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SPECIAL ARTICLE

Childbirth in Palestine

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Abstract

Objective: This study describes staffing, caseloads and reported routine practices for normal childbirth in Palestinian West Bank (WB) governmental maternity facilities and compares these practices with evidence-based care. *Methods:* Data on routine childbirth practices in all eight governmental hospitals were obtained through interviews with head obstetricians and midwives. Data on staffing and monthly number of births were collected by phone or personal interview from all 37 WB hospitals. *Results:* Forty-eight percent of WB deliveries took place in crowded and understaffed governmental hospitals. Reported practices were not consistently in line with evidence-based care. Lack of knowledge and structural barriers were reasons for this gap. *Conclusion:* The implications of limiting unnecessary interventions in the normal birth process are particularly important in a context of limited access and scarce resources. More skilled birth attendants and a universal commitment to effective care are needed.

1. Introduction

The parameters of effective childbirth care are well established [1], yet the gap between evidence and practice persists in both developed and developing countries [2]. The integration of beneficial practices into a developing country setting, while not a simple process, is crucial in a situation where restricted mobility and rising poverty limit access to care. Strategies for improvement need to be conceived within the workings of the system [3] in order to instigate change.

Care during childbirth has an important bearing on birth outcomes as harmful practices might interfere with the woman's health, autonomy, access to her baby, and the physiological process of birth and infant health. Childbirth practices have been classified according to the strength of

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research evidence, along a continuum of beneficial to harmful forms of care [4]. Studies have also shown that one unnecessary intervention in the physiological process of childbirth often leads to a "cascade of interventions" which may finally necessitate a Caesarian section [5].

Despite the importance of childbirth in Palestinian society, routine practices have never been assessed. The total fertility rate of 5.6 in the Occupied Palestinian Territory is one of the highest in the region; 96% of births take place in health institutions, and the Caesarian section rate has risen from 8.8% in 2000 to 12.4% in 2004 [6], raising questions about the patterns of childbirth care. In assessing normal childbirth practices in WB governmental hospitals and their consistency with evidence-based maternity care, this study highlights the complex interaction between actual childbirth practices and different agents, institutional factors, and political and social components influencing patterns of care, with the aim of identifying possibilities for change.

2. Methods

Information on routine policies and practices for normal childbirth was collected from all eight WB governmental maternity hospitals. A semi-structured questionnaire with 56 items in the form of fixed-choice and open-ended questions was used in interviews with the head obstetrician and midwife of each institution during fieldwork visits between May 2002 and April 2003. Observations of the hospital setting and interactions contributed to understanding the context of care. The extended period of fieldwork resulted from closures and curfews. For comparative purposes and a comprehensive overview of maternity hospital utilization, data on staffing and the monthly number of births during 2001 were collected from all 37 WB maternity facilities, according to a list provided by the Ministry of Health. Data were analyzed using the Statistical Package for the Social Sciences (SPSS 8). Content analysis according to themes was used for analysis of the qualitative data.

3. Results

3.1. Distribution of hospitals and staffing

While the private sector had the highest number of maternity facilities (15), only 13.2% of births in 2001 took place there, while 48.3% of births occurred in the 8 governmental hospitals, where maternity care was free of charge (Table 1). The total number of obstetricians and midwives in the 37 hospitals was 84 and 221, respectively, and only 7% (6) of the obstetricians were female. Table 1 indicates a discrepancy between staffing and caseloads in the governmental and private sectors. Only 32.1% of the obstetricians and 34.4% of the midwives worked in the governmental sector where almost half of the deliveries occurred, with 36.9% of the obstetricians and 20.8% of the midwives in the private sector, which had next to the least proportion of deliveries. The NGO sector seemed to fall in between, as Table 1 demonstrates. Excluding UNRWA with its single hospital, governmental hospitals had the highest deliveries per provider ratio. The ratio of deliveries/midwives was significantly higher in the governmental sector than in either non-governmental or private sectors. The ratio of deliveries/obstetricians was significantly higher in the governmental sector than in the private sector.

