Enhancing the Quality and Competitiveness of Indonesian Traditional Medicine Practitioners, Members of ASPETRI East Java, through Standardization

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Abstract: Traditional medicine in Indonesia. particularly herbal concoctions known as jamu, holds significant potential in supporting public health. However, variations in quality and preparation methods can affect the efficacy and safety of the products. This community service activity aims to enhance the quality and competitiveness of traditional medicine practitioners who are members of ASPETRI East Java through standardization. The methods employed include delivering educational materials and hands-on practice in formulating jamu for various ailments, as well as introducing participants to simplisia and medicinal plants. The program is designed to improve participants' knowledge and skills in selecting high-quality raw materials, proper processing techniques, and standardized dosing. Evaluation is conducted through pre-tests and posttests to assess knowledge improvement, along with participant satisfaction surveys regarding the content and training methods. It is anticipated that, through this initiative, traditional medicine practitioners will be able to produce jamu products that meet quality and safety standards, thereby increasing public trust and market competitiveness.

Keywords:Standardization, Jamu, Simplisia, Medicinal Plants,
ASPETRI East Java.

Introduction

Indonesia is renowned for its extraordinary biodiversity, ranking second globally after Brazil, with approximately 40,000 plant species, around 20,000 of which are medicinal plants. This wealth has been utilized for generations in traditional medicine practices, particularly through the use of herbal concoctions such as jamu. Jamu functions not only as a treatment but also as a preventive measure and an integral part of health maintenance in Indonesian society.

However, amidst the rapid development of the modern pharmaceutical industry and globalization, Indonesia's traditional medicine faces significant challenges. Variations in the quality, safety, and efficacy of jamu products are major concerns. Without adequate standardization, it is difficult for jamu products to compete in both domestic and international markets. Additionally, a lack of knowledge and skills in selecting raw materials, concocting processes, and determining appropriate dosages can affect the quality of the final product.

Recognizing the importance of standardization in traditional medicine, the Indonesian government has undertaken various initiatives. Instruksi Presiden No. 6 of 2016 on the Acceleration of Development of the Pharmaceutical and Medical Device Industry prioritizes the development of natural-based medicines, including jamu. Furthermore, Undang-Undang No. 17 of 2023 introduces the term "natural material medicine" to replace the previous terminology, providing a stronger legal foundation for the development and utilization of jamu in health services.

Peraturan Presiden No. 54 of 2023 also establishes a roadmap for the development and utilization of jamu, with seven main strategies: strengthening the production system, enhancing the market, increasing public traditional knowledge and human resource competencies, developing an integrated jamu information system, strengthening science and technology, preserving and protecting raw material resources, and reinforcing institutions, regulations, and infrastructure.

The Indonesian Traditional Herbal Medicine Association (ASPETRI), as a professional organization representing traditional herbal medicine practitioners in Indonesia, plays a strategic role in supporting these standardization efforts. Since its establishment on June 27, 2005, ASPETRI has been active in member training, seminars, preparation of traditional medicine service standards, and providing recommendations for its members. In East Java, ASPETRI is committed to improving the quality and competitiveness of traditional medicine practitioners through various training and certification programs.

One effective approach to standardization is through the delivery of materials and hands-on practice. This method allows traditional medicine practitioners to understand theory while simultaneously applying it in practice. Training that includes practicing jamu concoction for various diseases, introduction to simplicia, and identification of medicinal plants is crucial to ensure that the products produced meet quality and safety standards.

The importance of standardization is also supported by data from the World Health Organization (WHO), which states that more than 80% of the world's population uses natural-based medicine as an alternative. This indicates a significant

potential for Indonesian jamu products to capture the global market share, provided they meet recognized international standards. Standardized Indonesian traditional herbal medicine practitioners are expected to provide safe and high-quality traditional herbal health services, thereby improving the quality of life of the Indonesian people.

Moreover, the development of jamu into Standardized Herbal Medicines (OHT) and phytopharmaceuticals requires synergy between scientific research and traditional practices. Scientific research can provide empirical evidence regarding the efficacy and safety of jamu, while traditional practices offer empirical knowledge that has stood the test of time. This collaboration is expected to produce jamu products that are not only safe and effective but also highly competitive in the global market. Jamu, which has a long-standing empirical history of use in society, also gains scientific support, thereby increasing public trust.

