# Chapter 1 Evolution of Current Systems of Intrapartum Care

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This chapter provides a brief overview of the recent history of labour care and the predominant influences that have impacted on it. It includes a discussion of different models and approaches, reflected in trends around the place of birth and the evidence underpinning this. The roles of maternity-care professionals and of birth technologies are seminal in intrapartum care's recent history and will be critically reviewed. The chapter closes with speculation on what the future influences are likely to be.

# Introduction and history

It may seem a little far-fetched to link ancient Greek philosophy to current labour care practices but the legacy of Greek thought around the understanding of the mind and body is relevant to these deliberations. Plato is credited with originating the dualism of mind-body split which posited the mind as superior (Rauchenstein 2008). This legacy in western thought has resulted in a suspicion of bodily processes as liable to error and breakdown. The mind needs to govern the body to prevent this from happening. Reproduction has suffered under this belief for millennia, both in relation to sexual behaviour and childbirth (Christiaens & Bracke 2007). Both have been cast as base and potentially errant behaviours and experiences. In the context of labour, the unfolding of physical expression should therefore be subject to rational planning and ongoing monitoring and regulation. It is easy to see how the body physiology becomes reduced to mechanical functioning within this paradigm.

The suspicion of parturition has been aided and abetted by another historical-cultural belief deeply embedded in western societies that

can again be traced backed to Greek and Roman times – patriarchy (Longman 2006). This holds that social structures and especially power in the public sphere privileges men. Patriarchal beliefs and values, it could be argued, preceded mind–body dualism as it was men who propagated such ideas. In fact the history of western philosophy could be recast as a 'male only' mediated history (Zergan 2005). Patriarchy imposes control of men over women, especially in the public sphere and this has been played out in the recent history of childbirth where man midwives and subsequently male obstetricians oversaw many of the trends in the medicalisation of childbirth and the evolution and regulation of the midwifery profession (Donnison 1988).

Both patriarchy and dualism largely ignored childbirth until the Enlightenment period commenced in the 17th century when both the ideas and practices around childbirth began to migrate from the private, domestic sphere and enter the public domain (Fahy 1998). The Enlightenment saw an explosion in scientific advances, including the understanding of the human body. The accompanying rapid industrialisation saw the emergence of a wealthy middle class with disposable income. The emerging profession of man midwives saw an opportunity to profit from this wealth by offering childbirth services (Donnison 1988).

Prior to this, lay midwives and traditional birth attendants had provided support in childbirth, probably since the beginning of human evolution (Rosenberg & Trevathan 2002). Socrates' mother was a midwife and midwives are mentioned a number of times in ancient texts like the Bible. In the 17th century in the West, they continued to offer care to a huge majority of poor women but began to be excluded from the wealthy as male midwifery spread (Donnison 1988).

With the advent of inventions like the forceps by the Chamberlain family and pain-relieving drugs, and the rise of state provision for health care, childbirth was rapidly being viewed as belonging in the public sphere, overseen by accredited professionals. This heralded a drawn out battle for midwifery to be recognised as a profession in its own right with each country writing its own history of this struggle (Donnison 1988; Rhodes 1995).

## Medicalisation of childbirth

Childbirth practitioners in the Western world in the 21st century are inevitably influenced by the conditions of practice we are exposed to and the kind of education and training we have had. For the vast majority of midwives that means a 'surveillance' orientation to care in labour. Surveillance is premised, as Foucault argued, on a dominant discourse of what should happen so that the one doing the surveying, is judging

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whether what is under observation complies with a preordained order (Foucault 1979). Foucault argued powerfully that dominant discourses regulate public behaviours by imposing a particular reading (knowledge) of what should happen. One such discourse is the medicalisation of childbirth (Van Teijlingen *et al.* 2000). An illustration of the power of this discourse is the fact that labour is divided into three stages that entirely reflect a professional nomenclature (Walsh 2007). Each is required to be framed in chronological time that may bear little resemblance to narrative accounts by women. The pervasiveness of labour stages and their timing is illustrated by the ubiquity of the partograms in maternal labour records across most of the world.

