Tabriz University of Medical Sciences
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Evidence-Based Journal club

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Citation:

The experience of community health workers training in Iran: a qualitative study

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Scope

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Abstract

Background: The role of Community Health Workers (CHWs) in improving access to basic healthcare services, and mobilising community actions on health is broadly recognised. The Primary Health Care (PHC) approach, identified in the Alma Ata conference in 1978, stressed the role of CHWs in addressing community health needs. Training of CHWs is one of the key aspects that generally seeks to develop new knowledge and skills related to specific tasks and to increase CHWs' capacity to communicate with and serve local people. This study aimed to analyse the CHW training process in Iran and how different components of training have impacted on CHW performance and satisfaction.

Methods: Data were collected from both primary and secondary sources. Training policies were reviewed using available policy documents, training materials and other relevant documents at national and provincial levels. Documentary analysis was supplemented by individual interviews with ninety-one Iranian CHWs from 18 provinces representing a broad range of age, work experience and educational levels, both male and female.

Results: Recognition of the CHW program and their training in the national health planning and financing facilitates the implementation and sustainability of the program. The existence of specialised training centres managed by district health network provides an appropriate training environment that delivers comprehensive training and increases CHWs' knowledge, skills and motivation to serve local communities. Changes in training content over time reflect an increasing number of programs integrated into PHC, complicating the work expected of CHWs. In-service training courses need to address better local needs.

Conclusion: Although CHW programs vary by country and context, the CHW training program in Iran offers transferable lessons for countries intending to improve training as one of the key elements in their CHW program.

Keywords: Community health workers, Training, Primary health care

P E O: Formulate an Answerable Question:

- P Population/patient
- I Intervention/indicator
- C Comparator/control
- O Outcome .

PEO format - qualitative

P	Population and their problems	Who are the users, patients or community being affected? What are their symptoms, age, gender etc.
E	Exposure	Use for a specific *exposure* (this term is used loosely) such as "witnessed resuscitation" or "domestic violence" (Bettany-Saltikov, 2012)
O	Outcomes or themes	Are you looking for improvements in pain, responsiveness to treatment, mobility, quality of life, daily living? Usually there will be an element of looking at patient's experiences.

Background:

- The role of Community Health Workers (CHWs) in improving access to basic healthcare services, and mobilising community actions on health is broadly recognised.

- **Primary Health Care** (PHC) approach, identified in the Alma Ata conference in 1978, **stressed the role of CHWs in addressing community health needs**.

Background:

- Delegation of tasks to community level health workers has more recently been considered a;
  - a response to the global shortage in human resources for health
  - a key strategy to improve access to quality health services
- CHW training, seeks to develop new knowledge and skills related to specific tasks and to increase CHWs' capacity to communicate with and serve local people.

Background:

- There are many approaches to CHW training, from short term courses to long term certificate programs
  - CHWs in Brazil receive an 8 week residential course that includes curative, preventive and promotive components,4 weeks of fieldwork
  - In Thailand CHWs are trained for **7 days on the concepts of PHC, disease prevention and basic curative tasks** followed by on-the-job training for 15 days

Background:

- Training content varies significantly by the educational qualifications of CHWs and the required competencies for their roles and responsibilities
- Various forms of **distance education have also been trialed to provide CHW training**, although limited access to technology and low ITC literacy have been barriers to distance training in many developing countries

Training of CHWS in Iran :

- A national CHW program has existed in Iran since 1979.

- Iranian CHW, called behvarz in the Farsi language, is a full time employee of the health system, is selected from her/his own community and works in the village Health House

Training of CHWS in Iran :

- National, provincial and district health systems are responsible for planning and implementing CHW related policies and programs.
- According to the most recent statistics, in 2007 there were about 17,000 Health Houses in Iran, staffed by almost 31,000 male and female CHWs providing services to most of Iran's 65,000 villages with an estimated population of 28 millions

Objectives:

- This paper describes the training of CHWs in Iran and how the process and quality of existing training are perceived by the Iranian CHWs themselves.
- **In this paper we focus on behvarz training including training centres and trainers, training content, duration and facilities, and how these elements are perceived by behvarz to affect their performance and work satisfaction.**