However, challenges in standardization are not limited to technical aspects but also involve social and cultural aspects. Traditional medicine practitioners often have methods and recipes passed down through generations, which may differ from one region to another. Therefore, an approach sensitive to local wisdom and culture is essential in the standardization process.

On the other hand, educating the public about the importance of choosing jamu products that have been tested for safety, efficacy, and quality is also a determining factor for success. Consumer awareness of product quality and safety will encourage Indonesian traditional herbal medicine practitioners and natural material medicine producers to continually improve their service and production standards. Additionally, government support in the form of clear regulations and consistent law enforcement will ensure that only products meeting standards can circulate in the market.

In the global context, the recognition of jamu as an intangible cultural heritage by UNESCO would provide additional legitimacy and enhance the image of jamu in the eyes of the world. This is expected to open export opportunities and increase the country's foreign exchange through the jamu industry. Overall, efforts to standardize traditional medicine, particularly jamu, require a multidisciplinary approach involving various stakeholders, including the government, academics, practitioners, and the community.

Methods

The implementation method for the activity titled "Enhancing the Quality and Competitiveness of Indonesian Traditional Herbal Practitioners, Members of ASPETRI East Java, through Standardization" encompasses the stages of preparation, execution, and conclusion:

- 1. Preparation
 - a. Needs Identification and Coordination with Partners
 - 1) Coordinate with ASPETRI East Java management to identify specific member needs related to the standardization of traditional medicine.
 - 2) Determine a strategic training location that is easily accessible to participants.
 - b. Development of Training Materials
 - Develop training modules covering: Basic theory of Indonesian herbal formulations, Concepts of standardization in traditional medicine, Traditional diagnosis, Principles and techniques of formulating jamu for various diseases, Introduction and identification of simplicia and medicinal plants
 - 2) Materials are prepared based on current literature and in accordance with applicable regulations.
 - c. Procurement of Equipment and Materials
 - 1) Provide necessary equipment for practice, such as mixing tools, scales, and storage containers.
 - 2) Collect raw materials in the form of simplicia and medicinal plants to be used in practice sessions.
 - d. Recruitment and Registration of Participants
 - 1) Open registration for ASPETRI East Java members interested in participating in the training.
 - 2) Set the number of participants according to training capacity to ensure effective learning.
- 2. Execution Process
 - a. Opening
 - 1) Welcome remarks from the Chairperson of ASPETRI East Java and training facilitators.

- 2) Presentation of the objectives and agenda of the activity to participants.
- 3) Facilitators for this activity include:
 - Dr. Apt. Teguh Setiawan Wibowo, MM., MBA., M.Si., M.Farm., AIFO
 - Hartaty Larasaty, Br.M
 - Moh Risqy Lazuardi Ramadhan, A.Md Battra., SKM., M.Si.
- b. Theory Sessions
 - 1) Presentation on the Concept of Indonesian Traditional Herbal Medicine and Its Standardization: Explanation about traditional healers, natural material medicines, and original Indonesian formulations; Discussion on the importance of standardization in improving the quality and competitiveness of jamu products; Introduction to regulations and standards applicable in jamu production.
 - 2) Presentation on Traditional Diagnosis
 - 3) Introduction to Simplicia and Medicinal Plants: Identification of various types of simplicia and medicinal plants commonly used in jamu; Explanation of the characteristics, benefits, and processing methods of each plant.
- c. Practical Sessions
 - 1) Practicing Jamu Formulation for Various Diseases: Demonstration of standard-compliant jamu formulation techniques; Participants engage in hands-on practice under the guidance of facilitators.
 - Practice in Identifying Simplicia and Medicinal Plants: Participants are guided to directly recognize various simplicia and medicinal plants; Training in selecting high-quality raw materials that meet standards.
- d. Discussion and Q&A
 - 1) Interactive sessions to discuss experiences during practice, challenges faced, and applicable solutions.
 - 2) Facilitators provide feedback and clarification on participants' questions.
- e. Evaluation
 - 1) Conduct pre-tests and post-tests to measure participants' knowledge improvement before and after the training.

