To be motivated or only comply - patients views of hypertension care after consultation training for nurses

Eva Drevenhorn, Ann Bengtson and Karin Kjellgren

Linköping University Post Print



N.B.: When citing this work, cite the original article.

Original Publication:

Eva Drevenhorn, Ann Bengtson and Karin Kjellgren, To be motivated or only comply - patients views of hypertension care after consultation training for nurses, 2015, Health Education Journal, (74), 1, 28-36.

http://dx.doi.org/10.1177/0017896913517106 Copyright: SAGE Publications (UK and US)

1 // // 1 1 //

http://www.uk.sagepub.com/home.nav

Postprint available at: Linköping University Electronic Press http://urn.kb.se/resolve?urn=urn:nbn:se:liu:diva-113729

To be motivated or only comply – patients' views of hypertension care after consultation training for nurses

Drevenhorn E¹; Bengtson A²; Kjellgren KI^{2,3}

¹Department of Health Sciences, Faculty of Medicine, Lund University, Box 117, SE-221 00 Lund, Sweden

²Institute of Health and Care Sciences, The Sahlgrenska Academy, University of Gothenburg, Box 457, SE-405 30 Gothenburg, Sweden

³Department of Medical and Health Sciences, Linköping University, SE-581 85 Linköping, Sweden

Publicerad:

Drevenhorn E, Bengtson A, Kjellgren KI. To be motivated or only comply - patients' views of hypertension care after consultation training for nurses. (2015). *Health Education Journal*, 74(1), 28-36. DOI: 10.1177/0017896913517106

Abstract

Objective: To explore the patients' point of views of hypertension management after consultation training for nurses as part of a randomized, controlled study.

Method: Telephone interviews were conducted with 16 patients in the intervention group (IG) and 8 patients in a control group (CG) three years after nurses' consultation training in primary health care. On a three-day course, nurses were educated in patient centeredness, Motivational Interviewing, the Stages of Change model, guidelines for cardiovascular prevention, lifestyle changes and pharmacological treatment. Further they took part in video-recorded consultation training with simulated patients. A specially designed educational booklet was developed for the patients in the IG.

Results: Of the 16 patients in the IG, 13 reported that their views and former experiences were taken into account and all eight patients in the CG reported the same. Patients in the IG reported that the nurse listened and they had been guided and motivated to perform lifestyle changes. The booklet in the IG was reported to be read several times, but a few patients did not remember receiving it. There were more informed thoughts about how to manage lifestyle in the IG. Patients in the CG were less detailed in their descriptions.

Conclusion: Patients in both IG and CG reported to have made efforts to change lifestyle and patients in the IG reported that they had been coached and motivated by their nurses to do so.

Key words

Hypertension, Motivation, Patient satisfaction, Risk reduction behavior, Attitude

Introduction

For hypertensive patients changing lifestyle means reducing the risk of cardiovascular complications such as stroke and myocardial infarction. In counseling which actually leads to a change of lifestyle, patient centeredness is reported to be effective. Patient centeredness, as defined by Mathews², means a nursing action that "encourages the patients to disclose how they see their own world, what they are experiencing, and the meanings these experiences have for them" (p. 155). This means in practice that the counseling should emanate from the patients' values and view of what is important for them instead of the more paternalistic approach where the health care personnel's view of the patient is the governing factor. When patient centeredness is used, the consultation becomes an empowering process³ where the patients' autonomy is respected and the patient is met with empathy.⁴ This patient centeredness approach has been developed by Miller and Rollnick⁵ into a counseling technique called Motivational Interviewing (MI). MI was first used in counseling on alcohol abuse, but it has been shown to be useful in counseling on different behaviors. This was studied by Rubak and colleagues⁶ in a meta-analysis of 72 studies. The results revealed that, in 64% of the studies using MI in brief encounters lasting 15 minutes, the effect on patient variables such as body mass index, total blood cholesterol and systolic blood pressure could be seen. When lifestyle changes are made after an MI consultation, the advantage is that the patient makes the lifestyle change based on his or her own interest. This means that there is a greater chance that the change will be lasting than if the change is made because someone else demands it or it is made in another person's interest.

