#### **COMMUNITY SERVICE ARTICLE**

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# Provision Of Education For Pkk Women In Treating Hypertension At Home In Wonokoyo Village, Beji District, Pasuruan Regency, East Java, Indonesia

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**ABSTRACT** Housewives were one of the pillars of household strength, one of which was acting as nurses in the household, so that mothers were tasked with maintaining the health of members in the house. Mothers as household nurses include caring for families with hypertension problems. The problem found that hypertensive patients in Wonokoyo village did not take medication regularly and there was a mother's point of view in managing hypertension. It was necessary to intervene in the form of providing health education to children. PKK mothers so that the treatment of hypertensive patients could be completed and did not cause very large complications, including heart failure, kidney failure, and stroke. The purpose of this activity was to empower PKK mothers in treating hypertension in Wonokoyo village. The methods used were lectures, discussions, questions and answers, and light games. The results of the most important activities include: most of the participants in community service activities understand about the treatment and processing of hypertension, which includes: understanding, criteria, signs, and symptoms; mild treatment of hypertension; and there were 3 questions from participants, including healthy food processing, first aid for hypertension, and how to take hypertension medication. The implication of this activity was to increase the knowledge of PKK mothers about the treatment and management of hypertension. At the end of this community service activity, most of the people who took part were very excited and knew how to treat and manage hypertension at home, which in the long run cuts down on the number of complications.

**INDEX TERMS** Education, Empowerment, Hypertension, Wonokoyo

## I. INTRODUCTION

Hypertension was a disease that caused high morbidity. Hypertension is a condition in which a person experiences an increase in blood pressure above normal, which results in morbidity or morbidity and mortality or mortality. Hypertension was often referred to as the silent killer because it was deadly without any symptoms as a warning to its victims. Hypertension is a major risk factor for coronary heart disease and brain blood vessel disorders known as strokes. The higher the blood pressure, the lower the life expectancy [1]. The normal limit for blood pressure was 120-140 mmHg systolic pressure and 80-90 mmHg diastolic pressure, according to who. A person was declared to have hypertension if their blood pressure was > 140/90 mmHg. Meanwhile, according to JNC VII 2003, blood pressure in adults over the age of 18 years was classified as having stage i hypertension if the systolic pressure was 140-159 mmHg and the diastolic pressure was 90-99 mmHg. Stage ii hypertension was defined as having a systolic pressure greater than 160 mmHg and a diastolic pressure greater than 100 mmHg, while stage ii hypertension was defined as having a systolic pressure greater than 180 mmHg and a diastolic pressure greater than 116 mmHg. Hypertension was more common in middle age in the 55-64 age group. Hypertension in Asia was estimated to have reached 8–18% in 2009. Hypertension was found in 4,400 out of 10,000 Asians. The results of the 2008 household health survey showed that the prevalence of hypertension in Indonesia was quite high, 83 per 1,000 household members. In 2009, around 15-20% of Indonesian people suffered from hypertension. The prevalence of hypertension in Indonesia rose in men from 134 (13.6%) to 165 (16.5%). Hypertension in women rose from 174 (16. 0%) to 176 (17. 6%). There were several risk factors that could cause hypertension, including family history. Individuals with a family history of hypertension had a twice greater risk of suffering from hypertension than people who did not have a family history of hypertension. This was because fat could cause blockages in blood vessels so that it could increase blood pressure. stressed, or situations that cause distress and place physical and psychological demands on an individual [2]. Based on the results of the 2018 basic health research (Riskesdas), the prevalence of hypertension in East Java was 19.9 percent. Based on the results of this research, it is also known that with increasing age, the prevalence of hypertension increases. Judging from the level of education, the prevalence of hypertension was highest in the group of people with low education. This was possible because of ignorance about a good diet.

Wonokoyo village was one of the villages in Beji subdistrict, Pasuruan district, more precisely on Jl. Raya Gondang Legi-Pandaan was located in an industrial area. This attracted many immigrants to live and settle in the Wonokoyo Kulon village area. Wonokoyo village was an industrial estate village that was very strategically located and had great potential to develop. Included in the Beji district is Pasuruan Regency. Wonokoyo village was flanked by 2 Gempol Pandaan toll roads and 2 Gempol Pasuruan toll roads. Based on the results of the Wonokoyo census, it had a population of 5434 people and 1802 families. Wonokoyo village was located 50 m above sea level. It was also listed on the Indonesian earth map with a scale of 1:25,000. Wonokoyo village was one of 14 villages in the Beji subdistrict which typologically stretches from south to north with an area of +50 ha.

