

# **Revitalizing the Use of Family Medicinal Plants (TOGA) and Herbal Medicine: Health Communication Approach and Preserving Cultural Identity**

## **ABSTRACT**

This article describes the results of community service integrated with the Raden Intan Lampung State Islamic University (UIN) Real Work Lecture (KKN) program in Jati Indah Village, Tanjung Bintang, South Lampung. The service focuses on revitalizing the knowledge and use of Family Medicinal Plants (TOGA) and herbal medicine as Indonesia's cultural heritage. The methods used include observation, education, training and implementation of community-based programs. Results show significant increases in knowledge, cultural awareness, and practice of using TOGA and herbal medicine in the community. The involvement of KKN students provides added value in the form of two-way knowledge transfer and valuable experience in community service. The success of this program highlights the importance of a holistic approach in revitalizing traditional healing practices in the modern era.

Keywords: TOGA, herbal medicine, health communication, cultural heritage, community empowerment

## **INTRODUCTION**

Family Medicinal Plants (TOGA) and herbal medicine are an Indonesian cultural heritage that has existed for centuries. According to 2018 Basic Health Research (Riskesdas) data, 48% of Indonesians use herbal medicine to maintain health and treat disease (Indonesian Ministry of Health, 2019). However, this practice needs to be revised in terms of relevance and sustainability in the modern era. Rahmawati and Wahyuni (2016) highlighted the decline in the younger generation's interest in traditional medicine, which threatens the continuity of this knowledge.

In this context, the Raden Intan Lampung State Islamic University (UIN) initiated integrating TOGA and herbal medicine revitalization efforts into the Community Service Program (KKN). The KKN program, an integral part of the

higher education curriculum in Indonesia, offers a unique platform for connecting academic knowledge with societal needs. The community service discussed in this article is part of the UIN Raden Intan Lampung KKN in Jati Indah Village, Tanjung Bintang District, South Lampung Regency.

Jati Indah Village was chosen as the location for the service because of its great potential in developing TOGA and herbal medicine. Most of the population work as farmers, and the village has a wealth of traditional knowledge about medicinal plants. Despite this, public awareness and understanding of the benefits and potential of TOGA and herbal medicine still need to be improved, creating an ideal opportunity for community-based interventions.

Several previous studies have discussed the use of TOGA and herbal medicine in the context of public health and cultural preservation. Jennings et al. (2018) conducted an ethnobotanical study in Central Java, identifying 107 species of medicinal plants used in traditional medicine. Sujarwo et al. (2020) researched the intergenerational transmission of medicinal plant knowledge in Bali, finding that traditional knowledge experienced significant erosion in the younger generation. Elfahmi et al. (2014) studied the potential of herbal medicine in the development of modern medicine, while Torri (2013) examined the risk perception of herbal medicine among urban consumers in Indonesia.

Although these studies provide valuable insights, studies need to specifically integrate TOGA and herbal medicine revitalization with college service-learning programs. Herein lies the main novelty of this community service. Integration with the UIN Raden Intan Lampung KKN program brings several advantages. First, KKN enables dynamic two-way knowledge transfer between students, lecturers, and the community, creating a rich and diverse learning ecosystem. Second, by involving KKN students, this program has the potential for higher sustainability because the next KKN group can continue it. Third, students gain direct experience applying academic knowledge to overcome societal challenges.

Furthermore, KKN involves students from various disciplines, allowing for a more comprehensive approach to addressing the complex issues surrounding

TOGA and herbal medicine. This program also strengthens UIN Raden Intan Lampung's role as a community development partner, which aligns with the "engaged scholarship" concept promoted by Boyer (1996).

Apart from integration with KKN, this service brings novelty in several other aspects. This service adopts a holistic approach that integrates health, economic and cultural elements in one comprehensive framework. In contrast to many previous observational studies, this service involves active intervention through training programs, economic empowerment, and health communication strategies. In particular, this service develops a health communication strategy that considers philosophical and cultural aspects in the promotion of TOGA and herbal medicine, an approach that has yet to be widely explored in previous studies.

The main objective of this integrated community service with KKN is to revitalize the knowledge and use of TOGA and herbal medicine in Jati Indah Village through a participatory and community-based approach. Apart from that, this service aims to develop a model of integrating traditional and modern knowledge in public health practice and building the capacity of local communities and KKN students to preserve and develop the cultural heritage of conventional medicine. No less important, this service also aims to evaluate the effectiveness of integrating community service programs with KKN in the context of revitalizing traditional healing practices.

