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Perceived barriers to physical activity among nurses in Bandar Abbas, Iran: A qualitative approach

Sedigheh Abedini¹, Mohammadali Morowatisharifabad², Behnaz Enjezab³, Hosin Fallahzade⁴ and Abolfazl Barkhordari⁵

¹Research Center for social determinants in health promotion, school of health, Department of Public Health, Faculty of Health, Hormozgan University of Medical Sciences, Bandar Abbas, Iran, PhD candidate of Health Education, Shahid Sadoughi University of Medical Science, Yazd, Iran
²Associate Professor of Health Education, Department of Health Education, School of Health; Shahid Sadoughi University of Medical Science, Yazd, Iran.
³Faculty of Nursing and Midwifery Shahid Sadoughi University of Medical Sciences, Yazd, Iran.
⁴Associate professor in Statistics and Epidemiology, Shahid Sadoughi University of Medical Sciences, Yazd, Iran.
⁵Department of Occupational Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran.

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Background: Despite the importance of physical activity in improving health, involvement in physical activity declines during the past decades. Identifying barriers of physical activity helps researchers to design better and more effective strategies. Qualitative data are extremely valuable for providing insight into health determinants. The aim of this study was to determining nurses’ perceived barriers to physical activities. Methods: A qualitative approach using content analysis was used. Individual semi-structured interviews were conducted with a convenience sample of 30 nurses who had been minimum one year working experience in hospital. The interviews continued until data saturation was reached. Interviews were transcribed, coded, and systematically analyzed between February-March 2013 to identify themes related to barriers to physical activity. Results: Two main themes emerged from the analysis of the interviews: internal and external barriers. Internal barriers were including: lack of time, lack of motivation, inability of planning, prioritizing other activities over sports, fatigue induced by over-work and external barriers were cost and rotating working shift. Conclusion: This study provided a better understanding of physical activity barriers among Nurses. Identifying and removing barriers can help researches to develop physical activity which has a main role in human health promotion.

Keywords: Barriers, physical activity, nurses, qualitative approach, Iran.

INTRODUCTION

Regular physical activity evidently improves one’s health (Zunft et al., 1999), and has affected mental health, lowered depression, physical capabilities and quality of life (Allender et al., 2006, McDowell et al., 1997). It is considered as a key factor in maintaining health, controlling and preventing the majority of non-communicable diseases (Gharlipour et al., 2012). It has reduced the probability of affliction with cardio-vascular diseases, blood pressure, hyper-cholesterolemia and obesity (Warburton et al., 2006). It would lead to an increased bone mineral densitometry and, therefore, prevent osteoporosis and might help to control weight as well (Zunft et al., 1999). It has also been proved to be capable of reducing the probability of affliction with some types of cancers (McDowell et al., 1997).

Despite the known advantages of physical activities, not many individuals perform them. Within the past decades, the level of physical activity among adults and
children has been constantly decreasing. The data obtained from three national investigations conducted among Iranian adults have revealed that over 80% of Iranian populations are physically inactive (Kelishadi et al., 2007). In their study, Martin et al. (2009) reported the prevalence of inactivity to be 54.6% (Martins et al., 2009). In another investigation in Saudi Arabia, the prevalence of inactivity was found to be 96.1% (Nishida et al., 2003).

For a higher achievement of public health strategies, the reasons why people do not engage in physical activities need to be identified (Zunft et al., 1999); they perceived barriers correlated with physical activity have been investigated among diverse populations (Eyer et al., 1998, Cassou et al., 2011). These barriers could be intra-individual (internal) reflecting individual characteristics such as a negative attitude toward physical activity (Deforche et al., 2006). Or, as stated by Gyurcsik et al. (2006) they might be inter-individual (external) and social (Gyurcsik et al., 2006). The results of a study conducted by Nishida et al. (2003) on 719 employees (396 male and 323 female) in Japan indicated that having no social support such as not having an athletic spouse or receiving no encouragement or support from family members concerning regular physical activities have resulted in their reduced engagement in physical activities (Nishida et al., 2003). As revealed by Reichert et al. (2007), financial problems (40.3%) and fatigue (38.1%) were the two primary barriers to engagement in physical activities (Reichert et al., 2007).

Among different occupations, nursing is one which requires regular and adequate amount of physical activity. However, the body of previous research has attested to inadequate activity among nurses. The research findings obtained by Gharghaniet al. (2011) indicated that 73.5% of the medical emergency staff in Hamadan had poor physical performance (Gharlipour et al., 2012). In Saeedi et al. (2008) study as well, a low percentage of nurses were found to be physically active in their spare time. 40.7% of the population which was studied did, in fact, no physical activity in their spare time (Saeidi, 2008).

