

Education on Medication Management at the "Tresna Werdha Jombang" Nursing Home – Kediri

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ABSTRACT

The elderly population residing in nursing home requires special attention, because elderly people often have diabetes, hypertension and other chronic diseases which require them to store medicines to be taken regularly every day. Therefore, elderly people are required to understand drug management, namely how to obtain, use, store, and dispose of drugs. Inadequate understanding of medication management for the elderly in nursing home can cause damage to stored medication, resulting in a decrease in the effectiveness of the medication. The aim of this activity is to increase the understanding of elderly in terms of medication management. The community service method is in the form of a seminar with the opening stages, material presentation, and closing. The results of the activity lasted for 3 hours with 30 participants, and presentations from 4 speakers on the topic of how to obtain, use, store and dispose of medication properly and correctly. This activity went very well and the evaluation was calculated at the end. Through this educational activity, participants gain an understanding of how to obtain, use, store and dispose of medication properly and correctly so that medication can be used optimally and avoid swallowing expired medication by elderly people in nursing homes.

Keywords: Education, elderly, medicine, nursing home

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INTRODUCTION

Indonesia has now entered a period of aging population, based on data from the National Socio-Economic Survey conducted by the Central Statistics Agency in 2022, the elderly population is 10.48%. That means 1 in 10 residents is resident carry-on age (elderly) Central Bureau of Statistics, 2022b). This matter caused enhancement age hope increasing life expectancy. Life expectancy in East Java Province in 2022, namely 71.74 years while in Kediri Regency it is 72.97 years, while in Kediri City it is 74.34 years (Central Bureau of Statistics, 2022b).

Aging population can become a second demographic bonus if proportion of elderly increases and remains productive, so that can give donation for country's economy. However, the results the National Socio-Economic Survey in 2022 shows mark ratio dependency elderly of 16.09%, that is that one person is elderly supported by around 6 residents productive age (15-59 years) (Central Bureau of Statistics, 2022b). Unproductive elderly people are a burden on

the country's development.

The results of the 2020 National Socio-Economic Survey in terms of health, two out of five (42.09%) elderly experienced health complaints during the last month with a morbidity rate of 20.71%. The elderly morbidity rate is calculated based on the complaints experienced by the elderly and their impact on disruption of their daily activities. Health problems that elderly people often complain about are fever, coughs, colds, diarrhoea, headaches, complaints of chronic diseases, disabilities, accidents and other health complaints (Central Bureau of Statistics, 2022a).

Based on a survey from Association Gerontology Indonesian Medic which was implemented in 2022, the elderly in Indonesia will suffer disease chronic as much as 24.6. Disease chronic the majority suffer elderly that is hypertension (37.8%), diabetes mellitus (22.9%), rheumatism (11.9%), disease heart (11.4%), asthma (10.4%), disorders stomach (8%), acid veins (5.5%), disease lungs chronic (3%), cholesterol (3%), and disease fail kidney (2%) (Dihni, 2022). Chronic diseases suffered by the elderly, based on the level of risk, are grouped into 3, namely low risk, medium risk and high risk (Barrio-Cortes et al., 2021).

The majority of elderly people who experience health problems (81.99%) carry out self-medication, 15.69% seek outpatient treatment at health service facilities, and only a small portion (2.3%) do not receive treatment. The health service facilities chosen by the elderly to overcome the health problems they experience are primary health care centres (38.27%), doctor's practices (35.57%), clinics (11.82%), as well as hospitals and other health service facilities. The health insurance used by elderly people who are outpatient (44.79%) and inpatient (74.13%) are state-financed health insurance (BPJS), Jamkesda, health insurance covered by individuals, and other health insurance (Central Statistics Agency, 2022b). Due to the health problems, they experience, elderly people take an average of 1.4 medicines per day, explaining in detail that healthy elderly people take 1 medicine per day, while elderly people with chronic diseases take 2.7 medicines per day (Dihni, 2022).

Based on data from the United Nations (UN) in 2017, it shows that elderly people live alone or with their families. Meanwhile in Indonesia, the majority (56.7%) of elderly people live with their extended families, 17% of elderly people live with their partners, and 12.5% of elderly people live with their children (Pusparisa, 2020). However, there are elderly people who live in nursing homes, but it is not known what percentage of elderly people live in nursing homes. Nursing homes provide services to the elderly in the form of fulfilling physical, psychological and social needs that the elderly do not receive when they are in the family. By fulfilling the needs provided by nursing homes, this can help elderly people to improve social welfare (Triwanti et al., 2014).

The data above shows that the majority of elderly people suffering from chronic diseases store and use medication. In order to be able to manage medicines properly and correctly, sufficient knowledge is needed for the elderly and caregivers/ adults around elderly, so that the medicines stored and used can have optimal efficacy. Based on the background of the problems above, the lecturers and students of the Pharmacy at the Strada Indonesia Institute of Health Sciences Kediri intend to carry out community service with the title " Education on Medication Management at the "Tresna Werdha Jombang" Nursing Home - Kediri". This activity is an integrated part of the Home Care Course.

