



Intrinsic Motivation in The Development of Motivational Interviewing Method for Compliance Programs in Hypertension Patients

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ABSTRACT

Hypertension is a non-communicable disease and a major contributor to global mortality, including in Indonesia. Uncontrolled hypertension over a prolonged period can lead to arterial damage and adversely affect organs supplied by these blood vessels. Increased blood pressure places excessive workload on the heart, impairing its ability to pump blood effectively. Furthermore, hypertension increases the risk of stroke, kidney failure, hypertensive retinopathy, and even blindness. Efforts to control blood pressure require not only medical management but also strong internal motivation from patients. This study aimed to explore the internal motivation of hypertensive patients in controlling blood pressure through "OBEY" behavior. This study employed a qualitative research design using Focus Group Discussion (FGD). The participants were patients diagnosed with hypertension. The analysis identified key themes related to the implementation of "OBEY" behavior among hypertensive patients. The findings of this study are expected to serve as a basis for developing a Motivational Interviewing module tailored for hypertension patients to improve adherence and blood pressure control.

Keywords: Intrinsic Motivation, Motivational Interviewing, Hypertension.

ABSTRAK

Hipertensi merupakan penyakit tidak menular dan menjadi salah satu penyebab utama kematian di seluruh dunia, termasuk di Indonesia. Hipertensi yang tidak terkontrol dalam jangka waktu lama dapat menyebabkan kerusakan arteri serta berdampak buruk pada organ-organ yang disuplai oleh pembuluh darah tersebut. Tekanan darah yang tinggi meningkatkan beban kerja jantung sehingga mengganggu kemampuannya dalam memompa darah secara efektif. Selain itu, hipertensi juga meningkatkan risiko terjadinya stroke, gagal ginjal, retinopati hipertensi, bahkan kebutaan. Upaya pengendalian tekanan darah tidak hanya memerlukan penatalaksanaan medis, tetapi juga motivasi internal yang kuat dari pasien. Penelitian ini bertujuan untuk mengeksplorasi motivasi internal pasien hipertensi dalam mengontrol tekanan darah melalui perilaku "OBEY". Penelitian ini menggunakan desain kualitatif dengan metode Focus Group Discussion (FGD). Partisipan dalam penelitian ini adalah pasien yang didiagnosis menderita hipertensi. Hasil analisis mengidentifikasi tema-tema utama terkait penerapan perilaku "OBEY" pada pasien hipertensi. Hasil penelitian ini diharapkan dapat menjadi dasar dalam pengembangan modul Motivational Interviewing bagi pasien hipertensi untuk meningkatkan kepatuhan dan pengendalian tekanan darah.

Kata Kunci: Motivasi Intrinsik, *Motivational Interviewing*, Hipertensi.

INTRODUCTION

Hypertension is a non-communicable disease (NCD) that remains the leading cause of death globally each year. It is often referred to as the silent killer because it typically presents without noticeable symptoms (Ozougwu, 2019; Hastuti, 2020; Balwan, & Kour, 2021; Pokharel, Karmacharya, & Neupane, 2022; Wandile, 2024). Based on data from the Sehat Indonesiaku Application (ASIK), as of 2023, 47,405,179 individuals have undergone hypertension screening, with 20,938,684 classified as prehypertensive and 13,277,697 diagnosed with hypertension (Lukmenda, & Jiu, 2025). However, only 458,924 individuals have their blood pressure under control (Kementerian Kesehatan Republik Indonesia, 2024). These findings indicate a substantial

gap between diagnosis and effective management. Nationally, the prevalence of hypertension in Indonesia reached 30.8% in 2023, further emphasizing the urgency of addressing this public health issue.

At the regional level, data from the Health Service (2023) in Padang City show that essential hypertension is the most common disease treated in community health centers, affecting 93,684 individuals. Additionally, 419 families were included in assistance programs for moderate and severe hypertension cases across community health centers in 2023. Among these, Andalas Health Center recorded the highest number of hypertension cases, with 6,303 patients. These data highlight that hypertension remains a dominant health problem not only nationally but also locally, requiring more effective and sustainable control strategies (Mashuri, Ng, & Santosa, 2022).

If not properly managed, hypertension can lead to severe complications, including arterial narrowing, reduced blood flow, heart disease, brain and kidney damage, and retinal blood vessel rupture, which may result in blindness (Venkat, Chopp, & Chen, 2017; Rim et al., 2020; Singh et al., 2020; Kropp, 2023). Therefore, effective hypertension control is essential to prevent long-term morbidity and mortality. In Indonesia, hypertension management is implemented comprehensively through the "PATUH" program, which includes regular health check-ups, adherence to medical treatment, maintaining a balanced diet, engaging in safe physical activity, and avoiding cigarette smoke, alcohol, and other harmful substances (Kementerian Kesehatan Republik Indonesia, 2024).

