

Explaining Current and Changing Teachers' Educational Needs in Health Care Behvarz Training Centers during 2012-2013 in Iran

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Abstract

Background and purpose: Considering that health care training centers' teachers are one of the main elements of human-force training for rural health care system in the country, it is essential to improve knowledge and skills. The purpose of this study was to explain educational needs of teachers in our country in Behvarz training centers.

Methods: This is a qualitative and a needs assessment study and experts' opinion method, experts' group discussion and Delphi was used for data extraction and the study was conducted during the years 2012-2013 by two methods: direct and indirect needs assessment. Needs related to learning were determined using experts' opinion method after holding two sessions of experts' group discussion (two groups of ten top country teachers and a group of five top experts responsible for health providing) and two rounds of Delphi (a group of 12 Behvarz experts) and a round of ranking. The first round of Delphi questionnaire was designed with 77 closed questions and 3 essay questions in 5 categories based on Behvarz educational textbooks and the results of experts' group discussion sessions and were sent to the participants. Based on the results of the first round, the second round of Delphi questionnaire consisted of 84 closed questions and 3 open-ended questions was designed and resent. In third stage, a questionnaire of 68 items was sent to the experts to determine the priorities of educational needs. Data were analyzed using SPSS-18 statistical software.

Results: The findings indicate that each teacher needs general and special education issues (teaching, management, research method, personal development skills). Educational needs of first aid and relief efforts (of nursing) were determined for all teachers with different specialties and only English language skill was not determined necessary.

Conclusions: The results indicate that the educational needs are common in some cases for all teachers and in some cases differ in terms of study field and teaching area and due to changes in the current health package; educational needs are changing and require needs assessment and teachers' ongoing retraining.

Keywords: EDUCATIONAL NEEDS ASSESSMENT, INSTRUCTOR, BEHVARZ EDUCATION CENTERS, HEALTH CARE SERVICE SYSTEM

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Introduction

Health is an important issue of life and in rural health, health provision services is

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central core of health care system. Behvarz training centers is main training center for health care system in our country, villages and teachers' ongoing training in these centers helps to improve this process.

A flexible education system which considers time and place requirements can increase the efficiency of human resources training. To achieve this, teachers need ongoing education. The content of this training should

be based on objective community needs and this will be possible only through educational needs assessment. Therefore this study was done with the aim to explain current and changing educational needs of teachers of Behvarz training centers.

Methods

This is a needs assessment study through expert opinion method. Expert group discussion and Delphi was used for data extraction. The purpose of this study was to determine the teachers' present and future educational needs in Behvarz training centers based on scientific evidence and also professional experiences.

Questionnaire development, in this study, 25 people was invited to participate in expert group discussion. First, two sessions of focused group discussion were held to identify educational needs topics with the participation of 20 Behvarz instructors. These people were selected by regular random sampling method from the list of Behvarz teachers of the country. After

extracting the results of group discussion sessions, one discussion session was held to review the findings and questionnaire design with 5 experts responsible for health care provision who were selected based on purposive sampling method and according to researcher knowledge of their performance and work experience in health provision. Content validity of the questionnaire was determined with 6 experts responsible for health provision in health deputies of universities and senior experts in health deputy of Health Ministry, apart from the participants in discussion groups, as expert group and they were asked to comment on the questionnaire. After receiving guidance responses of elected group, proposed changes and reforms were applied and the final questionnaire was prepared. In order to achieve consistent findings, other researcher who had no connection with the study was used as an external observer and according to the same understanding of the findings, consistency of findings were confirmed.

