

Literature Study: Motivational Interviewing As One of Effective Interventions To Improve Self-Behavior In Chronic Disease Patients

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Abstract

Background. Motivational Interviewing has been used as an alternative intervention that has a positive impact on behavior change in health. Some studies said motivational interviewing directs patients to behave positively in dealing with various health problems due to chronic diseases. **Purpose.** This Literature Study was conducted to determine the effectiveness of motivational interviewing as one of the interventions to improve self-behavior because of the effect of chronic diseases. **Method.** A comprehensive searching was carried out using all health research databases. In this study, it was necessary to identify the effects of Motivational Interviewing that used a systematic review design. **Conclusion.** Motivational Interviewing could be provided by all family members of patients independently and sustainably. Motivational Interviewing could have a positive effect on the affirmation of achieving health goals to be achieved, provide problem solving for the difficulties of solving problems and as a measure of the strength of the patient's commitment in changing his health behavior.

Keywords: Motivational Interviewing, chronic disease

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Introduction

Chronic diseases such as diabetes, heart disease and obstructive pulmonary disease have increased in the last decade. According to the results of the Basic Health Research (Riskesdas) in 2007, 2013 and 2018, there was a tendency towards an increase in the prevalence of PTM such as diabetes, hypertension, stroke, and joint / rheumatic / gouty diseases. This phenomenon is predicted to continue (Ministry of Health Indonesia, 2019). Chronic disease is a disease with a slow journey and a long process. Chronic diseases usually have several causes that arise at one time. The cause of chronic diseases is usually due to heredity, lifestyle factors, exposure factors from the surrounding environment and psychological factors (Lorig et al., 2006).

Chronic diseases cause other diseases and can cause physical function loss. Some people are of the opinion that the symptoms of chronic diseases are interrelated such as if pain arises then it will cause shortness of breath, fatigue etc. The emergences of some of these causes make the body's condition worse (Lorig et al., 2006).

The cause of this chronic disease can be prevented or by changing the course of the

disease associated with symptoms with health education media or with support. Chronic illness is associated with poor quality of life and the impact of hospitalization. Chronic disease affects the ability of self-care in patients who have an impact on the family and social environment (Chen et al., 2018). Health behaviors in chronic diseases are based on theories of change in behavior change. Health behavior can be oriented to promotive, preventive, curative and rehabilitative aspects (New Zealand Guidelines Group, 2011).

A model or program of behavior change with motivational interviewing has proven to be effective in targeting changes in the behavior of chronic disease conditions namely diabetes, COPD, asthma and hypertension. Motivational interviewing is based on the theory of behavior change, social learning theory, trans-theoretical model, self-regulation and theory of action and reaction (New Zealand Guidelines Group, 2011). The purpose of Literature study was to review the effectiveness of motivational interviewing as an intervention to improve self-behavior due to chronic disease.

Methods

This study used a systematic review design. Combine systematic review motivational interviewing with different outcomes or objects from various populations and chronic disease conditions. Literature review is sought by using EBSCO with further searches using full text Medline. Advanced search used a combination of keywords: motivational interviewing, self management, chronic disease. This literature review used a literature review design. To minimize the risk of bias, all methods were developed and documented previously classified in accordance with the criteria for inclusion, namely: using a randomized controlled trial, motivational interviewing population, its intervention compared with cognitive therapy, social therapy. Motivational interviewing the results measured is the response behavior and self care index. After finding some results to these searches, the references and articles were chosen and checked in according to the inclusion criteria. All the research has been done in accordance with

the criteria of analysis and synthesis through data extraction and assessed quality. This assessment was done using a tool for CASP RCT. Quality assessment studies were done on an individual basis. At least 4 relevant articles were selected for review. After finding some results to these searches, the references and articles were chosen and checked in according to the inclusion criteria. At least 4 relevant articles were selected for review.