In a Swedish study⁷, 20 primary health care nurses were interviewed about their experience of a two-day training course on MI with supervision on four occasions during a period of six months. The results showed that the nurses found the supervision very important in learning

MI. Being an active listener and at the same time remaining passive, i.e. not giving advice or suggestions, was perceived as difficult and requiring a re-programming of their approach to the patient. It was also a great challenge to counsel patients who did not want to take responsibility for their own health. These results confirm other findings^{8,9} that counseling by nurses needs improvement to help hypertensive patients to change lifestyle. When training nurses in counseling methods, it is also important to consider the patients' view of the consultation regarding how helpful the counseling is for changing lifestyle. No studies could be found to have studied this before. The purpose of this study, as part of the larger SOPHI (Nursing management of patients in hypertension care) study, was therefore to explore the patients' point of views of being counseled about hypertension management after consultation training for nurses.

Methods

All nurses (n=213) working at health centers in Sweden with nurse-led hypertension clinics were invited to participate in the SOPHI study. ¹⁰ They were randomized to an intervention (IG) (n=19) or a control group (CG) (n=8). The nurses in the IG participated in a three-day consultation course during 2003-2004. They were trained by the authors (AA, ED, KK) in MI with patient centeredness ¹¹ (Table 1), the Stages of Change model ¹², guidelines for cardiovascular prevention ¹³, lifestyle factors and pharmacological treatment of hypertension and took part in video-recorded consultation training with simulated patients. A booklet which contained information about how to treat the patient according to the stage of change the patient was in was also developed for the nurses. ¹⁴ Another specially designed educational booklet about how to manage hypertension ¹⁵ was developed for the patients in the IG and all of them received one. The design of the booklet was intended to lead the patient from one lifestyle variable to another to obtain the whole picture of their own risk factors. The risk

factors were then gathered at the end where the patient could reflect on which one to start dealing with. Inclusion criteria for all participating patients of both sexes were <75 years of age, being diagnosed with hypertension, systolic blood pressure ≥ 160 mmHg and/or diastolic blood pressure ≥ 90 mmHg, body mass index ≥ 25 kg/m², serum cholesterol ≥ 6.5 mmol/l and/or serum triglycerides ≥ 2.3 mmol/l and not reporting regular physical activity. A more detailed description of the method, course, participants and the three-day residential training is previously reported. 10 Patients in the CG received the usual care. One consecutively included hypertensive patient per nurse participating in the IG (n=16) (three of the 19 nurses in the IG discontinued the study) and in the CG (n=8) were interviewed by telephone using a semi-structured interview guide in 2007. The first available patient (from a list with the consecutively included patients) per nurse answering the phone was interviewed and all of them accepted to participate. Information about what lifestyle changes the individual patient actually had performed was not collected as our interest focused on the patients' point of views of the nurses' counseling. During the study period a decrease was seen in systolic and diastolic blood pressure in both groups. 16 The patients had visited their nurse at least three times during the study period of two years when data was collected. Just as many men as women were interviewed in both groups and there was no significant difference regarding age between the groups (IG m=56.7 yrs; CG m=59.5 yrs).

The questions in the interview guide were developed to reflect how the patients perceived patient centeredness in the consultations and their view of ways of managing their hypertension (Table 2). The questions were designed to capture aspects such as perceived empathy and respect in the counseling, whether the patients had understood the message about how to manage hypertension and whether they had consciously reflected on changing lifestyle to manage their hypertension. Patients in the IG were also asked how they had used

the educational booklet. They were asked if and how many times they had read the booklet and what they thought about it. Further, they were asked if they had made any notes in the booklet and what they had learned from it. The first author (ED) conducted the interviews by telephone. During the interview, notes were taken of what the patients said. Immediately after each interview, the notes were supplemented to make sure that nothing of importance was omitted. The notes were analyzed and categorized by ED according to content analysis 17 using QSR NUD*IST Vivo 1.2 software (QSR International). The authors, AB and KK, verified the analyses and the results were discussed and revised to reach consensus.