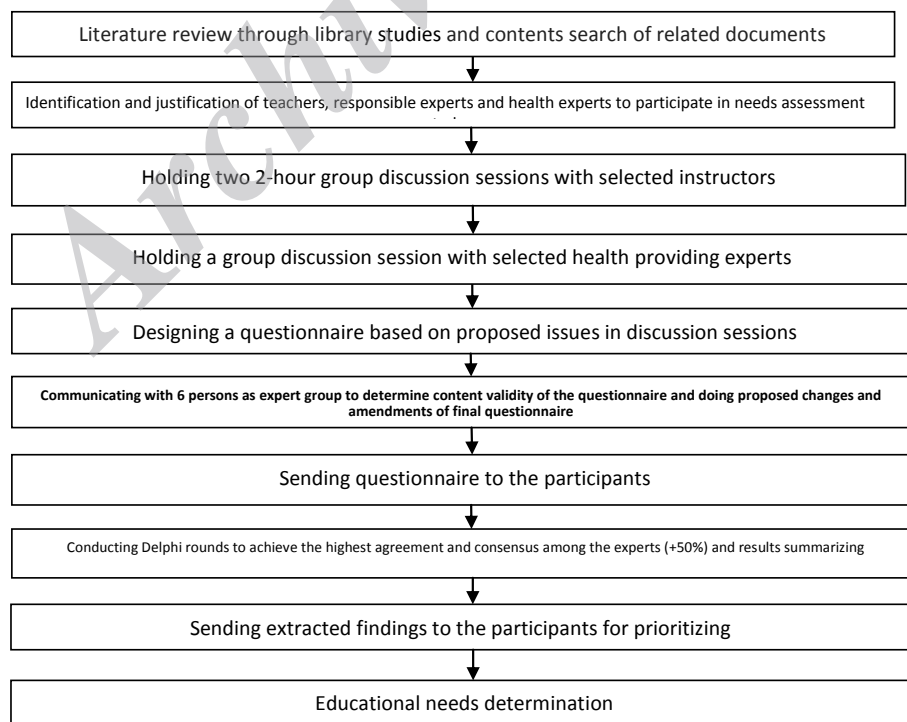


Figure 1. Process of the study

Table 1. Questionnaire items description

| Question type | | Ranking round | Second Delphi round | First Delphi round |
|---|--|---------------|---------------------|--------------------|
| Open question No. | | | 3 | 3 |
| Closed question No. | | 68 | 84 | 77 |
| Teaching | 1 | 19 | 20 | 18 |
| Network system management | 2 | 7 | 13 | 9 |
| Method | 3 | 4 | 7 | 6 |
| Information and communication technology | Personal development skills | 4 | 7 | 9 |
| English language | | 0 | 4 | 4 |
| Educational content of family health | Educational packages of current health program | 5 | 6 | 6 |
| Educational content of prevention and diseases care | | Area type | 6 | 6 |
| Educational content of environment and work health | | 4 | 4 | 4 |
| | | 3 | 3 | 3 |
| Educational content of midwifery | | | | |
| Educational content of nursing cares | | 12 | 12 | 12 |

Twelve experts were selected based on purposive sampling method for participating in a Delphi survey to determine educational needs of health care providers. This study was conducted in two rounds of Delphi. The first round questionnaire was sent to participants and after completion they returned the questionnaire to the researcher. The researcher after summing received responses again sent the questionnaire to the participants. This cycle was continued to obtain a relative consensus (agreement of more than 50%) and educational needs were specified and again in the form of a questionnaire were sent to the experts in order to prioritize and determine educational needs. Figure 1 shows the process of study and Table 1 describes questionnaire questions.

This questionnaire was adjusted in accordance with tricyclic Harden model and based on Likert scale.

In the first round of Delphi, related questions were answered by the experts.

The second questionnaire was adjusted by analyzing the results of the first round and again was sent to the experts for the second round. Analysis of the findings of two rounds of Delphi identified educational needs from the viewpoint of the experts. In order to determine educational priorities, the needs of each area were set in separate tables and again in the form of a questionnaire consisting of 68 educational needs in 5 domains were sent to the experts to prioritize.

Data analysis, Data analysis was done using statistical software SPSS-18. In order to describe the first and second rounds of Delphi questionnaire, descriptive statistics were used and the third round questionnaire was set to prioritize teachers' educational needs.

Ethical considerations, informed consent was obtained from all participants to participate in the study. They were assured that information obtained from this study will remain confidential and also they are free to leave research cycle at any stage. In

this study, the benefit of Persian and English were observed the principles of integrity.

Results

Educational needs and priorities (see Table 2 and 3) are as below. What comes from the findings and from the perspective of the experts is that every Behvarz teacher in addition to learn general educational content that includes educational content of teaching technique, network system management, research method and personal development skills/information technology and communication, they also should be trained in their specialized areas. Teachers should learn and teach educational content based on their expertise (field of study and work). All Behvarz teachers with different specialties require two skills, first aid and relief efforts of educational content of nursing cares related to educational packages of current health program.

Discussion

This study is the first integrated and academic attempt in Behvarz trainers' educational needs assessment.

The results of this study showed that 21 general educational priorities and 17 professional priorities are essential for Behvarz trainers. Obtained priorities are appropriate guidance for training and improving qualitative level of teachers and consequently Behvarz.