Results

The searching of research articles was done by searching for motivational interviewing, chronic disease. The search results carried out using these keywords in selected data bases were then examined one by one to get eligible to produce 4 articles which were then analyzed for quality. The method of searching for articles can be seen in the table below. The results of the four article reviews and data extraction can be seen in the following table

Research	Method	Objective and starting condition	Description of the technique	Main variables	Measured	Result achieved statistical significance/ summary of the finding
(Chen et al., 2018)	experiments	to investigate the effect of motivational interviewing on the self-care behaviours in patients with chronic heart failure	The intervention group receives 4 2 . The control group receives traditional health education 1	1. Session 1 focused on building a trusting relationship with the patient; and learning about the problems by inquiring about the patient's main symptoms, subjective feelings, lifestyle, disease control experience, psychology, and difficulties throughout the course of illness 2. Sessions 2 and 3: These sessions focused on seeking out solutions for self-care problems. The investigators encouraged the patients to talk about the difficulties when changing behaviours and	Kelompok intervensi diberi waktu 8 minggu Dengan diskusi efek perubahan perilaku pada status kesehatannya, hidupnya, pekerjaan dll, mendorong pasien untuk mengemukakan kesulitan dalam merubah perilaku, mendorong	Before intervention, the self-care behaviours scores were 79.00 ± 48.80 in the intervention group and 88.68 ± 29.26 in the control group. No statistically significant differences were found between two groups in scores for each subscale and total scale ($P > 0.05$). After intervention, the scores of self-care behaviours in the two groups were both

				<p>guided the patients to think about ways of solving these problems. The usual questions were as follows: 1) which behaviour do you think need to be changed? 2) What do you worry about when you change these behaviours? 3) How do you think about your choices? 4) What is the ideal situation for you? 5) What good results do you think you can obtain, if you make the change? 6) What do you think you ought to do next? Let patients list out the solutions themselves Session 4: Investigators and patients confirmed the planned behavioural changes together. The</p>		<p>improved at 155.13 ± 35.65 for the intervention group and 115.44 ± 22.82 for the control group with statistically significance ($P < 0.01$). The score of self-care behaviours increased by 76.13 point in the intervention group on average, whereas 26.76 point in the control group. There was significant difference between increases in scores of self-care behaviours in two groups ($P < 0.01$)</p>
(Ma, Zhou, Zhou, & Huang, 2014)	<p>A randomised controlled trial was used. One hundred and twenty eligible participants were randomly assigned to either the control group (usual care group) or the intervention group (motivational interviewing group)</p>	<p>This study tests the effectiveness of motivational interviewing compared with the usual care for Chinese hypertensive patients</p>	<p>1. The intervention group received 4 sessions The control group received traditional health education</p>	<p>It focused on the patients' behaviour changes, such as taking medication on time, healthy dietary habits, regular physical activity, drinking and smoking cessation and reducing stress. An MI-based counselling protocol was established, which included the following steps: (1) build rapport with the patients; (2) evaluate the patients' confidence and motivation for behaviour changes and their self efficiency; (3) help the patients become aware of and address the ambivalence blocking their behaviour to change;</p>	<p>The results revealed that the SBP and DBP of the intervention group decreased compared with ones of the control group over MI counselling, the difference values were 4.92 and 2.58, respectively, which had a statistical difference between two groups. There was a significant drop between the baseline vs. post intervention in BP values for the MI group and a slight decrease</p>	<p>The results of this study demonstrated that the total scores and the mean scores for each dimension of the adherence questionnaire were increased in the intervention group ($P < 0.05$), and the systolic blood pressure and diastolic blood pressure of the hypertensive patients greatly decreased in the intervention group during the six months of the motivational interviewing counselling ($P < 0.05$)</p>

