

Training and Mentoring Vocational Pharmacy Personnel to Become Responsible for Small Traditional Medicine Businesses

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ABSTRACT

The aim of training and mentoring activities for vocational pharmaceutical personnel to become people in charge of small traditional medicine businesses are to improve the quality and safety of traditional medicine products as well as improve the technical and managerial skills of vocational pharmaceutical personnel so that they can carry out their role as people in charge effectively. The methods used theoretical presentation sessions, questions/answers and discussions for online training and discussions, FGDs, workshops and case studies for offline mentoring at the Islamic University of Madura which were conducted on 88 students of the diploma three Pharmacy Study Program, Faculty of Health, Islamic University of Madura. The result is community service through training activities and mentoring for pharmaceutical vocational staff to become people in charge of small traditional medicine businesses, receiving an enthusiastic and positive response from the participants present.

INTRODUCTION

Indonesia's preparation, prevention and response to the next pandemic as well as strengthening the resilience of the pharmaceutical supply chain system need special attention. As can be seen, Indonesia has experienced difficulties in accessing medicinal products and medicinal raw materials due to the lockdown policies implemented by countries at the start of the Covid-19 pandemic to anticipate the impact of the spread of Covid-19, restrictions on the movement of goods and people, and restrictions Exports from countries producing global medicinal raw materials, namely China and India. This is caused by an increase in the need for medicines, including traditional medicines. Traditional medicine is a material or concoction in the form of plants, animals, minerals, extract preparations (galenic) or a mixture of these materials which have been used for generations for treatment and can be applied in accordance with the norms applicable in society (BPOM, 2014; Oktaviani et. al., 2021). As an effort to strengthen local production of essential medicines, including traditional medicines (standardized herbal medicines) in the context of utilizing and developing Indonesia's natural wealth through evidence-based medicine, the Indonesian Government always strives to prioritize the use of domestic products as a form of support and market certainty for industry, especially in small traditional medicine businesses (Setditjen Farmalkes, 2022).

According to the Regulation of the Minister of Health of the Republic of Indonesia Number 7 of 2012 concerning Registration of Traditional Medicines Article 1 Paragraph 7 and 8, a small traditional medicine business or called UKOT is a business that can make all forms of traditional medicine preparations (param, tapel, pilis, external medicinal liquid and chopped) , except for tablet and effervescent dosage forms. Small traditional medicine businesses (UKOT) must adopt good traditional medicine manufacturing methods to meet product quality requirements such as Good Traditional Medicine Manufacturing Practice (CPOTB) which cover all aspects related to traditional medicine production so that the products produced always meet the specified quality requirements. according to its intended use. Based on this, implementing all stages of the process in a small traditional medicine business requires a person in charge. One of the requirements for obtaining a traditional medicine small business production certificate is to have a technical person in charge at UKOT. The person in charge of a small traditional medicine business (UKOT) is an individual who has the main responsibility for ensuring that the entire process of production, processing, storage and distribution of traditional medicines is carried out in accordance with applicable standards and regulations. The role of the person responsible for the production process in a small traditional medicine business is very important to maintain the quality, safety and efficacy of traditional medicine products. In selecting a person in charge of a small traditional medicine business to maintain the quality, safety and efficacy of medicinal products, one of the conditions that must be met is that the person in charge has a background in pharmaceutical technical personnel such as vocational pharmaceutical personnel (Yogyakarta Special Region Health Service, 2020). Pharmacy vocational staff are professionals in the pharmaceutical field who have completed a Diploma in

Pharmacy and are equipped with the knowledge and skills to mix and prepare medicines, ensure the quality and safety of medicines, provide education and information related to medicines, maintain the cleanliness and tidiness of the pharmacy area and assist the Pharmacist in his duties. To improve technical skills and abilities even better, training and assistance for pharmaceutical vocational staff is needed to become those responsible for small traditional medicine businesses.

