

# A FOCAL GROUP STUDY OF PATIENT'S EXPERIENCES, PERCEPTIONS AND OPINIONS ABOUT NON-HEALTHY BEHAVIORS RESULTING IN LOW BACK PAIN

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**Abstract-** Patients with chronic low back pain hold various perceptions, experiences and beliefs about their pain which are based on prior learning and social influence. This study was employed to earn perceptions and beliefs of patients regarding low back pain to apply in health education planning. Eight focus group discussions including 6-10 people taking part in each of them was performed. Subjects included volunteers who recruited from Rheumatology Research Center of Tehran University of Medical Science and met the criteria including: women, 18 years of age or older, having a lumbar spine disease caused by degenerative disease diagnosed by physician, having a chronic condition existing beyond 90 days and not having experience of surgical operation in last two years. Participants were interviewed regarding two themes: experiences of subjects about non-healthy behaviors resulted in low back pain and the causes of doing these non-healthy behaviors. The results showed that the most common non healthy behavior was hard manual work with improper posture. About 50% of participants stated they had performed hard manual work because they hadn't any knowledge about the effects and consequences of this type of working. The rest of participants mentioned other factors such as lack of belief, positive attitude, skills and social support. This study proposes that factors such as attitude, perceptions and beliefs of patients should be considered in health education planning.

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**Key words:** Low back pain, health education, health behavior, patient's experience, knowledge

## INTRODUCTION

Low back pain is a common problem that affects an estimated 70% to 80% of adults at some point during their lifetime (1). Many patients report

recurrent episodes of low back pain with a variety of intervals and severity. Back pain prevents individuals and their families from engaging in desired activities (2).

Although back pain is common, it is also quite possible to prevent most back problems with simple steps including exercise and adopting correct postures (3). Patients' beliefs about the cause of their pain and anticipated effects of treatments will also influence whether they take up a particular treatment

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and the likely outcome of treatment (4). Belief that the pain is stable and unchangeable is associated with poor compliance with physical and psychological treatments (5). Conversely, patients who believe that they have greater control over their pain, are more likely to participate in and benefit from rehabilitation programs (6).

According to previous studies, cognitive-behavioral therapy and maintenance of exercise have emerged as important management tools for reducing the impact of disability from low back pain (7). In our community many individuals with low back pain do not adopt healthy behavior or have problem doing them. In process of planning a health education program we have to be aware of the reasons of non-healthy behaviors (8). Studies employing in-depth interviews - qualitative methods- are increasingly being used to build models for patient-centered care and health educational programs and are often superior to quantitative approaches when questions about human knowledge, belief, values and meaning of words are explored (9). This qualitative method study - focus group discussion - was employed to earn perceptions and beliefs of patients regarding low back pain to apply in health education planning.

## MATERIALS AND METHODS

In this study we have used group discussion to explore patients' experiences about their non- healthy behaviors resulted in low back pain, and the reasons of doing these non-healthy behaviors.

We had 8 focus group discussions, 6-10 person taking part in each of them. Subjects included volunteers who recruited from Rheumatology Research Center of Tehran University of Medical Science. Participants in this study met the following criteria:

- 1) women, 18 years of age or older (10),
- 2) having a lumbar spine disease caused by degenerative disease or by injury to spine diagnosed by physician (10),
- 3) having a chronic condition existing beyond 90 days (10),
- 4) not having experience of surgical operation in last two years (6),

5) having telephone number and living in Tehran.

The participants were divided based on age (< 45 and > 45) and education (with/without academic education), so that there were 4 groups with 6-10 participants in each. The length of discussing for each group was 1.5 to 2 hours. The participants were provided with oral information about focus group discussion, a consent form and a short researcher designed questionnaire, for collecting demographic details. They were asked to complete the consent form and questionnaire and bring them along to the group.