Research into determinants of sport and physical activity participation has done to quantitative methods (Allender et al., 2006), while the behavior formation process is truly complicated in human beings and has its roots in the cultural, social and economic texture of a community. Therefore, a numerous of experiences, perceptions and beliefs are not quantifiable and are required to be assessed in an appropriate method. Qualitative research methods provide a deep perception of one’s experiences and make their understanding of phenomena possible (Keshavarz et al., 2011). According to a review of previous literature, no qualitative study was found concerning the barriers to physical activities among nurses. Therefore, the present study was designed qualitatively with the aim of determining nurses’ perceived barriers to physical activities.

METHODS

This was a qualitative study based on content analysis; and it was part of a wider study, which used a sequential mixed-method design. We adopted a qualitative approach to gain an in-depth understanding of barriers about physical activity among nurses in Banda Abbas, Iran (February-March 2013).

The participants were selected through purposive sampling. Including criteria for participating in this study were: having at least one year work experience in nursing, under graduate and higher educational degree, and consent to participate in this research. Sampling with maximum variation (age, gender, position, kind of ward, work experience, marital status, and number of children) done. Data were collected through semi structured interviews, by one of researchers. This kind of interview is a usual method in qualitative researches for collecting data. Prior to each interview, the research purposes, reason to record the interview, voluntarily participation, information and interviewees identities confidentiality were explained to all participants. Researchers took participants’ consent for recording interview. Guidelines were used to perform the interview. Propos questioner was used whenever it was necessary. Also, some demographic questions were asked at the beginning of each interview. Each of the interview lasted approximately 45 min. All of the interviews were recorded and typed immediately after the record. The typed texts were conformed to the recorded interviews in order to verify their validity. Qualitative researches require the researcher’s immersion through the data. Therefore, one of the researchers listened carefully to the recorded interviews and typed them word by word. Then the contexts of each hand-written text were reviewed several times. The texts which were typed in Microsoft Office Word were transferred into a special qualitative data analyzing software called MAXQDA10 version 10.

In order to analyze the data, qualitative content analysis was used (a method used to interpret the content of textual data mentally). Content analysis is beyond the extraction of actual content derived from textual data. It can reveal the hidden themes and patterns from the content of data obtained from participants (Hsieh and Shannon, 2005). In this method, through a systematic categorization, a number of codes and themes are identified. In this method, firstly, meaning units or primary codes are extracted and then these codes are categorized based on similarities. It was attempted to maximize intra-category homogeneity and minimize inter-category heterogeneity, so that no datum would go in two categories. Accordingly, the themes and sub-themes were obtained (Graneheim and Lundman, 2004).
To be certain about the reliability and validity of the qualitative data, recommended criteria of the qualitative data, recommended criteria Guba and Lincoln were used including credibility, conformability, dependability and transferability (Sirati et al., 2012).

To enhance credibility of analysis we review and coded the data, discusses subthemes, and clarified coding (Slade et al., 2009) and sampling with maximum variation done (Graneheim and Lundman, 2004). Dependability was enhanced by accurate transcription, and comparison of audio tapes with transcripts for accuracy and verbal cues. Conformability was enhanced when the same sub themes emerged from the data of transcribes. To enhance transferability we describe of the participants' features, methods of data collection and analysis together with some examples from the participants' discourses Graneheim and Lundman (2009).

RESULTS

The data were obtained from the in-depth interviews conducted with 30 nurses (20 females and 10 males, with mean age34.13 ± 5.5) in Bandar Abbas. The analysis of data revealed 2 main themes, which are as follows: Internal and external barriers.

Theme 1: Internal barriers had the following sub-themes: Lack of time, lack of motivation, inability of planning, prioritizing other activities over sports, fatigue induced by over-work.

Lack of time

Some participants suggested that lack of time to physical activity stemmed from family and work responsibility. The combination of these duties left little time for physical activity.

“Well, I do not find the time for sports at all. I have a 1.5 year-old kid. My husband both works at the telephone company and has a private job. He is absent all afternoons and cannot assist me. So, I have no time” (P2).

“The main reason is time, what we don’t have. I myself after two work-shifts get back home at, say, 9 p.m. About 2 hours I do the house work and go to sleep. I get exhausted; I find no time for sports” (P21).

Lack of motivation

Lack of motivation was one of stated internal barrier to physical activity. Many participants stated that they were just “lazy”.

“Even if I find some time to spare, I would not be in the mood to do exercises. That is, I would not be motivated to do any” (P6).