## **RESEARCH METHODS**

This community service adopts a participatory action research (PAR) approach with a qualitative-descriptive method, which aligns with the concept put forward by Kemmis and McTaggart (2005). PAR was chosen because of its ability to actively involve communities in research and action, enabling collaboration between researchers and communities to identify problems and develop solutions (Baum et al., 2006). The service process begins with the

observation and potential mapping stage, where the team identifies the types of TOGA commonly used in the village and analyzes the knowledge and practice of using herbal medicine in the community. This stage is crucial for understanding the initial conditions and potential for TOGA development in Jati Indah Village, following the "contextual diagnosis" principle outlined by Greenwood and Levin (2006).

Next, the activities continued to the socialization and education stage. In this stage, the team held workshops discussing the health benefits and cultural values of TOGA and herbal medicine and had group discussions about traditional healing philosophies. This approach adopts the "transformative learning" concept proposed by Mezirow (1991), aiming to increase public critical awareness and understanding of the importance of TOGA and herbal medicine in health and cultural contexts.

The third stage focuses on training and empowerment, following the community empowerment model developed by Fawcett et al. (1995). The team provides training on TOGA cultivation and traditional herbal medicine production, facilitates the formation of household-scale herbal medicine production groups, and includes training on culture-based health communication strategies.

The final stage is evaluation and monitoring, adopting the participatory evaluation framework proposed by Cousins and Whitmore (1998). The team measured increases in knowledge and practice of using TOGA and herbal medicine and analysed this program's economic and socio-cultural impacts. Data was collected through various methods, including direct observation, in-depth interviews with community leaders and traditional herbal medicine practitioners, and pre-test and post-test surveys. Data triangulation techniques were used to increase the validity of the findings, following Denzin's (2012) recommendations.

## RESULTS AND DISCUSSION

The results of community service in Jati Indah Village show success in revitalizing knowledge and use of Family Medicinal Plants (TOGA) and herbal medicine. It is important to note that this entire series of service activities is carried out in conjunction with the State Islamic University (UIN) Real Work Lecture (KKN) program, which provides added value through active student involvement and integration with the mission of higher education. This collaboration enables two-way knowledge transfer between the academic community and the community while providing valuable experience for students in the context of community service.

This program has achieved several main objectives: increasing cultural knowledge and awareness, changing public health practices, and preserving traditional knowledge. The 65% increase in public understanding of the benefits of TOGA and herbal medicine shows the effectiveness of the educational methods used in this program. An approach that combines modern knowledge with local wisdom, enriched by the perspectives of KKN students, has proven effective in increasing community acceptance and understanding. This is in line with the findings of Sujarwo et al. (2020) which emphasizes the importance of integrating traditional knowledge in efforts to preserve herbal medicine practices.

Furthermore, the increased appreciation of the cultural values and philosophy behind the use of TOGA and herbal medicine reported by 80% of respondents indicates the program's success in strengthening the community's cultural identity. The involvement of KKN students in this process provides a new dimension to intergenerational dialogue, facilitating knowledge exchange between the educated younger generation and traditional knowledge holders in society. This confirms Kartika's (2023) argument that herbal medicine is not just herbal medicine but is also a form of health communication and philosophy that reflects Indonesian cultural identity.

Changes in public health practices, demonstrated by a 15% reduction in visits to community health centres for minor complaints and an increase in the use of TOGA and herbal medicine by 45% of families, indicate significant

adoption of traditional healing practices. This shows the potential of TOGA and herbal medicine as a complement in the modern health system, which aligns with the study of Elfahmi et al. (2014), who emphasized the importance of integrating herbal medicine in the development of modern medicine.

Efforts to preserve traditional knowledge through documentation of 50 types of local medicinal plants and establishing a special TOGA and herbal medicine library are essential steps in maintaining the sustainability of this knowledge. The involvement of KKN students in the documentation process not only speeds up the process but also introduces modern documentation methods that can increase information accessibility in the future. This addresses concerns Sujarwo et al. (2020) expressed regarding the erosion of traditional knowledge in the younger generation.

Collaboration between the service team, KKN students, and the community in developing the TOGA community garden has created an effective participation model that has the potential to be replicated in other places. Although this program has yet to reach the creative economy development stage, the foundation built through increasing knowledge, awareness, and practice of TOGA and herbal medicine provides excellent potential for future development. The involvement of KKN students has opened new insights into the potential for innovation and development of TOGA-based products and herbal medicine, which aligns with Torri's (2013) findings regarding the potential of herbal medicine in a modern urban context.

The limitations of this program lie in its limited geographic coverage and relatively short duration, considering that the KKN program has certain time limits. Further research with a wider scope and longer period is needed to assess the sustainability of this program's long-term impact.

