Childbirth care practices in public sector facilities in Jeddah, Saudi Arabia: A descriptive study

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\section*{Article info}

\textbf{Article history:} Received 28 August 2013 Received in revised form 1 February 2014 Accepted 6 March 2014

\textbf{Keywords:} Childbirth Policy Hospital practices Evidence-based practice

\section*{Abstract}

\textbf{Objectives:} to explore reported hospital policies and practices during normal childbirth in maternity wards in Jeddah, Saudi Arabia, to assess and verify whether these practices are evidence-based.

\textbf{Design:} quantitative design, in the form of a descriptive questionnaire, based on a tool extracted from the literature.

\textbf{Setting:} nine government hospitals in Jeddah, Saudi Arabia. These hospitals have varied ownership, including Ministry of Health (MOH), military, teaching and other government hospitals.

\textbf{Participants:} key individuals responsible for the day-to-day running of the maternity ward.

\textbf{Measurements:} nine interviews using descriptive structured questionnaire were conducted. Data were analysed using SPSS for Windows (version 16.0).

\textbf{Findings:} the surveyed hospitals were found to be well equipped to deal with obstetric emergencies, and many follow evidence-based procedures. On average, the caesarean section rate was found to be 22.4%, but with considerable variances between hospitals. Some unnecessary procedures that are known to be ineffective or harmful and that are not recommended for routine use, including pubic shaving, enemas, episiotomy, electronic fetal monitoring (EFM) and intravenous (IV) infusion, were found to be frequently practiced. Only 22% of the hospitals sampled reported allowing a companion to attend labour and childbirth.

\textbf{Key conclusions:} many aspects of recommended EBP were used in the hospitals studied. However, the results of this study clearly indicate that there is wide variation between hospitals in Jeddah, Saudi Arabia in some obstetric practices. Furthermore, the findings suggest that some practices at these hospitals are not supported by evidence as being beneficial for mothers or infants and are positively discouraged under international guidelines.

\textbf{Implications for practice:} this study has specific implications for obstetricians, midwives and nurses working in maternity units. It gives an overview of current hospital policies and practices during normal childbirth. It is likely to contribute to improving the health and well-being of women, and have implications for service provision. It could also help in the development of technical information for policy-makers, and health care professionals for normal childbirth care.

\section*{Introduction}

In 2000, 189 countries signed up to Millennium Development Goal 5 (MDG 5), which aims to improve maternal health and reduce maternal mortality. A key part of this strategy is to ensure women are delivered by skilled attendants capable of using effective practices which prevent or manage life threatening complications, while ensuring satisfactory care to women. There is a considerable body of scientific evidence on the effectiveness of childbirth care practices (for example, Cochrane Library, NMC and NICE guidelines, WHO database), yet evidence is also emerging that many countries are not adopting key beneficial practices while also retaining or adopting ineffective or even harmful practices.

Clinical practices should be evidence-based (Waldenström, 2007) as evidence-based medicine (EBM) enables practitioners to use...
the current best evidence on which to base health care decisions (Khan et al., 2003), it complements clinical expertise (Sackett et al., 1996) and identifies knowledge gaps (Tarling and Crofts, 2002). Strengthening practice rests on the application of an evidence-based approach, with the best available evidence stemming from research providing the basis for policies that guide practice. Evidence based practice (EBP) has become the main means of informing policy, practice, management and education within health care services across the developed world (Rycroft-Malone et al., 2004).

Saudi Arabia is a Muslim Arab monarchy in the Middle East. It has an estimated population of 25.37 million. In 2009 the total fertility rate was 3.04 children per woman, the neonatal mortality rate was 11 per 1000 live births, maternal mortality ratio (MMR) is estimated by interagency at 24[13–45] per 100,000 live births and nationally at 14.3 per 100,000 live births and 91% of women give birth in health facilities. Childbirths largely occur in hospitals and 98% are attended by skilled health care personal (MOH, 2008, 2011, 2012). While there are no statistics on the skill level of providers attending childbirth, obstetricians, midwives, nurse-midwives and nurses are all involved in childbirth care. The Saudi Arabian health system is mainly staffed by health care professionals recruited from all over the world, such as the Philippines, India, South Africa, Malaysia, the UK, the USA, Europe, and other Arab countries, who may have different qualifications to fill the critical gap in numbers of Saudi health care professionals to meet medical and nursing workforce needs. These professionals may have different training backgrounds, and play a significant role in the support and care of women during childbirth. Obstetric, midwifery and nursing professions in Saudi Arabia are regulated by the Saudi health commission which provides registration and training programme. The current situation of midwives in Saudi is not clear as the midwifery profession is still part of the nursing profession. There are no statistics about the number of midwives working in Saudi Arabia; their number is included under the nursing profession statistics. Midwifery education in Saudi Arabia is still not fully established. In 2006 the Prince Sultan Medical Military City in Riyadh started to offer a post-graduate diploma in midwifery which is accredited by the Saudi Commission for Health Specialties (SCFHS) for nurses who hold a bachelor degree in nursing. Since then, many other programmes in Jeddah and Dammam have started to offer post-graduate diplomas in midwifery. In addition, the Ministry of Health (MOH) is offering an associate diploma in midwifery that allows the graduates to work within the MOH hospitals only as midwives.