Based on the findings, since Behvarz provide various health services and works in several but related areas; the teacher in Behvarz training centers is responsible for guiding and monitoring, therefore he should have skill and prudence in related works according to his field and specialty.

Several studies were available on educational needs assessment about other target groups such as other healthcare providers, health system experts; general practitioners,

university professors, teachers, etc., but as target group of this study was different the results of those studies were not able to satisfy this specific group educational needs (4-12)

Teaching in Behvarz training centers is a specialized, multidimensional job with numerous job descriptions; playing such a role requires extensive knowledge in various fields. The findings of this study and other studies (13-16) also represent that understanding different methods of evaluating the educational programs, curricula, teaching methods, communicating with others, and professional ethics will result in increasing the efficiency of training.

The findings of other studies (16, 17) also emphasized on the role of teachers knowledge of the principles of management (network system management area). Knowledge of management principles can also save time and resources, provide proper and on time implementation of health services, and prevent parallel work and confusion.

In research method area, the results of this study like other studies (13, 14, 17) emphasized that teaching research method increase scientific competence of teachers in participating in quantitative and qualitative field studies and develop research-based education in Behvarz training centers and health system.

In personal development area, other studies (14, 17, 19) also indicated that Knowledge of the basics of information and communications technology (personal development area) is one of the basic requirements. With the expanding science and increasing importance of the Internet and computer, Behvarz trainers cannot play the role of teaching properly without proficiency and knowledge of computer and its related programs. Although those studies that have been conducted on faculty members' needs assessment indicated the importance of English learning, the experts considered English language proficiency for Behvarz trainers as a non-priority.

Like other studies (14,18,19) it can be expressed that full knowledge of the

Table 2. Percentage of participant's agreement in Delphi and ranking of teachers' educational needs in Behvarz education centres.

| Nursing instructors | | Midwifery instructors | | Health professional instructors | | Prevention and diseases instructors | | Family health instructors | | Educational issues | |
|----------------------|-----------|-----------------------|-----------|---------------------------------|-----------|-------------------------------------|-----------|---------------------------|-----------|--|----|
| Agreement percentage | Necessity | Agreement percentage | Necessity | Agreement percentage | Necessity | Agreement percentage | Necessity | Agreement percentage | necessity | | |
| 100 | 1 | 100 | 1 | 100 | 1 | 100 | 1 | 100 | 1 | Curriculum | 1 |
| 100 | 1 | 100 | 1 | 100 | 1 | 100 | 1 | 100 | 1 | Evaluation methods of educational programs | 2 |
| 100 | 1 | 100 | 1 | 100 | 1 | 100 | 1 | 100 | 1 | Internship education | 3 |
| 90 | 4 | 90 | 4 | 90 | 4 | 90 | 4 | 90 | 4 | Developing educational purposes | 4 |
| 90 | 4 | 90 | 4 | 90 | 4 | 90 | 4 | 90 | 4 | Communicating with students | 5 |
| 88 | 6 | 88 | 5 | 88 | 6 | 88 | 6 | 88 | 6 | Professional ethics of health system staff | 6 |
| 83 | 7 | 83 | 7 | 83 | 7 | 83 | 7 | 83 | 7 | Adults' education methods | 7 |
| 83 | 7 | 83 | 7 | 83 | 7 | 83 | 7 | 83 | 7 | Education in practical work room | 8 |
| 82 | 8 | 82 | 8 | 82 | 8 | 82 | 8 | 82 | 8 | Teaching methods, techniques and skills | 9 |
| 80 | 9 | 80 | 8 | 80 | 9 | 80 | 9 | 80 | 9 | Education and learning psychology | 10 |
| 80 | 9 | 80 | 8 | 80 | 9 | 80 | 9 | 80 | 9 | Communicating with people | 11 |
| 79 | 10 | 79 | 9 | 79 | 10 | 79 | 10 | 79 | 10 | Evaluation methods of knowledge, attitude, skill and performance of students | 12 |
| 75 | 12 | 75 | 11 | 75 | 12 | 75 | 12 | 75 | 12 | Designing educational workshops | 13 |
| 75 | 12 | 75 | 11 | 75 | 12 | 75 | 12 | 75 | 12 | Gain public support for health promotion | 14 |
| 75 | 12 | 75 | 1 | 75 | 12 | 75 | 12 | 75 | 12 | Methods of increasing students' motivation | 15 |

