PROFESE ON-LINE
peer-reviewed journal for health professions

ISSN 1803-4330

volume VI/1 • April 2013

Patient's perception of illness – benefits for nursing practice

Eva Vachková

Ústav sociálního lékařství, Oddělení ošetřovatelství,
Lékařská fakulta v Hradci Králové Univerzity Karlovy v Praze

ABSTRACT

Aim: The paper gives information about the first clinical verification of a shortened Czech version of the most widely used questionnaire which enables diagnosing the patient's illness perception – the IPQ-R questionnaire (Moss-Morris et al., 2002). The research had three aims: to evaluate patient's illness perception in a homogenous sample, to evaluate interpretations of the results by nurses including the determination of educational needs of patients, to find out the nurses' opinion on the justified use of the questionnaire in taking nursing history.
Methods: The shortened IPQ-R-CZ (Brief) questionnaire contains 20 items and comparable psychometric parameters as the original "long" version IPQ-R-CZ. It features five variables which characterise patient's illness perception. The observed sample comprised of 100 patients with mostly cardiovascular disease and five nurses who administrated the questionnaires and evaluated them using a key.
Results: The clinical verification showed that it was easy for the nurses to identify specific domains of educational needs based on questionnaire results.
Conclusion: After some changes and verification based on factor analysis, the questionnaire could supplement the nursing history and become the basis for educational process in selected patients.

KEY WORDS

patient, illness perception, questionnaire IPQ-R-CZ, questionnaire IPQ-R-CZ (B), educational needs, nursing diagnosis

INTRODUCTION

Today, the patient usually wants to take an active part in the healing process. The patient believes that he/she can influence the illness; that his/her behaviour matters and wants to know the possibilities and consequences of an illness (Bártlová, 1996). The role has also changed in the sense that the patient searches for information, discusses his/her illness with other people (including co-patients) and creates a so-called "lay perception" of the illness. In nursing – unlike in medicine – the illness does not play the dominant role. That is why it is easier for a nurse to see the person behind a concrete disease. Nurse's professional approach to the patients shows his/her congruence in perception of the patient as a human being together with patient's own conception of the illness and illness perception as a nursing problem. In other words, a professional approach should not lack acquaintance with the patient's subjective conception of the illness. In reality, this means to diagnose patient's illness perception and adjust the patient's education accordingly (Vachková, 2011, p. 93).

AIM

– to verify the shortened version of the IPQ-R-CZ in clinical practice.

Other sub-aim are:
– to evaluate patient's illness perception in a homogeneous sample (cardiovascular disease) of selected patients
– to evaluate the results interpretation by nurses, setting educational needs and identification of educational nursing diagnoses
– to ascertain nurses' opinions on the justified use of the questionnaire for taking nursing history

SAMPLE AND METHODOLOGY

The IPQ-R-CZ (Brief) questionnaire was used based on a Czech version of the IPQ-R (Revised Illness Perception Questionnaire by R. Moss-Morris et al., 2002). The IPQ-R-CZ questionnaire contains 70 items. Based on the modifications by J. Mareš and P. Ježek (2011, p. 84), a shortened version containing 20 items was

created, featuring necessary psychometric parameters. These investigated five variables characterising the patient's conception of the illness. This shortened version was administered by nurses at selected clinical departments. According to our prior analysis and comparison of our Czech version with foreign research (e. g. Song et al., 2007, Giardini et al. 2007, Alsén, 2009), we decided to focus on cardiovascular diseases (Mareš, Ježek, 2010, p. 77). The sample comprised of 100 patients with the following diagnoses: myocardial infarction, angina pectoris, atherosclerotic diseases, valvular heart disease, and lower limb thrombosis. Most of the diseases were of chronic nature. Cardiovascular diseases are connected with life-threatening conditions. The group comprised of 62 men and 38 women. The average age of men was 65 (median 65.5), the average age of women was 65.5 (median 68). The group average was 65 years of age (median 66). The shortened questionnaire was evaluated by five nurses who constituted the second group. They tested the practical use of the questionnaire. In a follow-up survey, they were asked about their experience using the questionnaire and summarised its contribution to knowing the patient better.

RESULTS

The research showed there are some differences in the perception, experience and evaluation of the disease between men and women (see Graph 1). The null-hypothesis of agreement between men's and women's score was tested against the disagreement option. A two-sample t-test was used, non-parametric Mann-Whitney, Kolmogorov-Smirnov tests, respectively. A statistically significant difference was established in the variable Understanding the disease ($p = 0.0341$) and the variable Negative emotion ($p = 0.000046$); the variable Influencing the disease ($p = 0.0759$) and social impact ($p = 0.062$) were on the border of statistical significance. Disease severity has no statistically significant difference ($p = 0{,}454$), it is perceived approximately the same by men and women. There is also a statistically significant difference in the overall average score between men (62 points) and women (67.4 points, see Graph 2). The average score indicates that cardiovascular diseases are mostly perceived by the patients as diseases with a moderately severe impact. This finding corresponds to the educational needs in particular areas as has been identified by the nurses in evaluating the IPQ-R-CZ (B) questionnaire. Using a key to the questionnaire, the nurses identified all five variables: disease severity, influencing the disease, understanding the disease, negative emotions and social impact of the disease.

