**Online supplementary materials**

**Table 2. The results of the review's analysis of self-management interventions in hypertension patients.**

| **Author** | **Title** | **Design study** | **Interventions** | **Results** |
| --- | --- | --- | --- | --- |
| Aungsuroch et al., (2022) | How a Self-Management Program Affects Blood Pressure Among Indonesians with Hypertension: A Quasi-Experimental Study | Quasy experimental | Self-management program | Self-management program was effective in reducing both systolic and diastolic blood pressure. |
| Afshari et al., (2022) | Examining the Effect of the Training Program by Using the Health Belief Model in Performing Self-Care Behaviors of Rural Patients Having High Blood Pressure | Quasy experimental | Self-management educational intervention based on the Health Belief Model (HBM) | Self-management educational intervention based on the Health Belief Model (HBM) increased perceived severity, self-efficacy, and self-care behavior scores in the intervention group relative to the control group. The intervention had a positive effect on the attitudes and behaviors of patients regarding exercise, diet, and medication adherence. |
| Chandler et al., (2019) | Impact of a Culturally Tailored mHealth Medication Regimen Self-Management Program upon Blood Pressure among Hypertensive Hispanic Adults  | Randomized control trials | mHealth self-management program | The program was found to be highly usable and effective in controlling blood pressure among Hispanics with poor medication adherence.  |
| L. Ebony Boulware et al., (2020) | Hypertension Self-management in Socially Disadvantaged African Americans: the Achieving Blood Pressure Control Together (ACT) Randomized Comparative Effectiveness Trial | Randomized control trials | Self-management program based on self-help group | The study found that interventions led to improvements in blood pressure control, slef-management skill and self-efficacy. |
| Kurt et al., (2022) | The Effect Of Self-Management Support On Knowledge Level, Treatment Compliance And Self-Care Management In Patients With Hypertension | Randomized control trials | Self-management support | Self-management support led to improvements in hypertension knowledge, treatment adherence, self-care management, and blood pressure control. |
| Persel et al., (2018) | Effect of Electronic Health Record-Based Medication Support and Nurse-Led Medication Therapy Management on Hypertension andMedication Self-management: A Randomized Clinical Trial | Randomized control trials | Electronic Health Record (EHR) self-management interventions | Implementing electronic health record (EHR) tools to support medication self-management, along with nurse-led education, led to improved blood pressure control among hypertensive patients with poor medication adherence. |
| Zhu et al., (2018) | Development and evaluation of a nurse-led hypertension management model: A randomized controlled trial | Randomized control trials | Self-management support | Self-management support interventions are effective in reducing blood pressure and improving self-care behaviors and these interventions can be used in community service settings. |
| Kurnia et al., (2020) | The Effect of Educational Program on Hypertension Management Toward Knowledge and Attitude Among Uncontrolled Hypertension Patients in Rural Area of Indonesia | Quasy experimental | Self-management education program | Self-management educational program increases knowledge and attitude of patients on management of hypertension. |
| Kilic et al., (2018) | The Effect of Education Provided Using the Roy's Adaptation Model on Hypertension Management | Quasy experimental | Self-management education based on the Roy Adaptation Model | Self-management education was effective in improve self-management and lower blood pressure. |
| .Chaboksavar et al., (2021) | Combination of self-management theory with PRECEDE–PROCEED model to promote life quality in patients with hypertension | Quasy experimental | Self-management theory and the PRECEDE-PROCEED model | The combination of self-management theory and the PRECEDE-PROCEED model had a significant positive effect on the quality of life of hypertension patients. |
| Ozoemena et al., (2019) | Effects Of A Health Education Intervention On Hypertension-Related Knowledge, Prevention And Self-Care Practices In Nigerian Retirees: A Quasi-Experimental Study | Quasy experimental | Self-management health education program on hypertension | Self-management health education interventions have a positive effect on increasing the knowledge of retired hypertensive patients and improving self-care practices. |
| Li et al., (2019) | A WeChat-Based Self-Management Intervention for Community Middle-Aged and Elderly Adults with Hypertension in Guangzhou, China: A Cluster-Randomized Controlled Trial | Randomized control trials | WeChat-Based Self-Management Intervention | WeChat-based self-management program had a positive impact on self-care behaviors among patients with hypertension. |