Despite the availability of such programs, the success of hypertension control largely depends on the patient's adherence and active participation, which are strongly influenced by individual motivation. In this context, "OBEY" behavior reflects the patient's compliance with recommended health practices. Motivation plays a crucial role as a driving force in shaping such behavior. It can be categorized into intrinsic and extrinsic motivation, with intrinsic motivation considered more influential because it originates from within the individual without external stimulation (Morris et al., 2022; Mercader-Rubio et al., 2023; Urhahne, & Wijnia, 2023). Intrinsic motivation is closely related to an individual's need for competence and autonomy in decision-making (Zychová, Fejfarová, & Jindrová, 2024). Factors influencing intrinsic motivation include needs, expectations, and interests, as well as knowledge, behavioral awareness, perception, and cues.

One approach to enhancing intrinsic motivation is through motivational interviewing, a counseling method that aims to elicit behavioral change by strengthening an individual's internal motivation. This approach is expected to foster awareness of maladaptive behaviors and encourage the adoption of healthier behaviors, ultimately improving blood pressure control among hypertensive patients.

However, previous studies have predominantly focused on clinical management and general adherence programs such as "PATUH," with limited exploration of the internal motivational aspects that drive "OBEY" behavior among hypertensive patients, particularly using qualitative approaches. Moreover, there is a lack of context-specific models or modules that integrate motivational interviewing with patient behavior in hypertension management.

Therefore, the novelty of this study lies in exploring the intrinsic motivation of hypertensive patients in the context of "OBEY" behavior using a qualitative approach, which will serve as the basis for developing a motivational interviewing module tailored to hypertension management. This study aims to explore the intrinsic motivation of hypertensive patients in controlling blood pressure through "OBEY" behavior.

RESEARCH METHODS

This study employed a qualitative research design to explore the intrinsic motivation of hypertensive patients in relation to compliance ("OBEY") behavior in blood pressure control. A Focus Group Discussion (FGD) approach was used as the primary method of data collection to obtain in-depth insights into participants' experiences and perspectives.

The study was conducted at Andalas Health Center from March to November 2024. The participants consisted of 36 individuals diagnosed with hypertension, including adults, pre-elderly, and elderly groups. Participants were selected using a purposive sampling technique based on

inclusion criteria, namely patients diagnosed with hypertension and willing to participate in the study.

Data were collected using a semi-structured guide containing open-ended questions focused on compliance (“OBEY”) behavior in hypertension management. The FGD sessions were conducted in several groups to facilitate active discussion, with each session guided by a trained moderator and supported by a note-taker. All discussions were documented through audio recordings and field notes to ensure data completeness.

Data analysis was performed using thematic analysis. The researchers transcribed all FGD recordings verbatim, followed by data reduction, coding, categorization, and identification of emerging themes based on participants’ statements. To ensure the credibility and validity of the data, triangulation techniques and peer debriefing were applied during the analysis process.

RESULTS

The results of the Focus Group Discussion (FGD) revealed several themes related to hypertension control behavior based on the “OBEY” concept, which includes regular health checks, adherence to treatment, maintaining a healthy diet, engaging in physical activity, and avoiding risk factors. Findings are presented based on age groups: adults, pre-elderly, and elderly.

Regular health check-ups and adherence to medical advice

Among adult participants, most reported routinely attending monthly health check-ups at nearby health facilities, as reflected in the statement: *“Have had a health check once a month at the nearest health facility”* (P2, P3, P4, P6, P7, P10, L1, P11). Some participants expressed strong motivation driven by family responsibilities, such as *“I have carried out a health check once a month, because I remember that the children at home are still small”* (P5). However, barriers such as lack of transportation and low motivation were also identified, for example: *“There is a desire to come... but there are many obstacles such as no one to take them”* (P1) and *“Rarely do check-ups... because they are lazy”* (P8, P9).

In the pre-elderly group, most participants reported consistent monthly check-ups (*“Since hypertension is routinely controlled every month...”* (L1, P1, P2, P3, P4, P5, P6, P7, L3, L4, L5)), although time constraints remained a barrier (*“It is rare... because there is no time”* (L2)).

Among elderly participants, regular visits were also common; however, some expressed fatigue and decreased motivation due to long-term illness (*“I’ve had hypertension for more than 10 years and I’m tired...”* (P5)). Other barriers included lack of time and perceived ineffectiveness of treatment (*“because there is no effect”* (L1)).

Adherence to appropriate and regular treatment

In the adult group, several participants reported good adherence to medication (*“Regularly taking medication”* (P2, P4, P5, P6, L1, P11)). However, some expressed concerns about side effects (*“my heart beats”* (P1)) and doubts about effectiveness (*“but there is no effect on blood pressure”* (P3)). Non-adherence was also reported due to forgetfulness, fear of complications, or preference for alternative remedies such as cucumber consumption (P7, P9, P10).