| | | | | | | | | | | | |
|--|----|----|----|----|----|----|----|----|----|---|----|
| 67 | 15 | 67 | 14 | 67 | 15 | 67 | 15 | 67 | 15 | Educational needs assessment of students | 16 |
| 60 | 16 | 60 | 15 | 60 | 16 | 60 | 16 | 60 | 16 | Educational technology | 17 |
| 50 | 20 | 50 | 19 | 50 | 20 | 50 | 20 | 50 | 20 | Educational design | 18 |
| 50 | 20 | 50 | 19 | 50 | 20 | 50 | 20 | 50 | 20 | Exams analysis methods | 19 |
| The area of network system management | | | | | | | | | | | |
| 91 | 3 | 91 | 3 | 91 | 3 | 91 | 3 | 91 | 3 | Behvarz education center management | 1 |
| 88 | 6 | 88 | 5 | 88 | 6 | 88 | 6 | 88 | 6 | Process documentation and quality promotion | 2 |
| 78 | 11 | 78 | 10 | 78 | 11 | 78 | 11 | 78 | 11 | Health center management | 3 |
| 71 | 13 | 71 | 12 | 71 | 13 | 71 | 13 | 71 | 13 | Management and leadership foundations | 4 |
| 57 | 17 | 57 | 16 | 57 | 17 | 57 | 17 | 57 | 17 | Customer orientation | 5 |
| 57 | 18 | 57 | 17 | 57 | 18 | 57 | 18 | 57 | 18 | Operational and strategic planning | 6 |
| 50 | 20 | 50 | 19 | 50 | 20 | 50 | 20 | 50 | 20 | Educational management | 7 |
| Research method area | | | | | | | | | | | |
| 75 | 12 | 75 | 11 | 75 | 12 | 75 | 12 | 75 | 12 | Research methods in health system | 1 |
| 70 | 14 | 70 | 13 | 70 | 14 | 70 | 14 | 70 | 14 | Research methods in education | 2 |
| 51 | 19 | 51 | 18 | 51 | 19 | 75 | 19 | 51 | 19 | Statistics and information system | 3 |
| 50 | 20 | 50 | 19 | 50 | 20 | 50 | 20 | 50 | 20 | Report writing methods | 4 |
| Personal development skills/ information and communication technology area | | | | | | | | | | | |
| 92 | 2 | 92 | 2 | 92 | 2 | 92 | 2 | 92 | 2 | Microsoft Office Word | 1 |
| 92 | 2 | 92 | 2 | 92 | 2 | 92 | 2 | 92 | 2 | Internet | 2 |
| 91 | 3 | 91 | 3 | 91 | 3 | 91 | 3 | 91 | 3 | Software programs existing in network | 3 |
| 88 | 6 | 88 | 5 | 88 | 6 | 88 | 6 | 88 | 6 | Introduction to electronic information resources in health area | 4 |
| 82 | 8 | 82 | 7 | 82 | 8 | 82 | 8 | 82 | 8 | Microsoft Excel | 5 |
| 82 | 8 | 82 | 7 | 82 | 8 | 82 | 8 | 82 | 8 | Microsoft Power Point | 6 |
| 50 | 20 | 50 | 19 | 50 | 20 | 50 | 20 | 50 | 20 | Introduction to search methods and strategies in | 7 |

| | | | | | | | | | | health area | |
|--|--|--|--|--|--|--|--|--|--|--|----|
| Educational packages of current health program | | | | | | | | | | | |
| Family health | | | | | | | | | | | |
| | | | | | | | | | | Individual health education for family members | 1 |
| | | | | | | | | | | Nutrition | 2 |
| | | | | | | | | | | Children health | 3 |
| | | | | | | | | | | Young and adolescent health and schools health | 4 |
| | | | | | | | | | | Middle-aged health | 5 |
| | | | | | | | | | | Elderly health | 8 |
| Diseases' prevention and cares | | | | | | | | | | | |
| | | | | | | | | | | Infectious diseases | 1 |
| | | | | | | | | | | Immunization | 2 |
| | | | | | | | | | | Mental health | 3 |
| | | | | | | | | | | Epidemiology | 4 |
| | | | | | | | | | | Accidents | 5 |
| | | | | | | | | | | Non-infectious diseases | 6 |
| Environment and work health | | | | | | | | | | | |
| | | | | | | | | | | Public environment health | 1 |
| | | | | | | | | | | Health environmental risks management | 2 |
| | | | | | | | | | | Healthy life style | 3 |
| | | | | | | | | | | Professional health | 4 |
| Midwifery | | | | | | | | | | | |
| | | | | | | | | | | Fertility/Reproduction health | 1 |
| | | | | | | | | | | Midwifery | 2 |
| Nursing cares | | | | | | | | | | | |
| | | | | | | | | | | Symptomatic simple treatments | 1 |
| | | | | | | | | | | First aid | 2 |
| | | | | | | | | | | Injections | 3 |
| | | | | | | | | | | Anatomy and physiology of the human body | 4 |
| | | | | | | | | | | Relief efforts | 5 |
| | | | | | | | | | | Dressing | 6 |
| | | | | | | | | | | Social nursing of mental health | 7 |
| | | | | | | | | | | Crisis and disaster management | 8 |
| | | | | | | | | | | Nursing | 9 |
| | | | | | | | | | | Physical examinations | 10 |
| | | | | | | | | | | Pharmacology | 11 |
| | | | | | | | | | | Rehabilitation education based on society | 12 |