Many people in Wonokoyo were affected by hypertension. Women who became wives and mothers as well as workers tended to bring them into work-family conflict because women remained the main focus, which was related to their main duties as mothers and wives. The results of research conducted by Cinamon and Rich showed that working women or mothers experience family conflict more often and emphasize the importance of family work conflict, when family as the most important domain for most women affects work could be a nuisance for them.

The various roles of women were factors that could cause the risk of hypertension. In fact, on the one hand, mothers continued to work and have a career, while on the other hand, they could not be separated from their roles as mothers and wives, not to mention when it was associated with the division of domestic work in the household where mothers who still had more to do. On the other hand, my mother was a person who could control a good diet for the family. As was known, a mother provides food for the family, and the family consumes any food provided by the mother. So the main focus in maintaining the diet in the family was to provide knowledge to the mother as a food presenter in the family, namely by maintaining the intake of sodium that entered the body according to the daily adequacy of the family. A mother was at the forefront of preventing hypertension at the family level. Mom's knowledge was the key to the success of prevention programs at the family level. Pkk was a community organization whose members were women in a banjar or hamlet. This organization played an important role in society, especially for mothers to share information about their daily lives. The PKK organization was the right target for the implementation of the hypertension prevention program in Banjar Puseh Kangin. With the increasing knowledge of PKK mothers related to hypertension, in the future the prevalence of hypertension in Wonokoyo Kulon village could be reduced.

Based on a preliminary study conducted by researchers in January 2021 in Wonokoyo, most of the mothers did not know about how to prevent hypertension and the understanding of people who had hypertension, especially in Wonokoyo village at that time, that antihypertensive drugs should not be taken every day. shop so that he knows how to drink according to his own will. The problems mentioned above have never been carried out by an attempt or research to solve them. The services provided so far were routine. The different perspectives of mothers in the treatment and management of hypertension need to have been addressed so as not to cause very big problems, including heart failure, kidney failure, and stroke.

The authors found that this problem was a problem for nurses in determining the management of hypertensive patients at home, so the authors made a breakthrough about the procedures for managing hypertension patients at home. This theory provides instructions to mothers that determine the management of hypertension patients by empowering families, especially mothers. The advantages of mothers were that they were managers in terms of food. This was helpful in solving patient problems. Among other things, they were in line with the medical team and in accordance with complaints that started with impaired body functions. The hope in meeting family needs was that there were the same standards that could be used by all mothers so that nurses could easily determine actions in managing hypertension in the household.

## II. METHODS

The approach method offered to realize the goals and realization of the program was health promotion and counseling activities. Health promotion used the spin method that was rotated by the participants. In each spin box there was a card containing information about hypertension including: understanding, symptoms, treatment, complications. Participants would spin the spin and read when the spin needle stopped, and the card was closed with a lecture and discussion to strengthen the material. And this activity begins and ends with filling out pre and post test questions and measuring blood pressure, as well as assisting in observing signs and symptoms of hypertension.

## **III. RESULTS AND DISCUSSION**

Community service activities began with the preparation of a proposal in 2021 and was approved by the research and community service unit (UPPM) of the *Poltekkes Kemenkes Surabaya with a financing program in 2022. Prior to implementation, the* community service team approached the village head and the Wonokoyo village midwife, Beji district, Pasuraan regency. This was done 3 weeks before the implementation of community service, which in essence approved and welcomed this activity.

The implementation of community service was assisted by several students in June 2022, which was attended by 86 PKK women. At 08.00 PKK, women had started to arrive to sign the attendance list, receive materials and kits as well as consume. The event started at 09.00 to 11.00, which began with singing the song Indonesia Raya, Mars PKK, and reading the 10 main PKK programs. This was followed by a speech from the village head and followed by a speech by Mrs. Tanty Wulan Dari, S.Kep., Ns, M.Kes. core material delivered by Dr. Moh. Bahrudin M.Kep,Sp.Kmb., assisted by Siti Maimuna, S.Kep., M.Kes., explained the empowerment of PKK mothers in the treatment of hypertension at home. At the end of the presentation, there was a question and answer session. There were 3 questions from participants, namely: 1) why does high cholesterol cause pain in the head on the back; 2) procedures for taking hypertension medicine; and 3) various types of food that were allowed for hypertensive patients. The community service team conducted a pre-test with the aim of knowing the knowledge of PKK mothers about hypertension and its management for 15 minutes. After the pre-test continued with the presentation of the material and continued with a blood pressure checking session, the event continued with counseling and filling out the post-test questionnaire for 15 minutes.