The patients participated in the study voluntarily, after receiving oral and written information and after written consent had been obtained. They were also informed that they could interrupt their participation whenever they wanted without giving any reason. The notes from the interviews were treated as confidential data and were only accessible to the researchers.

Results

The telephone interviews lasted for 4-26 minutes (md=9) for the IG and 4-17 minutes (md=7) for the CG. The results of the analysis are presented both numerically and with quotations (excerpts) from the interviews with patients in the IG and the CG.

Perceived patient centeredness

Patients' answers about patient centeredness are presented in Table 3. A few patients in the IG had not perceived that they had been met with empathy (question 1) or that their knowledge and former experience was utilized (question 2). Nine of the 16 patients in the IG and five of the eight patients in the CG said that they did not have more knowledge now compared with when they started visiting the nurse (question 3). The categories, developed from the answers

to the supplementary questions to questions 1 (in what way) and 2 (what would you have wished for), were almost the same for both groups. One exception could be seen in the answers to question 1 about the way in which the patients' views had been met with empathy where the categories "more time needed" and "did her best" were found in the IG, in addition to the joint categories "explains and answers questions", "she is good" and "good staff collaboration". However, when looking more closely at the way the patients expressed themselves, there was a difference. When patients in the IG were asked how they were met with empathy, they gave a more differentiated view (excerpts IG) compared with patients in the CG (excerpts CG) in the category "she is good". Expressing that the nurse had stood by and taken an interest in the patient and been forthcoming was interpreted as a more patient-centered attitude than talking about one's nurse as kind, nice and as "they" indicating a more general attitude and that the patient did not really know who his/her nurse was.

Excerpts IG

"Talk about everything, easy to talk to"

"She stood by me"

"She has taken an interest in me, been forthcoming"

"Just sympathetic"

Excerpts CG

"They are good"

"They are skilled"

"She is kind, nice and considerate"

Answers to question 4 about what had been good with the conversation with the nurse formed the categories information, easy to talk to, questions, motivated, cooperation, don't know and no conversation. How the patients expressed themselves were fairly similar in both the IG and CG. When it came to information the patients in the IG said "we have talked" or "I have been told", while patients in the CG used the words "she tells me what to do" or "I was recommended". There was one unique category "cooperation" for the IG, where one patient said "we are in agreement". One patient in the CG said that "they don't say much, they take my blood pressure, I get the numbers", which formed the category "no conversation".

From the answers to question 5 about what had been poor with the conversations the categories "all good" and "not kept promise" was found in both groups, but the categories "reminded", "lack of time" and "don't know" was found only in the CG. The category "not kept promise" related to two patients who expected to be followed up twice a year but were only called once. The category "reminded" related to a patient who thought that the consultations with the nurse reminded her that she had high blood pressure, which was stressful, as was filling in the study forms.

The categories "coach", "not importunate", "security", "helpful", "understanding", "nothing" and "don't know" were formed from the answers to question 6 about what kind of support the patients had received. The category "coach" was expressed by the patients in the IG as "she has pushed me to think, she has tried to guide me", while patients in the CG said "she has pepped me up, I have pressure on me with the weighing". One patient in the IG also pointed out that "she is not importunate". For one patient in the CG, the category "security" meant coming to the clinic to have his/her blood pressure measured, while, for one patient in the IG, it meant filling in the values of measurements (blood pressure, weight, blood lipids and so on)

in the booklet and the freedom to call at any time. For patients in the IG, the category "helpful" meant "having been backed up, great help". For patients in the CG, however, it meant "I have tried to do as she told me, they take the blood pressure several times". For one patient in the CG, the category "understanding" meant having been given a good idea about the treatment for hypertension.

