

Knowledge of Iraqi primary health care physicians about breastfeeding

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معلومات الأطباء العراقيين العاملين في مراكز تقديم الرعاية الصحية الأولية حول الرضاعة من الثدي
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الخلاصة: أجري مسح استبباني لخمسين طبيباً من الأطباء العاملين في مراكز الرعاية الصحية الأولية في مدينة الرمادي، في العراق عام 2001 لتقييم معارفهم حول الرضاعة من الثدي وتحديد مفاهيمهم الخاطئة حولها. وكانت المعرفة الأساسية حول الرضاعة من الثدي جيدة (متى تبدأ هذه الرضاعة، ومدى تكرار الإرضاع، وإعادة إدرار اللبن، وأهمية العوامل النفسية). وكان هنالك نقص في قدراتهم في التعامل مع بعض المشكلات العملية المتعلقة بتحسين الرضاعة من الثدي. وكانت نسبة من يهتمون بأن يقوموا بإسداء النصيحة بمواصلة الإرضاع في حالة حمل الأم المرضعة 64٪، كما اعتقد 38٪ منهم أن القدرة على الإرضاع ترتبط بحجم الثدي، ولم يعرف إلا 66٪ منهم متى يجوز البدء بالإرضاع بعد العمليات القيصرية. وتجري الآن دراسة الخطوات التي ينبغي اتخاذها من أجل تحسين هذه المعارف والمعلومات، وتوفير الدورات التدريبية.

ABSTRACT A questionnaire survey was conducted on 50 primary health care physicians in Ramadi city, Iraq, in 2001 to assess their knowledge and identify misperceptions about breastfeeding. Basic knowledge about the main processes of breastfeeding was good (when to start feeding, frequency of feeding, relactation, importance of psychological factors), but there were deficiencies in their ability to deal with some practical problems related to breastfeeding. Only 64% would advise continuation of breastfeeding when a lactating mother discovers that she is pregnant, 38% of them thought a mother's ability to breastfeed was related to breast size and only 66% knew when to start feeding after caesarean section. Steps for improving the knowledge and training are addressed.

Connaissances des médecins de soins primaires irakiens en matière d'allaitement maternel

RÉSUMÉ Une enquête par questionnaire a été réalisée en 2001 auprès de 50 médecins de soins primaires à Ramadi (Iraq) afin d'évaluer leurs connaissances et de détecter les idées erronées qu'ils pouvaient avoir au sujet de l'allaitement maternel. Leurs connaissances élémentaires sur les principes essentiels de l'allaitement maternel étaient satisfaisantes (début idéal de l'allaitement, fréquence, relactation, importance des facteurs psychologiques), mais ils avaient parfois des difficultés à remédier à certains problèmes pratiques relatifs à la promotion de l'allaitement au sein. Seuls 64 % d'entre eux conseillaient la poursuite de l'allaitement lorsqu'une mère allaitant découvrait qu'elle était enceinte, 38 % pensaient que la capacité d'une mère à allaiter avait un rapport avec la taille des seins et 66 % seulement savaient quand faire débuter l'allaitement après une césarienne. Des mesures destinées à améliorer les connaissances et la formation sont à l'étude.

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Introduction

Breastfeeding is recognized as the best way to provide for both the growth and health of infants and has unique biological and emotional effects on the mother and child [1]. Promotion of exclusive breastfeeding in the first 4–6 months of life is one of the most effective interventions for improving child survival [2]. The mortality risk of artificially-fed infants is 3–5 times higher than for breastfed babies [3]. Breastfeeding is considered a life-saving practice in developing countries and has been reported to improve infant survival rates in poor countries [4,5]. Despite the well-known benefits, there is a well-documented decline in breastfeeding in many countries, especially developing ones. In contrast, a resurgence of breastfeeding in many industrialized countries has been noted [6].

The decline of breastfeeding in developing countries can be attributed to a variety of social, economic and cultural factors. The health services may contribute to the decline by failing to encourage mothers to breastfeed, by separating mothers and babies after birth and by promoting the use of formula milk [1]. All health workers, particularly primary health care physicians (PHCPs), play an important role in the initiation and duration of breastfeeding. They should be able to promote breastfeeding, to provide appropriate information and to demonstrate a thorough practical knowledge of breastfeeding management [1]. However, among the documented causes of decline in breastfeeding are the attitudes and practices of health workers, particularly physicians who are known to be ambivalent about breastfeeding [7]. There are an increasing number of health professionals who are ill-educated with regard to breastfeeding and have misconceptions about human milk and a negative attitude towards

breastfeeding [8]. When confronted with lactation difficulties in new mothers, many find it easier to recommend formula milk to prevent further problems and inconvenience [9]. Additionally, health workers are not immune to popular beliefs and practices concerning breastfeeding and lactation that are deeply ingrained in many societies [10]. Some of these beliefs might be harmful.

