Comparative assessment of Iranian Midwifery education curriculum against the International Confederation of Midwifery (ICM) global standards for midwifery education

Background: The aim of this study was to evaluate the strengths and weaknesses of the midwifery curriculum in Iran according to ICM Global Standards for Midwifery Education. 

Methods: In this comparative study the Iranian midwifery education curriculum in the part of "Competency in provision of care during pregnancy" was compared against ICM Global Standards for Midwifery Education. In both domains of basic knowledge (35 items) and skills (26 items), the entire Iranian midwifery curriculum was searched for similar content, as well as the number of related courses. Also evaluation was done for 'adequacy' of each item by a four point Likert scale (adequate, relatively adequate, relatively inadequate, inadequate).

Results: Quality assessment of the Iranian midwifery curriculum in terms of basic knowledge and skills regarding 'Competency in Provision of Care during Pregnancy' showed that from 35 items in basic knowledge domain, 47.57% were adequate, 15% relatively adequate, 2.85% relatively inadequate and 2% were inadequate. In the domain of skills from 26 items, 53.85% were adequate and 46.15% were relatively inadequate. In relation to two items there was no related content in the Iranian curriculum including "signs of female relevant labor" and "postpartum care".

Conclusion: The curriculum of midwifery education in Iran covers ICM Global Standards for Midwifery Education against "Competency in Provision of Care during Pregnancy" except for two items. Therefore, not covering these important issues is one of the most noteworthy weaknesses of this curriculum and should be considered in the future reforms.
INTRODUCTION

Every year, 10-15 million women suffer from severe or long-lasting illnesses or disabilities caused by complications during pregnancy or childbirth (1) and 358,000 women die annually due to pregnancy, intrapartum and postpartum complications and unfortunately 99% of these deaths occur in developing countries (2, 3), while 80% of them are preventable with skilled staffs (4).

Reduction of maternal mortality by 75% until 2015 is one of the most significant Millennium Development Goals (MDGs), and the proportion of births assisted by skilled staffs is one of the indicators to measure the achievement of this important goal (5). A quality midwifery service is central to reduce maternal, newborn and infant mortality and morbidity worldwide and to achieve this quality service, the recruitment and retention of an effective trained workforce is essential (6). The state of the World’s Midwifery report 2011 claims that strengthening midwifery capacities and services is the key to accelerate progress towards MDGs 4 and 5. Provided that they are trained, equipped, supported and authorized to do so, midwives can help to avert over 60% of all maternal and newborn deaths, which is equal to as many as 3.6 million lives saved by 2015 (7). It has been claimed that the availability of a health provider with specific midwifery skills and competencies, particularly life-saving skills, is acknowledged to be a key component of any safe motherhood strategy (8, 9). As identified in the International Confederation of Midwives (ICM), midwives are specialists in normal pregnancy, labor and birth and the postnatal period, with an important role to play as primary maternity care providers (3). Therefore midwives have a key role in achieving MDGs goal related to reduce the Maternal Mortality rate (MMR), Infant Mortality Rate (IMR) and health of communities (10). The United Nations pays special attention to the quality of midwifery service and to achieve this quality the recruitment and retention of educated and trained midwifery workforce is essential (11).

Empowerment in maternal and newborn health is achieved when midwives receive a firm and standard education. This means that although curricula vary between and within countries, all must meet particular requirements of clinical and theoretical hours and specific skills (12). Standard and qualified training programs are suggested by the International Confederation of Midwives (ICM) and midwives must be educated and trained according to the Global Standards for Midwifery Education (13). The ICM Global Standards for Midwifery Education (2010) suggest six categories for the evaluation including: organization and regulation (5 sub-categories), curriculum (6 sub-categories), student body (with 15 items in total), resources; facilities and services (5 sub-categories), midwifery faculty (8 sub-categories), midwifery program, with emphasis on competency (17 items in total). The ICM Global Standards for Midwifery Education (2010) represent the minimum expected for a quality midwifery education curriculum in Iran according to ICM Global Standards for Midwifery Education in the section of ‘Competency in Provision of Care during Pregnancy’.