Patients' point of view of how to treat hypertension

In the IG, nine patients (n=16) stated that they had made some lifestyle changes as an answer to question 7 about if they had changed anything to deal with their blood pressure, whereas six patients in the CG stated to have done so (n=8). The patients who had not made any changes in the IG mentioned "my bad conscience, I haven't done anything" or "I know, but I do nothing", for example. Patients in the CG said, for example, "No, I was sent to the diabetes clinic and to the physiotherapist for lifting techniques". Otherwise, when asked about what they had changed (question 8), patients in both groups mentioned that they had changed their food habits, had started or changed exercising, had lost weight, had stopped smoking, had tried to manage their stress and to lower their intake of salt. Among the patients in the CG, it was observed that they were less detailed in their description of changes in food habits, but mentioned efforts to drink a smaller amount of coffee to lower their blood pressure and stressed the importance of restricted salt consumption.

The answers regarding what the patients thought was most important to do to lower their blood pressure (question 9) was expressed much in the same way in both groups. They mentioned that it was important to reduce or maintain their weight, to exercise, to be aware of what they ate, to take their medicines, to take it easy and to feel good. Patients in the IG also mentioned checking their blood pressure as a way of lowering their blood pressure and one

patient said that he was continuing as usual as he did not perceive any trouble with his blood pressure. A couple of patients in the CG mentioned salt again and one mentioned drinking sour lingonberry juice as the most important thing.

Patients in both groups gave much the same answers about how they planned to continue changing their management (question 10). They were going to continue exercising, pay attention to their food intake, manage their stress and check their blood pressure. One patient in the IG said that he was doing enough. Others said "I don't tend to my blood pressure, I just take medicine", "continue to lose another 10 kg" or "don't think much about it, when you don't feel anything, you don't want to think about it". Examples from the CG were "pull myself together" regarding exercise and food intake and "I'm waiting for an appointment for a follow-up".

Point of views on the booklet in the intervention group

Of the 16 patients in the IG, all of whom had received the booklet, 6 patients had read the booklet 1-3 times, four patients at least 3 times and two patients said that they were still reading the booklet occasionally, while four patients reported that they had not read it. Good things about the booklet were that they could read about hypertension, fill in answers to the questions to mark their own risk profile, while some patients were unable to say what was good. None had written their own notes in the booklet, where space had been left to do so. Some patients said that nothing was poor in the booklet and they had difficulty exemplifying what they had learned from reading the booklet, but some were able to say exactly what they had learned, such as "think about my diet, exercise, cycling twice a week" or "thinking about food and exercise, handling stress". Some said that they now had knowledge about

hypertension and the heart, how things work and what to do, how to eat and that exercise was good for lowering the blood pressure.

Discussion

In the telephone interview, 13 of the 16 patients in the IG reported that their point of views and former experiences were taken into account compared with all eight patients in the CG. Patients in the IG said, however, that they had been guided and motivated to perform lifestyle changes in contrast to the patients in the CG, who had been pepped up or told what to do. The patients in the IG, who all got a booklet as a part of the intervention, reported reading it several times, but a few patients did not remember receiving it.

Some of the interviewed patients were extremely brief in their answers and had difficulty explaining or expressing themselves in more detail when encouraged to do so. This could be explained by the fact that they were not used to being interviewed, especially on the telephone. Silence for reflection is not as comfortable on the telephone as in an individual meeting. The patients in the IG might have had difficulties too, to remember the booklet they had received several years ago, since the interviews were performed three years after the intervention. Also, during these three years we do not know if the nurses in the CG could have got an interest in counseling technique and participated in MI training, which in that case is a confounding factor. Another limitation of the study is the small number of interviewed patients. This was because of the initially difficulties in recruiting nurses to the study. The recruitment ended when the nurses at all health centers in Sweden with a hypertension clinic had been asked. If the number of patients had been larger in the telephone interview or we would have had the opportunity to do the interviews in person, the data might have become richer and a more distinct result might have come forward. To do the interviews in person

was, however, impossible as the patients lived in places all over the country, as they took part in a nationwide multicenter study. Unfortunately we were not able to audio-record the interviews and therefore the collected data for analysis consisted of short written notes.