By far the most potent marker of medicalisation is the ever-increasing rates of Caesarean section, especially over the last decade (Johanson *et al.* 2002). The rises have not been accompanied by improving maternal and perinatal mortality, which begs the question of whether the Caesareans were necessary. The normalisation of Caesarean birthing has reached a point where, in the United States, an active debate exists as to whether Caesarean delivery should be a choice for women (Maier *et al.* 2000). The Caesarean issue raises another consequence of medicalisation – the attendant morbidities for mother and babies. Both Johanson *et al.* (2002) in Britain and Barros *et al.* (2005) in Brazil have raised concerns in this area. In Brazil, the 'modernisation' of maternity services has resulted in such high rates of intervention that a counter movement (REHUNA, Movement for the Humanisation of Birth 2008) has arisen to humanise birthing practices.

### Backlash

Across the western world a backlash against the discourse of medicalisation is gathering momentum. This is being led by an alliance of consumer groups, midwives and other childbirth professionals challenging orthodoxies like hospital birth for all and the routine application of technologies like continuous fetal monitoring (Goer 2004). They have been successful in some countries in reducing episiotomy and artificial rupture of membrane rates but not in lowering Caesarean rates. Arguably, they have been more successful in addressing infrastructure and policy issues in maternity services such as the development of a vibrant midwifery profession and installing a woman-centred ethos to maternity care policy (Hirst 2005; DH 2007).

A woman-centred ethos is fleshed out with recurrent themes of choice, information and continuity appearing in policy documents on maternity services across the western world over the past 25 years (DH 1993; Declerq *et al.* 2002; Roberts *et al.* 2002). These themes have prompted the exploration of different midwifery models of working

like teams, caseloads and group practices in addition to redressing the bias to acute services in maternity services (Page 1995). Continuity schemes like these are generally based in primary care. Consumer action has also stimulated more social science research and from the late 1980s onwards, alternative models of care began being hypothesised (Kirkham 2004).

## Models of childbirth

Jordan (1983) was the first to suggest that cultural determinants constructed birth in contrasting ways in different settings but it was left to Davis-Floyd (1992) to conceptualise these variations as models of childbirth. She framed the medicalisation of birth as a technocratic model and a midwifery approach as holistic model. She delineated a number of values and beliefs which she believed typified attitudes and practices within each model and these have become a useful heuristic device in much of the literature since (Wagner 2001; Walsh & Newburn 2002). The debate around models is explicit in the midwifery and sociological childbirth literature but almost entirely absent from medical journals, though it is known that obstetricians and midwives conflict over what each considers to be the appropriate care of labouring women (Reime *et al.* 2004). There is still clearly a need for greater dialogue between the two professional groups, challenging though that is likely to be, given the historical imbalance of power between them.

The literature around models of birth runs a significant risk of essentialising the characteristics of contrasting beliefs when interrelationships and practices in context do not reflect this. There are plenty of exceptions to the rule where obstetricians endorse normality and midwives favour intervention. Recent literature on the meaning of natural or normal birth demonstrates that neither is a self-evident state, which is revealed when all trappings of medicalisation are stripped away (Mansfield 2008). Instead, Mansfield argues that each is accomplished by enacting particular social practices which she suggests are related to activity during birth, preparation before birth and social support.

No one would argue that either a medical or social model of birth could be applied with consistency to every birth, depending on which model was favoured by the principal actors. Purists on both sides would agree that there may be a place for elements of each in certain births. Even the elective Caesarean choice can be undertaken in a womencentred, holistic way and, from time to time, natural labours require medical interventions. Davis-Floyd *et al.* (2001) argues for a postmodern midwife who can seamlessly traverse between social and technocratic models but that transition often requires a geographical movement between home or birth centre and hospital. Does working and birthing

in different settings hinder or help the provision of intrapartum care? The next section examines this issue.

## Place of birth debate

Nowhere has the divide over place of birth been more evident than in the United Kingdom. Against a backdrop of a long history of home-birth provision by midwives, recent wholesale hospitalisation of birth has prompted argument and counter-argument around the interpretation of evidence (Gyte & Dodwell 2007; Steer 2008). Though epidemiological research is very reassuring about the safety of home birth, when the National Institute for Health and Clinical Excellence (NICE) intrapartum guideline was being formulated in 2007, different members of the guideline group could not agree on the weighting of evidence around home-birth transfers (Gyte & Dodwell 2007). One of the consumer representatives resigned in protest at the way some of the professionals on the group had admitted evidence that was clearly not robust enough. It was as though their deeply held beliefs about the risks of home birth won out over a dispassionate consideration of the evidence.