Based on this, community service is carried out through training and mentoring for pharmaceutical vocational staff with the theme "The Role of Pharmaceutical Vocational Staff in Innovation and Development of Herbal Medicine Products" using the Zoom application or online, aimed at students of the diploma three Pharmacy study program, Faculty of Health, Universitas Islam Madura. 88 participants and accompanied by lecturers as resource persons and the committee involved. This training and mentoring activity aims to improve competency and technical skills regarding traditional medicine production (including formulation, extraction, processing and packaging), understanding the quality and safety standards that must be adhered to in traditional medicine products (including methods of quality control and supervision of the production process) and improve the overall quality of traditional medicine products that are safe and effective.

IMPLEMENTATION AND METHODS

Community service through training and mentoring activities for pharmaceutical vocational staff to become those responsible for small traditional medicine businesses with the theme "The Role of Pharmaceutical Vocational Staff in Innovation and Development of Herbal Medicine Products" was carried out online via the Zoom application (for training) which was held on May 23 2024 at 08.30 WIB to finished. This training and mentoring activity was attended by 88 students from the diploma three Pharmacy study program, Faculty of Health, Universitas Islam Madura, the Universitas Islam of Madura as the activity committee, and lecturers as resource persons. Meanwhile, mentoring activities for pharmaceutical vocational staff to become people in charge of small traditional medicine businesses are carried out offline at Universitas Islam University for 6 months starting from January 2024 to June 2024. The timeline for these training and mentoring activities is carried out in the stages shown as follows:

1. Planning
 - a. Carrying out planning and coordination with Universitas Islam Madura for the implementation of training and mentoring activities for pharmaceutical vocational staff to become those responsible for small traditional medicine businesses.
 - b. Analyzing training needs where identifying gaps between current competencies and desired competencies.
 - c. Designing effective teaching methods and designing learning materials covering traditional medicine regulations, quality control, production processes, risk management and others.

- d. Select resource persons who have relevant knowledge and experience in the fields of pharmacy and traditional medicine and prepare guides and teaching materials to ensure teaching consistency.
 - e. Prepare guidebooks, reading materials and equipment needed for practical and mentoring sessions.
 - f. Determine the criteria for participants who can take part in the training based on educational background and work experience, such as participants from a Diploma Three Pharmacy educational background.
 - g. Determine the appropriate duration of training and mentoring time, including theory and practical sessions.
 - h. Provide e-certificates for participants who successfully complete the training.
2. Training Activities

Participants in the training and mentoring activities for pharmaceutical vocational staff to become those responsible for small traditional medicine businesses were 88 students from the Diploma Three Pharmacy study program, Faculty of Health, Universitas Islam Madura, using the Zoom application as an online face-to-face forum for training activities. What to do next includes:

- a. Prepare material to be presented in the zoom meeting in sharescreen mode so that participants can see it on their respective zoom screens.
- b. The lecturer as a resource person opened the training activity by introducing himself to all participants who attended the training activity and mentoring vocational pharmaceutical staff to become those responsible for small traditional medicine businesses. Then, the resource person began to provide an introduction about the purpose and importance of pharmaceutical vocational staff as those responsible for small traditional medicine businesses. The resource person explains the points that will be discussed and provides a brief overview of what will be learned during the zoom meeting session.
- c. The resource person explained what a small traditional medicine business is, what requirements must be met to become the person in charge, what duties and responsibilities are assigned to pharmaceutical vocational staff as the person in charge and the benefits for improving the quality of small traditional medicine businesses. Apart from that, the resource person explained that pharmaceutical vocational staff as those responsible must understand the laws and regulations governing traditional medicines, including health laws, BPOM regulations and Standar Nasional Indonesia (SNI) as well as understand the registration and licensing process for traditional medicines, including the documents required. The responsible user must also ensure that all production and distribution processes comply with applicable regulations.

- d. Then, the resource person explained that vocational pharmaceutical personnel as those in charge need to know the quality management system implemented to ensure products meet established standards and that there are testing procedures, both for raw materials, intermediate products and finished products to ensure quality and quality documentation.
- e. After finishing explaining the presentation of the material on the zoom screen, the resource person opened a question/answer and discussion session with the participants and facilitated discussions regarding matters that should be prioritized. The resource person reminded us about the importance of training vocational pharmaceutical personnel as those responsible for small traditional medicine businesses to maintain the quality and efficacy of medicines from time to time.
- f. The resource person closed the training activity session.