Among pre-elderly participants, most reported taking medication regularly once a day (P1, P2, P4, P6, L5), although limited time to access health services remained a challenge (L2).

In the elderly group, although routine visits were reported, similar barriers emerged, including fatigue in long-term treatment, limited time, and perceived lack of treatment effectiveness.

Maintaining a healthy diet and balanced nutrition

Adult participants demonstrated varying levels of adherence to dietary recommendations. Some reported healthy practices such as consuming fruits and vegetables and reducing salt intake (*“I regularly consume fruit and vegetables, and reduce salt”* (P1)). However, many participants admitted difficulty maintaining dietary patterns (*“Difficult to regulate eating patterns”* (P2, P6, P9, L1, P11)).

Pre-elderly participants generally showed better awareness of dietary restrictions, including avoiding fatty foods and limiting hypertension-triggering foods. Nevertheless, unhealthy habits such as frequent snacking, eating outside, and lack of dietary knowledge were still reported (“*Not knowing about food information...*” (L5)).

Among the elderly, some participants reported limiting certain foods, but others indicated no dietary restrictions and continued consumption of high-fat foods such as coconut milk-based dishes (“*I often eat coconut milk and curry that is reheated repeatedly*” (P3)).

Engagement in safe physical activity

In the adult group, physical activity varied widely, ranging from regular jogging (“*Jogging every day*” (P1, P3, L1)) to irregular exercise or sedentary behavior (“*Rarely exercise*” (P6, P9, P11)). Some reported simple activities such as walking around the house or climbing stairs.

Pre-elderly participants generally demonstrated higher engagement in physical activity, including daily exercise and exercising up to five times per week. Activities included walking around the neighborhood and structured exercise routines.

In contrast, elderly participants tended to engage in light physical activity such as leisurely walking. However, physical limitations such as knee pain and increasing age reduced their ability to perform regular exercise (“*Unable to walk, often has pain in the knee*” (P3)).

Avoidance of cigarettes, alcohol, and other harmful substances

In the adult group, exposure to cigarette smoke at home was still common among participants (P1–P11), and some participants continued smoking despite attempts to reduce consumption (“*Still smoking, but reduced*” (L1)).

Among pre-elderly participants, some had successfully quit smoking (L1), while others continued smoking at reduced levels (L2, L3, L4, L5). Passive exposure to cigarette smoke within the household was also frequently reported.

In the elderly group, most participants no longer smoked; however, exposure to cigarette smoke from the environment remained a concern. Some participants reported living in smoke-free households, while others continued to experience passive exposure.

Table 1. Summary of “OBEY” Behavior in Hypertensive Patients (n = 36).

Variable	Category	n	(%)
Health Check-ups	Regular	29	81%
	Irregular	7	19%
Medication Adherence	Adherent	14	39%
	Non-adherent	22	61%
Healthy Diet	Adherent	14	39%
	Non-adherent	22	61%
Physical Activity	Regular	19	53%
	Irregular	17	47%
Smoking Exposure	Active smokers	5	14%
	Passive smokers	25	69%
	Former smokers	2	6%
	Not exposed	4	11%

Table 1 shows that although the majority of hypertensive patients have good adherence in terms of regular health check-ups (81%), adherence to other components of “OBEY” behavior remains relatively low. Medication adherence and dietary compliance are still suboptimal, with only 39% of participants adhering, while more than half exhibit non-compliant behavior. Physical activity shows a more balanced distribution, yet nearly half of participants are still inactive. Notably, exposure to cigarette smoke is highly prevalent, with the majority being passive smokers (69%), indicating a strong environmental influence.

DISCUSSION

Regular health check-ups and adherence to medical recommendations are essential components in hypertension management. The findings of this study showed that the majority of participants, 29 individuals (81%), reported regularly undergoing health examinations. Several underlying motivations were identified, including the desire to know their health condition after being diagnosed with hypertension, routine monthly control at the health center, awareness of blood pressure levels, the presence of hypertension-related symptoms, and the intention to maintain overall health. The most dominant motivations were the desire to understand their health condition and to remain healthy. However, a smaller proportion of participants (19%) did not perform regular check-ups due to various barriers such as lack of time, feelings of laziness, competing priorities, boredom with routine control, and the perception that there was no significant effect from regular visits. These findings indicate that both intrinsic motivation and external barriers play a crucial role in shaping patient compliance. To prevent a decline in adherence, repeated counseling is necessary and can be conducted periodically, particularly because patients usually visit the same health facility, allowing healthcare providers to reinforce education consistently (Ratiojeng, & Tuminah, 2009).

