

Assessing health worker's duties from the viewpoint of principals and pupils concerning healthcare of students in the rural areas of Iran

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Abstract

Objectives: To evaluate the duties of regional healthcare workers (Behvarzes) regarding healthcare of pupils in the rural areas of Iran.

Method: This descriptive, cross-sectional study was conducted in 2007-2008 on 384 pupils and their school managers in the rural areas of Sharbabak in Kerman, Iran. The research population was evaluated with separate questionnaires for the managers and the pupils. The results were analysed using descriptive statistical methods.

Results: The study showed that 250 (65%) of the total participants believed that the Behvarzes performed the minimum required duties for supervision of the pupil's personal health, and 257 (67%), 173 (45%), 269 (70%) and 269 (70%) thought they performed the minimum for promoting the environmental health status of the school, for pupils' nutrition, for accident prevention, and for disease control respectively.

Conclusion: Behvarzes have been very successful in promoting healthcare among villagers in Iran, but they should pay more attention to the nutritional status of the students.

Keywords: School health, Auxiliary health workers, Kerman, Iran (JPMA 62: 558; 2012).

Introduction

Physical and mental health is one of the individual and social rights of human beings in every country, and healthy people are considered an important factor for community improvement.¹ In Iran the primary healthcare programme has had an important role in reaching the health goals defined by the World Health Organization and mass health promotion.²

The harm of not applying the rules of hygiene is not limited to a special group or social class, but they are targeted towards all individuals. Therefore, it is essential to perform awareness programmes in public places such as schools where students spend long hours. When students are trained and encouraged to adopt hygienic habits, they can transfer such practices to their families and to large groups of people in society as well.³

Youth health is important because adolescence is a dynamic period in human growth and development. The WHO states that adolescence is a period between 10-19 years, and the health personality of humans is formed in this period. The world youth are now threatened by many illnesses (such as infectious diseases, malnutrition, etc). Also their health may be endangered by cancer and cardiovascular diseases in the future. These risks can be the

result of poor lifestyle and hygienic conditions in adolescence. Therefore, schools, as one of the most important organised social institutions, should provide resources, hygiene and security information and training to students. Providing a safe and healthy environment can facilitate proper development of the physical and mental health of pupils.⁴

The general goal of the school health programmes is the promotion of pupils' health. This is achieved by activities about health training, school environmental health, and regular evaluation of pupils' health to plan for promotion of health care services.⁵

Since the rural schools in Iran do not have a health instructor, the services of the 'Behvarz,' or village health worker, in rural schools is essential and they should know what methods are fit for the presentation of desirable healthcare to rural populations. Undoubtedly, to reach economic and social development, it is necessary to choose specific ways in each country. One of the successful ways is to improve people's knowledge, which is the responsibility of the local health workers.

The soul of Iran's health system lies in its most outlying facility, the Health House, which is run by a caring community of health workers called the Behvarz. The health workers are familiar with the culture and traditions of

the place they live and work (i.e. Iranian villages) and since the health worker is chosen from the local people, therefore, has their approval and support. There are more than 17,000 health houses in Iran^{5,6} and more than 27,000 community health workers are active in these health houses of which more than half are women. On average, each health house serves 1200 to 1500 people in its main village and surrounding villages.^{5,6} The minimum age for male and female health workers is 20 and 16 respectively. They are required to have had 11 years of regular education, plus two years of theoretical and practical training before being awarded a certificate to practise. Even after their graduation, the Behvarzes undergo regular monitoring and distance-learning. According to the Iranian health officials, these community workers have made huge success in improving Iranian health indices and have made a significant contribution to the decline in mortality and morbidity rates in the last three decades.⁶

Behvarzes are initially trained to meet the basic healthcare needs of people living in remote rural areas. The female Behvarz is generally responsible for those tasks that are performed within the Health House such as receiving clients, providing routine healthcare to those under its coverage, immunisation, recording data, child and maternal health, simple medications etc. The male Behvarz, on the other hand, is predominantly concerned with activities outside the Health House such as follow-up of cases with communicable diseases, case-finding, immunisation, sanitation, environmental health projects and routine care in satellite villages. Also, the Behvarzes are responsible for pupils' healthcare in rural schools. A major contributing factor in Behvarzes' success has been the intimate relationship between the Behvarz and the community. It was exactly due to this fact that choosing Behvarzes strictly from within the community was considered.⁶ The Behvarz is almost always chosen from the main village where the health house is stationed. However, if this is not feasible, a candidate is recruited from one of the satellite villages. Behvarzes are chosen with the direct participation of village authorities, such as the village council, local clergy, and other influential figures of the community.⁷

This study aimed at evaluating the responsibilities and duties of the Behvarzes in schools, which is valuable because health behaviours are formed and adopted during young ages and careful attention would result in the prevention of many diseases in the future. Second, pupils are vulnerable and are exposed to many illnesses. Third, if the pupils learn health knowledge and develop a better attitude towards hygiene and healthcare, they will not only promote their own health, but also transfer it to the next generation and will be efficient members for health promotion in society.

Subjects and Methods

A descriptive, cross-sectional study was performed on girl's junior high school pupils and principals in the rural areas of Shahrababak in the Kerman Province of Iran in 2007-2008. The study population consisted of all pupils in first, second and third educational years. There were 10 schools in the rural areas comprising 681 pupils and 10 principals. The total sample size needed with a prevalence of 50% and accuracy of 0.05, according to the relevant formula, was 384 students. Students were taken from different schools proportionate to their population, and a total of 384 pupils were questioned. The research population was evaluated with 2 questionnaires, comprising 48 questions, about Behvarzes' duties consisting of personal health, environmental health, nutritional health, prevention of diseases and accidents. The questionnaire validity was approved by expert opinion and the reliability was evaluated in a small pilot. Descriptive statistical methods were used for analysis.