3. Mentoring Activities

Assistance activities for pharmaceutical vocational staff as those in charge are carried out offline within the Universitas Islam Madura for 6 months which includes the following activities:

- a. Discussion: participants and resource persons as activity companions in the accompanying process of this activity exchange ideas to discuss regulations or rules governing traditional medicines, the quality management system used, including ISO 9001 or other standards, discuss quality testing methods for raw materials, intermediate products, and finished products and the validation process. Then, it continues with the latest technology used in traditional medicine production and how to integrate it into existing processes and must think about ways to increase production efficiency and reduce waste.
- b. Workshop: In carrying out the workshop, the resource person accompanies the participants to carry out a workshop on testing the quality of raw materials, intermediate products and finished products. Then, implement the quality management system that has been studied in the accompanying discussion. Not only that, participants will face a production practicum session where direct training will be held in the traditional medicine production process, from extraction of raw materials to packaging of finished products. With workshops, participants can also develop new product formulations or improve existing ones. Furthermore, participants are also expected to carry out K3 simulations to maintain safety when the drug production process is carried out.
- c. FGD (Focus Group Discussion): In the FGD, participants were invited to identify the main challenges faced in the production and distribution of traditional medicines. Then, a brainstorming session was held for the participants to find innovative solutions to the challenges that had been identified.

- d. Case Study: In case studies, participants are required to discuss in depth real things that occur and are relevant to the challenges faced in traditional medicine production and focus on solving specific problems through a problem-based approach. By analyzing case studies, participants can develop analytical skills and problem solving, understanding practical and theoretical implications, and learning from the success or failure experiences of other organizations. Case studies also allow participants to test their knowledge in real situations which is very important to become competent people in charge of small traditional medicine businesses.

The method used in training activities for pharmaceutical vocational staff to become people in charge of small traditional medicine businesses is a material presentation, question/answer and discussion session conducted online via the zoom meeting application. Meanwhile, the methods used for mentoring vocational pharmaceutical staff to become those responsible for small traditional medicine businesses are discussions, workshops, FGDs and case studies conducted offline within the Universitas Islam Madura. Some of the equipment used for online training activities via the Zoom meeting application is a laptop, laptop web camera, external microphone, headphones or headset, stable internet network, zoom background control and recording equipment. Meanwhile, some of the equipment used for offline mentoring activities at Universitas Islam Madura are laptops, projectors, whiteboards and markers, microphones, and simulation rooms for mentoring, including workshops, FGDs and case studies.

The materials used in training and mentoring activities for pharmaceutical vocational staff to become those responsible for small traditional medicine businesses online are presentation materials in the form of powerpoints and offline are guidebooks and simulation rooms to support mentoring activities for 6 months. This training and mentoring activity is carried out to improve competency and technical skills regarding traditional medicine production (including formulation, extraction, processing and packaging), understand the quality and safety standards that must be adhered to in traditional medicine products (including methods of quality control and supervision of the production process) and improving the quality of traditional medicine products that are safe and effective as a whole as a form of responsibility for the duties of small traditional medicine businesses carried out by pharmaceutical vocational personnel.

RESULTS AND DISCUSSION

Community service through training and mentoring activities for pharmaceutical vocational staff to become those responsible for small traditional medicine businesses is carried out online and offline, namely theory presentation sessions by holding online meetings via zoom meetings and mentoring with offline meetings at Madura Islamic University. In carrying out online activities, the activities were guided by two resource persons, namely Dr. Teguh Setiawan Wibowo, M.M., M.Si., M.Farm., Apt., AIFO. (Director of Akademi Farmasi Yannas Husada Bangkalan) and Alief Putriana Rahman, S.Si., M.Farm (Head of the Third Diploma in Pharmacy Study Program at the Universitas Islam

Madura). The resource person entered the zoom meeting room accompanied by the committee and then the participants began to enter the zoom meeting room one by one, up to 88 students. After all participants entered the complete zoom meeting, the participants began to listen to the resource person's presentation regarding pharmaceutical vocational staff who act as people in charge of small traditional medicine businesses.