METHOD

The implementation method is a seminar on drug management (how to obtain, use, store and dispose of drugs) at the "Tresna Werdha Jombang" Nursing Home, Kediri. This activity aims to increase the understanding of elderly people in nursing homes regarding the importance of good and correct medication management so that medicines remain useful when used and

expired medicines are not swallowed by elderly people. This activity was carried out offline in the meeting room of the "Tresna Werdha Jombang" Kediri Nursing Home, on Friday, June 23 2023 at 08.00-11.00 WIB. The targets of this activity are employees, caregivers/administrators, and the elderly at the "Tresna Werdha Jombang" Kediri Nursing Home. The stages carried out in this community service activity can be seen in Figure 1.

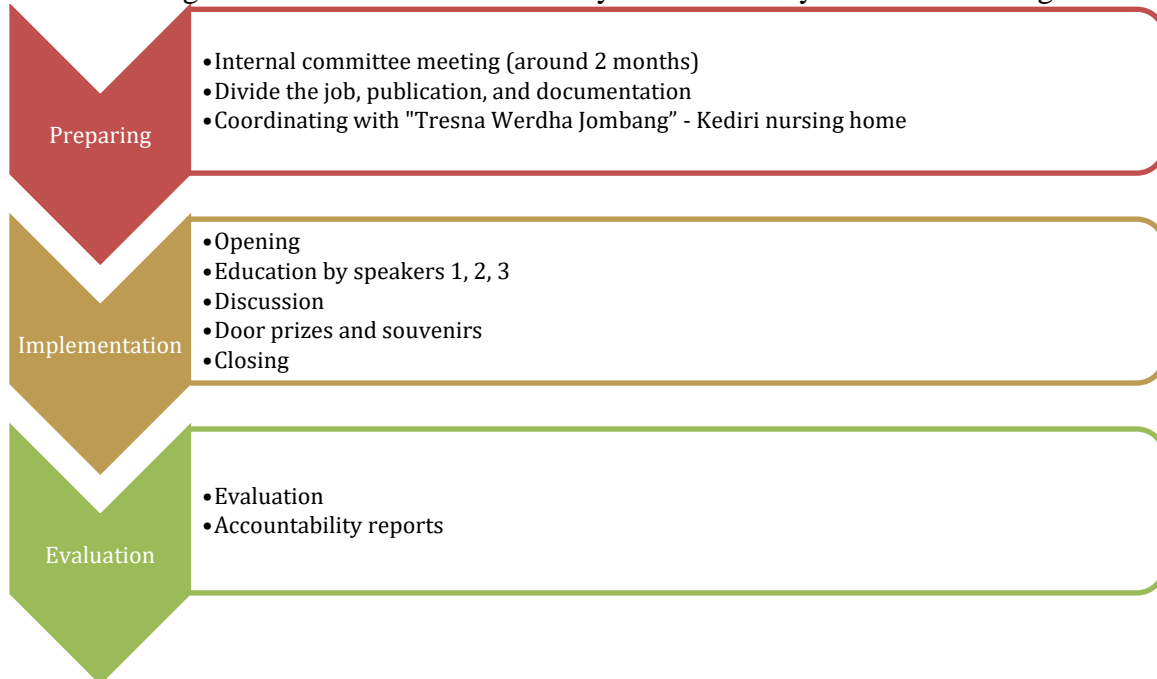


Figure 1 Flowchart of Education on Medication Management at The "Tresna Werdha Jombang" Nursing Home - Kediri

RESULT

The educational activity on drug use at the "Tresna Werdha Jombang" Nursing Home in Kediri is entitled "DAGUSIBU (Get, Use, Store and Dispose of Medication) properly and correctly." This title is determined according to the pharmacist's role in providing education regarding good and correct medication management to the public. This activity was attended by 30 participants consisting of employees, caregivers and elderly people who live at the "Tresna Werdha Jombang" Kediri nursing home. Participants enthusiastically took part in a series of events consisting of an opening, presentation of material, discussion/question and answer, distribution of door prizes, and ending with an oral evaluation, giving souvenirs, a group photo session, and closing.



Figure 2. Delivery of materials by the speakers

Activities carried out with theme "DAGUSIBU (Get, Use, Store, and Dispose of Medicine) With Good and True" emphasized about importance manage drugs routinely used by the elderly age in nursing homes. This matter intended for the medication to be used still effective and preventive happen drug expired which is swallowed by elderly. This activity was carried out with the first speaker who explaining how to get medicine. Medicines must be obtained from official, legal sources, namely pharmacies, primary health care centers, clinics or hospitals. Medicines should not be purchased from grocery stores that do not store the medicines they sell properly, do not monitor temperatures, and do not periodically check expiration dates.