DISCUSSION

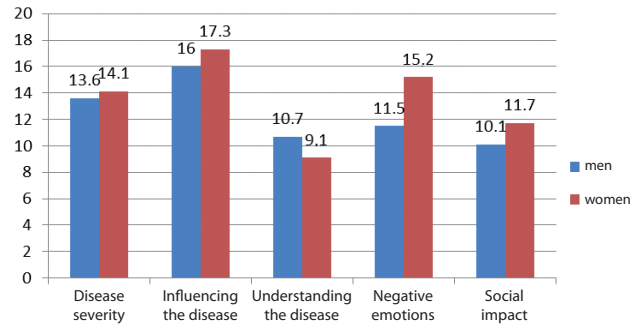
Based on the score next to each of the variables, the nurses identified individual educational needs for a concrete patient. Thus, the subsequent education provided by a nurse was targeted. It is important to note that some patients changed their attitude prior to the education itself: either when filling in the questionnaire (the patient clarified his/her own illness perception in the process), or after the patient was informed about the survey results. Some results were quite surprising even for the nurses, as they revealed that education was necessary in patients with whom it had not been previously expected.

1st **variable:** Disease severity is characterised with four items, the score ranges between 4–20 points. The more points, the more severe the disease is for the patient. As it obvious from the above mentioned research sample results (see Graph 1), the average score was approximately the same in both men (13.6) and women (14.1). According to the health condition and the concrete diagnosis, the nurses evaluated the appropriate perception of disease severity and subsequently – according to the score – the need for education in this particular area. The educational diagnosis, which emerges from the variable disease severity, is connected with the nursing diagnoses reflecting underestimation of the disease, ineffective therapeutic regimen, incorrect nutrition, attitudes to health behaviour, refusing treatment, distrust and non-compliance. The nursing diagnoses are identified as being current as well as potential, including health promotion (see Tab. 1 for details).

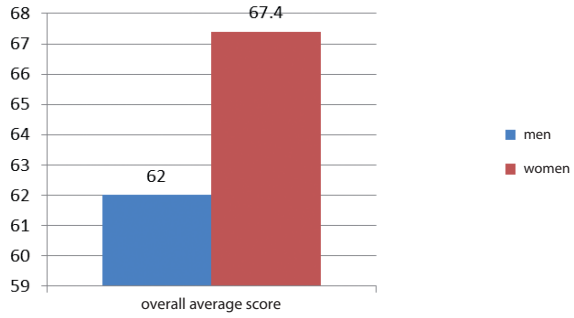
2nd **variable:** The possibility of influencing the disease is characterised with five items, the highest score is 25 points, the lowest 5 points. With this variable, the score was again higher in women (17.3) than in men (16), the difference is on the border of statistical significance.

This variable also depends on the cause of the disease. When the patients feel that they have caused the disease with their own risk behaviour (e. g. smoking, unhealthy diet, etc.), then the possibility of influencing the disease by the patient is perceived as higher, provided he/she changes the behaviour.

The educational need in this area it based on the importance of maintaining the therapeutic regimen, provision of information about the causes of a particular disease and enhancement of a healthy life style based on the patient's history. The identified nursing diagnoses are based in the 1st domain of



Graph 1 Comparison of the average score of each variable between men and women



Graph 2 Comparison of the overall average score between men and women

the NANDA taxonomy, Health Promotion, Health Management (see Tab. 1).

3rd variable: Understanding the disease is represented with three items, with the lowest score of 3, the highest is 15 points. With this variable, there was a statistically significant difference (see Graph 1) between men (10.7) and women (9.1). The score shows that the patients mostly understand the disease, which is a satisfying finding and may attest to good knowledge about a particular disease. The patients trust their own judgement about knowing the disease as well as gaining information from various media. This fact confirms the claim by Bártlová (2005) that the contemporary patient thinks more about his/her own disease and is better informed than it used to be in the past. However – based on the questionnaire results – the need for better education regarding patient's gender was confirmed. Men tend to approach their disease in a more rational way than women and require more factual information. The educational need is linked to the 5th domain of NANDA Taxonomy, Perception/Cognition of the 4th class Cognition, Deficient Knowledge that must be always specified according to the concrete disease (see Tab. 1).