Table 3. Skill areas of teachers of Behvarz centers with priority

| The area of educational package of current health program | | | | | Individual development/ information and communication technology | Research method | Network management | system | Teaching | area |
|---|-----------------------|---|----------------------------|---|--|-------------------------------------|--------------------------------------|--------|--|-------------------|
| Nursing instructors | Midwifery instructors | Environment health instructors | Diseases instructors | Family health instructors | Word 1 | Research methods in health system 1 | Behvarz management 1 | center | Curricula 1 | Educational issue |
| Crisis and disaster management 1 | Nutrition 1 | Professional health 1 | Epidemiology 1 | Middle aged health 1 | Using software programs existing in the network 1 | Research methods in education 2 | Educational management 2 | | Evaluation methods of curriculum 1 | |
| Mental health social nursing 1 | Reproductive health 1 | Public environment health 1 | Infectious diseases 1 | Young, adolescents and schools health 1 | Excel 2 | | Operational and strategic planning 2 | | Traineeship education 1 | |
| First aids 2 | Midwifery 2 | Health environmental risks management 2 | Mental health 2 | Children health 2 | PowerPoint 2 | | | | Teaching methods, techniques and skills 2 | |
| Physical examinations 3 | | | Non- infectious diseases 2 | Elderly health 2 | | | | | Developing educational objectives 2 | |
| Pharmacology 4 | | | Immunization 3 | Nutrition 3 | | | | | Communicating with students 2 | |
| Nursing 4 | | | Accidents and incidents 3 | Individual health education of family members 3 | | | | | Adults education methods 6 | |
| Relief efforts 5 | | | | | | | | | Evaluation methods of students' knowledge, attitude, skill and performance 6 | |
| Symptomatic simple treatments 5 | | | | | | | | | Tests analysis methods 7 | |
| Dressing 6 | | | | | | | | | Professional morality of health system staff 7 | |
| Society-based rehabilitation education 6 | | | | | | | | | Educational workshops holding design 7 | |
| Human body anatomy and physiology 7 | | | | | | | | | Communicating with people 8 | |
| Injections 7 | | | | | | | | | Healthy lifestyle 2 | |

principles of family health education and ability to transfer this knowledge to health providers increase health and public awareness in the most deprived areas of the country.

The studies on needs assessment of health care providers (18, 19) indicated a priority of health providers' education on diseases and

mental health, which was also confirmed in our study

An overview of the educational topics of issues in environment and professional health teachers reflects the fact that some environment and professional health in deprived areas is neglected and the findings of this study and other studies (18, 19) emphasized on inclusion of educational

content of environment and professional health for related teachers and its impact on the culture.

Findings of this study showed that nutrition, reproductive health and midwifery were the most important issues that midwifery teacher should be regularly updated upon.

Since many rural areas are covered by Behvarz lack the most basic medical facilities and in the event of accidents, Behvarz are the only available health care professional, therefore this study and other studies (13, 18, 19) have emphasized on the nursing education priorities such as crisis management, social care and mental health) for nursing teachers who teaches Behvarz .

The findings indicated that continuous education of teachers based on the needs assessment, can lead to improve the quality of graduates, the Behvar.

At a low cost, with careful planning, proper design of health system, practical education, monitoring and appropriate feedback and timely review of the program, important achievement in education system of Behvarz can be gained.

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