A study on preference and practices of women regarding place of delivery

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تفضيل وممارسات النساء حول مكان الولادة

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الخلاصة: أجرى الباحثون دراسة عرضية في البصرة، شملت 353 امرأة وضعت مولودها حديثاً في مؤسسات الرعاية الصحية. وقد كان الغرض الرئيسي للدراسة التعرُّف على العوامل التي ساعدت في اتخاذ النساء القرار حول انتقاء مكان الولادة؛ المستشفى أم البيت. وقد لاحظ الباحثون أن 16.1٪ منهن فقط ولدن في المنزل، و83.9٪ منهن ولدن في المستشفى، وأن الأسباب الرئيسية لاختيارهن الولادة في المستشفى هي الأمان والسلامة (96.6٪)، ونظافة أفضل (66.6٪) وبسبب وجود أجهزة طبية (63.2٪). أما الأسباب الرئيسية لاختيار الولادة في المنزل فهي الدعم الاجتماعي والخصوصية (98.2٪). وقد لاحظ الباحثون الاتساق في اختيار النساء لمكان ولادتهن عبر الحمول المختلفة (السابقة والحالية واللاحقة).

ABSTRACT This was a cross-sectional study in Basra, and involved 353 women who had recently given birth drawn from health care institutions. The main objective was to determine the factors that helped determine the women's choice of place of delivery: hospital or home. Only 16.1% delivered at home, while 83.9% delivered in hospital. The main reasons for choosing hospital delivery were safety and security (96.6% of the women), better hygiene (66.6%) and because of medical advice (63.2%). The main reasons for the choice of home delivery were social support and privacy (98.2%). The women were consistent in their choice of delivery place across different pregnancies (previous, present and future).

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Introduction

One of the issues to be considered in studying the place of delivery for pregnant women is the importance of women's choice, and the role of technology as a facilitator, allowing choice to be exercised safely [1].

The view of professionals on where women should deliver is mixed [1]. Some consider pregnancy is always associated with risk and hospital delivery is recommended for all pregnant women. Others suggest that home delivery might be safe for women with a low-risk profile and when supervision is made by trained professionals. A third view is in the middle and sees the place of delivery a joint judgement between professionals and clients. These views illustrate the current differences between the medical and midwifery models of care. The former declares that labour is only ever normal in retrospect (i.e. all labour should be considered a complication), whereas the latter says that most labours are normal and should be treated as such [1].

As a trend, the demand for birth centres and midwifery services varies in different countries. Birth centres and midwifery services grew substantially over the last decades of the 20th century in the United States of America (USA) [2]. In the United Kingdom (UK), after a low point in the mid-1970s, midwifery has regained popularity after the wide-spread introduction of midwifery teams with improved continuity and full responsibility for total care in normal cases [1]. In Turkey, home delivery represents only a small fraction of the total reported deliveries [2], while in Tunisia, community health centres staffed by university-educated midwives are well dispersed throughout the country and most deliveries are in these health centres, or in local hospitals or clinics [2].

Utilization of health care services, including maternal services, is determined by complex interacting factors [3–6]. Common determinants are level of need, distance, economic factors, awareness and satisfaction, sociodemographic characteristics and administrative arrangements. With respect to delivery, these factors definitely operate. Other determinants include traditions, fear of death, the perception of risk on health, the perception of intervention, presence of special problems and complications, level of information available to clients and cost of care or family income [2,5–8].

Previous field studies carried out in Basra indicated that hospital delivery represented about 76.2% of all reported deliveries. The remaining deliveries took place at home either under the supervision of trained midwives (11.4%) or untrained midwives (12.4%) [9, Department of Primary Health Care/ Basra, unpublished report, 2007].

The governmental health care system in Iraq is the main source of health care. Hospitals and health centres where delivery care is available are staffed by doctors and trained midwives. The system has been extensively damaged in the past 2 decades [*10*]. Accordingly, patient interaction with the system might have changed with respect to changed perception of quality of care by consumers. It would be useful therefore to explore the views of consumers on their preferences regarding specific items of care, such as place of delivery for pregnant women. Understanding the forces behind choice of place of delivery will improve the health services delivery and assist in directing efforts towards better use of resources. Thus this study was carried out to identify the factors affecting the preference of women regarding place of delivery.

Methods

This was a cross-sectional study to investigate the preference of women in Basra about the place of delivery (hospital or home) and factors affecting this preference. The study was carried out in Basra City over a period of 10 months from January to October 2007.