Furthermore the interviewer was not blinded to whether the patients belonged to the IG or CG, which might have influenced the performance of the interviews. It was nonetheless interesting that a small difference could be seen in the patients' point of views of perceived patient centeredness whether or not their nurse had received consultation training.

Interventions like this are otherwise not easy to evaluate, as behavior, in this case the nurses' counseling, is not easy to keep unvaried over time and with different patients with a different complexity of lifestyle problems.

The effect of the consultation training was seen in the answers from the patients (IG), as they said that their nurses were more engaged and not just good or skilled. The talk about "cooperation" in the IG could mirror the desired way of counseling according to MI.⁵ There may also be a difference between being coached by being pushed to think (IG) and being pressurized by visits for weighing (CG). MI emanates from a patient-centered approach with a cognitive direction, where the patient's own participation in problem solving is crucial. How or to what extent MI is used after training was highlighted in a study with MI-trained general practitioners (GP)¹⁸ counseling patients at increased risk of cardiovascular disease, where the GPs, although trained, were not sensitive to their patients' individual perceptions, thoughts and personal situation. There is also a discrepancy between perceiving security through seeing the nurse for blood pressure measurements (CG) and filling in the values for blood pressure, weight and blood lipids (IG) in a working booklet. The latter can be interpreted as the patients having an interest in having control over their hypertension. A desire to have control could be the result of being motivated to be engaged in one's treatment.¹⁹ Patients in the IG also named

the different important variables (e.g. blood pressure, cholesterol and weight) that were written down in the working booklet. Another difference was that some patients in the CG talked about the nurse as "they", which implies that the continuity maybe was not sufficient. Patients in the IG consistently referred to the nurse as "she" and seemed to have a personal relationship with their nurse. To have a trusting relationship and continuity in care is regarded as valuable both by nurses⁹ and patients.²⁰

Patients in the IG explicitly talked about lifestyle changes as a way of controlling their blood pressure compared with the CG, where some patients appeared not to understand the question about changing lifestyle but said that they were sent to the diabetes clinic or the physiotherapist. Although several lifestyle factors were talked about by the patients, none of them apart from one mentioned alcohol; he said he was aiming to continue to "attend" to it. We know from analyses from other consultations¹⁰ that the nurses from the IG most often talked about alcohol with their patients after the training. What then are the underlying causes that explain why patients did not mention alcohol as one among all the other factors? Rollnik et al. 10 suggest an overall reluctance to talk about alcohol, as it is often perceived as a touchy subject¹¹ and this is apparently confirmed in our data. It is also worth noting how one patient (IG) talked about how to treat hypertension as not wanting to think about it when he/she did not feel any symptoms and another patient in the CG answered that he/she waited for an appointment for a follow-up. This way of dealing with a perceived threat to health is confirmed by the results of Lahdenperä and Kyngäs²¹ interviews with hypertensive patients where some were acting careless while other were serious, adjusted well or felt frustrated. Our intervention by nurses did not totally affect the patients' attitudes to treatment, as there were patients in our study, even one in the IG, who expressed carelessness. This may well be connected to the concepts of monitoring and blunting²², which embraces that patients have

different coping styles when they are faced with a threat of disease and have still not perceived any harm from it. Monitors are highly attentive and sensitized and blunters avoid and minimize threats. Meeting different patients individually depending on their coping styles can affect adherence to treatment. In this case, we do not know how the individual interviewed patients reasoned, as a monitor or a blunter, which could influence their perception of the follow-up visits to their nurse.