An active programme to promote breastfeeding was adopted by the Iraqi Ministry of Health (MOH) in 1992. The goals were to decrease mortality and morbidity and the prevalence of malnutrition in infants less than 2 years of age. In Iraq in 1997 the percentages of mothers breastfeeding for 1 month was 91.8%, for 2 months 80.6%, for 3 months 76%, between 4–12 months 63%–68% and in the 2nd year 50% [11].

The aim of this study was to assess the knowledge and to identify misperceptions about breastfeeding among PHCPs in Al-Anbar governorate of Iraq.

Methods

This cross-sectional study was conducted at the maternity and child hospital in Ramadi city. All PHCPs participating in a refresher course carried out in the hospital during May 2001 were the subject of this study. This course was one of the many courses arranged by the MOH with the aim of improving the knowledge and practice of physicians working at primary health care centres. It usually invites doctors from all provinces in the governorate and covers subjects related to programmes adopted by the MOH such as acute respiratory infections, control of diarrhoeal diseases, expanded programme of immunization and breastfeeding. There are 149 physicians in the 113 health care centres in different provinces of the governorate.

Self-administered pretested questionnaires were distributed to all PHCPs before the start of the course. The objective of the study was explained to all participants. Physicians filled the questionnaires simultaneously, privately and separately. In order to increase the response rate and ensure the answers were candid, the questionnaire was anonymous. The questionnaire was designed to test the background knowledge of physicians about the process of breastfeeding, such as breastfeeding in newly pregnant mothers, breastfeeding and diarrhoea, effects of psychological factors, diet and size of breast on breastfeeding, the use of pacifiers and the adverse effects of breastfeeding on the health of mothers. It also included questions to test the ability of physicians to deal with different problems and questions they may face during their practice, such as when to start breastfeeding after normal vaginal delivery and caesarean section, relactation, cracked nipples, how often a mother should breastfeed her baby and when to start complementary foods.

The respondents were given sufficient time to fill out the questionnaires (20 minutes) and questionnaires with incomplete data were eliminated from the final analysis. Since the questionnaires were designed to assess the knowledge of PHCPs about breastfeeding, recall bias was not a problem.

Results

A total of 50 PHCPs filled the questionnaires completely. There were 17 (34%) males and 33 (66%) females and the mean age was 36 (standard deviation 5.8) years.

Table 1 shows a summary of the overall response of physicians to questions about basic knowledge about the process of the breastfeeding. Almost all of the respondents (98%) gave a satisfactory response about

Table 1 Overall response of primary care physicians ($n = 50$) in Al-Anbar to questions about breastfeeding

Question	No.	%
<i>When a breastfed baby develops diarrhoea</i>		
Stop breast feeding immediately	0	0
Continue breastfeeding ^a	49	98
Don't know	1	2
<i>Breastfeeding and new pregnancy</i>		
Stop breastfeeding immediately	7	14
Continue for weeks	8	16
Continue for months ^a	32	64
Don't know	3	6
<i>Relationship between psychological factors and successful breastfeeding</i>		
There is a relation ^a	47	94
No relation	3	6
Don't know	0	0
<i>Relationship between size of breast and successful breastfeeding</i>		
There is a relation	19	38
No relation ^a	29	58
Don't know	2	4
<i>Relationship between diet of the mother and successful breastfeeding</i>		
There is a relation ^a	39	78
No relation	10	20
Don't know	1	2
<i>Breastfeeding as contraception</i>		
Useful ^a	44	88
Not useful	3	6
Don't know	3	6
<i>The use of a pacifier</i>		
Useful and desirable	1	2
Not useful, not harmful	5	10
Not useful and harmful ^a	43	86
Don't know	1	2
<i>Breastfeeding has adverse effects on the health of mothers</i>		
Yes	8	16
No	41	82
Don't know	1	2

^aCorrect answer.

continuation of breastfeeding if an infant develops diarrhoea, but only 32 (64%) of them would advise continuation of breastfeeding for months when a lactating mother discovers that she is pregnant; 14% would advise her to stop breastfeeding immediately.

The majority of the physicians (94%) gave the correct answer regarding the relationship between psychological factors and successful breastfeeding but 38% of them thought that the mother's ability to breastfeed is related to her breast size.

When asked about the relationship between diet and successful breastfeeding, 78% of the respondents believed there was a relation while 20% thought there was not.

The majority of the PHCPs gave the correct answers when asked about the role of breastfeeding as a contraceptive (88%), harmful effects of pacifiers (86%) and the lack of an adverse effect of breastfeeding on the health of mothers (82%).