The studied women were those who had delivered a baby within 40 days of the interview. They were drawn from 2 sources: Al-Basra Maternity and Children's Hospital, covereing women admitted with their babies for reasons unrelated to delivery; the second source was primary health care (PHC) centres and included women attending the centres for BCG vaccination of their babies. Four PHC centres were randomly selected from a list of 20 PHC centres in the first health sector in Basra. Women were selected from those attending the health centres during the morning working hours and who had a baby born within 40 days of the date of the interview. The study included 353 women, 117 from the primary health centres and 236 from the hospital. Of theses, 226 women were from Basra City centre and 127 from outlying districts and remote areas of Basra governorate.

A special unvalidated questionnaire form was designed by the researchers to obtain information on sociodemographic characteristics of the women, the distance between the place of residence and nearest official delivery facility, parity, place of delivery of present, first, previous and future child when applicable and reasons behind choosing home or hospital delivery. Data were collected through direct interviews of the women by the investigators. The women gave informed verbal consent to participate and there were no refusals.

Data were analysed with *SPSS*, version 11 and frequencies are presented.

Results

Demographic characteristics of the women

Table 1 shows the age distribution of the women. Women aged 20–29 years represented the highest proportion (56.9%)

Table 1 Distribution of the women according to age, education, occupation, place of residence and time taken to travel to the nearest place of delivery (*n* = 353)

Variable	No.	%
Age (years)		
< 20	59	16.7
20–29	201	56.9
30–39	90	25.5
≥ 40	3	0.8
Education		
Illiterate	85	24.1
Read and write	47	13.3
6 years	121	34.3
7–9 years	39	11.0
10–12 years	12	3.4
≥ 13	49	13.9
Occupation		
Housewife	320	90.7
Working outside the home	33	9.3
Place of residence		
Basra City Centre	226	64.0
Northern Area[a]	43	12.2
Western Area[b]	47	13.3
Southern Area[c]	28	7.9
Eastern Area[d]	9	2.5
Travel time to place of delivery (minutes)		
< 10	31	8.8
10–19	135	38.2
20–29	125	35.4
30–59	53	15.0
≥ 60	9	2.5

[a]*Qurna, Mdaina and Hartha.*
[b]*Zubair, Safwan and Um-Qasr.*
[c]*Abul-Khasib and Fao.*
[d]*Shatt-Al-Arab.*

while there were very few women aged 40 years and above, accounting for only 0.8% . Just above one-third (34.3%) of the women had completed primary education, while 37.4% were either illiterate or just able to read and write. Almost 14% had an education above secondary level (Table 1). Most of the women were housewives not working outside the home (90.7%).

The majority of the women were from Basra City (64.0%) with far fewer coming from the other 4 areas (Table 1). The great majority (82.4%) needed less than half an hour to reach a place of delivery; only 2.5% needed more than 1 hour.

Parity and use of prenatal care

Most of the women had had either 2–3 previous births (39.1%) or 1 birth (36.3%) (Table 2). Only 8.2% had parity above 5. Just under two-thirds of the women (64.6%) had 5 or more visits to prenatal care clinic. Less than 6% had had no prenatal visits at all.

Place of delivery

Most previous deliveries of the women took place in hospital (Table 3). Nearly 84% of the present children were delivered at hospital and only 16% were delivered at home. Similarly the place of delivery of the first child and previous child was hospital in 82.2% and 75.1% of women respectively. When women were asked where they would have their next child delivered, 83.3% said they would have it in hospital.

Reasons for choice of delivery site

The most frequent reason given for preferring a hospital delivery was that the hospital was safe and secure (from the health point of view) (96.6% of the women) (Table 4). The hygiene of hospitals was the reason given by 66.6% of the women. Emergency transfer from midwife to hospital was reported by 5.4% of the women and lack of availability of a midwife by 2.4%.

The reasons reported by women who delivered at home for preferring home delivery are also shown in Table 4. Social support and privacy was the predominant reason given by 98.2% of the women who had home delivery of their present child. Fear of interventions and repeated examinations at hospitals was the concern of 71.9% of the women who preferred home delivery. About 17.5% had an unplanned home delivery as a result of quick labour or the security situation did not allow transfer to hospital.