Screening Questions:

1. Was there a clear statement of the aims of the research? ☐ Yes ☐ Can't tell ☐ No

HINT: Consider

- What was the goal of the research?
- Why it was thought important?
- Its relevance

۱- آیا بیان روشنی ازاهداف تحقیق وجود دارد؟ بله خیر

توجه:

اهداف تحقیق چیست؟

چرا این اهداف مهم هستند؟

آیا اهداف مرتبط هستند؟

Method:

- Information about behvarz training was gathered from both primary and secondary sources. Secondary data were collected through analysis of policy documents, unpublished reports, national and provincial operational plans, and training materials/modules
- **Documentary analysis was supplemented by individual interviews with ninety-one behvarz from 18 provinces.**
- **This sample was drawn from the national database of the Iranian ministry of health**

Method:

- Study participants were purposively recruited from differing socioeconomic and geographic areas

- represented a broad range of **age (from 25 to 54 years old), work experience (from 2 months to 30 years), educational levels (primary school to university student),and both male and female behvarz**

- **Three Iranian-based research assistants travelled to the 18 provinces (6 each) and conducted the interviews.**
- **In each province, a number of eligible participants were approached by the interviewers and assistance**
- **Those who expressed interest in participating contacted the research assistant by phone**

Method:

- Primary data provided an in-depth understanding of the strengths and weaknesses of the training process from the viewpoint of behvarz.
- **The interviews were conducted between October 2009 and February 2010**
- **at the village Health Houses or District Health Centres**
- **Interviews were recorded with the consent of participants and transcribed by the three research assistants.**
- **All audio tapes were checked against the transcribed text by the first author**
- **Interview data were coded to comparable categories. The key themes and illustrative quotes were translated into English.**

Method:

- This paper presents participants' perceptions and experiences with the training process and courses.
- Ethics approval was granted by the Iranian ministry of health and Flinders University ethics committee

Screening Questions:

2. Is a qualitative methodology appropriate? ❑ Yes ❑ Can't tell ❑ No

HINT: Consider

- If the research seeks to interpret or illuminate the actions and/or subjective experiences of research participants
- Is qualitative research the right methodology for addressing the research goal?

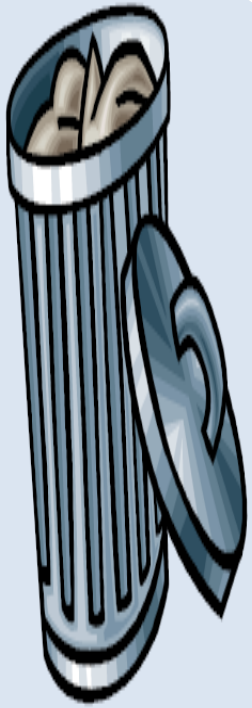
۲- آیا رویکرد تحقیق (Methodology) متناسب می باشد؟ بله خیر

توجه:

آیا تحقیق به دنبال توضیح دادن و شفاف سازی عملکرد وتجربیات شخصی شرکت کنندگان تحقیق می باشد؟

Screening Questions:

Is it worth continuing?



Detailed question:

3. Was the research design appropriate to address the aims of the research?

❒ Yes ❒ Can't tell ❒ No

HINT: Consider

- If the researcher has justified the research design (e.g. have they discussed how they decided which method to use)?

طرح تحقیق

۳- آیا طراحی مطالعه (Research design) متناسب با اهداف تحقیق می باشد ؟ نمره:

توجه	نوشتن توضیح
■ آیا محقق علت طراحی مطالعه رابیان کرده است ؟ (مثال: آیا مطالعه برای دست یابی به اهداف تحقیق به درستی ومناسب طراحی شده است؟ آیا در مورد این که از کدام روش استفاده شود بحث شده است؟)	

Detailed question:

4. Was the recruitment strategy appropriate to the aims of the research? ☐ Yes ☐ Can't tell ☐ No

HINT:Consider

- If the researcher has explained how the participants were selected
- If they explained why the participants they selected were the most appropriate to provide access to the type of knowledge sought by the study
- If there are any discussions around recruitment (e.g. why some people chose not to take part)