| Le et al., (2023) | Effectiveness of a Health Education Program in Hypertensive Patients with Dyslipidemia and/or Microalbuminuria: A Quasi-Experimental Study in Vinh Long Province, Vietnam | Quasy experimental | Self-management education | Self-management health education significantly improved self-management of hypertension patients, as measured by blood pressure reduction, change in self-care behavior, and patients' satisfaction. |
| Otieno et al., (2023) | Effect of Patient Support Groups for Hypertension on Blood Pressure among Patients with and Without Multimorbidity: Findings from a Cohort Study of Patients on a Home-Based Self-Management Program in Kenya | Quasy experimental | Self-management hypertension patient support groups | Self-management hypertension patient support group significantly reduced systolic blood pressure. |
| Sun et al., (2020) | The clinical effects of a new management mode for hypertensive patients: a randomized controlled trial | Randomized control trials | WeChat Group-Based Self-Management Intervention | Self-management WeChat group significantly reduced systolic and diastolic blood pressure. |
| Naeemi et al., (2022) | The effect of educational intervention on self-care behavior in hypertensive older people: Applying the health belief model | Quasy experimental | Self care educational based on health belief model | The effect of educational intervention on self-care significantly reduced systolic and diastolic blood pressure. |
| Putri et al., (2022) | Effectiveness of self-management on adherence to self-care and on health status among elderly people with hypertension. | Quasy experimental | Self-management interventionbased on Nursing Outcome Classification (NOC) and nursing Intervention Classification (NIC) | The effects of self-management were positive on adherence to caring for themselves and on health status. The most influencing factor on self-care compliance and health status after being controlled by confounding variables was self-management. |
| Aungsuroch et al., (2022) | How a Self-Management Program Affects Blood Pressure Among Indonesians with Hypertension: A Quasi-Experimental Study | Quasy experimental | Self-management programs | There was a significant effect of the eight-week self-management program on systolic blood pressure and diastolic blood pressure. |
| Alsaqer et al., (2022) | Self-care of hypertension of older adults during COVID-19 lockdown period: a randomized controlled trial | Randomized control trials | Self-management education using application | Application-based self-management education could improve self-care maintenance, self-care monitoring and self-care confidence in hypertension patients. |
| Beigi et al., (2014) | The Effect of Educational Programs on Hypertension Management | Quasy experimental | Self-management education | The educational program was effective in increasing knowledge, improving self-management, and controlling detrimental lifestyle habits of patients with hypertension. |
| Zhang et al., (2021) | The effects of nursing of Roy adaptation model on the elderly hypertensive: a randomised control study | Randomized control trials | Self-management program based on roy adaptation model | Self-management interventions using the RAM improved self-efficacy, self-management behavior, medication compliance, quality of life, and blood pressure in hypertension patients. |
| Aghajani et al., (2013) | Effect of Self - Care Education on Quality of Life in Patients With Primary Hypertension: Comparing Lecture and Educational Package | Quasy experimental | Self-Care Lecture, and Self-Care educational package | A study comparing lectures and educational pamphlets for patients with primary hypertension found that both methods can enhance various aspects of patients' quality of life, such as general health, social function, physical function, physical role, power and energy, and mental health. |
| Andersson et al., (2023) | PERson-centredness in Hypertension management using Information Technology: a randomizedcontrolled trial in primary care | Randomized control trials | Web-based self-management interventions | An interactive Web-based self-management interventions are effective in lowering blood pressure. |
| Putra et al., (2022) | Smartphone-Based Self-management Education Improves Compliance and Self Efficacy and Reduces Blood Pressure in Hypertension Patients | Quasy experimental | Smartphone-Based Self-management Education | Smartphone-based self-management education is effective for increasing compliance and self-efficacy, and it may lower blood pressure in hypertensive patients. |
| Kordvarkane et al., (2023) | Effect of education based on the Common-Sense Model of Self Regulation on blood pressure and self-management of hypertensive patients: A clinical trial study | Randomized control trials | Self-management program based on self-regulation model | Self-management programs based on self-regulation models are effective in reducing blood pressure and improving self-management in hypertensive patients. |