The resource person explained that Society 5.0 and Pharma 5.0 influenced the role of vocational pharmaceutical workers in innovation and development of herbal medicine (traditional medicine). Apart from that, changing times towards the Industrial Revolution 4.0 is changing face-to-face systems into cyber systems and virtual worlds because of the Internet of Things (IoT). Former Japanese Prime Minister, Shinzo Abe, said that Society 5.0 could improve human security and welfare, especially in industry, information and society. Referring to this, the resource person stated that natural medicines are ingredients, ingredients, or products originating from natural resources in the form of plants, animals, microorganisms, minerals, or other ingredients from natural resources or mixtures of these ingredients that have been used. from generation to generation or has been proven to be efficacious, safe and of good quality, used for health maintenance, health improvement, disease prevention, treatment and health restoration based on empirical or scientific evidence (Undang-Undang Republik Indonesia No 17 Tahun 2023 tentang Kesehatan). Meanwhile, herbal medicine is an ingredient or concoction that comes from traditional knowledge or cultural heritage and meets other criteria in accordance with the provisions. The resource person continued that herbal medicine has several criteria, including using raw material sources, carried out by the herbalist, based on evidence, has uses and meets safety and quality requirements. Then, the resource person explained about the herbal medicine brands that currently exist in Indonesia, such as Jamu Day, Brand Indonesia, and others. Not to forget, the resource person talked about the purpose of using natural ingredients and the emergence of cafes selling healthy herbal medicine as the latest trend.

Then, the source stated that based on Pasal 286 of Undang-Undang Republik Indonesia No 17 Tahun 2023 tentang Kesehatan states that vocational pharmaceutical personnel are health workers who provide pharmaceutical services which are under the authority of pharmacists within certain limits. Diploma three Pharmacy graduates can become operators of pharmaceutical services, implement management of pharmaceutical preparations, medical devices (Alkes), and consumable medical materials (BMHP) and become operators of the production of pharmaceutical preparations such as medicines, natural medicines and cosmetics and medical devices. The interviewee assessed that the occurrence of Covid-19 had led to thinking about the independence of the pharmaceutical sector being the main key to getting out of the pandemic, something that had to be achieved. Apart from that, weaknesses in the independence of the drug and vaccine industry are serious and have a negative impact on the country. The interviewee said that 1 in 3 people had used traditional health products or services in Indonesia with 59% of Indonesians consuming herbs and 44% of households using traditional methods for health.

The resource person also explained how the goals, opportunities and challenges in the use of traditional medicines as well as accelerating the development and use of medicines could be carried out. Apart from that, the resource person also explained several strategies for developing traditional medicine in the Society 5.0 era. After explaining the theory presentation session, the resource person proceeded to a question/answer and discussion session to find out how far the participants understood the information provided.

During the implementation of training and mentoring activities for pharmaceutical vocational staff as those responsible for small traditional medicine businesses, participants in training and mentoring activities totaling 88 students from the Diploma Three Pharmacy study program, Faculty of Health, Universitas Islam Madura, were placed in a simulation room for mentoring for 6 months. and hosted by a zoom meeting for training activities for pharmaceutical vocational staff to become those responsible for small traditional medicine businesses. Based on the results of training and mentoring activities for vocational pharmaceutical workers who are responsible for small traditional medicine businesses, the participants were very enthusiastic and enthusiastic in listening to the material presentation session about the duties and responsibilities of a vocational pharmaceutical worker appointed as responsible for small businesses. traditional medicine and received a positive response from the participants who attended. Documentation related to the process of training and mentoring vocational pharmaceutical staff to be responsible for small traditional medicine businesses is shown in the following picture:



Figure.1 Material Presented Using Zoom Meeting
(Source: Personal Documents, 2024)