METHODS

This comparative study was conducted using the ICM Global Standards for Midwifery Education (2010) to evaluate the educational curriculum of midwifery in Iran. The midwifery education standards were developed globally using a modified Delphi survey process during 2009-2010, and represent the minimum expected for a quality midwifery program, with emphasis on competency-based education rather than academic degrees (16). The ICM Global Standards for Midwifery Education (2010) suggest six categories for the evaluation including: organization and administration (6 sub-categories), midwifery faculty (8 sub-categories), student body (with 7 sub-categories), curriculum (6 sub-categories), resources; facilities and services (5 sub-categories) and assessment strategies (5 sub-categories) (13). We assessed the midwifery education curriculum of Iran against the category of curriculum of ICM Global Standards for Midwifery Education (2010). We used the curriculum mapping tool. The wording of the ICM Essential Competencies for Basic Midwifery Practice has been amended in this document. This mapping tool is focused on the basic knowledge, professional behaviors and skills and/or abilities that the individual midwife should know/demonstrate/perform. This mapping tool is focused on the curriculum of studies (17). In this mapping tool competency-based midwifery education program is evaluated in seven main domains, including:

1- Competency in the social, epidemiologic and cultural context of maternal and newborn care: this domain includes 21 items of knowledge, ten of specific professional behaviors and six item of skill or ability, 37 items in total.

2- Competency in the pre-pregnancy care and family planning: this domain includes 15 items of knowledge, no item of specific professional behaviors and 11 items of skill or ability, 36 items in total.
3- Competency in the provision of care during pregnancy: this domain includes 35 items of knowledge, no items of specific professional behaviors and 26 items of skill or ability, 61 items in total.
4- Competency in the provision of care during labor and birth: this domain includes 26 items of knowledge, no item of specific professional behaviors and 43 items of skill or ability, 69 items in total.
5- Competency in the provision of care for women during the postpartum period: this domain includes 22 items of knowledge, no item of specific professional behaviors and ten items of skill or ability, 32 items in total.
6- Competency in the postnatal care of the newborn: this domain includes 18 items of knowledge, no item of specific professional behaviors and 18 items of skill or ability, 36 items in total.
7- Competency in the facilitation of abortion-related care: this domain includes ten items of knowledge, no item of specific professional behaviors and eight items of skill or ability, 18 items in total.
8- In the current study, we compared the Iranian midwifery education curriculum in the third competency: ‘competency in provision of care during pregnancy’ of ICM Global Standards for Midwifery Education (2010). The curriculum was examined against ICM standards by three researchers using a check list contained three columns including “the items”, “number of related courses”, and “adequacy”. In both domains of basic knowledge (35 items) and skills (26 items) related to ‘competency in provision of care during pregnancy’, we searched the entire Iranian midwifery curriculum for similar content, and then we identified related courses by numbers. Also we evaluated ‘adequacy’ of each item by a 4-point Likert scale (adequate, relatively adequate, relatively inadequate, and inadequate).
9- The results were reported using descriptive statistics in terms of the related courses for each item and also number (percent) in terms of adequacy of items.

RESULTS
The results of comparing the Iranian midwifery curriculum against ICM standards, the number of related courses and quality assessment for each item in Basic knowledge domain in the context of ‘competency in provision of care during pregnancy’ are shown in Table 1. This table demonstrates the majority of items covered by the Iranian midwifery curriculum; but in two items there is no related content in this curriculum. These items are: “signs of female genital cutting and its effects on reproductive health” and “normal limits of the results from community-relevant laboratory tests commonly performed in pregnancy”.
Table 2 shows the results of comparing Iranian midwifery curriculum against ICM standards, the number of related courses and quality assessment for each item in skills domain in the context of ‘Competency in provision of care during pregnancy’. This table demonstrates all of the items covered by the Iranian midwifery education curriculum.
Quality assessment distribution of the Iranian midwifery curriculum in terms of basic knowledge and skill domain in the context of ‘competency in provision of Care during pregnancy’ shows that from 35 items in basic knowledge domain, 47.57% were adequate, 15% relatively adequate, 2.85% relatively inadequate and 2% were inadequate. In Skill domain from 26 items, 53.85% were adequate and 46.15% were relatively inadequate (table 3).