3.2. Reported practices in governmental maternity facilities

For purposes of comparison with the best evidence, practices have been classified according to Enkin et al. [4] (Table 2). All eight hospitals reported using the 'three beneficial forms of care' and at least seven reported using all but one of the seven 'forms of care likely to be beneficial'. The harmful practices most frequently applied were the lithotomy position for giving birth and the liberal use of

Table 1 The distribution of West Bank maternity hospitals, monthly deliveries, and staffing by sector

Sector	Hospitals, %(*n*)	Average monthly deliveries, 2001, %(*n*)	Staff obstetricians, %(*n*)	Midwives, %(*n*)
Governmental	21.6 (8)	48.3 (2274)	32.1 (27)	34.4 (76)
Non-governmental	35.1 (13)	36.1 (1698)	29.8 (25)	40.7 (90)
Private	40.5 (15)	13.2 (623)[a]	36.9 (31)	20.8 (46)
UNRWA	2.7 (1)	2.3 (110)	1.2 (1)	4.1 (9)
Total	99.9[b] (37)	99.9[b] (4705)	100 (84)	100 (221)

[a] Data here are for 13 private hospitals.
[b] The total is not 100% due to rounding.

Table 2 Classification of the reported practices of the eight governmental hospitals according to Enkin et al.

Practice	Number of hospitals reporting routine use
Forms of care likely to be ineffective or harmful	
Enema	2
Pubic shaving	4
Lithotomy position during 2nd stage of labor	8
Liberal or routine use of episiotomy	6, particularly for primigravidae
Forms of care unlikely to be beneficial	
Withholding food and drink	2
Routine intravenous infusion	3
Routine suctioning of the newborn	3
Beneficial forms of care	
Prophylactic oxytocics in 3rd stage	8
Active vs. expectant management of 3rd stage	8
Unrestricted breastfeeding	8
Forms of care likely to be beneficial, although not established by randomized trials	
Midwifery care for low-risk women	8
Presence of a companion for labor and birth	0
Freedom of movement and choice of position in labor	8
Non-pharmacological methods of pain relief	7
Keeping newborn babies warm	8, dry and put on heated resuscitation table
Encouraging early mother—infant contact and breastfeeding	8
Prophylactic vitamin K to baby	7
Forms of care with a trade-off between beneficial and adverse effects	
Narcotics to relieve pain in labor	7 use pethidine frequently
Epidural analgesia to relieve pain in labor	6 do not provide epidural analgesia; 2 provide it for a small # of cases
Oxytocin for augmentation of labor	5 reported augmentation with oxytocin in over 50% of the cases
Continuous electronic monitoring versus intermittent auscultation during labor	All facilities reported using intermittent auscultation and having at least one monitor. Only three hospitals had a fetal stethoscope

episiotomy, while the beneficial practice of a companion during labor and birth was not utilized at all.

3.3. Providers' perceptions and obstacles to adopting evidence-based practices

Providers' perceptions helped to contextualize current practices. Midwives expressed their belief in the physiological process of childbirth and awareness of their role in promoting it. However, in seven of the eight hospitals, midwives claimed that high caseloads and overcrowding were reasons for neglecting provider support and for frequent utilization of oxytocin and pethidine in normal labor. Obstetricians showed more interest in emergency cases, remarking that complications have increased due to late arrivals after delays at checkpoints and late referrals from private hospitals for Caesarean operations free of charge. They expressed the need for alternative settings for low-risk birthing women so as to accommodate the needs of high-risk patients in referral hospitals. All providers reported that low salaries and chronic stress were factors affecting adequate provision of care.

4. Discussion

With the increased need for free services and unpredictable access to maternity facilities, hospitals face daunting challenges in providing safe and satisfying care. While providers claimed to use most of the beneficial practices, reported practices do not always reflect actual care. However, the assessment gives a general overview and identifies essential challenges to change. Avoiding harmful practices would improve quality. Governmental hospitals were critically understaffed with obstetricians and midwives, raising the issues of minimal human resources for safe childbirth and staff motivation, both crucial in promoting change [7]. Female obstetricians are rare, in spite of women's preference in maternity services for female providers [8].