In terms of treatment adherence, only 14 participants (39%) reported regularly taking medication, while the majority (61%) were non-adherent. Participants who adhered to treatment were primarily motivated by the desire to remain healthy and fear of complications such as stroke, especially among those with family responsibilities. On the other hand, non-adherence was influenced by several factors, including perceived ineffectiveness of medication, forgetfulness, taking medication only when symptoms appeared, preference for herbal or traditional remedies, fear of kidney disease, and concerns about side effects. The most common issue identified was forgetting to take medication. These findings suggest that adherence is a complex behavior influenced not only by patient motivation but also by perceptions of treatment outcomes and side effects. The lack of consistent blood pressure reduction may also be attributed to factors such as inappropriate drug regimens, inadequate dosages, and lifestyle influences, indicating that adherence alone does not guarantee optimal outcomes (Kementerian Kesehatan Republik Indonesia, 2019). Compliance is achieved when patients consistently follow medical recommendations, including regular treatment, medication adherence, and routine monitoring. Importantly, such compliance is strongly driven by individual awareness and is further supported by family involvement, which has been shown to significantly enhance adherence and improve blood pressure control.

Regarding dietary behavior, only 39% of participants reported maintaining a healthy and balanced diet, while the majority (61%) did not adhere to dietary recommendations for hypertension. Participants who followed a healthy diet were mainly motivated by the desire to stay healthy, limit foods that trigger hypertension, and consume fruits and vegetables while reducing salt intake. Conversely, those who were non-adherent reported challenges such as difficulty controlling eating patterns, frequent snacking, reliance on outside food, absence of dietary restrictions, limited knowledge about hypertension diets, and consumption of reheated or unhealthy foods. The most prominent barrier was difficulty in regulating eating habits. These findings highlight that knowledge and behavioral control are critical factors influencing dietary adherence. High sodium intake is known to reduce arterial diameter and increase blood volume, thereby elevating blood pressure and contributing to hypertension (Yunus, 2021; Susanti, 2024; Linda, 2018).

Physical activity patterns among participants also varied considerably. A total of 19 participants (53%) reported engaging in regular daily exercise, motivated by the desire to maintain health, achieve physical comfort, and enjoy activities such as walking around their home or neighborhood. However, 47% of participants did not exercise regularly, citing reasons such as irregular exercise habits, low motivation, physical limitations, and preference for light or occasional activities. Some participants also reported barriers such as knee pain and inability to perform certain physical activities. These findings suggest that while awareness of the benefits of exercise exists, consistency remains a challenge. Regular physical activity is essential in reducing vascular stiffness, improving cardiovascular endurance, lowering blood pressure, and enhancing overall heart and lung function (Umbas et al., 2019).

Exposure to cigarette smoke and other harmful substances was also identified as a significant issue among participants. Only 14% of participants were active smokers, but a large proportion (69%) were passive smokers due to exposure from family members. A small number had successfully quit smoking (6%) or were not exposed at all (11%). The predominance of passive smoking indicates the strong influence of the home environment on health behavior. Nicotine exposure contributes to increased blood pressure by stimulating the release of epinephrine, which causes vasoconstriction and forces the heart to work harder. Additionally, nicotine increases heart rate and cardiac contractility, further elevating blood pressure.^{5,6} Alcohol consumption has also been associated with hypertension, as it can stimulate hormonal responses and increase blood viscosity, ultimately affecting the Renin-Angiotensin-Aldosterone System (RAAS) and blood pressure regulation.

In addressing these behavioral challenges, the role of healthcare providers, particularly nurses, is crucial in delivering education and promoting behavior change. Motivational Interviewing is an effective approach that emphasizes patient autonomy and encourages individuals to actively participate in finding solutions to their health problems. This approach is expected to enhance intrinsic motivation, leading to positive behavioral changes. With adequate knowledge and strong internal motivation, hypertensive patients are more likely to adopt healthy lifestyles and reduce the risk of complications associated with hypertension.

CONCLUSION

This study concludes that the intrinsic motivation of hypertensive patients in controlling blood pressure through “OBEY” behavior remains suboptimal. Although some patients demonstrate awareness and willingness to maintain their health, various internal and external barriers still hinder optimal adherence. These include limited time to attend routine health check-ups, forgetfulness in taking antihypertensive medication, difficulty in maintaining a healthy and balanced diet, low levels of regular physical activity, and continued exposure to cigarette smoke, particularly as passive smokers.

These findings indicate that patient behavior in hypertension management is not solely influenced by knowledge, but also by intrinsic motivation, perceptions, and environmental factors. Therefore, strengthening intrinsic motivation through approaches such as Motivational Interviewing is essential to improve patient adherence and support more effective blood pressure control.

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