated up to 4 cms. for two to three days with no progress and if there is no advance in contractions after 12 hours. The former could be argued as genuine prolonged labour, the latter is in line with the Friedman curve (Arancibia, Platt et al., 1995: 51).

In one of the main teaching texts for obstetrics used in Bolivian medical schools, the argument in favour of acceleration is that with poor contractions, the mother is exhausted physically and psychologically, her pulse is accelerated, and she begins to suffer from dehydration. The consequences for the foetus are foetal suffering and death. Therefore, measuring by the Friedman curve, it is better to intervene at an earlier, more opportune moment to accelerate labour (Botero et al., 1990: 363). What the text does not discuss and what the students are not learning about is how labour patterns are impeded by hospital practices such as restricting physical position and mobility, subjecting women to cold, and refusing access to food and drink during labour, and to social support. All these lead to the exhausted state, raised pulse and dehydration which are then construed as reasons why early intervention with oxytocin is a beneficial alternative. The disadvantages of intravenous oxytocin were not mentioned by doctors, except to say that it produces much more painful contractions. Risks of increased postpartum haemorrhage and increased foetal distress, due to the strength of contractions, were not discussed. Nor was the fact that there is a need for more frequent monitoring and for more vaginal examinations to check progress and record it on the partogram.

If the partogram alone is used to determine the progress of a labour, the danger is that it is impossible to distinguish what is a 'prolonged labour' and what is a pattern of an individual labour, which is slow during the dilatation phase but steady and absolutely correct for that individual woman's physiology. If only the 12-hour rule is used, with no recourse to other criteria whereby to measure progress, such as the condition of the mother and the baby, it can result in a dramatic increase in interventions to deal with the 12 hour parameter. Keirse (1989) argues that augmentation of labour for slow progress is an intervention that has a place in obstetrical care only after other more simple measures have been tried. For him, allowing women the freedom to walk around and to eat and drink as tolerated are at least as effective as oxytocin augmentation. Enkin et al. (1995: 263) argue that there is an urgent need for good controlled trials on a prolonged latent phase of labour.

In the statistics for 1,000 home births, recorded by Gaskin (1980: Appendix H), the average first stage for first-time mothers who are known to often take longer in labour, was 10 hours, 12 minutes. The longest labour was 72 hours. There were no maternal deaths, and a total of 7% were transferred to hospital. The Caesarean section rate was 1%. The rate of maternal complications was 6%. Perinatal deaths including those delivered in hospital were 15 per 1,000. Gaskin argues that if the woman is eating and sleeping as she needs to, if she is moving around as she wishes, if the membranes are intact, if the foetal heartbeat is strong, the process of dilatation can evolve over three or four days and be fine for woman and foetus alike. It is interesting to note that long labour of itself is not a cause for alarm for women giving birth at home in the countryside (see Chapter 11.4.3.2 above).

Enkin and his colleagues note that between a third and one half of women who have slow progress in labour, according to measures such as the partogram, usually have acceptable levels of uterine action (Enkin et al., 1995: 267). The focus must then shift surely to the context of that labour —are women really being supported sufficiently with physical and psychological strategies to help them labour well?

14.7 CAESAREAN SECTIONS

As indicated in Chapter 13.4.3.6, there is an ongoing problem in the rate of Caesarean sections and in standardising criteria for Caesarean sections in Bolivia, as elsewhere. One senior Bolivian obstetrician states that the rate of Caesarean sections has increased in recent years because of concern for the baby's welfare. Another senior consultant said the criteria were foetal suffering and instances such as placenta praevia and hypertension (Murphy-Lawless, 1995). According to the authors of the Cochrane

database, the optimal rate of Caesarean section is not known but it appears virtually certain that little improvement in outcome for the foetus takes place once the rate goes over 7% (Enkin et al., 1995: 318).

Reported rates in the institutions surveyed varied widely, reflecting the lack of standardised criteria as well as the impact of factors such as socio-economic status and social convenience for doctor and patient. A further element in the rate of Caesarean sections relates to the almost complete dearth of teaching and experience in using forceps. Faced with a complicated labour and a lack of skill in handling the birth manually and/or with forceps, doctors must resort to the Caesarean section.