None of the governmental hospitals allowed the presence of a birth companion during labor and delivery, which is of particular concern given understaffing and the acute psychosocial needs of pregnant women. Continuous support during childbirth has been shown to reduce the use of analgesia and operative deliveries and to increase maternal satisfaction [9]. Lack of space, need for privacy, and the burden of additional lay people interfering

with hospital routines were reasons given for rejecting family support (traditionally by a mother or mother-in-law). While observation points to lack of space as a genuine issue, the effect of laboring alone appears to be worse than the risk of lack of privacy. Female relative support in a developing country has been shown to be a low-cost, culturally acceptable intervention associated with a higher frequency of normal delivery [10].

Wide application was reported of the use of pethidine, the most common analgesia in the WB hospitals for labor pain, and of the augmentation of normal labor with oxytocin. Midwives' reasons for increased use of these interventions were overcrowding, understaffing, and women's anxiety about returning home. Both interventions may be harmful routine practices given insufficient monitoring and personnel. The frequent use of oxytocin during the first stage increases fetal morbidity and mortality in developing country contexts [11]. Pethidine is associated with respiratory difficulties of the newborn, hinders early breastfeeding, and high doses during labor have been associated with addictive behaviors later in life with fetal exposure to opiates [12]. According to a recent study, women reported that narcotics as pain relief during labor were less likely to be rated as very helpful than five drug-free methods, such as hot or cold objects, hands-on techniques, and position changes [13]. While all hospitals reported the use of electronic fetal monitors to assess fetal heartbeat, providers also claimed that this equipment was difficult to maintain and repair because of frequent closures. Only three hospitals had a fetal stethoscope, a cheap and appropriate tool for fetal surveillance.

Some aspects of quality care are difficult to apply in a developing country, especially if they increase costs. For example, one-to-one midwifery care in the governmental hospitals, even though currently a non-realizable option, should in the long-term be considered as a strategy that improves birth outcomes and ultimately reduces costs [14]. Some beneficial practices, on the other hand, would not require additional resources or structural change. Permitting food and drink during normal labor might shorten its duration and reduce the need for oxytocin infusion [15]; avoiding routine intravenous infusions would reduce the negative effects on the mother and newborn, the additional burden on the birth attendants and the cost of the intervention. Encouraging women to give birth in a sitting, squatting or side-lying position could facilitate the second stage and shorten the duration of the birth [16]. Restricting episiotomy would reduce the workload of providers and postpartum complications of the mother [17].

Finally, lack of knowledge and outdated habits were factors explaining ineffective care. Routine practices seemed to depend on the style of the head obstetrician rather than guidelines rooted in best evidence. Few mechanisms were available to assure quality care. Changing practices seems to be a long process requiring policies and a birthing environment promoting education, re-education, the availability of information and the transformation of individual health providers into a team aware of the need to change practices in line with effectiveness.

5. Conclusions

This study has identified a gap between reported practices and research evidence with critical implications for childbirth care. Understaffing, overcrowded facilities and ineffective interventions raise questions concerning the organization of maternity care. Normal births without unnecessary technical interventions are relatively inexpensive [18] and less likely to lead to iatrogenic complications, something crucial in a situation where access to higher levels of care is frequently limited.

There needs to be a sufficient number of skilled birth attendants with appropriate attitudes, skills and time to support normal labor and birth and avoid over-medicalization. Many women in the region still consider childbirth to be a physiological process [19]. Within this particular environment, an appropriate and sustainable model of care for uncomplicated childbirth is needed, including attitudes, management structures and gender considerations that facilitate the process with a minimum of interventions.

Regional studies have described maternity practices inconsistent with research evidence [20—22], raising challenges for women, health providers and policy-makers in improving childbirth care. Evolving practices would benefit from further analysis, concerning components of the birthing environment in a given context that promote normal birth. More generally, research might focus on the ways in which a particular environment impacts the utilization of specific practices, on what happens in the process of transfer of obstetrical and midwifery training and childbirth technology to developing countries, and on modalities for placing women at the center of the childbirth event.

The childbirth process is shaped not only by medical, institutional and health factors, but also by the broader context within which childbirth is embedded. An assessment of routine interventions in childbirth care with a view to improving practi-

ces is not a luxury but a necessity, given scarce human and material resources and limited access to services.

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