- 2) Participant Satisfaction Survey to gather feedback on materials, delivery methods, and overall training implementation.
- 3. Conclusion
 - a. Presentation of Evaluation Results
 - 1) Provide an overview of pre-test and post-test results.
 - 2) Share feedback from the participant satisfaction survey.
 - b. Certification and Awards
 - 1) Award participation certificates to participants who have completed the entire training series.
 - 2) Special recognition for participants with outstanding performance or contributions during the training.
 - c. Official Closing
 - 1) Expressions of gratitude from the Chairperson of ASPETRI East Java and facilitators.
 - 2) Hopes that the acquired knowledge can be applied in daily traditional medicine practices.
 - 3) Information on follow-up actions or future programs that may be conducted.

With this structured implementation method, it is hoped that traditional healers who are members of ASPETRI East Java can enhance their competencies in formulating jamu according to standards, thereby producing high-quality products that are safe and effective for the community.

Result

The activity titled "Enhancing the Quality and Competitiveness of Indonesian Traditional Herbal Practitioners, Members of ASPETRI East Java, through Standardization" was conducted on February 17, 2025, involving 12 participants who are members of ASPETRI East Java. The effectiveness of the training was evaluated through pre-tests and post-tests to measure the improvement in participants' knowledge and skills.

Before the training, participants were given a pre-test to assess their initial knowledge regarding the standardization of traditional medicine, herbal formulation, and the identification of simplicia and medicinal plants. After the training, a post-test

was conducted with the same material to measure the increase in knowledge. The following are the average pre-test and post-test results of 12 participants of the Standardization of Indonesian Traditional Herbal Medicine.

Peserta	Skor Pre-Test	Skor Post-Test
1	60	85
2	55	80
3	70	90
4	65	88
5	50	78
6	62	84
7	58	82
8	67	89
9	53	79
10	61	83
11	59	81
12	64	87

Table 1. Pre Test and Post-Test Scores of Participants of the Standardization of Indonesian Traditional Herbal Medicine

The average pre-test score of the 12 participants was 60.08, and the average post-test score was 84.25, indicating a significant increase of 24.17 points. This significant improvement demonstrates that the standardization training successfully enhanced participants' understanding of the material presented by the facilitators. The training method, which combined theory and practice, proved effective in increasing participants' knowledge and skills. This aligns with research showing that practical approaches in health training can significantly improve participants' competencies.

Participants showed improved skills in formulating herbal medicines according to standards. They were able to apply knowledge about dosage, ingredient combinations, and correct formulation techniques, which is crucial to ensure the quality and safety of the herbal products produced. Through practical sessions, participants could better identify various simplicia and medicinal plants, which is essential in selecting quality raw materials for herbal medicine production. This competency enhancement is expected to be implemented in daily traditional health service practices. Standardized traditional healers will be able to provide higher quality, safe, and effective services to the community. Although this training showed positive results, challenges such as limited access to quality raw materials and standard equipment still exist. It is recommended to establish cooperation with the government and related institutions to provide the necessary resources. This training successfully increased the knowledge and skills of traditional healers, members of ASPETRI East Java, in the standardization of traditional medicine. The implementation of training results is expected to improve the quality of traditional health services and the competitiveness of Indonesian herbal products in both domestic and international markets.

Conclusion

The implementation of standardization activities by ASPETRI East Java has made a significant contribution to enhancing the competence and professionalism of traditional herbal practitioners in the region. Through structured training, participants acquired better knowledge and skills in formulating herbal medicines according to established standards. This aligns with ASPETRI's goal to improve and enhance the competence of its members in Indonesian traditional medicine services.

This competency improvement is expected to enhance the quality of traditional medicine services, enabling them to compete at national and international levels. Additionally, this activity supports efforts to preserve and develop Indonesia's cultural heritage in the field of traditional medicine.

The success of this program underscores the importance of collaboration between professional organizations, the government, and the community in promoting the standardization and legality of traditional medicine practices. Thus, traditional healers can make a real contribution to the national health system, in accordance with applicable regulations.

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