Focus groups were held at Rheumatic Disease Center which was convenient to the participants and note-takers. The sessions of discussion were guided by a moderator and were audio recorded with the permission of the participants. Discussions were structured around two areas related to the experiences of subjects about non-healthy behaviors resulted in low back pain and the causes of doing these non-healthy behaviors. The moderator used questions and prompts developed earlier through observation and experience from previous studies to generate and facilitated discussion. Strategies to ensure trustworthiness of data collection included expansion and rephrasing of questions to ensure detailed discussion within focus group discussion and participants' verification of the moderator's summaries (11).

## Analysis

Immediately after the discussion the moderator and note-taker listened to the recording and made detailed notes. Data from each group was analyzed separately.

For each groups we read over transcripts several times and then made codes in the margins next to particular statements to delineate the topics that were discussed. The margin codes were reviewed for emergent themes.

Once we had a general sense of the themes we re-read the transcript to gather the data. We then compared themes that emerged from each group. Next we looked for common elements in themes to find whether there was an underlying structure to the experience of health behavior for older or more educated participants.

## RESULTS

The following themes were extracted from the findings of this study.

### Non-healthy behaviors

Participants were asked several questions about what constitute their non-healthy behavior. We asked about this explicitly so responses were not coded as emergent themes. In response, almost all of participants stated that doing hard manual housework especially after marriage, lifting heavy objects without proper posture and hosting a lot particularly for their husbands' family has caused their low back pain. More than 50% of participants responded that they did not adopt recommended back saving body mechanics and correct posture in different position like standing, sitting, walking, sleeping and lifting heavy objects. Another behavior they mentioned was sudden and high risk movements while doing housework. Three women mentioned that they suffered low back pain because of walking for long periods or doing their housework in standing position. Several participants responded that having many pregnancies and deliveries without recommended intervals and doing hard manual work during pregnancy have resulted in their low back pain. Several women explicated that psychological factors and not having spiritual and mental comfort throughout their life caused their low back pain. A few stated not doing exercise regularly and machinery life style have led to low back pain. Three people said their low back pain is due to their age. The rest of opinions each stated by one participant were genetic factor, bad nutrition and cesarean section.

### Causes of non-healthy behavior

#### Predisposing factors (knowledge)

In this theme first we explored the knowledge of the participants about healthy behavior regarding low back pain. The majority of subjects only had partial knowledge about benefits of exercise and proper postures in standing, sitting and sleeping. Although they knew that good nutrition and normal weight are beneficial for their health regarding low back pain in general, they did not know how exercise,

adopting proper posture or decreasing weight can affect the vertebra column and decrease or eliminate low back pain. Also, they had no knowledge regarding the anatomy and physiology of vertebral column, although they were aware of diagnosis of their disease. In response to the question why they did heavy manual housework with improper posture or why they didn't exercise or did not comply proper body mechanics with recommended medical posture, less than 50% of the participants stated they did not know that these behavior which could result in low back pain. One of participants stated: "I thought that I would be always young and would be able to do everything". Some of the participants said: "our parents didn't know these things themselves and consequently didn't tell us anything about. In the other hand, in the past radio and television didn't have programs on health like those they have nowadays and we lived with whatever had been passed from our grandmothers".

#### Predisposing Factors (Belief)

As mentioned above, nearly more than 50% of subjects had some knowledge about healthy behaviors related to low back pain. In this theme they were asked why they did non-healthy behaviors in spite of their knowledge regarding the disadvantages of such behaviors. In response about 50% of participant said that they didn't really believe these behaviors would lead to low back pain.

One of the subjects said: "my mother and mother in law always told me not to lift heavy objects because of back and knee pain in the future but I didn't believe them because I thought I would always remain young". Another participants said: "Whenever I had pain I obey health recommendations but as soon as my pain relieved with resting and taking analgesics, I forgot my low back pain and do the same wrong behaviors".

#### Predisposing factors (Values)

The people with knowledge and belief about the effect of non-healthy behavior on low back pain were asked why they did these behaviors in spite of their awareness and belief. In response, nearly 50% of them stated that they didn't pay attention to their health, and their health wasn't as valuable as their

children or husbands satisfaction and their family's views about them. One woman said: "I was very anxious to clean up my home; so without considering my health, I worked hard. I couldn't sleep comfortably if anything was not in its place. Another one stated: "We paid attention to every unimportant and weary thing but not our health. It was not a priority".

