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Complementary and alternative medicine in obstetrics: a survey from Iran

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Abstract
Purpose This survey assessed the use of complementary and alternative medicine (CAM) methods by obstetricians in the Islamic Republic of Iran.
Methods Obstetricians in the province of Tehran were identified using the "Ketabe 118 Mashaghel" (2008), a source of medical department information. A survey on the use of CAM methods during childbirth and the reasons behind their application was conducted on site.
Results CAM methods are by in 37.3% (62/166) of the obstetricians. Acupressure, massage, and phytotherapy were found to be the most frequently used methods. Use of CAM was influenced by the employment status of the midwives and inversely correlated with the number of deliveries in the hospital.
Conclusions CAM methods are used in Iran to some extent. With evidence-based medicine in mind it is interesting to note that in Iran mainly CAM methods which already have some proven benefit are used.

Keywords CAM · Complementary · Alternative · Obstetrics · Acupuncture · Homeopathy

Introduction

Recently, there have been several studies focusing on the use and prevalence of complementary and alternative medicine (CAM) methods in obstetrics in many parts of the world. However, they have mainly focused on Australia, Great Britain, Norway, Sweden, Germany, Italy and the USA [1–13]. All of these studies indicate that CAM is frequently used in the field of obstetrics, during both pregnancy and delivery. This may lead to the conclusion that there must be an increased demand for and high prevalence of these methods everywhere in the world. However, it has to be considered that most of the countries named above have related historical and cultural backgrounds. Thus, it is possible that CAM could be of either lesser or greater importance in other countries with differences in the prevalence rates and the methodology used.

We initiated this study in order to find out more about the extent of CAM use and possible reasons for using CAM in obstetrics departments in the Islamic Republic of Iran. We selected the Tehran Province, where 12.2 million inhabitants were recorded in 2006. This means that 19% of the population of Iran (70.5 million) lives in this area. The Tehran Province includes the capital of Iran, Tehran, which has 7.8 million inhabitants, 13 townships, 43 municipalities, 1,358 villages and is Iran's most densely populated region [14]. All obstetrics departments in the province of Tehran were consulted.

Methods

Methods were defined as CAM according to the criteria of the National Centre for Complementary and Alternative Medicine at the National Institute of Health (NCCAM), which can be found on http://nccam.nih.gov/health/whatiscam/overview.htm, and were published in 2006.

Identifying obstetrics units

We identified the obstetrics departments in the Tehran province through researching the local area using the

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"Ketabe 118 Mashaghel" (2008), a source of information about local medical departments. Following on from this research, questionnaires were given to members of the various departments. The questionnaire used was a translated version of one we used in an earlier study in Germany which assessed the obstetric department's demographic data, the department's own perception of the type of obstetric care provided, the types of CAM therapies offered, the primary "prescriber" or provider of CAM, whether quality control instruments and clinical pathways had been established and why the unit used CAM [2]. There were no problems with intelligibility. A copy of the questionnaire may be obtained from the corresponding author. The study was approved by the ethics committee of the Justus-Liebig-University Giessen in August 2008 (second amendment to application number 02/07). Furthermore, the study was approved as a doctoral thesis by the Iranian Embassy in Frankfurt and permitted by the Iranian Ministry of Health.

Statistical analysis

Data management and statistical analyses were performed using SPSS^{TM} software. A probability of error below 5% was regarded as significant.

Results

Between August 2008 and March 2009, we conducted a survey of the 248 gynaecologists of the obstetric departments in the province of Tehran, Iran, which we had identified earlier.

Response rates and types of units

Overall, 66.9% (166/248) of the questionnaires were returned. The responding physicians were involved in 134 deliveries per year on average (median 150, standard deviation (SD) 37.24, range 10–200). Ten (6.0%) cooperated with freelance midwives, 20 (12.0%) with both freelance and employed midwives, and 136 (82.0%) with employed midwives, which constituted a majority. Most of them considered their obstetrical theory and methodology to be modern (89.8%).

CAM therapies offered

CAM methods were offered by 37.3% (62/166) of the obstetricians. The prevalence of the various CAM methods is shown in Table 1. Acupressure, massage, and phytotherapy were found to be the most frequently used methods; however, they were not used very frequently. Most frequently, acupressure was used by 18.1% of the obstetricians. Figure 1 shows who decides how and where the various methods are employed. It shows that physicians primarily control the use of hypnosis, homeopathy and acupuncture, whereas aromatherapy, phytotherapy and massage are mainly under the direction of midwives. Massage and aromatherapy are mainly used because of midwives' convictions and positive experiences, homeopathy because of positive experiences and the perceived proven efficacy, hypnosis because of demand from patients, acupuncture, phytotherapy, and reflexology because of physicians' convictions and positive experiences, and acupressure because of perceived proven efficacy and positive experiences.