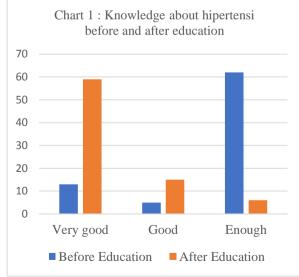


FIGURE 1. Knowledge for hypertension after and before



Figure 2. Registration of community service participants



Figure 3. opening by singing Indonesia Raya song and PKK march



Figure 4. spin game to introduce hypertension



Figure 5. lectures and discussions about hypertension



Figure 6. prayer reading in closing



Figure 7. photo session together

Counseling PKK mothers about hypertension disease management and promotion of hypertension The training materials for these cadres include an introduction to understanding, signs and symptoms, complications and tools for checking blood pressure, conveying information about blood pressure and hypertension, and training PKK women on the corrected way to measure blood pressure. Community empowerment as an effort for early detection of hypertension risk factors blood pressure examination, blood pressure examination to determine target risk factors related to hypertension.

Knowledge of PKK mothers about treatment of a total of 85 people who had their blood pressure checked, 21 were found to be suffering from hypertension. In the age range of less than 40 years, 8 people with hypertension were found. While the age group of 45-55 years also found 8 people with hypertension. There were 15 people with hypertension in the age group of more than 75 years. Screening for hypertension risk factors. Screening for hypertension risk factors has been carried out. The hypertension risk factors observed in this service include BMI and blood sugar levels. There were 3 people who had a BMI above normal. Distribution of hypertension leaflets to ensure that patients' knowledge of hypertension was better. Leaflets were distributed to patients who had studied at home. This was so that they did not forget and could re-learn about hypertension wherever they were. The leaflets of our dedication were as shown in the image below.

The presence of PKK women has recently become a health alternative to overcome the crisis of human resources in providing health services to the local level, by recruiting them from the local community. PKK mothers can play a role in reducing barriers to health care and increasing access to therapy for many of the rural poor. In the sociological dimension, the presence of PKK women represents what is called social capital for the marginalized, including rural communities, to obtain quality resources like those of the upper class. In this case, PKK women are able to offer two functions. First, is the structural function, where they are able to provide comprehensive health services to rural communities based on more intimate social relationships, considering the status of PKK mothers who are generally also members of the marginalized group themselves. Second, is the cognitive function, where PKK women position themselves as agents of professional health practitioners to popularize modern health care.

The urgency, furthermore, is realized by the intervention function that is mandated to them. Some of them are providing health information, preventing disease and improving health, and identifying health problems experienced by a patient. In addition to carrying out prevention and supervision services which incidentally are the embodiment of basic primary care, PKK mothers can also provide referrals for treatment for patients to health services. This crucial role often makes PKK women in the eyes of marginalized communities an option for treatment.

In order to improve the work skills of PKK mothers, the health empowerment activities carried out by PKK mothers must be participatory in the context of binding commitment and motivation for their involvement. This participatory work means how the cadres are able to optimize their leadership power by looking at the actual health problems they find at the local community level. At the same time, PKK mothers are encouraged to participate in determining the accountability mechanism of the public health system, including health care. To do this effectively, PKK mothers need to receive clear socialization of the purpose of their presence through adequate training and guidance. The competence of PKK mothers can be increased in a number of ways. First, is to provide training aimed at empowering their knowledge and skills needed to identify aspects of health in general. Second, by practicing good communication skills to convey messages to the public.