Table 2 shows the response of physicians to questions to explore their abilities to deal with practical points about how to breastfeed. The majority of the PHCPs (92%) knew when mothers with normal vaginal delivery should start feeding but only 66% knew when to start it after caesarean section.

When physicians were asked about how often a mother should breastfeed her baby, only 36 (72%) knew the right frequency (on demand). Most of the physicians (82%) believed that a mother who stops breastfeeding temporarily for weeks or months could start breastfeeding again if she wanted.

When the physicians were asked about the management of cracked nipples, only 14% would advise the use of antiseptic ointment or antibiotics and 34% would advise to wash the breast with soap and water; 42% would advise to continue breastfeeding without treatment and 8% would suggest termination of breastfeeding.

Table 2 Responses of primary care physicians ($n = 50$) in Al-Anbar to questions about practical aspect of breastfeeding

Question	No.	%
<i>When after normal vaginal delivery should mothers start breastfeeding?</i>		
30 minutes ^a	46	92
6 hours	2	4
1 day	2	4
3 days	0	0
Don't know	0	0
<i>When after caesarean section should mothers start breastfeeding?</i>		
12 hours ^a	33	66
1 day	11	22
3 days	1	2
Don't know	5	10
<i>How often should mothers breastfeed their babies?</i>		
Every 2 hours	9	18
Every 4 hours	4	8
Every 6 hours	0	0
On demand ^a	36	72
Don't know	1	2
<i>Relactation</i>		
Possible ^a	41	82
Not possible	5	10
Don't know	4	8
<i>Management of cracked nipples</i>		
Stop breastfeeding	4	8
Wash breast with soap and water only	17	34
Use antiseptic ointment and antibiotics ^a	7	14
Continue breastfeeding without treatment	21	42
Don't know	1	2
<i>When to start semisolid foods</i>		
Before 4 months	0	0
4–6 months ^a	46	92
After 6 months	4	8
Don't know	0	0

^aCorrect answer.

Regarding the best time to start supplemental foods for the infant, the majority (92%) gave the correct answer (4–6 months).

Discussion

This study demonstrates clearly that PHCPs are deficient in some aspects of their basic knowledge about breastfeeding and in their abilities to deal with practical problems related to the promotion of breastfeeding.

Although the majority of PHCPs (98%) would advise a mother to continue breastfeeding if the baby develops diarrhoea, only 64% of them would advise continuing breastfeeding for months when the mother discovers that she is pregnant. It is not necessary to stop breastfeeding when a lactating mother becomes pregnant. While the quantity of milk may decrease, the quality of milk may be still good and breastfeeding for the first few months of pregnancy will cause no harm to the child in her uterus [12]. In a study of female college students in Ramadi city in 2001, only 11% thought that a pregnant woman should continue breastfeeding for months [13]. Furthermore, a study of Ramadi women found that weaning from the breast was due to a new pregnancy in 36% [14]. In a study from Sudan, the majority of the mothers (89.2%) thought that a new pregnancy contraindicated the continuation of breastfeeding [15] and in Norway a new pregnancy was found to be the only important reason for ceasing to breastfeed within 2 years [16]. The concept of stopping breastfeeding when a mother discovers she is pregnant is probably deeply ingrained and widespread throughout the world [10, 17, 18]. In a study from the United Kingdom, 23% of the health professionals agreed that breastfeeding should stop if pregnancy occurs, and a further 22% were not sure. In Saudi Arabia, 32% of health

workers would advise to stop breastfeeding immediately when a mother got pregnant [17, 19].

When the PHCPs were asked about the role of psychological factors, diet and size of the breast in successful breastfeeding, the majority (94%) recognized the importance of psychological factors but only 78% believed in the role of the diet and 38% of them thought the size of breast was important for successful breastfeeding. The role of psychological factors is beyond doubt. Anxiety, associated with unfounded fears of lactation failure and of milk insufficiency, is one of the most common reasons for mothers failing to initiate breastfeeding, interrupting it prematurely or beginning complementary feeding before it is nutritionally required. Emotional support will strengthen a mother's confidence that she can successfully breastfeed [1]. One-third of the PHCPs in this study were unaware of the role of dietary factors in successful breastfeeding. Nutritional requirements during lactation are greater than in pregnancy, so women should be taught about the importance of adequate diet in order to sustain lactation without depleting their own nutritional store. Particular attention should be paid to intake of protein, calcium and vitamins. One of the important misperceptions about breastfeeding shown in this study is the belief that successful breastfeeding is affected by the size of the breast. A similar figure was obtained among female college students in Ramadi city [13]. This supports the idea that doctors are not immune to widespread misconceptions about breastfeeding in the community. Efforts should be made to increase the awareness of PHCPs and other health workers about this issue.