Twelve of the 16 patients in the IG remembered that they had read the specially developed booklet¹⁵ and several were still reading it occasionally. This may be interpreted as meaning that the patients had been introduced to the booklet and had not just had it handed over. Furthermore, the booklet was developed to look nice to attract to be opened and to be easy to read.²³

Lifestyle change is most important as the basic initial treatment of moderate hypertension. So counseling on ways of changing behavior should be quality assured in some way. Among MI trainers, there is an on-going discussion about the value of MI practitioners performing authentic audio recordings for their own evaluation to maintain learned skills. The question about how courses are conducted if they are to be called MI training has also been raised²⁴; this is a very important aspect when it comes to performing high-quality nursing in hypertension care. More studies on how MI training courses are conducted and how patients perceive educated nurses' counseling would be of great value for further development of nursing in hypertension care.

Conclusions

After consultation training for nurses in hypertension care, all patients in the CG reported that their point of views and former experiences were taken into account compared with 13 of 16 patients in the IG. Patients in both groups had made efforts to change lifestyle and patients in the IG reported that they had been coached and motivated by their nurses to do so.

Ethical approval

This multi-center study was approved by the Local Ethics Committee at the Faculty of Medicine, Gothenburg (Ö363-00).

Declaration of conflict interests

The authors declare that they have no competing interests.

Authors' contributions

ED, AB and KK designed the study and analyzed the data, and ED and KK led the writing of the manuscript. All authors read and approved the final version.

Table 1. Criteria for patient centeredness in counseling ¹¹

Using open questions

Using expansive ways of putting questions

Reflecting on what is said

Perhaps provoking the patient

Allowing pauses

Identifying the patient's perceived threats to health

Identifying the patient's perceived vulnerability to complications

Making it easier for the patient to obtain and assimilate relevant knowledge

Helping the patient to see opportunities for changing behavior

Helping the patient to weigh up the pros and cons for changing behavior

Identifying the patient's beliefs in the power of changing behavior

Negotiating the reason for behavioral change

Negotiating where the patient should start his/her behavioral change

Negotiating the goal for changing behavior

Negotiating the behavior the patient should change

Summarizing the counseling

Table 2. Questions put to the patients to comprise perceived patient centeredness and patients' view of how to treat hypertension.

Perceived patient centeredness

1. Have your views or problems been met with empathy?

If yes, in what way? If no, what would you have wished for?

2. Was your former knowledge and experience utilized?

If yes, in what way? If no, what would you have wished for?

- 3. Do you have more knowledge about hypertension now than before?
- 4. What has been good about the conversations with the nurse?
- 5. What has been poor about the conversations?
- 6. What kind of support have you received from the nurse to treat your hypertension/health?

View of how to treat hypertension

- 7. Have you changed anything to deal with your blood pressure?
- 8. What have you changed/not changed?
- 9. What is the most important for you to do to lower your blood pressure?
- 10. What are you planning to continue to change to treat your blood pressure?

Table 3. Patients' perception of patient centeredness.

	Intervention			Control		
	n=16			n=8		
Question	Yes	No	Don't know	Yes	No	Don't know
1. Met with empathy	13	2	1	8	0	0
2. Knowledge and experience utilized?	11	2	3	8	0	0
3. More knowledge now than before?	9	6	1	5	3	0