In Sucre at the *Hospital de la Mujer*, the section rate for 1994 appears to be 17% (including treatment of placenta praevia).² They are not using a lower segment abdominal operation when they section a woman because if the section is considered a non-emergency, final year medical students are given the opportunity to do the surgery. However, they do not have the skill to operate and extract the baby quickly enough with a lower segment so a full transverse operation is used instead. In Lajastambo Hospital, the overall section rate is 'low' but this reflects the average between two consultants. For the consultant who tends to favour section over acceleration, the rate is thought to be approximately 15%.

In the *Hospital de la Mujer* in La Paz, the section rate is also approximately 17% (ILCA, 1995b: 23). In the *Clínica Corazón de Jesús* in El Alto, a rate of 18% was reported but the rate in general in the group of establishments they visited was 6.7% of total births (CIES, 1995b: 19). In the IPTK hospital in Ocurí, the rate was reported as an average of 8% but adjusting for institutional births in the District of Ocurí as distinct from the hospital, it appears that the more likely rate is 18% (Aguilar and Bradby, 1995: 41).

In the outlying small dispensaries of Macha and Colquechaca, the doctors reported that they were not equipped to do Caesarean sections. Women who are considered at risk are sent to Colquechaca for medical attention but the roads are poor and the journey is a long one. The Caesarean has great notoriety amongst rural and migrant women and is one of the principal reasons why women fear going to the hospital at Ocurí. The doctor in Colquechaca had sent two women to Ocurí in February and March of 1995. The doctor in Macha listed the criteria for Caesarean section as being: small pelvis, transverse lie, twin pregnancy, oblique position, hypertensive disorders,

² This percentage is derived from raw totals the *Hospital de la Mujer* compiled between January and December, 1994.

and a foetus with a large head if combined with another factor. He also included a previous Caesarean section as a reason for section (Arancibia, Platt et al., 1995: 51). This last indicator really only holds if the previous section has been a classical section. The teaching in medical schools should be emphasising the importance of the lower segment operation. The recommendation in Cochrane is that the uterine incision should be made transversely in the lower uterine segment, except in rare instances and that in subsequent births, a trial of labour should be permitted, as this is a safe and effective procedure in safeguarding the woman from uterine rupture while encouraging subsequent vaginal delivery (Enkin et al., 1995: 320, 293). Because the operation has significant risks and disadvantages for women, including higher morbidity and mortality, their recommendation is that it should only be used where there are unequivocal indicators (*ibid.*).

There are definable instances where Caesarean section will be life-saving for the foetus and these include: instances of rhesus isoimmunization, essential hypertension, renal disease, certain cases of diabetes, and severe cases of pre-eclampsia (Inch, 1989: 70). However the total percentages of pregnant women who may be affected by these conditions are very small; leaving aside pre-eclampsia, a disease largely of poverty, at most the combined figure would be 2.5%. Yet section rates have been rising steadily since the 1970s. Some current international section rates are: Brazil, 31.6%; the United States, 25%, Republic of Ireland, 14%. The Netherlands with one of the lowest rates of perinatal mortality in the world, has a 7% rate of Caesarean section.

Despite WHO objections there appears to be increasing scope to widen the criteria for sections, albeit with different emphases, coming from somewhat different directions within obstetrics, including so-called 'defensive obstetrics' and fears of risk to the foetus.

In the Bolivian context, it appears that there may well be a specific problem in that forceps are almost never used in the Bolivian hospitals. But because other supportive non-interventionist techniques during labour are not being extensively used, Caesarean section is the only viable strategy to hand for dealing with what is defined as a difficult labour. The risks of maternal mortality are four times higher with a Caesarean section, and there is increased blood loss, and increased infection afterwards (Wagner, 1994: 183). It appears to be an area of teaching which requires further evaluation. Teaching could be widened out to include developing the social model of birth within hospitals and incorporating supportive strategies during labour.

14.8 BIRTH POSITION

Almost all women who gave birth in hospital in our sample did so in a supine or lithotomy position. This reflects a policy across the board in all the institutions surveyed. Even though hospitals such as *the Hospital de la Mujer*, in Sucre, and the IPTK hospital in Ocurí, speak about having a policy of choice for women, as part of '*parto humanizado*', in practice there is none. The doctor in Macha spoke of a recommendation from seminars in Sucre to permit women to use either a sitting position or a squatting one (Arancibia, Platt et al., 1995: 51).