Discussion

We attempted to understand some of the factors that influence the choice of women regarding the place of delivery as reported by women themselves. Hospital delivery prevailed among the studied women: 83.9% had their last delivery in hospital and only 16.1% took place at home. This result is similar to the findings reported by primary health care centres in Basra [Department of Primary Health Care/Basra, unpublished report, 2007] for the years 2004, 2005 and 2006 and showed that

Table 2 Distribution of women according to parity and use of prenatal care (*n* = 353)

Characteristic	No.	%
Parity		
1	128	36.3
2–3	138	39.1
4–5	58	16.4
> 5	29	8.2
No. of prenatal visits		
None	20	5.7
1–2	41	11.6
3–4	64	18.1
Sub-total (inadequate use)	125	35.4
5–6	115	32.6
7–8	56	15.9
9–10	42	11.9
11–12	11	3.1
≥ 13	4	1.1
Sub-total (adequate use)	228	64.6

hospital delivery represented 68.7%, 72.9% and 74.9% respectively. These figures indicate 2 things: first, hospital delivery is common and, second, hospital delivery is increasing with time. Such a high use of hospital delivery care could reflect a high degree of people's awareness of the need for a safe and secure place for delivery where qualified staff and opportunities for medical intervention, if needed, are available, unlike the situation in home deliveries. The issue of safety is a matter of judgement. Some studies have shown that home delivery in some communities may be as safe as hospital delivery, for example a study carried out on Nordic women in 1994 [11].

The reasons given by the women for preferring hospital delivery are rational. Safety and security were the reasons behind the choice of 96.6% of the women who had a hospital delivery and these are undoubtedly valid. It indicates a high level of awareness among the women of health issues regarding delivery and the value given to their own health and that of their unborn baby. Child birth is not a laboratory project that can be reproduced at will [12] but a natural event that in many situations cannot be predicted in exact time, sequence and ease or difficulty.

Table 3 Distribution of the women according to place of delivery (*n* = 353)

Place of delivery	No.	%
Present child		
Home	57	16.1
Hospital	296	83.9
First child		
Home	40	17.8
Hospital	185	82.2
Previous child		
Home	56	24.9
Hospital	169	75.1
Next child		
Home	59	16.7
Hospital	294	83.3

Hygiene was the second important reason for the choice of hospital delivery, reported by 66.6% of the women. This reflects both the recognition of women of the importance of hygiene for delivery and their expectation of good hygiene standards in hospitals.

Medical advice was a common reason for preferring hospital delivery, reported by 63.2% of the women who had hospital delivery. This is an important point. As the influence of doctors and other health staff increases, as could happen if the family health model is widely adopted, the demand for hospital delivery is likely to increase.

Having a hospital delivery because of a recognizaed risk (high-risk pregnancy) reflects the success of prenatal care in identifying high-risk women and encouraging them to make the appropriate choice for delivery. Similar results have been reported by other studies carried out in the UK [13] and Canada [14] where high-risk pregnancies were more frequent among hospital-delivered women than home-delivered women.

As regards personal choice, 71.9% of hospital-delivered women claimed that it was their own personal choice to request hospital as the place for delivery. This was also reported in a study in Canada in 1999 [7]. The study in Canada also reported the role of the family in determining the place and even the mode of delivery.

The predominant reason reported by home-delivered women for preferring home delivery was social support and/or privacy, reported by 98.2% of the women. Social support was through birth attendant, relatives, friends and others, and is a very important factor for reassurance and support in the progress and outcome of labour. This feeling

Table 4 Reasons given by the women for the choice of hospital or home delivery

Reason[a]	No.	%
***Hospital delivery* (n = *296*)**		
Safe and secure	286	96.6
More hygienic place	197	66.6
On medical advice	187	63.2
Recognized high risk factor	99	33.4
Emergency	16	5.4
Others (No midwife available)	7	2.4
***Home delivery* (n = *57*)**		
Social support and/or privacy	56	98.2
Fear of intervention in hospital	41	71.9
Unplanned (delivery quick or at night)	10	17.5

[a]*More than one reason could be given.*

may make it less feasible to convince such women to have hospital delivery and undermines the view that all labour events should be considered a complication waiting to happen until proved otherwise [1]. The privacy of home does make it a more comfortable place for delivery and if the birth is attended by trained midwives, it may be as safe as hospital delivery [1]. Other studies agree with our finding of the importance of support in home delivery. In the UK, for example, a number of studies found that home delivery provided more than just sympathetic care in a nicely decorated room [13,15]. For many women, the benefit of delivering at home comes from the feeling of privacy and being surrounded by family members and friends. Our study also showed that fear of interventions (medical and surgical) and repeated vaginal examination in hospital was an important factor in avoiding hospital delivery as reported by 71.9% of the women who preferred home delivery. Indeed, a study carried out in Denmark in 1997 on low-risk women planning home or hospital births showed that the planned home birth group had less severe maternal laceration, fewer interventions and fewer episiotomies [16].

The results of our study represent the studied women only and we cannot claim to generalize these results to all women in Basra governorate. However, there is no reason to believe that these results do not reflect the general situation in the community of Basra governorate. In conclusion, most of the women in our study preferred a hospital delivery but nearly 1 in 6 preferred home delivery. Both groups had their own expressed justifications for their choices.

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