References

- 1. van Weel-Baumgarten E. Patient-centred information and interventions: tools for lifestyle change? Consequences for medical education. *Fam Pract*. 2008; 25 Suppl 1: i67-70.
- 2. Mathews B. Measurement of psychological aspects of the nurse-patient relationship. *Nurs Res.* 1962; 11: 154-62.
- 3. Holmstrom I and Roing M. The relation between patient-centeredness and patient empowerment: a discussion on concepts. *Patient Educ Couns*. 2010; 79: 167-72.
- 4. Mason P and Butler C. *Health behavior change: a guide for practitioners*. Edinburgh: Churchill Livingstone, 2010.
- 5. Miller WR and Rollnick S. *Motivational interviewing preparing people for change*. 2nd ed. London: The Guilford Press, 2002.
- 6. Rubak S, Sandbaek A, Lauritzen T and Christensen B. Motivational interviewing: a systematic review and meta-analysis. *Br J Gen Pract*. 2005; 55: 305-12.
- 7. Söderlund L, Nilsen P and Kristensson M. Learning motivational interviewing: exploring primary health care nurses' training and counselling experiences. *Health Educ J.* 2008; 62: 102-9.
- 8. Johansson K, Leino-Kilpi H, Salanterä S, et al. Need for change in patient education: a Finnish survey from the patient's perspective. *Patient Educ Couns*. 2003; 51: 239-45.
- 9. Eriksson I and Nilsson K. Preconditions needed for establishing a trusting relationship during health counselling an interview study. *J Clin Nurs*. 2008; 17: 2352-9.
- 10. Drevenhorn E, Bengtson A, Allen JK, Säljö R and Kjellgren KI. Counselling on lifestyle factors in hypertension care after training on the Stages of Change model. *Eur J Cardiovasc Nurs*. 2007; 6: 46-53.
- 11. Rollnick S, Mason P and Butler C. *Health behavior change: a guide for practitioners*. Philadelphia: Churchill Livingstone, 2002.
- 12. Prochaska JO and DiClemente CC. Transtheoretical therapy: Toward a more integrative model of change. *Psychol Psychother-T* 1982; 19: 276-88.
- 13. de Backer G, Ambrosioni E, Borch-Johnsen K, et al. European guidelines on cardiovascular disease prevention in clinical practice. Third joint task force of European and other societies on cardiovascular disease prevention in clinical practice. *Eur Heart J*. 2003; 24: 1601-10.
- 14. Drevenhorn E, Bengtson A, Norvinsdotter Borg I and Kjellgren K. *Att följa sin behandling steg för steg vägledning för sjukvårdspersonal (Following one's treatment step by step instructions for healthcare personnel)*. Stockholm: Skire Project, 2003.
- 15. Drevenhorn E, Bengtson A, Norvinsdotter Borg I and Kjellgren K. *Att följa sin behandling steg för steg arbetshäfte för patienter (Following one's treatment step by step working booklet for patients)*. Stockholm: Skire Project, 2003.
- 16. Drevenhorn E, Bengtson A, Nilsson MP, Nyberg P and Kjellgren KI. Consultation training of nurses for cardiovascular prevention a randomised study of 2 years duration. *Blood Press.* 2012; 21: 293-299
- 17. Krippendorff K. *Content analysis an introduction to its methodology*. 3rd ed. London: Sage, 2013.
- 18. Kehler D, Christensen B, Lauritzen T, Christensen MB, Edwards A and Bech Risor M. Cardiovascular-risk patients' experienced benefits and unfulfilled expectations from preventive consultations: a qualitative study. *Qual Prim Care*. 2008; 16: 315-25.
- 19. Butterworth SW. Influencing patient adherence to treatment guidelines. *J Manag Care Pharm.* 2008; 14: 21-4.

- 20. Baker R, Boulton M, Windridge K, Tarrant C, Bankart J and Freeman GK. Interpersonal continuity of care: a cross-sectional survey of primary care patients' preferences and their experiences. *Br J Gen Pract*. 2007; 57: 283-9.
- 21. Lahdenperä TS and Kyngäs HA. Levels of compliance shown by hypertensive patients and their attitude toward their illness. *J Adv Nurs*. 2001; 34: 189-95.
- 22. Miller SM, Brody DS and Summerton J. Styles of coping with threat: implications for health. *J Pers Soc Psychol*. 1988; 54: 142-8.
- 23. Pierce LL. How to choose and develop written educational materials. *Rehabil Nurs*. 2010; 35: 99-105.
- 24. Söderlund LL, Madson MB, Rubak S and Nilsen P. A systematic review of motivational interviewing training for general health care practitioners. *Patient Educ Couns*. 2011; 84: 16-26.