In practice, the gynaecological position is the only one that is acceptable. A medical resident in one of the hospitals is concerned about this aspect of birth and argued that women should be able to choose their own position, not least because people do not necessarily accept this rule. Women from the countryside try to give birth either in the bath or in their bed and it leads to conflictual situations. Staff in another hospital said that there is conflict with women over the birth position because women prefer to stand or kneel. If the woman refuses to assume the gynaecological position, they must get 'angry' with her to enforce compliance (Murphy-Lawless, 1995). One consultant argued that the gynaecological position favours better communications between doctor and patient. This is the classic argument in favour of the gynaecological or lithotomy position, that it gives the obstetrician a clearer view of the birth process and enables him to intervene quickly should that become necessary.

The disadvantages for a woman labouring flat on her back with her legs in a raised position include the following: maternal blood pressure drops; there is a reduction in blood circulating back to the heart with a potential drop in oxygen available to the foetus; there is a greater incidence of abdominal strain (these muscles are trying to work in two directions at once); strain on the lower back from rotatory pressure on the sacrum and lumbar vertebrae; greater incidence of tearing; inhibition of spontaneous placental delivery, and greater pain for the woman. The advantage of an increase of 30% in the cross-section of the birth canal which women have in a vertical position, aiding the expulsive contractions is entirely lost (Inch, 1989: 117-123). Perhaps most significantly, the woman loses control over her own labour when she is lying flat on her back with legs raised —she can be managed but she cannot manage.

The sole rationale for the gynaecological position in birth, that it gives the doctor ready access, is easily dealt with in terms of the physiology of labour. In the instance of a dystocic shoulder for example, it is far easier and done more rapidly to help shift

a woman onto all fours if she is already in a position where her legs are mobile, rather than slung up in stirrups or on rests (see also Chapter 11.3 above). According to Cochrane, there is no justification for making a woman labour flat on her back (Enkin et al., 1995:234). The WHO Fortaleza Declaration states the same principle (WHO, 1985b).

14.9 EPISIOTOMY

Policies, practices and teaching on routine episiotomies should not be separated from the problem of maternal position during the second stage of labour. Unfortunately, they are. In the *Hospital de la Mujer* in Sucre, all students are taught to do a routine episiotomy on nulliparous women, 'when the perineum is stretching and before it tears'. This was the stated policy in all the institutions surveyed although in practice, the rates might vary. The IPTK Hospital in Ocurí reported a 70% rate of episiotomy on first-time mothers, citing especially the many women who were only 15 or 16 years of age who needed this intervention because of their youth. However, episiotomy on second-time mothers was also in evidence (Aguilar and Bradby, 1995: 37; Murphy-Lawless and Ramos, 1995: 4). The doctor in Colquechaca advanced the argument that episiotomy is necessary for first-time mothers and for women more than 30 years old carries straight across the board in the three largest units in Sucre. The only dissenting point of view was from the doctor running the *Sa Grada Centro de Familia* in Sucre who argued that at most 50% of first-time mothers require an episiotomy.

There are underlying factors contributing to the rates of episiotomy and to their consequences. One is the gynaecological or lithotomy position for delivery, with the woman's knees being held wide apart, which stresses the perineal tissue even before the baby's head moves down onto the perineum. This predisposes a woman to more tearing and to making the bulge appear more as if it is going to tear, both factors which contribute to higher episiotomy rates (Inch, 1989: 142). In Sucre, medical students are being trained to use the mediolateral incision which bleeds much more than a midline incision. It is a difficult incision to repair, is slow to heal and during labour itself, can lead to vaginal tearing during the labour process (Inch, 1989: 132). The other problem of medical students handling this aspect of birth this way is that if they are unfamiliar with the bulge of the baby's head as it begins to move along the perineum, they will cut too early in the second stage when the perineum is still very thick, resulting in extensive blood loss. Using blunt scissors and cutting before the height of a contraction is the other major training issue because the crushed and

swollen tissue that results from these practices is very slow to heal. It also makes suturing difficult.

The obstetric concentration on time also comes into play. If the second stage is unhurried, the perineal muscle tissue can thin and stretch but slowly. It is not permitting a woman sufficient time during the second stage that leads to bad tearing. Generally, if tears do occur when a woman gives birth in an upright position and in her own time, they are tiny nicks which heal very rapidly. High rates of maternal morbidity in the wake of episiotomy have been consistently reported since 1935 yet it continues to be a widespread practice, the most commonly performed surgical operation done without a patient's consent in north Atlantic countries (Tew, 1990: 293; Kitzinger, 1981). Routine episiotomy is a form of obstetric care which has now been evaluated as being either ineffective or harmful to the woman in labour (Enkin, et al., 1995).