It is now acknowledged by the most influential sources of evidence that there is no risk-based justification for requiring the birth of all women in hospital and, furthermore, that women should be offered an explicit choice when they become pregnant over where they want to have their baby (Enkin *et al.* 2000). Tew (1998) argues that the perinatal mortality rate for planned home birth is actually better at home than in hospital, though she is reliant on retrospective analysis of data. Nevertheless, her scholarship has been in-depth and meticulous. Most experts agree that it would be almost impossible to undertake a prospective randomised controlled trial in this area because of the large numbers required to establish statistical significance on perinatal mortality and because it is a topic that most women are not neutral about (Devane *et al.* 2004; Fullerton & Young 2007). In other words, they may be reluctant to be randomised to either hospital or home.

Apart from the recent NICE Intrapartum Guideline (NICE 2007), the most comprehensive recent review of the home-birth research literature was undertaken by Fullerton and Young (2007) and included 26 studies from many parts of the developed world. The conclusions were that the 'studies demonstrate remarkably consistency in the generally favourable results of maternal and neonatal outcomes, both over time and among diverse population groups.' (p. 323) The outcomes were also favourable when viewed in comparison to various reference groups (birth centre births, planned hospital births).

It is important to note that randomised controlled trials have demonstrated clear benefit in a number of associated elements of the

home-birth 'package of care'. These include continuity of care during labour and birth (Hodnett *et al.* 2007) and midwife-led care (Hatem *et al.* 2008), both of which are probably universal aspects of home-birth provision.

Though official UK-government policy up to the present is to offer women a choice about the place of birth, the national home-birth rate is still only about 2% compared with 25% in the early 1960s (The Information Centre 2006). Despite the rhetoric of choice, there are plenty of anecdotal stories of women being discouraged from choosing the home-birth option.

Home birth has been described by Cheyney (2008) as 'systemschallenging praxis' because it is such a countercultural choice in the western world. Both women and midwives have to challenge powerful discourses of safety, authoritative obstetric knowledge and professional hegemony to secure their choice of home birth. What was exciting about her findings of women choosing home birth in the United States was the narrative of personal empowerment that was a consequence of their choice. Many spoke of inhabiting the metaphysical place of 'labourland' where they uncovered and experienced the power of birth that left them in awe.

There are no randomised controlled trials and generally a paucity of good quality research on free-standing birth centres or midwiferyled units. Walsh and Downe's (2004) structured review found these environments lowered childbirth interventions but methodological weaknesses in all studies made conclusions tentative at best. Stewart *et al.*'s (2005) commissioned review reached similar conclusions. However, this model has still been endorsed by the Department of Health (2007) in the Maternity Matters Report and this may reflect policy thinking that free-standing birth centres would be unlikely to have worse outcomes than home birth as a similar profile of women use both.

Regarding integrated birth centres or alongside midwifery-led units, evaluations have shown no statistical difference in perinatal mortality and encouraging results regarding the reduction in some labour interventions (Hodnett *et al.* 2005). Debate has continued to rage over the noted non-significant trend in some of the studies of higher perinatal mortality for first-time mothers (Fahy 2005; Tracy *et al.* 2007). This is unlikely to be resolved until contextual studies exploring the interface at transfer or clinical governance arrangements or the impact of contrasting philosophies is examined in depth.

All of which underlines the need for robust, prospective, multimethod studies which separate out modes of care from types of birthing centre and this is now being addressed by the birthplace study being conducted by the National Perinatal Epidemiology Unit (NPEU 2008).