#### **Predisposing factors (Attitude)**

Only a few people said that in going through our knowledge, belief and value we considered our health, we had a positive attitude to health behavior and use all of recommendations in each situation. One participants said: If everyone decides to change herself, she will be able to. I was someone who would clean up the house wholly and replace all of the furniture weekly, but now I cannot do that and I don't do that anymore because my health is more important for me. But the most of the participants said that in spite of having positive attitude, they didn't do exercise and health behavior, so we asked about other factors.

#### **Enabling factors (skills)**

In this theme we asked the participants about their skills to do proper exercise for stretching, strengthening and increasing flexibility of back muscles and other supporting muscles like abdominal and leg muscles. In response the majority of people weren't able to do these exercises properly. Also they did not have skill to use proper body mechanics in everyday activities like standing, sitting and lifting heavy things. One of participant stated: "since I believed exercise is one of the best treatments to decrease low back pain, I began to do it but after doing it I got severe back pain so I didn't continue that". Another woman said: "I didn't know how to do exercise so as soon as I started my pain became worse and I stop doing that". Another one said "I knew I should have done exercise but I didn't know how to". Nearly all of the participants hadn't enough skill to act right. Also in this theme about 50% of women said that they hadn't enough time to do exercise and adopt proper body mechanics.

#### **Reinforcing factors**

In this theme the majority of people said that they

hadn't family support especially from their husband and their children. Several persons said they had been responsible for health of all family members but no one cared for them, as if all of housework was their duties. About less than 50% of participant said that not only they had not any support but also they had to do all the heavy work. Only a few people told that they had been told to do exercise and adopt healthy behavior from health system members like physician or health educator. One participant stated that not only physicians didn't educate her, their statements and behaviors disappointed her.

## **DISCUSSION**

In going through the process of planning a health education program, social, epidemiological and behavioral factors must be considered (8). There are many non-healthy behaviors affecting well being of people. Among health problems some have non-behavioral and some have behavioral causes (12). In this study we assessed only behavioral reasons. As mentioned, the commonest non-healthy behavior among participants in this study was heavy manual work with non-proper body mechanics posture. In another research performed in Iran, hard physical activity was the most important risk factor for low back pain (12).

This study found that improper posture while standing, sitting and lifting is very common and among these, stooping while working and lifting heavy objects is the commonest. Several epidemiologic studies have demonstrated a relationship between LBP and working postures especially stooping (13). According to the findings of this study lack of knowledge, belief and attitude were the main reason for not adopting healthy behavior. Similarly, Symonds *et al.* concluded that use of educational pamphlets in the primary care setting and promoting knowledge of individuals with low back pain, change behavior and alter the number of visits to a physician (14). Cedraschi *et al.* suggested that individuals' attitude and belief are important areas to target to produce behavioral change in response to back pain episode rather than simply targeting behaviors alone (15).

The findings of the study showed that many

participants didn't pay attention to their health because it wasn't as valuable as other things like housework, a finding discussed clearly in value theory and value clarification teaching strategies and well represented in health education literature (8). This study showed that the majority of the participants didn't know the skills of proper exercise and body mechanics. As we said before nearly all of the participants didn't know how to do exercises properly and keep their body mechanics in different postures. Dishman *et al.* stated that only 10-25% of adults living in free market societies are active enough in their leisure time to reap those benefits (16). This study also showed that social and health system support are not adequate whereas the availability of health and social support are strongly related to behavior changing to decrease pain and discomfort (17).

In conclusion, according the findings of this study, in order to improve health behaviors of individuals suffering from low back pain and to encourage patients to do exercise regularly, health educators must increase knowledge and change perception and attitude of patients. This study proposes that in health education planning, factors such as attitude, perceptions and beliefs of patients should be considered.

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