The use of pacifiers is thought to be one of the causes for early weaning [1, 20–22]. In one study the risk that a child would be

weaned at any age between 1–24 months was higher in pacifier users than in non-users [23]. Most of our PHCPs (86%) understood the harmful effects of pacifiers. Avoidance of pacifiers is one of the steps adopted by the World Health Organization (WHO) to promote successful breastfeeding [1].

Of the participating physicians, 16% thought that breastfeeding adversely affects the health of lactating mothers. These adverse effects ranged from hair loss, time wasting to maternal nutritional depletion. This is a slightly lower figure than among female college students in Ramadi city (22%) [13]. These misbeliefs about the adverse effects of breastfeeding seem to be widespread in our community. Other adverse effects of breastfeeding that were suggested were disease transmission and spoiling the shape of the breast. Some of these claimed adverse effects are incorrect (spoiling the shape of the breast and time wasting), some are erroneously attributed to breastfeeding (hair loss can be explained by hormonal changes occurring around the time of delivery) and some are preventable (disease transmission and nutritional depletion).

PHCPs play an important role in the initiation and success of breastfeeding and they are usually challenged by critical questions regarding the initiation and continuation of breastfeeding. Their ability to help mothers to breastfeed successfully and solve problems related to breastfeeding is proportional to their knowledge about breastfeeding. When the PHCPs were asked about the best time for starting breastfeeding after normal vaginal delivery, the majority (92%) gave a satisfactory response, but when asked about the best time to start it after caesarean section, only 66% knew the correct answer. Breastfeeding should start as early as possible, preferably within the first hours. After

caesarean section, the mother will probably require more help to find a comfortable feeding position and to attach the baby to the breast in the first few days than she would if she had been vaginally delivered [24]. The small number of PHCPs who responded correctly to the question about the right time for first feeding after caesarean section is probably related to the fact that they are not usually in contact with women after caesarean section.

About two-thirds of PHCPs recognized on-demand feeding as the best frequency for feeding a baby. Most recent studies recommend on-demand feeding, whereby babies are offered breastfeeding whenever they want [25–28]. In one study from Spain, on-demand feeding was found to be strongly associated with successful breastfeeding in both hospital and home deliveries [29]. Encouraging breastfeeding on demand is one of the steps adopted by WHO for successful breastfeeding [1].

Most of the participating physicians (82%) knew that relactation is possible. This is reassuring when compared with the response of the health workers from Saudi Arabia (30%) [19]. Relactation is possible and there are steps that can be taught to a mother if she needs to restart breastfeeding [27]. A woman of any age can relactate, if she is adequately motivated for frequent suckling, irrespective of her parity, nutritional status, lactation gap, birth order of the child or whether she has fed her previous baby or not [2]. Unfortunately, only 39% of female college students in Ramadi city knew about relactation [13]. This low response probably reflects the misbelief of the older women in our community that this milk might be harmful for the baby.

PHCPs in this study seemed to be ignorant about how to deal with the problem of cracked nipples. Only 14% recommended the use of antiseptic ointment or antibiot-

ics. Lactating mothers are more likely to develop sore nipples, especially those with engorged breasts and women with small or flat nipples. Sometime soreness might develop into a crack, which is very painful and might interfere with breastfeeding.

When asked about the best time to start semisolid foods, the majority of physicians (92%) knew the correct answer. This positive response is consistent with what is recommended by WHO [1] and most standard paediatric textbooks.

The role of the entire health system is considered vital for breastfeeding to be successfully initiated and established. Ideally, all health workers with whom expectant and new mothers come into contact should be committed to promoting breastfeeding and should be able to provide appropriate information as well as demonstrate a thorough practical knowledge of breastfeeding management [1].

From the results of this study, we conclude that PHCPs in Al-Anbar governorate lack some basic knowledge about breastfeed-

ing and are inadequately trained to manage some related problems. As breastfeeding is considered a life-saving practice in developing countries and the role of health workers, especially PHCPs, in protecting, promoting and supporting breastfeeding is undisputed, the need for improving knowledge and training of PHCPs is vital. This can be achieved through many steps such as: the integration of WHO basic concepts related to breastfeeding programmes into the curriculum of all medical colleges; including topics related to breastfeeding updates in continuous medical education programmes; and making available to all PHCPs the WHO/UNICEF publications related to breastfeeding. Furthermore, establishing breastfeeding clinics in the major primary health care centres in the governorate is essential. These clinics should be managed by physicians who are adequately trained to manage and promote breastfeeding and are well-prepared to deal with the many problems that might be encountered by lactating mothers.

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