The quality of maternal care worldwide is receiving increasing attention with regard to hospital policies and practices for normal childbirth and whether they are evidence-based. A literature search was conducted to identify the evidence concerning normal childbirth policies and practice in maternity wards worldwide. A wide range of well-established online databases was used including Medline, Maternity and Infant Care, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Cochrane Library Database of Systematic Reviews, Pubmed and Google Scholar. Some studies found had examined the routine policies and practices of normal birth worldwide (Mainmbolwa et al., 1997; Festin et al., 2003; Turan et al., 2006; Harris et al., 2007; Danichevski et al., 2008; The SEA-ORCHID Study Group, 2008; Chalmers et al., 2009). In the Arab world, studies of hospital policies and practices for normal childbirth have begun to assess whether they are within EBP (Khayat and Campbell, 2000; Abdulsalam et al., 2004; Khaliil et al., 2005; Wick et al., 2005; Hassan-Bitar and Wick, 2007; Sweidan et al., 2008; Khreshel et al., 2009). All have shown deviation from EBP for normal childbirth.

The regional research network, Choices and Challenges in Changing Childbirth (CCCC) (2005) documented facility-based practices for normal labour and birth in Egypt, Lebanon, the West Bank and Syria, and compares regional facility-based childbirth practices according to WHO classifications of beneficial and harmful practices for normal birth. However, we were unable to identify any studies in the published literature which explored hospital policies or practices, or whether EBP is followed for maternity services during antenatal care, labour, birth and post partum care in Saudi Arabia.

This study was conducted to explore reported hospital policies and practices during normal childbirth in maternity wards of public sector facilities in Jeddah, Saudi Arabia and to assess whether these practices are evidence-based. The ultimate objectives of the study were to generate baseline data of hospital policies, practices and routines applied in labour rooms and maternity wards for women having normal childbirth in Jeddah government hospitals; to obtain estimates of the frequency of certain practices and to identify the variation in hospital policies and practices.

In this study the research question emerged from searching the literature about hospital policies and practices during normal childbirth and from the researcher’s own experience, as follows: ‘Do government hospitals in Jeddah, Saudi Arabia, adopt consistent obstetric policies and practices and to what extent are these in conformity with internationally accepted evidence based guidelines?’

Methods

Design and sample

The research design adopted for this study is a descriptive survey. The nature of the research question, collecting information about hospital policies and practices for normal childbirth in maternity wards, lends itself to a quantitative approach (McColl et al., 2001; Bowling, 2002; Cluett and Bluff, 2006). Face-to-face structured interview was the main method selected for this study. Although it is highly time-consuming compared to a self-administered questionnaire, in face-to-face interviews, the interviewer can easily probe responses and clarify any ambiguities to reduce misunderstandings, and response rates are higher than for postal surveys because of the interpersonal interaction (McColl et al., 2001; Bowling, 2002). Hence, structured interviews are particularly appropriate in the hospital setting where department heads are always busy and returning a written questionnaire could be difficult for respondents, leading to a low response rate.

On the basis of the annual statistical book prepared by the MOH in Saudi, the sampling frame was 15 hospitals. We excluded all hospitals lacking a maternity or labour ward, which left a sample of 10 hospitals. The target samples were all government hospitals in Jeddah, providing maternity services. Jeddah city was chosen for this research because it has all hospital types available in Saudi Arabia. These included six MOH, two Military, one Teaching and one other specialist government hospital, a total of 10. All hospitals were invited to participate in order to capture the typical variation of public hospital services and all but one agreed. Ethical approval for the study was obtained from City University London’s Research Ethics Committee Ref: MSc/09-10/20 and from the hospitals themselves. Nine out of 10 hospitals approached provided ethical approval for the study. Ethical approval was not granted by one hospital, because its procedures took longer than expected and time was limited for this study. Informed consents were obtained from all participants who were interviewed.