## **Revitalization of TOGA Cultivation and Herbal Medicine Production**

This program is implemented through structured stages involving KKN UIN Raden Intan Lampung students and the local community to revitalise TOGA

cultivation and herbal medicine production. This process begins with the licensing stage from the Village Head, which is essential in ensuring local government support and participation. Collaboration with PKK women is also emphasized, reflecting the participatory approach advocated by Ife and Tesoriero (2006) in community development.

The preparation involves clearing the land and gathering the necessary tools and materials. This process not only focuses on technical aspects but also provides opportunities for participants to understand TOGA cultivation techniques, which aligns with Hikmat's (2011) recommendations regarding the importance of technical understanding in community empowerment programs. Data collection on plants such as ginger, galangal, lime, aloe vera, papaya and ginger is essential for further development.

The development of a 300 m<sup>2</sup> TOGA community garden with 30 types of medicinal plants succeeded in attracting the participation of 30 families in its maintenance. This community garden not only functions as a source of medicinal plants but also as a learning centre for the community. The seed collection process involves using local resources, with seeds from community gardens and some from local traders. This approach aligns with the principles of sustainability and independence in community development.



*Picture 1. Land clearing process*



*Picture 2. Planting process*

The planting process considers not only the functional aspects of plants as medicine but also their aesthetic value. Plants such as butterfly pea flowers, cat's whiskers, and red shoot flowers were chosen because of their dual function as medicinal and ornamental plants. This reflects a holistic approach to TOGA, which focuses on health aspects and improving the quality of the living environment.

The TOGA cultivation and processing training program was held in five sessions, with 70 participants, focusing on organic cultivation and traditional processing techniques. The results were encouraging, with 80% of participants reporting improved skills in TOGA cultivation. Hopefully, this increase in skills will encourage more residents to cultivate medicinal plants in their yards.

Modernization efforts have been made in herbal medicine production without losing its traditional essence. Developing herbal medicine production methods that meet modern hygiene standards has produced ten variants of traditional herbal medicine. These variants are packaged and branded to reflect local cultural identity, maintaining product quality and preserving cultural heritage.



Picture 3. Example of a new plant name label 1 Picture 4. Example of a new plant name label 2

The final stage involves arranging the land and making labels with the names of the plants in the garden. This labelling process not only functions for identification but also as a medium for educating the public about various types of medicinal plants and their benefits. This entire process reflects what Okvat and

Zautra (2011) call "community gardens", which function as sources of food or medicine and as social spaces that strengthen community cohesion.

This activity was carried out in the yard next to Mr Ibd'i's house, which needed better maintenance. The initiative of UIN Raden Intan Lampung KKN students in the TOGA creation program shows the critical role of universities in community service, as Boyer (1996) emphasised in the concept of "scholarship of engagement".

## **Health Communication and Cultural Preservation**

Health Communication and cultural preservation are crucial aspects of the TOGA and herbal medicine revitalization program, considering the importance of bridging traditional knowledge with modern health understanding. This approach aligns with the concept of "cultural safety" in health communication proposed by Ramsden (2002), which emphasizes the importance of considering cultural background in delivering health information.

Culture-based health communication campaigns are implemented by developing educational materials that combine modern and traditional knowledge. This approach is in line with the cross-cultural health communication model developed by Kreuter and McClure (2004), which emphasizes the importance of adapting health messages to the cultural values of the target audience. These efforts resulted in a 60% increase in public understanding of the health benefits of TOGA and herbal medicine. This significant increase in understanding shows the effectiveness of a culturally tailored health communication approach, as Resnicow et al. (1999) argued in their study of culture-based health interventions.

This overall approach to health communication and cultural preservation reflects what Dutta (2007) calls a "culture-centered approach to health communication". This approach emphasizes the importance of understanding the meaning of health in the local cultural context and involving communities in the health communication process. Thus, the TOGA and herbal medicine

revitalization program aims to improve knowledge and health practices, strengthen cultural identity, and empower communities to preserve their traditional knowledge heritage.

## **CONCLUSION**

Community service in Jati Indah Village has succeeded in revitalising the use of TOGA and herbal medicine through an approach that integrates health communication, cultural preservation and community economic empowerment. This activity demonstrates that:

1. Health communication strategies that consider cultural aspects can increase the acceptance and use of TOGA and herbal medicine in modern society.
2. A creative economic approach focusing on cultural identity can open new economic opportunities while preserving cultural heritage.
3. Community empowerment programs that emphasize knowledge transfer between generations effectively preserve traditional healing practices.

The TOGA and herbal medicine revitalization model developed in this service can be replicated in other areas, with adjustments to the local cultural context. Policy support from local governments, collaboration with research institutions, and integration with formal education programs that emphasize cultural preservation and innovation in traditional medicine are needed for program sustainability.

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