۴- آیا روش نمونه گیری متناسب با اهداف تحقیق می باشد؟ نمره:

توجه	نوشتن توضیح
■ آیا محقق در مورد نحوه انتخاب شرکت کنندگان(نمونه گیری) توضیح داده است؟	
■ آیا توضیح داده شده است که افراد انتخاب شده مناسبترین افراد برای دستیابی به این اطلاعات می باشند؟	
■ آیا توضیحاتی در باره ورود شرکت کنندگان در مطالعه وجود دارد (مثال: چرا بعضی ازافراد انتخاب شده در مطالعه شرکت نکرده اند)؟	

Detailed question:

5. Was the data collected in a way that addressed the research issue? ☐ Yes ☐ Can't tell ☐ No

HINT: Consider

- If the setting for data collection was justified
- If it is clear how data were collected (e.g. focus group, semi-structured interview etc.)
- If the researcher has justified the methods chosen
- If the researcher has made the methods explicit (e.g. for interview method, is there an indication of how interviews were conducted, or did they use a topic guide)?
- If methods were modified during the study. If so, has the researcher explained how and why?
- If the form of data is clear (e.g. tape recordings, video material, notes etc)
- If the researcher has discussed saturation of data

جمع آوری داده ها

۵- آیا داده ها به شکلی جمع آوری شده اند که بتوان به موضوعات اساسی تحقیق دست یافت؟ نمره:

توجه:	نوشتن توضیح
■ آیا محل جمع آوری داده ها توضیح داده شده است؟	
■ آیا روش جمع آوری داده ها به روشنی مشخص شده است(بحث گروهی متمرکز؛ مصاحبه ساختاریافته و...) ؟	
■ آیا محقق توجیهی درباره روش های انتخابی دارد؟	خیر
■ آیا محقق روش های جمع آوری داده ها را به روشنی توضیح داده است؟ (روش مصاحبه؛ آیا نشانه ای از چگونگی اداره وهدایت مصاحبه وجود دارد؟ آیا از راهنمای عناوین موضوعات استفاده کردند؟)	خیر- در مورد نحوه جستجو و موارد بررسی اسناد توضیحان کافی ارائه نشده است
■ آیا روش های استفاده شده درطول مطالعه تغییر یافته یا اصلاح شده اند؟ اگر بله، آیا محقق توضیح داده چگونه و چرا؟	موردی ندارد
■ آیا شکل و چگونگی جمع آوری داده ها روشن شده است (ضبط صوت؛ تصویر ویدوئی؛ یاداشت برداری و ...)؟	بله- ضبط صوت
■ آیا محقق در مورد اشباع داده ها توضیح داده است؟	خیر

Detailed question:

6. Has the relationship between researcher and participants been adequately considered?

☐ Yes ☐ Can't tell ☐ No

HINT: Consider

- If the researcher critically examined their own role, potential bias and influence during
  (a) Formulation of the research questions
  (b) Data collection, including sample recruitment and choice of location
- How the researcher responded to events during the study and whether they considered the implications of any changes in the research design

بازخورد (ارتباط با شرکت کنندگان/ تشخیص سوگیری محقق)

۶- آیا ارتباط بین محقق وشرکت کنندگان به اندازه کافی مورد توجه قرار گرفته است؟ نمره:

توجه:	نوشتن توضیح
■ آیا محقق به طور جدی نقش خود و احتمال سوگیری و تاثیرگذاری در موارد زیر را بررسی کرده است؟ ▪ تنظیم وتدوین سوالات تحقیق ▪ جمع آوری داده ها؛ نمونه گیری وانتخاب محل تحقیق	
■ محقق چگونه به اتفاقات در طی مطالعه پاسخ داده؟ و آیا نتایج حاصل از این تغییرات در طراحی مطالعه را توضیح قرار داده است؟	

Detailed question:

7. Have ethical issues been taken into consideration? ☐ Yes ☐ Can't tell ☐ No

HINT: Consider

- If there are sufficient details of how the research was explained to participants for the reader to assess whether ethical standards were maintained
- If the researcher has discussed issues raised by the study (e.g. issues around informed consent or confidentiality or how they have handled the effects of the study on the participants during and after the study)
- If approval has been sought from the ethics committee