14.10 FORCEPS

Forceps are seldom used in training and infrequently used in practice in the institutions surveyed. Few obstetricians have had training in their use and students are currently taught about them but not their use in practice. In the instance of a difficult labour, a Caesarean section is the preferred strategy. In the Lajastambo Hospital in Sucre, their use is prohibited outright on the grounds that they are dangerous to the baby. In the Hospital de la Mujer in La Paz, they are used once in every 115 births (ILCA, 1995b: 23). Doctors in Macha and Colquechaca do not have a forceps and do not recommend their use at all.

To give some context to these findings in terms of medical practice elsewhere, in Ireland in 1994, 20% of all births were forceps-assisted deliveries in an extremely medicalised context. Medical students there regularly work with forceps and even midwives are trained to do a Wrigley's lift-out delivery if the head is on the brim (historically in Europe, all midwives have been prevented from using forceps). In contrast, in the Netherlands where midwives still handle the majority of births and a significant minority of births still take place at home, the forceps rate was 2.4% in 1988 (Wagner, 1994:189). The French obstetrician Michel Odent in his hospital practice in Pithiviers in the 1970s and 1980s, was utterly opposed to the use of forceps. But what he did have was a very developed level of midwifery skills to support women physically and psychologically through their labours. He used Caesarean section after ventouse if all else failed in terms of those midwifery skills.

The status of the foetus and the problem of damage to the foetal head appears to be of great concern to Bolivian obstetricians. Hence their use of the Caesarean section. However, they have not incorporated any of the findings that would alleviate their concerns about the foetal head, such as for example using upright position to ensure a speedier delivery.

Given a choice between a forceps delivery and a Caesarean section, for the sake of the woman, a forceps delivery would be preferable. Given a much wider range of choice in which different sorts of skills associated with midwifery were brought into play, the incidence of Caesarean sections could be lowered dramatically while forceps could be used in accordance with strict and specific criteria only.

14.11 THIRD STAGE MANAGEMENT AND HAEMORRHAGE

All the institutions surveyed used some form of active management (see Chapter 11.2 above for the discussion on active management). Women are still in the gynaecological or lithotomy position. The cord is cut immediately after the baby is born. There is then a series of waiting times, 10 minutes to 30 minutes, with 15 minutes being the most usual response, before intervention in the form of rubbing forcibly to achieve a contraction is applied. Controlled cord traction is employed in some hospitals and not at all in others. All institutions give ergometrine in some form, either by injection or in tablet form after the birth as a routine precaution against haemorrhage.

In Sucre, the *Hospital de la Mujer* teaches that the placenta normally comes out within 15 minutes but if it has not come out within 30 minutes, then doctors are instructed to do a manual removal. They do not teach controlled cord traction which is considered dangerous but they do teach students how to speed expulsion by 'expression' of the uterus. This can be alongside with or in addition to forcible rubbing. Fundal pressure of this nature, where kneading or squeezing of an already contracted uterus is involved impedes the process of placental detachment, leading to incomplete separation of the placenta and increased blood loss (Cunningham et al., 1993: 616). Afterwards they use ergometrine routinely to control for possible haemorrhage. If the uterus does not contract then, they use ten to twenty units of oxytocin, given intravenously. In the *San José Dispensario*, in Poconas, they also wait 30 minutes before manual removal but during that 30 minutes, they use 'expression'. One of the two consultants there said that Credé's method is used from time to time. They administer ergometrine in two doses, one immediately after the placenta is expelled and one twelve hours later. In Lajastambo

Hospital, the normal time for waiting is 20 minutes. They do use some controlled cord traction. The same thirty minute rule on manual removal applies. Ergometrine is given routinely, often in tablet form for up to five days. In *Sa Grada* dispensary, the practice is slightly different in that no manual compression or 'expression' is used and they wait 15 minutes for the placenta to emerge spontaneously which, in their experience, it generally does. After 15 minutes, they use some controlled cord traction. Ergometrine after delivery is routine.

There is absolutely no recognition that if the woman waits and rests, the placenta will come out. Obstetricians, including teaching obstetricians, are not familiar with the physiological third stage and the research done on it. The combined practices of no administration of drugs, upright position where the woman chooses it, delayed cord cutting and clamping (allowing the weight of the blood-filled placenta to assist in peeling off the uterine wall), putting the baby to the breast at once to take advantage of physiologically produced oxytocin to stimulate uterine contractions, no fundal pressure, no time limits and no ergometrine once the placenta is delivered are not known.