4th variable: Negative emotions are represented with four items: the score ranges between 4–20 points. This variable shows statistically significant differences in the sample (see Graph 1), but this time the score is higher in women (15.2) than in men (11.4). These values correspond with the general higher degree of emotionality in the female gender. Men, despite the disease severity, tend to feel less emotional about it and if they do, they tend to hide their emotions. Analysis of the results shows that the educational need in the area of negative emotions is more frequent in women. The survey research indicates that the **need for social support** in coping with stressing situation is the most important educational need. Unfortunately, in reality we often neglect to educate in this area. We only focus on education related to knowing the disease, the therapeutic regimen, diagnostics, nursing care, changes in attitudes to health behaviour; even though coping with negative emotions may improve some of the somatic symptoms as well as the correct approach to and understanding of the disease. The educational needs in this area are linked to the nursing diagnoses from the 9th domain of the NANDA taxonomy Coping/Stress Tolerance, 2nd class Coping Response. (see Tab. 1).

5th variable: Social impact of the disease is represented with four items – the higher the score, the stronger social impact the disease has on the patient. The score ranges from 4–20 points. In the research sample, the average score in men (10.1) and women (11.7) is, similarly to the 2nd variable, on the border of statistical significance (see Graph 1). Social impact connected with cardiovascular diseases is perceived as having medium strength. It depends on the individual patient's social background.

Social impact is understood from the economic viewpoint, as well as the social perspective where the patient's profession and family play the major role. If the patient has a good social background and social support (e. g. is employed, family relationships are fine, financially secure), the social impact score does not reach higher than 10 points. However, education is sometimes necessary even in this area. The educational need in social impacts is linked to the nursing diagnoses from 7th domain of the NANDA taxonomy Role Relationships, 2nd class Family Relationships (see Tab. 1).

Table 1 Variables in patient's conception of illness – educational needs and their relation to nursing diagnoses (modified according to Herdman, 2010; Marečková, 2006; Vachková, 2010)

Variable – area of education	Domain	Class	Nursing Diagnosis	Code
1. Disease severity	**1. Health Promotion**	**2. Health Management**	Ineffective Self-health management	00078
			Ineffective Health Maintenance	00099
			Ineffective Family Therapeutic Regimen Management	00080
			Readiness for Enhanced Self-Health Management	00162
	2. Nutrition	**1. Ingestion**	Readiness for Enhanced Nutrition	00163
			Imbalanced Nutrition: Less Than Body Requirements	00002
			Imbalanced Nutrition: More Than Body Requirements	00001
		5. Hydration	Deficient Fluid Volume (dehydration)	00027
			Excess Fluid Volume (hyperhydration)	00026
	5. Perception/Cognition	**4. Cognition**	Deficient Knowledge (must be specified)	00126
			Readiness for Enhanced Knowledge	00161
	10. Life Principles	**3. Value/Belief/Action Congruence**	Noncompliance (must be specified)	00079
2. Influencing the disease	**1. Health Promotion**	**2. Health Management**	Ineffective Self-health management	00078
			Ineffective Health Maintenance	00099
			Ineffective Family Therapeutic Regimen Management	00080
			Readiness for Enhanced Self-Health Management	00162
			Readiness for Enhanced Nutrition	00163
3. Understanding the disease	**5. Perception/Cognition**	**4. Cognition**	Deficient Knowledge (must be specified)	00126
			Readiness for Enhanced Knowledge	00161
	10. Life Principles	**3. Value/Belief/Action Congruence**	Noncompliance (must be specified)	00079
	9. Coping/Stress Tolerance	**2. Coping Responses**	Fear	00148
4. Negative emotions			Anxiety	00146
			Ineffective Coping	00069
			Readiness for Enhanced Coping (individual)	00158
5. Social impact	7. Role Relationships	**2. Family Relationships**	Interrupted Family Processes	00060
			Readiness for Enhanced Family Processes	00159

CONCLUSION

We have described the nurses' clinical experience using a shortened, interim version the IPQ-R-CZ questionnaire. We have ascertained that based on the questionnaire results, it is easy for the nurses to determine the precise areas of patients' educational needs and understand the patient's conception of illness better. Based on a detailed analysis, it became clear it is desirable to adjust and re-validate the shortened version IPQ-R-CZ questionnaire with regard to its sensitivity to specific diseases and age categories. We can assume that this version will be useful for nurses, particularly in the area of individualised educational process.

"Supported by the programme PRVOUK P37/09"

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CONTACT DETAILS OF MAIN AUTHOR

Mgr. Eva Vachková
Department of Social Medicine, Department of Nursing, Charles University Faculty of Medicine in Hradec Králové
Šimkova 870
CZ-500 38 HRADEC KRÁLOVÉ
vachkovae@lfhk.cuni.cz