“One reason could be forgetting about ourselves that is not paying attention to ourselves; in other words our laziness. Whether that is because of overwork or a social or economic matter I do not know. It is the same in the case of sports. If I somehow respect myself, I should find a way to lengthen my life, and prevent injuries. But, we often forget about ourselves” (P7).

Inability of planning

Planning can play a key role in achieving one’s goals. Having the right plans help one to use existent facilities in the best way and adapt to the varying contextual variables. However, inability of planning can have undesirable consequences. A number of participants in this study referred to inability of planning as a barrier to engagement in physical activities.

“...I have no proper planning. Well, this is actually one of my problems. Having no plans can be one reason. I keep saying let’s wait till my child grows, let’s first finish this task; or my husband is absent and does not help me with this and the like” (P2).

“Well, many things occur unexpectedly. For example, I go home; I get everything done and go for a rest. Somebody calls and says she is coming over. Then I have to call off my rest or exercise plans. Or sometimes I suddenly make up my mind to go for a visit and then again cannot do exercises anymore” (P3).

Prioritizing other activities over physical activity

As a number of participants stated, since some individuals prioritize other things in their lives which seem to be more important for them they, therefore, have no time left for sports. As an instance, some of such cases are:

“It has not been acculturated. Health is not yet of a high significance for many of our people. I do not think we pay as much attention to our own health as we do to that of our children’s” (P18).

“...We do not spend time on our own health. The only thing we do in the work place is to deal with patients. At home, we get engaged in house work. In the spare time left we have to either rest or cope with children and their homework. We would spend no time on ourselves and our health” (P26).

Fatigue induced by overwork

Fatigue is induced by excessive activity or use of muscles. Some of the participants stated overwork in nursing as a main barrier for doing physical exercises.

“Well, one reason could be fatigue, because of many shifts or it could be due to laziness” (P4).

“Inadequate number of the nursing force can lead to high work pressure and the fatigue induced by that. All together they stop me from doing exercises” (P13).

Theme 1: External barriers had the following sub-themes: Costs and Rotating working shift
Costs

The cost was an environmental/external barrier for doing physical activity. This issue focused on the high costs of memberships and classes and low income in nurses. “Well, there is the matter of costs as well. With the current status and the salary of the nursing system, they do not seem to be able to pay for sports too” (P15). “Any sport that you choose has its own costs. These days all costs are high. Even I may not be able to pay for them and so choose to leave them” (P18). “Well, one reason could be the costs. When a nurse’s salary is not enough; then s/he first considers the main costs of life such as foods. One other is sport which has its own expenses” (P25).

Rotating working shift

Shift work is a main challenge for those who work in shifts especially nurses. One problem they experience is disorder in their social life. Some participant’s stated to it as a barrier to performing physical exercises: “Unfortunately one problem in our profession is its rotating working shift. Because of that I cannot plan for myself to do sports. If there was a gym or pool in hospitals that would be very effective” (P6). “One problem in the profession of nursing is its swing shifts. The time gyms or swimming pools are open for public use; I am unable to go there” (P9).

DISCUSSION

The current study aimed to explore the physical activity barriers among nurses in Bandar Abbas. Report analysis showed that internal (lack of time, lack of motivation, inability of planning, prioritizing other activities over sports, fatigue induced by over-work) and external (costs and rotating working shift) barriers in physical activity. Lack of time was one of internal barriers in this study. This finding is supported by several studies (Aghamolaei et al., 2008, Reichert et al., 2007, McKenna et al., 1998 and Stutts, 2002). For instance, lack of time was the primary barrier for women in focus groups that have done by Eyler et al., (1998). Also, the Research Society of American Retirees showed that lack of time, fatigue, health problems, and heart problems are considered as the major barriers to physical activities in the middle-aged women (Holmes, 2005).

In spite of these facts that women form a big part of task on community, this matter has not changed the expectations from them. Women still have a major responsibility of caring family, children, and other family members, in addition to their responsibilities outdoors. The combine of responsibilities leaves them with little time for self-care. So, women reported lack of time as a barrier to exercise (Enjezab et al., 2012).

Another sub-theme of internal barriers in this study was lack of motivation. Eyler et al.’s (1998) study which was conducted on women in California and Missouri reported lack of motivation as a barrier to physical activity (Eyler et al., 1998). In their research, Chinn et al. (1999) also referred to lack of motivation as a barrier to physical exercises (Chinn et al., 1999).

Why nurses, despite their knowledge and professional nature which concerns providing public health, do not attention to physical exercises themselves could be due to inadequate self-efficacy or social support. As the study carried out by Eyler et al. (1998) showed that part of lack of motivation seemed to stem from lack of social support(9). Receiving social support from spouse, family or friends can activate one’s participation in physical activities in all groups. Moreover, Nishida et al. (2003) indicated that lack of social support leads to lowered physical activity (Nishida et al., 2003).