The benefits of updating practices to include the physiological third stage in the hospital setting are considerable, especially if an active first stage of labour is also radically reduced. The results of the physiological third stage in controlled trials, even though it has been difficult to achieve the complete package of physiological management (see Chapter 11.2 above), have been telling: there has been no increase in postpartum haemorrhage for the women involved. There has been a drop in nausea and vomiting from the routine use of ergometrine, a drop in the number of women requiring manual removal of the placenta, a drop in the number of women having secondary postpartum haemorrhage, a drop in the number of women reporting pain and other complications in the first six weeks after birth (Inch, 1989; Begley, 1990).

14.12 CONCLUSION

The current policies and practices in the Bolivian maternity hospitals this project surveyed can be characterised as favouring the biomedical model of birth in which practices based on obstetric technologies to control the labour process very often override the simple non-invasive aids and support which are seen as socially and psychologically acceptable to women (Wagner, 1994). The adherence to a biomedical model accounts, at least in part, for the fact that so few women arrived at the end of their hospital births wishing to give birth in hospital again. Few women gave birth in

hospital without any form of medicalised birth technology being applied to them. If only 9% to 15% of births develop serious complications, there is no logic in the policies being promoted in hospitals and by medical doctors. There are discomforts, disadvantages and risks for women who enter hospital and who must accept the medical package, whether they approve of it or not.

On the basis of what women in our study have indicated, there are three areas of current practice which stand out as especially unhelpful. They are distinguished by their routine application and ineffective and harmful outcomes for women who come from a background where these hospital practices have especially adverse meanings. The first is the insistence on the gynaecological position for labour and specifically for the second stage and birth itself. This is a near uniform practice in the hospitals. When it is combined with levels of oxytocic augmentation of up to 36% of labours overall, in addition to the episiotomy which is necessary to deal with the results of the lithotomy position and pushing against the perineum from that angle, it compounds a series of ill-effects for women and their unborn babies. The juxtaposition of this package with the proven benefits and importance of a vertical position in labour and birth which will shorten labour and expose women and babies to least risk, raises the issue of careful evaluation. The research on this aspect of labour is over thirty years old. Why can it not now be taken on board along with measures such as walking during labour, access to food, drink and social support as women wish?

The second area is active management of the third stage of labour. Active management policies, as pursued in the institutions we surveyed, carry with them the increased likelihood of secondary postpartum haemorrhage for women who do not have easy access to medical facilities. The far safer alternative is for hospitals to initiate a policy of physiological management, especially measures such as not cutting the cord until the placenta has been delivered. If there is then a difficulty of placental delivery, all the tools are in place for responding to clear, specific medical indications, including ergometrine and manual removal. To run an active management policy on the grounds of possible risk, while exposing women to measurable levels of adverse physiological reactions, including secondary haemorrhage, is not justifiable.

The third area is the problem of Caesarean sections. The section rate, even in the public sector of the hospitals, is too high according to WHO criteria and to those criteria in *Plan Vida*. To use Caesarean section in place of forceps on the grounds that the latter are more dangerous, is not useful, given the measurable adverse outcomes of Caesarean section for women and the demonstrable fear rural women have of these

adverse outcomes. The rates of Caesarean section and forceps use combined should not be above 15% (Wagner, 1994: 189).

This review raises issues of training, of the overdetermination of birth by doctors rather than midwives. It indicates the pressing need to build new knowledges and ongoing evaluations into existing structures. The notion of informed choice on the part of women has only just begun to be recognised, in the concept of 'parto humanizado' which remains a set of precepts on paper but not ones which are there in practice.

All these practices which have been reviewed in the preceding sections have been subjected to intense debate and research and many of them to excellent controlled trials. Through developments such as the Cochrane database with the levels of meta-analysis it now affords, there is an opportunity to re-evaluate policies, practices and teaching. That opportunity must be seized through initiatives such as *Plan Vida* to establish new norms of practice which are relevant, if hospitals are to be able to make significant contributions to maternal health and well-being. The social model of birth with a concentration on training personnel in the skills of non-invasive methods of support during labour and birth, working alongside *parteras* and encouraging their use of valuable traditional Andean methods, and otherwise concentrating on the development of focused, reliable and sensitive responses in emergency situations could transform the state health care services in the eyes of Bolivian women.