مسائل اخلاقی

۷- آیا مسائل اخلاقی مورد توجه قرار گرفته؟ نمره: ۳

توجه	نوشتن توضیح
■ آیا توضیحاتی کافی درباره چگونگی تشریح مطالعه و اهداف آن به شرکت کنندگان وجود دارد؟ بطوریکه خواننده مقاله ارزیابی درستی ازرعایت استانداردهای اخلاقی داشته باشد.	
■ آیا محقق مسائل ومشکلات ناشی از مطالعه را توضیح داده است (مثال: درباره رضایت آگاهانه؛ اعتماد؛ چگونگی مواجهه با اثرات مطالعه روی شرکت کنندگان در حین مطالعه)؟	
■ آیا محقق از کمیته اخلاق رضایت یا موافقت گرفته (احراز موافقت از کمیته اخلاق)؟	

Detailed question:

8. Was the data analysis sufficiently rigorous? ☐ Yes ☐ Can't tell ☐ No

HINT: Consider

- If there is an in-depth description of the analysis process
- If thematic analysis is used. If so, is it clear how the categories/themes were derived from the data?
- Whether the researcher explains how the data presented were selected from the original sample to demonstrate the analysis process
- If sufficient data are presented to support the findings
- To what extent contradictory data are taken into account
- Whether the researcher critically examined their own role, potential bias and influence during analysis and selection of data for presentation

تحلیل داده ها

۸- آیا تحلیل داده ها از استحکام و قوام لازم برخورداراست؟ نمره:

توجه	نوشتن توضیح
■ آیا توضیح جامع درباره فرایند تحلیل داده ها وجود دارد؟	
■ آیا تحلیل درون مایه ای صورت گرفته است؟ اگر چنین باشد آیا روشن است که چگونه دسته ها و درون مایه ها از متن استخراج شده اند؟	
■ آیا محقق برای نشان دادن فرایند تحقیق روشن ساخته است که داده های گزارش شده چگونه از نمونه اصلی انتخاب شده اند؟	
■ آیا اطلاعات داده شده برای تایید وپشتیبانی یافته ها کافی هستند؟	
■ تا چه حدی به داده های متضاد اشاره شده است؟	
■ آیا محقق به طور جدی نقش خود؛ سوگیری وتاثیر پذیری در طی تحلیل داده ها وانتخاب داده های ارائه شده را ارزیابی کرده است؟	

Results:

- With regard to behvarz training, findings clustered under three critical issues:
  - training centres, facilities and trainers;
  - training content and duration; and
  - training quality and outcome

Results:

Training centres, facilities and trainers:

Pre-service training

- After recruitment, successful applicants undergo preservice training.
- hosted by a **specialised centre called District BehvarzTraining Centre (DBTC)** that provides 2 year residential training for students.
- There are now 224 DBTCs throughout the country that are linked to and supervise by the district health networks.
- , **consists of 1 director, 5 trainers,and administration staff**