Results

Response to the questionnaires showed that 250 participants (65%) believed that the Behvarzes performed their duties about supervision of the pupils' personal health satisfactorily; 288 (75%) thought that Behvarzes spoke to students about health subjects as much as it was required, and 184 (48%) thought Behvarzes used wall newspapers for distribution of health information properly. Only 180 (47%) thought that Behvarzes paid enough attention to pupils' appearance, and all of them confessed that Behvarzes do examine pupils' health regularly.

According to our observation and confirmation by the principals concerned, all the schools had pipe-water supply and 6 schools (from 10) had trees, 5 had enough (4 to 6) water-taps (the required standard is one water tap for every 75 individuals), 6 schools had painted walls, 7 schools had a sport ground, and 9 schools had an asphalt yard. All schools enjoyed a surface area of at least 1000 m² (the required standard is 10 m² for each individual), 8 schools had built-in electrical wiring, but only 4 had sufficient health equipment such as first aid boxes, soap and

Table: Frequency of participants who believed that health workers (Behvarzes) performed the minimum required duties in the rural Shahrababak community (n=269).

Task	Frequency (Percent)
Supervision of the pupils' personal health	250 (65%)
Supervision of the school environmental health	257 (67%)
Supervision of the pupils' nutrition	173 (45%)
Accident prevention programmes in schools	269 (70%)
Disease control	269 (70%)

disinfecting liquids.

Other results showed that only 173 (45%) of the participants believed that the Behvarzes satisfactorily performed their duties about the supervision of pupils' nutrition. Although 242 (63%) said they avoided eating unhealthy snacks, but, according to our observations, only 3 school buffets were supplied with healthy snacks for the pupils, and the remaining were engaged in selling unhealthy snacks.

The result also showed that 269 (70%) believed that the Behvarzes attended to at least the minimum required duties about teaching and taking care of accident prevention; 192 (50%) thought that Behvarzes used posters and picture as a training aid properly; and 346 (90%) said they were interested in learning preventive steps.

Results also showed that 257 (67%) thought that the Behvarzes' performance about supervision of the school environmental health was satisfactory; 326 (85%) declared they obeyed the safety rules; 111 (29%) believed that there was no immediate danger to them as they walked to school; and 269 (70%) believed that the Behvarzes performed at least the minimum duties about controlling diseases. Fortunately, all of students in our study had accident insurance coverage and health records. Only 3 principals had noticed that the Behvarzes did check the pupils' vaccination status, and 77 (20%) had been referred to health centres for treatment at least once (Table).

Discussion

This study evaluated one of the end-line health services in Iranian Primary Health Care, which is the role of the Behvarz in school health promotion in one of the remote rural communities. The study showed that Behvarzes teach health subjects and use educational aids for the purpose in the villages. They also checked students' health routinely. One of the healthcare duties in schools was to give the required attention to students' personal hygiene and cleanliness which most of the Behvarzes performed well. The only similar study performed in Iran was a study in 2005 in the villages of Hamadan which showed that the Behvarzes were successful in teaching health issues about vaccination, child nutrition, maternal care, dangerous pregnancies, breastfeeding, contraception, clean water and oral rehydration therapy, and 85.7% of the society had good knowledge about the topics taught by the Behvarz.² Securing pupils' personal health and creating health habits can lead to the distribution of information in society, and, eventually, we can see its positive effects on their families and the greater society.⁸

Also with continued checking, controlling and reporting about the school environment, Behvarzes can

improve the unsuitable conditions of environmental health, including the condition and safety of the building, water, toilets, classes etc. It is essential to consider school health and safety for enjoying a better school environment.

About students' nutrition, the results showed that many students tended to have foods like chocolates, cheese snacks, popcorn etc. Unhealthy nutrition starting from childhood and adopted throughout adolescence can lead to undesirable conditions and nutrition insufficiency afterwards. The most prevalent side effects are anaemia, goiter, malnutrition and chronic infection. Therefore, we need a proper teaching and supervision programme in childhood for consuming healthy nutrition and nutritional improvements in order to establish a proper basis for healthy nutrition in adulthood.⁹

Meanwhile, for creating a safe environment and securing pupils' health, it is essential to make use of the health services of Behvarzes and educators in different areas of the country in accordance with the local needs. In general, there should be more attention paid to the challenges being faced by these auxiliary health workers (AHWs) since they are vital for the future ability of the country to deliver care to the population and for recruitment and training. Systematic and centralised data is needed on predicting the future number and types of health workers required in national healthcare settings.¹⁰

On the other hand, even in developed countries many healthcare delivery organisations are struggling to survive due to the competitive healthcare market; and AHWs are being asked to be more flexible, more tolerant and more capable team members. Simultaneously, educators are facing difficulties preparing future AHWs with appropriate skills.¹¹

Conclusion

Although making a huge difference in Iran, there is still room for improvement for the Behvarzes. Better control and supervision, especially from the provincial authorities, is needed to further improve the situation. Behvarzes also suffer from lack of job satisfaction because of heavy workload and low salaries. These issues should be resolved to the benefit of the primary healthcare in Iran.

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