We analysed which factors influenced the use of CAM during childbirth and found that the employment status of the midwives influenced CAM use. CAM methods were offered in 100% of cases where there was cooperation with freelance midwives ($n = 10$) and at a rate of 45.0% (9/20) in cases of cooperation with both freelance and employed midwives. Obstetricians cooperating with employed midwives only offered CAM in 31.6% of cases (43/136). We also found an inverse correlation between CAM use and

Table 1 Comparison of the prevalence rates of various CAM methods in obstetrics

	This study	Münstedt (2009)
Moxibustion	0.6	54.5
Massage	17.5	52.2
Aromatherapy	6.0	76.6
Homeopathy	3.0	93.4
Hypnosis	4.2	4.5
Acupuncture	4.8	97.3
Phytotherapy	11.4	29.3
Acupressure	18.1	27.4
Reflexology	6.6	11.4
Reiki	0.0	2.9

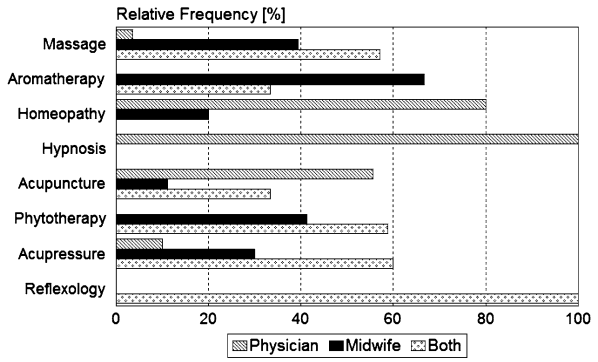

Fig. 1 Frequencies of who decides on the use of the various methods

the number of deliveries, which means that obstetricians with lower numbers of attended deliveries were more likely to use CAM during delivery ($r = -0.197$, $p = 0.011$).

Discussion

This study is the first analysis of CAM methods used by obstetricians in an Islamic country; in this case, the Islamic Republic of Iran. The results show that acupressure and massage are the most commonly used CAM methods in obstetrics. We found that some methods are used because of midwives' convictions and others because of physicians' convictions. Either one may make the decision as to whether to use a particular method. Demand from patients does not seem to play an important role in the decision of whether or not to use CAM.

Meanwhile, as mentioned in the introduction, there are two studies which have analysed the use of CAM during delivery in detail [1, 2]. This circumstance calls for a comparison and the formation of some conclusions, especially regarding the background to CAM administration. A summary of the results of this study in comparison to our earlier study is shown in Table 1. It clearly shows that there are striking differences between Iran and Germany and supports the hypothesis that cultural differences and beliefs are responsible for this variation [1, 2, 15]. In Iran, compared to Germany, they are more likely to use the methods that are supported by evidence, recorded in the appropriate literature [1, 16]. This may be better understood in the context of the fact that medical knowledge in Iran dates back more than 6,000 years and the context of the tradition of the "Hadith" [the tradition of the Prophet Mohammad (pbuh)]. It is believed that for every disease God sends to the people, he also sends the appropriate remedy [17]. The famous Iranian polymath Ali Ibn Sina (980–1037), better known by the name Avicenna, held the opinion that remedies or medicaments must be carefully investigated before they are used by the patient, and this is described in his great work, the "Canon of Medicine" (Arab. Quanun) [18]. People in the Islamic Republic of Iran have great faith in Iranian traditional medicine (TM) and CAM [19]. Thus, there is an ongoing conflict between Iranian TM and allopathic health care. Although TM and CAM have been influenced by the introduction of allopathic health care, they are an integral part of the culture of the Iranian people. Despite great pressure from the allopathic sector, TM/CAM has continued to prevail and in the past two decades scientists and state officials have been paying greater attention to Iranian traditional, CAM. The Islamic and Traditional Medicine Group, one of the strongest groups in the Iranian Academy of Medical Sciences, has taken significant steps to revive and promote Iranian TM by publishing old Iranian books on TM, compiling different books on phytotherapy and making strategic plans and proposing them to the Ministry of Health and Medical Education in order to establish a place for TM within the formal healthcare system [20].

This study also shows that CAM in Iran is a field in which both midwives and physicians are interested. This contrasts very much with the findings from Germany where CAM administration is dominated by midwives and those from Croatia where only physicians use acupuncture as their sole CAM method [21].

In conclusion, the general perception that CAM use is similar throughout the world is clearly disproved in this study. This study also shows that a more rational approach to CAM is possible, which demands a better education in this field for both midwives and physicians.

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Conflict of interest None.

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