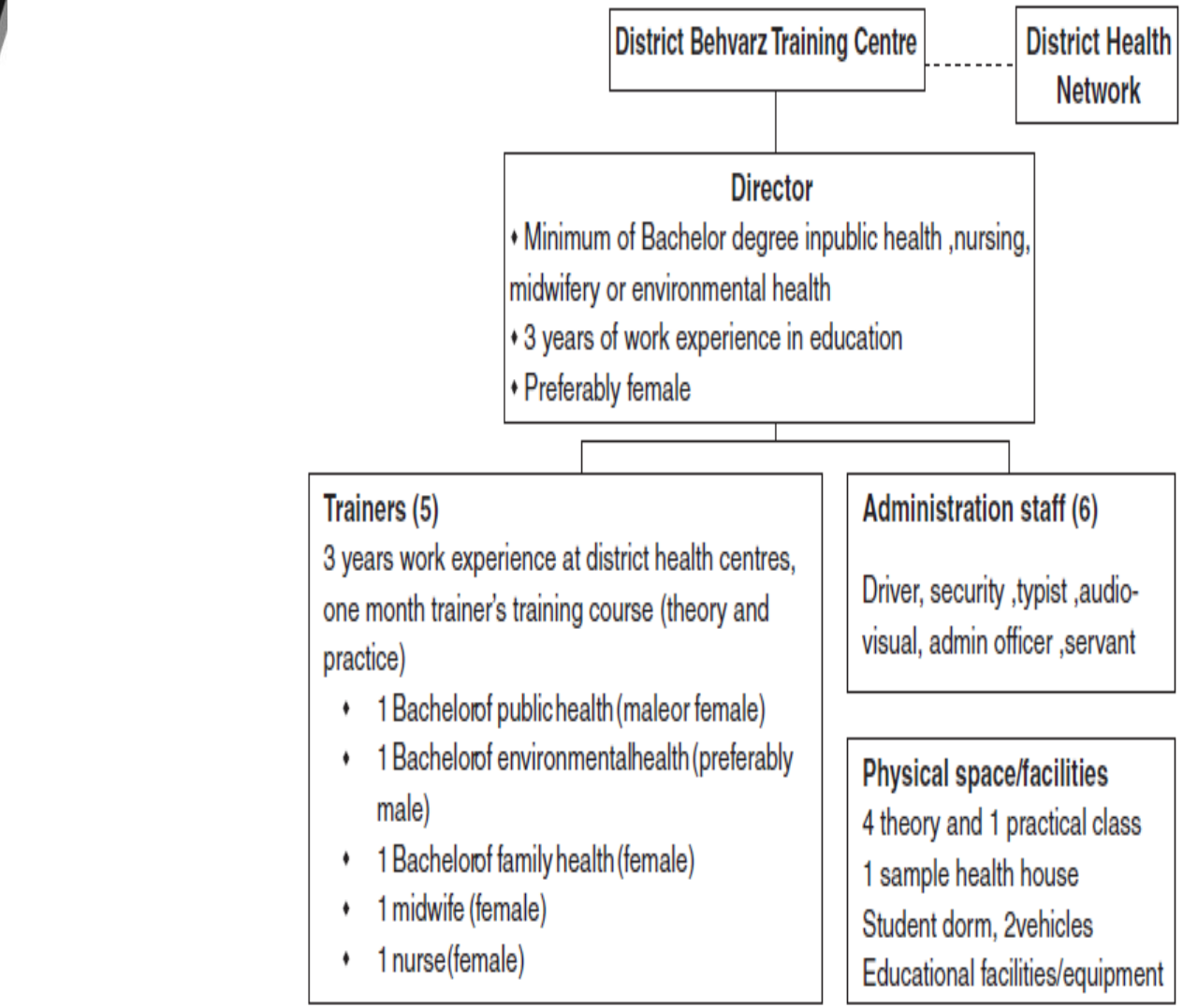


Figure 1 Organisation chart of District Behvarz Training Centre in Iran.

Results:

Training centres, facilities and trainers:

Pre-service training

- The DBTC is responsible for a range of activities:

a)behvarz recruitment

b) administering the entrance exam and interviews;

c) planning and implementation of training courses, and administering the final exams;

d) providing supervision and support during the course of training; and

e) providing a safe and secure environment for students, and the arrangement of cultural or entertaining events.

Results:

Training centres, facilities and trainers:

Pre-service training

- Behvarz trainers are full-time employees of the health system.
- The trainers' roles are explicitly defined and include :
- collaboration in behvarz recruitment,
- training and day to day supervision and
- assessment of behvarz students during training.

Results:

Training centres, facilities and trainers:
Pre-service training

- In each centre, a range of **7–15 students are trained each year**

- Behvarz students are provided training allowance, free training, accommodation, transport and meals during their training course.
- **Cultural, religious and entertaining events** are included to build relationship with the trainers, improve social and interpersonal communication skills and provide an enjoyable training environment for students.

Results:

In-service training

- aims to update behvarz with new policies and programs, reinforce initial training, and ensure they are practicing skills learned.
- In-service training is provided at regular intervals, varying from monthly to **twice a year, and offered in the form of workshops, monthly meetings**
- mainly carried out by **GPs or other allied health workers in Rural Health Centres**..
- These centres are responsible for behvarz supervision and also provide in-service training

Results:

In-service training

- Although in-service training is believed to be crucial in updating their knowledge and skills, a number of participants in our study compared it unfavourably with pre-service training.
- They complained about its quality and timing,, inadequately qualified trainers who are unfamiliar with the behvarz working environment, the lack of practical sessions and of physical space and training facilities.