The second speaker explained how to use medicine. The chronic diseases that many elderly people suffer from at the "Tresna Werdha Jombang" Nursing Home in Kediri are hypertension, diabetes mellitus, rheumatism, asthma, stomach disorders, gout and cholesterol. The second speaker explained clearly how to use antihypertensive, antidiabetic and other chronic drugs which are routinely consumed by the elderly at the "Tresna Werdha Jombang" Nursing Home in Kediri. This seminar was also attended by employees and caregivers of the elderly, so it is hoped that they will be able to remind the elderly about the material provided today if the elderly forget.



Figure 3. Providing souvenirs of medicine boxes to the "Tresna Werdha Jombang" Nursing Home in Kediri

The third speaker provided an explanation to the participants on proper and correct medication management education regarding how to store medication. Medicines consumed by the elderly must be stored properly, away from direct sunlight, not placed in a damp place, and the expiration date must be regularly checked so that expired and unexpired medicines are not mixed up.

The fourth speaker gave an explanation about how to dispose of medicine. Medicines that have expired or medicines that are damaged before the expiration date must be thrown away. Explanation of how to dispose of damaged and expired medicines in the form of tablets/caplets/capsules, syrup, eye drops, ear drops, and topical medicines such as skin ointments. This explanation is accompanied by good and correct medication disposal practices.

The medicine management seminar at the "Tresna Werdha Jombang" Nursing Home in Kediri closed with an oral evaluation, giving souvenirs to employees and the elderly at the Nursing Home, and a group photo.

DISCUSSION

The "Tresna Werdha Jombang" Kediri Nursing Home belongs to the Social Service Department of East Java Provincial which accommodates 80 elderly people. Elderly people are individuals who are 60 years old or more. Elderly people in this nursing home receive services in the form of fulfilling physical, psychological and social needs that elderly people do not get when they are in the family. By fulfilling the needs provided by nursing homes, this can help the elderly to improve social welfare (Triwanti et al., 2014).

In the health sector, the "Tresna Werdha Jombang" Kediri nursing home also collaborates with the Pare Primary Health Care Centre to provide regular health check for the elderly, which are carried out through the integrated elderly service post at the "Tresna Werdha Jombang" Nursing Home in Kediri. So that the medical needs of the elderly in this nursing home are covered by Pare Primary Health Care Centre. Apart from that, the Nursing Home "Tresna Werdha Jombang" Kediri also has a special health room in the Nursing Home which is equipped with medicines and health nurses who also live in the Nursing Home.

The majority of elderly people in this nursing home suffer from chronic diseases. The chronic

diseases that many elderly people suffer from at the "Tresna Werdha Jombang" Nursing Home in Kediri are hypertension, diabetes mellitus, rheumatism, asthma, stomach disorders, gout and cholesterol. This is in line with research conducted by Dihni (2022) which states that hypertension, diabetes mellitus and rheumatism are the three highest chronic diseases suffered by many elderly people. (Barrio-Cortes et al., 2021; Dihni, 2022; Husnayain et al., 2020; Mahwati, 2014).

Medication management education in nursing homes provides significant benefits for residents and health workers involved in their care. According to research by Garcia et al. (2023), effective education programs can increase users' knowledge about the correct use of drugs and potential drug interactions (Garcia, R., & Martinez, 2023). This can reduce the risk of errors in medication use and increase compliance with the treatment plan. Implementing a drug management education program in nursing homes requires a holistic and coordinated approach. According to Patel et al. (2023), the program must be adapted to the special needs and characteristics of each nursing home resident (Patel, P., 2023). The educational material prepared must be delivered in language that is easy to understand and use learning methods that are appropriate to the resident's literacy and understanding level. There are various methods of drug management education, one of which is education about correct drug management which is called DAGUSIBU. Education on correct medication management using the DAGUSIBU method has been written in guidelines published by the Indonesian Pharmacists Association (IAI, 2014). This educational program using the DAGUSIBU method has also been implemented in Sleman, Jogjakarta and in certain groups such as the PKK women's group (Lutfiyati et al., 2017; Maziyyah, 2015).

Health workers who work in nursing homes have an important role in supporting this drug management education program. They are not only responsible for conveying appropriate information to nursing home residents, but also for providing support and guidance in daily medication use. According to Clark & White (2023), collaboration between health workers and nursing home residents in managing medication can increase the success of educational programs (Clark, L., & White, 2023; Garcia, R., & Martinez, 2023).

The long-term benefits of medication management education programs in nursing homes include improving the health and quality of life of residents, reducing the risk of medication side effects, and saving health care costs. According to a study by Kim & Lee (2022), increasing knowledge and adherence to medication use can result in better clinical outcomes and reduce the frequency of hospital visits (Anurogo et al., 2024; Clark, L., & White, 2023; Kim, J., & Lee, 2022).

CONCLUSION

Medicine management education in nursing homes has great potential to improve the quality of life and health of residents. By integrating principles of correct and safe medication use into care programs, nursing homes can become safer and more supportive environments for seniors and older adults. By continuing to improve these educational programs based on research and best practices, we can create a better care environment for the aging generation.

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