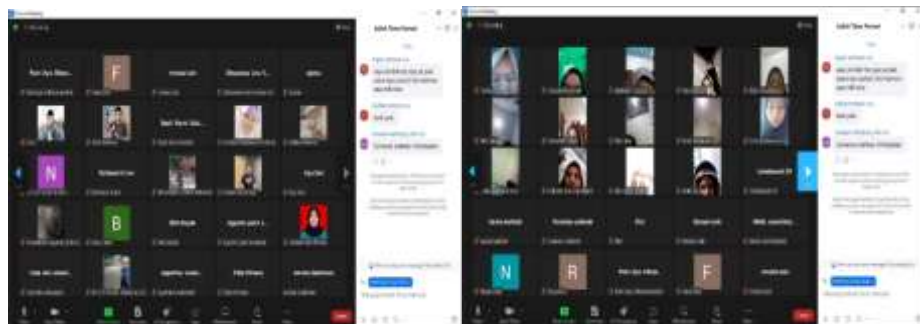




Figure.2 Screenshot of Training Participants Participating in Zoom Meeting
(Source: Personal Documents, 2024)

CONCLUSIONS AND RECOMMENDATIONS

Community service through training and mentoring for pharmaceutical vocational staff to become those responsible for small traditional medicine businesses which is carried out online using the zoom meeting application and offline within the Universitas Islam Madura, including presentation of material, questions/answers and discussions (via zoom meeting) and includes discussions, FGDs, workshops and case studies (through offline mentoring) which are led directly by lecturers as resource persons and supported by parties who help prepare participants' equipment and needs during training and mentoring activities. This training and mentoring activity was attended by a total of 88 students from the diploma three Pharmacy study program, Faculty of Health, Universitas Islam Madura as an effort to improve the quality and safety of traditional medicinal products as well as improve the technical and managerial skills of pharmaceutical vocational staff so that they can carry out their role as people in charge in an effective manner. effective. It is hoped that training and mentoring activities for vocational pharmaceutical workers to become those responsible for small traditional medicine businesses can be an opportunity for vocational pharmaceutical workers as those responsible for developing new traditional medicine products that are safer, more innovative, more effective, in line with health trends and meet applicable quality standards. .

Based on the results of training and mentoring activities for pharmaceutical vocational staff to become those responsible for small traditional medicine businesses, it is hoped that graduate students from the Diploma Three Pharmacy study program, Faculty of Health, Universitas Islam Madura, can carry out ethical competence in the pharmaceutical industry and social responsibility of the industry towards society and the surrounding environment. , apart from having competitive technical and managerial skills in small traditional medicine businesses. Then, you can increase efficiency, reduce costs without sacrificing product quality and develop strong leadership skills to lead the industry to success.

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REFERENCES

- BPOM. (2014). Persyaratan Mutu Obat Tradisional. Badan Pengawas Obat dan Makanan, Jakarta
- Dinas Kesehatan Daerah Istimewa Yogyakarta. (2020). Regulasi Perizinan UKOT, www.dinkes.jogjaprovo.go.id, diambil dari <https://dinkes.jogjaprovo.go.id/berita/detail/regulasi-perizinan-ukot>
- Oktaviani, A.,R., Takwiman, A., Santoso, D.,A.,T., Hanaratri,E.,O., Damayanti, E., Maghfiroh,L., Putri,M.,M., Maharani, N.,A., Maulida, R., Oktadela, V., A., Yuda, A. (2021).Pengetahuan dan Pemilihan Obat Tradisional Oleh Ibu-Ibu di Surabaya, Jurnal Farmasi Komunitas, Vol.8, No.1: 1-8.
- Peraturan Menteri Kesehatan RI Nomor 7 Tahun 2012 tentang Registrasi Obat Tradisional
- Setditjen Farmalkes. (2022).Workshop Peningkatan Kapasitas Penanggung Jawab Teknis Sarana Produksi Obat, Obat Tradisional dan Kosmetika, www.farmalkes.kemkes.go.id, diambil dari <https://farmalkes.kemkes.go.id/2022/12/workshop-peningkatan-kapasitas-penanggung-jawab-teknis-sarana-produksi-obat-obat-tradisional-dan-kosmetika/>
- Undang-Undang No 17 Tahun 2023 Tentang Kesehatan.