Results:

Training duration and content

- two years of residential preservice training.
- The relatively long period of initial training reflects the variety and complexity of work roles that the Iranian CHWs are expected to perform, ranging from case detection and disease management in different age groups to disease prevention, health promotion and community development

Results:

Training duration and content

- The training program was originally divided **into three blocks of 6.5, 9 and 7.5 months** respectively.
- This was changed in 2001 to a two term program consisting of“theoretical” and “practical” knowledge and skills, and“clinical placements” in Health Houses and Rural Health Centres.
- The inclusion of different training approaches, particularly clinical placements that allow students to gain experience in the work environment, was frequently reported by the participants to have a positive impact on their clinical and communication skills and confidence.

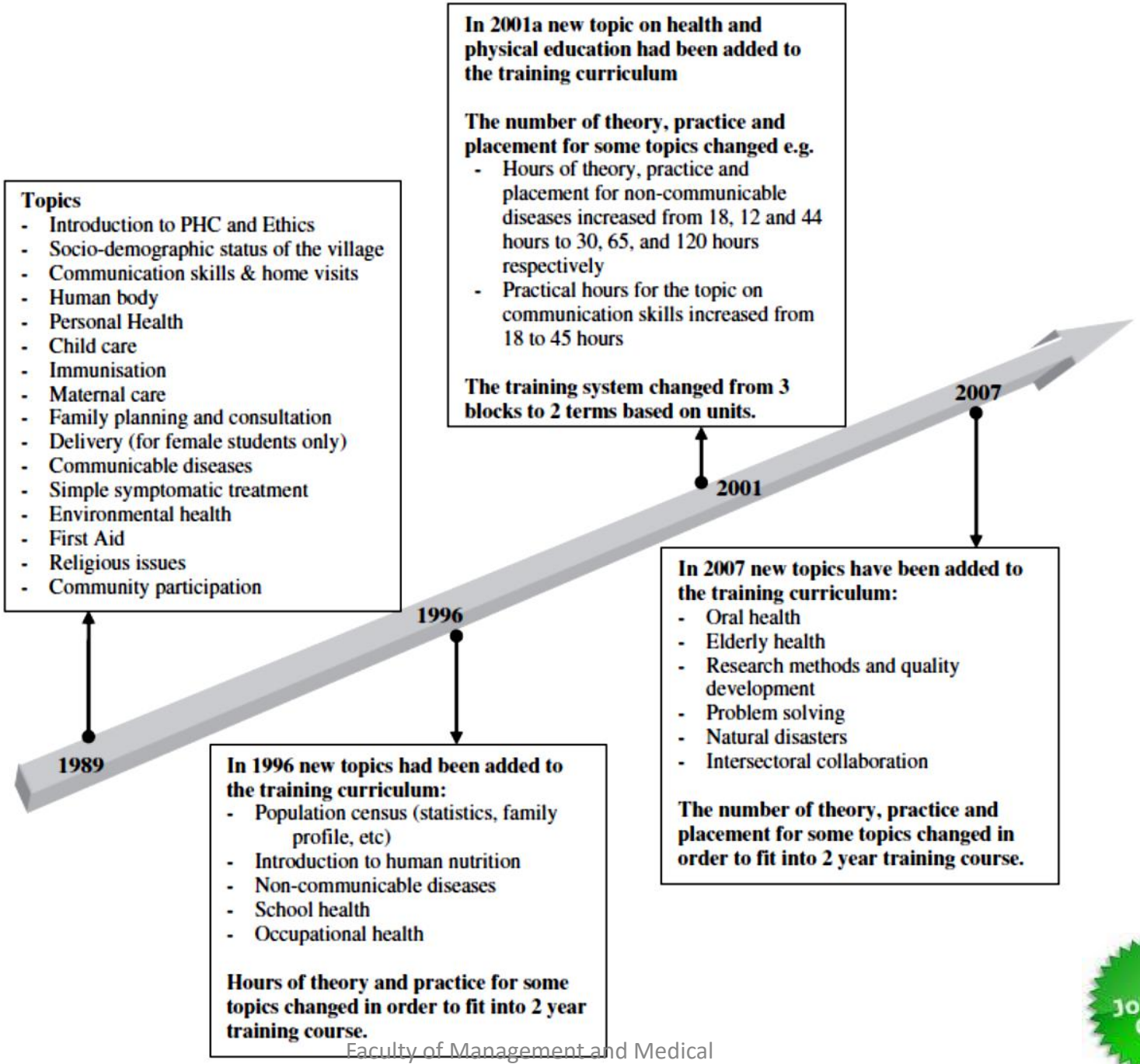


Figure 2 ***Behvarz*** **training topics between 1989 and 2007.**

Results:

Training duration and content

- original training of behvarz had a focus on maternal and child health, communicable diseases and environmental health.
- The inclusion of new topics including **non-communicable diseases, school health, oral health, elderly health, research methods and statistics, intersectoral collaboration, and natural disasters** over time demonstrates a responsive training system to meet the **changing needs of behvarz and rural community** over time.

Results:

Training duration and content

- minimum required qualification for behvarz candidates is high school certificate.
- However, due to an increased rate of rural literacy a number of candidates have university degrees in public health related fields.
- This group of candidates has to go through **similar recruitment process including the entrance exam and interview but the duration of pre-service training decreases to 6–8 months**.
- .

Results:

Training duration and content

- In some areas, in addition to the two year compulsory training, complementary training has been provided to meet the local needs. Midwifery training for female behvarz, called behvarz-mama in the Farsi language, is an example.
- is designed for rural areas that do not have access to a maternal facility and specialist midwifery services.
- The program includes 5 weeks training, incorporating 46 hours of theory and 252 hours placement in DBTC and public hospitals or other maternal health facilities