Qualitative literature on home birth and free-standing birth centres highlight two other aspects of care in these settings. These are to do with

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how temporality is enacted and how smallness of scale impacts on the ethos and ambience of care. The regulatory effect of clock time is much less in evidence both at home and in birth centres. Labour rhythms rather than labour progress tend to be emphasised by staff and there is usually greater flexibility with the application of partograms. Part of the reason for this lies in the absence of an organisational imperative to 'get women through the system' (Walsh 2006a). Small numbers of women birthing mean less stress on organisational processes and a more relaxed ambience in the setting. This appears to suit women and staff well. It also appears to be attuned to labour physiology, which inherently manifests biological rhythms based on hormonal pulses of activity, rather than regular clock-time rhythms (Adams 1995).

Home birth and birth centres have enormous potential to expand as currently they provide 4% or less of all births across the western world (Walsh 2007a). This represents a tiny proportion of all suitable births. Estimates of what proportion of women might take up this option vary from 15% (Wagner 2006) to 80% (Arms 1999). Within the United Kingdom, there is evidence that long-standing integrated birth centres birth around 25% of all births from their catchment areas (Walsh 2006b).

## **Contemporary challenges**

Current issues for intrapartum care are divergent depending on whether one is considering the Western world or the developing world. For the latter, the spectre of unacceptable perinatal and maternal mortality continues to dominate the agenda. Yet even here, strategies to address the problem have to be more than replicating high-tech Western-style maternity hospitals. Arguable poverty is the greatest killer of all in these contexts, but as Ronsmans and Graham (2006) comment, the statistics defy simplistic analysis and the identification of linear cause and effect. Multiple interventions are required to address a complex phenomenon, including the provision of midwifery care to remote areas.

In the west, morbidity rates are on the rise in some countries, primarily related to private provision of maternity care where financial incentives reward intervention (Block 2007). Governments are vexed by the problem of how to incentivise non-intervention as the Payment by Results formulae in England illustrates (O'Sullivan & Tyler 2007). As one would expect intuitively, midwifery-led care of low-risk women is cheap (Tracy & Tracy 2003) with clear reductions in consumables. It is likely that the imperative to provide one-to-one care in labour will drive alternative service provision as this is always more complex to address in large maternity hospitals. What is emerging in the western world is the rationalisation of perinatal services by the creation

of tertiary centres of excellence forming a hub for local midwifery-led units or birth centre and home birth (Maternity & Newborn Working Party 2007). This model is likely to increase the numbers of birth centres and midwifery-led units and will be welcomed by service users and midwives.

This will contribute positively to addressing the trend to increasing medicalisation of birth but this phenomenon is fed by a number of powerful discourses including the techno-rationalist age, risk and professional power (Walsh 2006b). Techno-rationalism proffers that science is progressive and altruistic, and holds an optimistic view of technology (Lauritzen & Sachs 2001). It is challenging for an anthropological approach to childbirth to have credibility, competing for women's hearts and minds, when up against such a ubiquitous and pervasive alternative. In what other context of our lives would we embrace pain as part of 'rites of passage' transition? In what other context would we reject the use of technology in favour of traditional skills? This is why preserving the anthropological alternative in out-of-hospital birth settings is so crucial. It is unlikely that these frontiers will ever be rolled back in hospital where professional vested interest in maintaining them is strong. In the hospital context, technologies application in treating pathology is appropriate and beneficial but in childbirth its attendant iatrogenic effects have undermined this intent. In addition, the integration of technologies with labour care in the context of institutional hospitals has tended to dehumanise the birth experience (Kitzinger 2006).

Sensitivity to the user voice in maternity care is also driving reform, especially around choice and options for birth. As in broader health, the rise and rise of what are now called 'experts by experience' (Preston-Shoot 2007), is requiring service providers to move beyond tokenism in user consultation to planning services and evaluations with them. This is beginning to challenge professional and managerial power as a number of stories of resisting closures of birth centres illustrate (Walsh 2006a).

## Conclusion

The future is uncertain regarding trends in intrapartum care. The postmodern era that we are moving into is characterised by choice, eclecticism and a suspicion of grand narratives that propose to answer all the questions (Walsh 2007b). Both technocratic birth and natural birth are childbirth versions of a grand narrative. Neither can claim complete jurisdiction over the vagaries of the childbirth experience, though both have an appropriate context of application. There will continue to be ongoing tension over their respective claim on the care and practices in childbirth.

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