The ability to identify warning signs indicates that when properly trained they can gain practical knowledge and implement community-based interventions. Furthermore, based on the support, although PKK mothers experience obstacles such as low literacy rates, with proper training and supervision, they are able to provide more differentiated health services at the community level. argues that training for PKK mothers, which is more focused on disease prevention and health promotion, needs to be optimized, which in previous research was believed to be realized by implementing a participatory learning system. This system was identified as an effective way to build individual and group capabilities, to identify and prioritize: Appropriate Technological Innovations and Community Capacity Building Models in the Covid-19 Era. At the furthest point, we think this can train PKK mothers to get used to a participatory work environment, which, as we proposed earlier, is an ideal work style for health cadres.

The characteristics of participatory learning systems, seeks to integrate passive classroom teaching with interactive group activities and clinically oriented practicum. In this system, health cadres have more opportunities to carry out clinical-based simulations which are very important to optimize their knowledge transfer process. The application of participatory learning systems, at other times, is supported by field research on learning methods for health cadres based on the principles of autonomy pedagogy and problem-based active learning. For them, this system is able to encourage health cadres to apply efficient work patterns and produce an effective analysis of public health problems. The effectiveness of interactive and clinically integrated learning activities in conveying knowledge and skills to participants, ultimately has better implications in preparing the applicable knowledge of health cadres. This is because the participatory learning system is able to influence knowledge, attitudes, behavior, and learning outcomes. The application of this method, according to them, is understood to increase the knowledge score of health cadres. Therefore, the potential for health cadres to spread health promotion messages to others in a way that can be understood and accepted by community members is even greater.

The evaluation of the implementation of community service after the activity results in most (85%) of the

knowledge of PKK mothers showing an increase from good to very good when compared to the previous only 63% with indicators of understanding, signs and symptoms, and simple handling of hypertension. The last program of community service activities This community event was the closing of the event, which was marked by giving awards to the performers and speakers as well as giving souvenirs to the people of Wonokoyo village. After the closing ceremony was over, the committee and participants prepared to go home and returned to their homes.

## **IV CONCLUSION**

Community service activities regarding empowerment of PKK mothers in the treatment and treatment of hypertension at home in Wonokoyo Kulon Village, Beji District, Pasuruan Regency have been carried out very well with increasing results, or most of the knowledge of treatment and management of hypertension was very good.

There were 3 questions from community service program participants related to 1) why high cholesterol causes headaches in the back; 2) procedures for taking hypertension medicine; and 3) various types of food that were allowed for hypertensive patients. The community service program will in the future provide treatment and processing to the level of practice.

#### REFERENCES

- M. Bahrudin, Buku Referensi Kebutuhan Pasien di Ruang Perawatan Intensif Ditinjau Dari Sudut Pandang Keluarga. Deepublish, 2020.
- [2] M. B. Bahrudin, "Terapi Modalitas Treadmill Tes Pada Pasien Gangguan Kardiovaskuler Modality Therapy Treadmill Test In Patients Cardiovascular Disorders," *J. Keperawatan*, vol. 6, no. 3, pp. 138–142, 2013.
- [3] M. Bahrudin, T. Wulandari, and A. Y. R. I. Al Bustomy, "Development Of Quality-Of-Life Models Of Chronic Renal Failure Patients Based On Self-Regulatory Intervention," *Nat. Volatiles Essent. Oils J.*, pp. 86–93, 2022.
- [4] M. Bahrudin, S. Sutomo, and H. Purwanto, "Service Agencies Policy And Nurse Motivation As Determinants Of Information For Family Patients In Critical Care Unit," *Heal. Notions*, vol. 1, no. 3, pp. 201– 203, 2017.
- [5] M. Bahrudin and T. Wulandari, "Studi Fenomenologi Pengalaman Keluarga Suku Jawa dengan Anggota Keluarga Menderita Covid-19 di Ruang Perawatan Intensif," *J. Ilmu Kesehat.*, vol. 5, no. 1, pp. 8– 13, 2021, doi: 10.33006/ji-kes.v5i1.211.
- [6] M. Bahrudin, N. L. P. E. Sudiwati, and T. Wulandari, "Development Of Diagnosis Determination Model In Nursing Process Based On Patient-Centered Theory," *Indian J. Forensic Med. Toxicol.*, vol. 13, no. 4, pp. 1596–1598, 2019, doi: 10.5958/0973-9130.2019.00533.4.