- Each student has to undertake 5 deliveries with assistance and 10 deliveries and postnatal care independently, pass the theory exam and complete the clinical placement in order to be awarded a certificate.

As a result of this initiative the number of deliveries by traditional birth attendants in one province decreased from 16.6% to 3% between 2006 and 2008, with a concomitant increase in home deliveries by behvarz-mamas from 6.4% to 12%

Results:

Quality and outcome of training

- The CHW training is mainly evaluated by an assessment of their satisfaction, and competency in delivering the tasks that are allocated to them
- Behvarz knowledge and skills are assessed **through theory and practical exams during and at the conclusion of the pre-service training as pre-requisites to their certification.**
- Similarly, **pre- and post-tests are used in the in-service courses to assess knowledge improvement and gaps**.
- However, the review of training policies and plans in Iran found little documentation of mechanisms to evaluate the quality and impact of training courses

Results:

Quality and outcome of training

- **The majority of participants believed that the pre-service training was comprehensive and included relevant topics** that had a huge impact on their capacity to provide healthcare services, and to build their confidence and skills in communicating with rural people

Results:

Quality and outcome of training

- The friendly environment of the training centres,
- the nature of trainer-trainee relationships,
- and highly qualified trainers
- were particularly noted by most participants as features that **made the training courses an exciting period of their life and career and had positive impact on the learning process and motivation**.

Results:

Quality and outcome of training

- Clinical placement in the Health Houses under the direct supervision of the trainers was stated crucial in gaining work experience, building relationship with local community, and collaborating with other local organisations.
- Interviews with a broad range of behvarz, however, identified a **number of problems related to the preservice training**. Centrally produced materials, booklets,and step-by-step guidelines was perceived didactic by some participants that constraints adult participatory learning, and problem solving capabilities of the students.
- This perspective was particularly prominent among younger participants with higher educational qualification.

Results:

Quality and outcome of training

- Given the socioeconomic, geographic and climate diversity in Iran that creates differences in health needs, a number of participants stressed on the lack of formal mechanism to adapt training materials to local conditions.