				(4) help the patients find the discrepancies between their values and their current behaviours; (5) provide strategies of adherence to behaviour changes; (6) summarise the pros and cons of the proposed behaviour changes; (7) set realistic and specific goals for behaviour modification; (8) prompt the patients to follow the plan for behaviour change; and (9) provide an overall summary of the MI session and the patients' performances	between the baseline vs. post intervention in BP vales for the usual care group. There were no statistically significant differences in the laboratory indices between the two groups and within the subjects in the groups	
(Frost et al., 2018)	A systematic review of reviews	to appraise and synthesise the review evidence for the effectiveness of Motivational Interviewing on health behaviour of adults in health and social care settings.	Searches identified 5222 records. One hundred and four reviews, including 39 meta-analyses met the inclusion criteria. Most meta-analysis evidence was graded as low or very low (128/155). Moderate quality evidence for mainly short term (<6 months) statistically significant small beneficial effects of Motivational Interviewing were found in 11 of 155 (7%) of meta-analysis comparisons. These outcomes include reducing binge drinking, frequency and quantity of alcohol consumption, substance abuse in people with dependency or addiction, and increasing physical activity participation	Reviews using structured, pre-planned methods to synthesise research studies addressing a clearly defined topic or research question (which could comprise either quantitative, qualitative or mixed methodology) • Published from January 2000 • Interventions described as Motivational Interviewing or Motivational Enhancement Therapy (MET) delivered in any format (e.g. face to face, online, group, text or telephone) • English language • Interventions focused on adults	Two reviewers (PC and HF) categorised each review into one of four of the following domains depending on the focus of the review. Domain 1: Stopping or preventing an unhealthy behaviour Domain 2: Promoting healthy behaviour for a specific problem Domain 3: Behaviour change for multiple health related problems and /or multiple behaviour-problems Domain 4: Behaviour change in specific settings Reviews in Domain 1 and 2 were then subgrouped by HF and PC	Searches identified 5222 records. One hundred and four reviews, including 39 meta-analyses met the inclusion criteria. Most meta-analysis evidence was graded as low or very low (128/155). Moderate quality evidence for mainly short term (<6 months) statistically significant-small beneficial effects of Motivational Interviewing were found in 11 of 155 (7%) of meta-analysis comparisons. These outcomes include reducing binge drinking, frequency and quantity of

					according to the main health behaviour or problem	alcohol consumption, substance abuse in people with dependency or addiction- and increasing physical activity participation
(O'Kane et al., 2019)	Using mixed-methods pilot data from an MI-based obesity prevention intervention delivered via home visits by health educators (HEs) with 44 families (n = 17 four home visit group; n = 14 two home visit group), we examined: 1) fidelity of MI adherence by HEs; 2) parents' perceptions of the intervention ; and 3) HEs insights pertaining to the intervention 's deliver	This study explored the feasibility and acceptability of using Motivational Interviewing (MI) in the home setting with families of preschoolers	1. Motivational interviewing fidelity assessment 2. Assessment of health educator perceptions 3. Assessment of parent perceptions		1) HEs' MI fidelity using the Motivational Treatment Integrity (MITI) coding system; and 2) parents' and HEs' experiences with and perceptions of MI delivered within the home setting	Multiple measures of MI fidelity were deemed to exceed defined proficiency levels. Ninety-three percent of families reported being "satisfied" to "very satisfied" with the intervention. HEs reported building a high level of trust with families and gaining a thorough understanding of familial context. Parents appreciated how HEs' were knowledgeable and provided personalized attention when discussing health goals. Some parents suggested more directive advice and follow-up visits as ways to improve the intervention

Discussion

Chronic illness is a picture of disease with symptoms that appear slowly and are identical to how individuals are able to manage themselves and initiate themselves to change behavior into healthy living (Engelen et al., 2019). Self-

management in patients with chronic disease is an effort of strong self-ability to be able to prevent the cause of disease, manage symptoms, treatment, physical and psychological effects and lifestyle changes due to chronic illness (Engelen et al., 2019)

Behavior change is expected to be carried out throughout the life cycle of patients with chronic diseases. Behavioral change is carried out with behavioral change counseling including motivational interviewing (Gruhl & Leuven, 2014). The effectiveness of motivational interviewing depends on the background of the population with different kinds of health problems and chronic illnesses suffered. From some studies say that motivational interviewing sometimes there are some conflicts. This conflict can be handled by knowing the obstacles and the reviewer can practice interventions based on evidence based practice (Frost et al., 2018).

The implementation of motivational interviewing involves reviewers, policy holders and research so that the implementation of motivational interviewing can be of good quality and has the power of individuals to carry out the program being run (Frost et al., 2018)

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