DISCUSSION
This study showed that the Iranian curriculum of midwifery education regarding ‘competency in provision of care during pregnancy’ covers the ICM Global Standards for Midwifery Education (2010). With respect to the knowledge domain, 90.42% of the items were “adequate” or “relatively adequate” and only 8.56% of items were “relatively inadequate” or “inadequate”. In the domain of skills related to ‘competency in provision of care during pregnancy’, the Iranian curriculum of midwifery education had a better condition compared to the knowledge domain; as 100% of items were covered by the Iranian curriculum.
The Iranian curriculum of midwifery education in comparison with some countries in Asia and the Middle East has a better situation and this curriculum covers the ICM Global Standards for Midwifery Education (2010) carefully. The International Confederation of Midwives (ICM) and United Nations Population Fund (UNPAF) evaluated the situation of midwifery education, regulation and association in six South Asian countries (Afghanistan, Bangladesh, Bhutan, India, Nepal, and Pakistan) in 2010. According to this study only Afghanistan and Bangladesh had a midwifery curriculum based on ICM’s essential competences for basic midwifery practice (18). Also in the mentioned study, a content analysis was done on the open questions. The results showed that in Afghanistan, the main concern of participants was ‘inadequate formal midwifery education’. In Pakistan comments reflected the inadequacy of formal midwifery education and inadequacies in competency-based education curriculum. Respondents from Bangladesh highlighted that legislation to address the education and deployment of midwives is required (18). Bogren and et.al suggested that midwifery education curriculum in these countries should be reformed based on international standard programs such as ICM Global Standards for Midwifery Education (18).
Also Apay et.al (2012) assessed the situation of midwifery education in Turkey. They stated that “midwifery education in Turkey has reached to undergraduate level through a gradual and slow progress” (19). Shaban and Leap (2012) reviewed midwifery education curriculum documents in Jordan. According to their findings, they suggested that there is no regulatory standards for the accreditation of midwifery education program in Jordan, including competency standards and minimum clinical practice requirements (20). Another study was done in order to assess the quality of training of community midwives in Pakistan. Results showed that the knowledge and skills of community midwives are insufficient. Due to the findings, the researcher recommended to allocate more time to clinical training and the theory to practice ratio of 25:75 that should reach to 40:60. They suggested to provide additional support to teachers for developing academic calendars and course plans (21).
Considering the ICM Global Standards for Midwifery, education of midwives is important due to WHO statement, which emphasizes that qualified midwives provide one of the most effective interventions to reduce deaths in pregnancy and childbirth (22, 23). Fulerton et al. stated that in order to be considered as a fully qualified midwife, a formal education is required based on ICM Essential Competencies for basic midwifery (24). Conversely, a health care system
that relies on midwives who are less than competent to
provide care throughout their professional careers is
dangerous to women, newborns, families and communities (1).
Ronsmans C, Achadi EL, Hussein J. Current challenges facing midwifery educators in education curricula. A review of pre-den Broek N. Another item that is not covered by the Iranian curriculum of midwifery education is one of female genital cutting had been reported to be important due to high incidence of female genital cutting in the west and southwest region of Iran. The incidence of female genital cutting in pregnancy”. Nowadays using pregnancy kits is very common, so it is necessary that midwifery students have enough information about these kits and interpretation of their results in order to help women and counsel them. We suggest that this item be considered in the future reforms of midwifery education curriculum of Iran.

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Conflicts of interest: There were no conflicts of interest in conducting this research.

REFERENCES