Discussion:

- CHW training is integrated into the Iranian primary health care system and is consequently recognized in the national health planning regulations and financing.
- Nationally-coordinated set of CHW policies
- adequate financial
- resource support for training,
- standardised training modules,
- periodic reviews and certification for CHW training

facilitates the implementation and sustainability of the program

Discussion:

- existence of specialised training centres, managed by the district health system, was perceived effective in delivering comprehensive training for CHWs.
- It appears from this study that the general climate of the training organisation, trainer-trainee relationship and the norms of the training groups are important
- Residential pre service training at district level was perceived influential in building the relationship between behvarz students and trainers as well as providing the opportunity for closer supervision and student assessment.

Discussion:

- CHW training content and its changes over time in Iran reflects:
- a) overall increasing trend in literacy rate among rural population including CHWs themselves that requires a comprehensive training to meet the educational needs of behvarz students;
- b) increasing number of health programs integrated into the Iranian PHC, and as a result complex work being expected of CHWs.
- The training content also demonstrates a focus on disease prevention, health promotion and health education as the principles of PHC approach

Discussion:

- it appears from this study that **Better management of in-service courses and greater involvement of DBTCs in facilitating such courses may improve the quality of in-service training and behvarz satisfaction**

Discussion:

- Finally, this study did not set out to measure the effect of training on behvarz performance and community health outcomes, which is methodologically complex.
- Other studies suggest that the behvarz program has positively affected community health gains and narrowing rural–urban gaps in health
- Although it is hard to directly attribute the health achievements to the quality of training courses,
- it is not illogical to suggest that the behvarz training program has contributed to these positive health gains

conclusion:

- The experience of CHWs training in Iran provides valuable lessons for countries that established CHW models and intend to provide rigorous training as one of the key program elements, although the total number of 91 interviews may not represent the full perspective of the more than 31,000 behvarz now working in rural areas of Iran.
- The high level political support given in Iran to comprehensive primary health care, including the Behvarz program, is demonstration of how such support can lead to a strong health sector which contributes to improving population health outcomes and reducing urban – rural health inequities..

Detailed question:

9. Is there a clear statement of findings? ☐ Yes ☐ Can't tell ☐ No

HINT: Consider

- If the findings are explicit
- If there is adequate discussion of the evidence both for and against the researchers arguments
- If the researcher has discussed the credibility of their findings (e.g. triangulation, respondent validation, more than one analyst)
- If the findings are discussed in relation to the original

یافته ها و بحث

۹- آیا بیان روشنی از یافته ها وجود دارد؟ نمره :

توجه	نوشتن توضیح
■ آیا یافته ها واضح وروشن هستند؟	
■ آیا بحث های کافی در مورد شواهد موافق یا مخالف استدلالهای محققان وجود دارد؟	
■ آیا محقق برروی اعتماد (قابلیت اعتماد) یافته ها بحث کرد است (مثال: تلفیق (Triangulation)، بازبینی شرکت کنندگان (Participant validation)، به کاربردن بیش از یک تحلیلگر)؟	
■ آیا یافته ها در راستای سوالات اصلی تحقیق بررسی وبحث شده اند؟	

Detailed question:

10. How valuable is the research?

HINT: Consider

- If the researcher discusses the contribution the study makes to existing knowledge or understanding e.g. do they consider the findings in relation to current practice or policy?, or relevant research-based literature?
- If they identify new areas where research is necessary
- If the researchers have discussed whether or how the findings can be transferred to other populations or considered other ways the research may be used

ارزش تحقیق

۱۰- تحقیق انجام یافته تا چه اندازه با ارزش است؟ نمره :

توجه	نوشتن توضیح
■ آیا بحث های محقق درباره مطالعات گوناگون باعث ایجاد آگاهی و درک مفاهیم شده است(مثال: آیا آنها یافته ها را در ارتباط با سیاست ها و فعالیت های جاری و یا در ارتباط با متون مبتنی بر تحقیق وشواهد بررسی می کنند)؟	
■ آیا محققین زمینه های جدیدی را که نیازمند تحقیقات می باشند مشخص کرده اند؟	
■ آیا محققین تعمیم پذیری نتایج به جوامع دیگر رابحث کرده و یا راهکارهای دیگری برای استفاده از نتایج تحقیق بیان نموده اند؟	

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Questions?