Inefficiency at planning was another sub-theme of internal barriers in this study. We were surprised to find this sub them, because this item was not mentioned in other studies.

In order to live in a society, everyone needs individual and social skills. One of the most important individual skills is the ability of planning. Through aging this skill is expected to be acquired. The first step to optimally use one’s precious opportunities and time in life is to have an efficient and correct plan. At the basis of planning lies decision making. Therefore, it can be possible to provide nurses with the required information concerning proper planning principles with the help of instructional media. They can also mention the benefits of planning such as proper utilization of resources and adaptation to contextual variables and, therefore, create the opportunity of executing decisions regularly. Nurses can be encouraged to plan and participate more in physical activities.

Moreover, the findings of this research indicated prioritizing tasks other than exercises as a barrier to engagement in physical activity. This is accordance with the findings of other studies. Kelishadi et al. (2010) showed the prioritizing of studies over sports as one barrier for children’s and teenagers’ (8-18 years of age) engagement in physical exercises in Isfahan (Kelishadi et al., 2010). Teimouri et al. (2010) also revealed that young teenage girls in Sanandaj are faced with a myriad of barriers of adopting an active lifestyle. Such barriers included ‘lower importance of sports than other activities such as doing homework or house work (Taymoori et al., 2010).

This could indicate to the fact that doing physical activity and sports has not yet had its special position in individuals’ life. And, it appears that healthcare providers and supporters need to make more attempts with this aim. All of us should learn that human beings can never find enough time to do all they need to do. Therefore, persons should learn to choose among a great many of
individual responsibilities those which are of a higher significance. It seems that the best method of prioritizing one’s tasks and duties is concerned with the consequences of either doing or not doing it. Physical activity has infinite consequences especially in preventing and treating some diseases. It can also result in liveliness and better mood. Finally, being healthy and lively can, for sure, help people with a better management of house work, care taking of children, better contact with the spouse or colleagues and a more efficient nursing. Therefore, using the required instructions, we can hope that nurses in our country include physical activity in their priority list.

One of the sub-themes of external barriers to physical exercises in this study was determined to be the cost problem. This item has been reported as one barrier to engagement in physical activities in several studies (Allender et al., 2006, Chinn et al., 1999, Hosseini et al., 2012). In a population-based study on people at or above 20 years of age in Brazil that conducted by Reichert et al. (2007) , 40.3% of subjects reported to economic problems as a main barrier to physical activities (Reichert et al., 2007).

Many of the hard-working classes of people including nurses are unfortunately faced with financial problems these days. However, through systemic supports such as contracts with some sport equipment stores or gyms as well as covering a percentage of such costs by the authorities of hospitals, this problem can be to some extent solved.

Rotating working shift was another external barrier in this study. Conduction of this research qualitatively and in the population of nurses can be viewed as strength of this research, since no similar study could be found through the authors’ search of previous studies.

It appears that the required predictions in terms of preparing proper sport facilities for nurses can lead to an improvement in their regular physical activity. As pinpointed by some of the participants, through some systemic supports including contracts with gyms, these hard-working personnel who attempt to public health can be provided with the chance of doing physical activity. This can guarantee their mental and physical health.

Also, findings of this research indicated the fatigue induced by over work as another external barrier to one’s engagement in physical activities.

It seems that since most of the nursing job is done in a standing position, nurses get exhausted and, therefore, try to spend the rest of their time resting. As a result, though they are aware of the benefits of physical activity, they do not engage in it to stay healthy. Unfortunately, the current number of nurses working in the state hospitals of Bandar Abbas is beyond the standard limit. This would impose over-work on them. Employing more work force in the nursing personnel and lowering the load of work on them might be capable of removing this barrier and increasing their engagement in physical activities. Gharghani et al. (2012) sought to determine the effective factors in doing physical exercises among the emergency medical staff of Hamadan province. They found a statistically significant correlation between the frequency of shifts (in hours) and doing physical activities (Gharlipour et al., 2012). Moreover, a significant correlation was found between working hours and doing physical exercises in one’s spare time in the research findings reported by Burton et al. (2000).

CONCLUSIONS

Barriers to physical activity in this study were categorized in two general sub-themes: internal and external barriers. Therefore, if we consider these barriers and attempt to remove them, physical activity can be improved. That would be followed by an improvement in nurses’ health state, a more efficient work force and finally a healthier society.

Limitation

The findings of the qualitative research cannot be generalized to other communities, there are some ways for providing acceptability and objectivity for data and increasing the accuracy of used data, which can help in applying these results for similar communities.

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REFERENCES