- [7] N. Barnum, *Nursing Theory, Analisis, Application, Evaluation*, 5th ed. New York: Lippincott, 2015.
- [8] Basavanthappa, Nursing Theories. New Delhi. India: Mosby Company. Jaypee Brother Medical Publisher, 2017.
- [9] A. Berman, Fundamental of Nursing. Concepts, Process and Practice, 8th ed. New Jersey. USA: Pearson, 2018.
- [10] J. M. Black and J. Hawks, *Medical Surgical Nursing: Clinical Management For Positive Outcomes*, 7th ed. Philadelphia: Elsevier Saunders, 2001.
- [11] Brunner and Suddarth, *Medical Surgical Nursing: Clinical Management For Positive Outcomes 7th.* Philadelphia: Elsevier Saunders, 2012.
- [12] H. Efendi and T. A. Larasati, "Dukungan Keluarga Dalam Manajemen Penyakit Hipertensi," J. Major., vol. 6, no. 1, pp. 34–40, 2017.
- [13] B. George and Julia, Nursing Theories The Base For Professional Nursing Practice, 4th ed. East Norwalk: Apleton & lange, 2011.
- [14] J. B. George, Nursing Theories : The Base For Professional Nursing Practice, 4th ed. USA: Appleton & Lannge, 2010.
- [15] E. Guyton, "Fisiologi Kedokteran." EGC, Jakarta, 2001.
- [16] H. Hariawan and C. M. Tatisina, "Pelaksanaan Pemberdayaan Keluarga Dan Senam Hipertensi Sebagai Upaya Manajemen Diri Penderita Hipertensi," *J. Pengabdi. Masy. Sasambo*, vol. 1, no. 2, p. 75, Apr. 2020, doi: 10.32807/jpms.v1i2.478.
- [17] A. Joeliantina, O. Soedirham, M. Agil, M. B. Qomaruddin, and K. Kusnanto, "A Literature Review Of Complementary And Alternative Medicine Used Among Diabetes Mellitus Patients," *Int. J. Public Heal. Sci.*, vol. 8, no. 2, p. 277, Jun. 2019, doi: 10.11591/ijphs.v8i2.16537.
- [18] S. Kholifah and I. W. Suyadnya, "Metodologi Penelitian Kualitatif; Berbagi Pengalaman dari Lapangan." 2018.
- [19] S. N. Kholifah, H. Yumni, Minarti, and T. Susanto, "Structural Model Of Factors Relating To The Health Promotion Behavior Of Reproductive Health Among Indonesian Adolescents," *Int. J. Nurs. Sci.*, vol. 4, no. 4, pp. 367–373, 2017, doi: 10.1016/j.ijnss.2017.10.001.
- [20] O. K. Laka, D. Widodo, and W. Rahayu, "Hubungan Hipertensi dengan Tingkat Kecemasan pada Lansia di Posyandu Lansia Desa Banjarejo Kecamatan Ngantang Malang," *Nurs. News J. Ilm. Keperawatan*, vol. 3, no. 1, 2018.
- [21] A. Marriner Tomey and M. R. Alligood, Nursing Theorists And Their Work, 6th ed. St. Louis: Mosby, 2016.
- [22] A. I. Meleis, "Theoretical Nursing, Development and Progress." Lippincott, Philadelphia, 2016.
- [23] P. S. Nugroho and D. S. Fahrurodzi, "Faktor Obesitas Dan Kolesterol Terhadap Hipertensi Di Indonesia (Indonesian Family Life Survey V)," *Ghidza J. Gizi dan Kesehat.*, vol. 2, no. 2, pp. 44–48, Jun. 2018, doi: 10.22487/ghidza.v2i2.7.
- [24] T. Sumiatin and W. T. Ningsih, "Peran Keluarga dalam Program Indonesia Sehat dengan Pendekatan Keluarga (PIS-PK) melalui Pelaksanaan Program Keluarga Berencana (KB)," J. Ners dan Kebidanan (Journal Ners Midwifery), vol. 7, no. 2, pp. 170–176, 2020, doi: 10.26699/jnk.v7i2.art.p170-176.
- [25] D. Widyaningrum, D. Retnaningsih, and T. Tamrin, "Hubungan Dukungan Keluarga Dengan Kepatuhan Minum Obat Pada Lansia Penderita Hipertensi," *J. Ilmu Keperawatan Komunitas*, vol. 2, no. 2, p. 21, 2019, doi: 10.32584/jikk.v2i2.411.



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