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COMMUNITY EMPOWERMENT THROUGH CULTIVATION TRAINING AND HERBAL DRINK POWDER PRODUCTION IN THE LEPROSY PATIENT FAMILY COMMUNITY

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ABSTRACT

Social stigma still attached to the families of leprosy patients in Sumber Glagah Hamlet, Pacet, Mojokerto, causes limited access to education, employment, and social interaction. This condition has led to a decrease in family income, even though leprosy is curable. To overcome this, community empowerment was carried out through cultivation training and the production of herbal drink powder as an effort to improve the economy and quality of life. The activity was conducted in Sumber Glagah Hamlet, Pacet District, Mojokerto. The methods used were counseling and training on the archipelago herbal drink (Serbat Nusantara) and the cultivation of herbal ginger plants. The total number of participants was 23 leprosy patient family members. The increase in participant knowledge was measured by giving a pre-test before the activity and a post-test after the training. The results showed a significant increase in knowledge, reaching a "Good" category score of 86.95%. Participants were very enthusiastic, demonstrated by their activeness during the discussion and question-and-answer session. This activity concludes that skill-based training, such as making herbal drink powder, can significantly increase the

knowledge and morale of leprosy survivor families in economic empowerment efforts. It is suggested that similar programs be carried out sustainably and collaboratively to reduce stigma and strengthen local economic independence.

Keywords: Ginger; Herbal Drink; Knowledge; Plant Cultivation; SIJAKUN.

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INTRODUCTION

Social stigma remains a major challenge for the families of leprosy patients in Sumber Glagah Hamlet, Pacet District, Mojokerto. Despite the curable nature of the disease with proper treatment, the social and economic consequences persist. This stigma limits access to education, employment, and social interaction, often worsening the family's economic condition. Most families in Sumber Glagah Hamlet rely on traditional agriculture for their livelihood. The area possesses potential for high-economic-value herbal plants, particularly ginger. However, the community lacks the necessary knowledge and skills to manage and cultivate these herbal potentials effectively. Furthermore, physical limitations and social barriers hinder many family members from securing stable employment. Therefore, opening new opportunities through community empowerment based on cultivation training and herbal drink powder production is crucial to help them improve their family economy and quality of life. This training is expected not only to enhance skills but also to provide new avenues for income through the processing and marketing of herbal products. Previous similar activities in 2024 showed an 83.34% increase in knowledge among leprosy alert cadres, confirming the community's willingness to learn.

OBJECTIVES

General Purpose

The general purpose of this community service is to improve the economic independence and quality of life of the leprosy patient family community through skill-based empowerment.

Special Purpose

The specific objectives of this community service are:

1. To enhance the knowledge and practical skills of families of patients with leprosy regarding the cultivation of medicinal ginger plants.
2. To increase the knowledge and skills of leprosy patient families in making herbal drink powder (Serbat Surabaya).

PLAN OF ACTION

Strategy Plan

The educational media used included PowerPoint presentations, leaflets containing brief information on leprosy and herbal cultivation, and direct demonstrations of making herbal drink powder. Interactive discussion and Q&A sessions were also provided to deepen the participants' understanding.

The community service was carried out through the following sequence of activities:

1. Counseling on Herbal Ginger Plant Cultivation: Conducted offline at the

Sumberglagah Hamlet hall by lecturers from the UNUSA Faculty of Medicine. The activity included pre-test, material presentation, Q&A, conclusion, and post-test.

2. Training on Herbal Ginger Plant Cultivation: Guided by the proposing team, demonstrating the method of ginger cultivation.
3. Counseling on the Benefits of Herbal Drink Powder (Serbat Surabaya): Conducted offline at the Sumberglagah Hamlet hall by lecturers from the UNUSA Faculty of Medicine. The activity followed the same sequence as the first counseling session.
4. Training on making Herbal Drink Powder (Serbat Surabaya): Guided by the proposing team, demonstrating the preparation of the Serbat Surabaya powder.

Implementation

It contains everything that is done by the author until the activities planned by the writer are carried out. This implementation can be in the form of an implementation of a strategy plan.

Setting

The entire community service program was conducted at the Sumber Glagah Hamlet Hall, Pacet District, Mojokerto, East Java. This location was selected for its historical significance as a former settlement for leprosy patients and its function as the central meeting point for the target community.

Target

The program successfully engaged a total of 23 participants. This group consisted of immediate family members and primary caregivers of leprosy

survivors, specifically targeting the productive age group (25–40 years old) to maximize the impact on the family's economic recovery and sustainability.

RESULTS AND DISCUSSION

Result

The community service activities, which comprised counseling on the benefits of Serbat Nusantara herbal drinks and hands-on training for ginger cultivation, successfully demonstrated a significant increase in the knowledge level of the 23 participants from Sumberglagah Hamlet. The evaluation was conducted using a pre-test and a post-test, with scores categorized as Good (76–100%), Sufficient (56–75%), and Less (< 55%).

Prior to the intervention (pre-test), the initial knowledge level was low. The majority of participants, specifically 12 respondents (52.51%), were categorized as having Less knowledge, and 10 respondents (43.37%) had Sufficient knowledge. Only a single respondent, representing a mere 4.34% of the group, achieved a good score.

Following the comprehensive counseling and training sessions, the post-test results showed a dramatic shift. The number of participants with Good knowledge surged to 20 respondents, representing 86.95% of the total participants. Conversely, the number of participants with Less knowledge dropped to zero, and only 3 respondents (13.5%) remained in the Sufficient category. This striking change confirms the effectiveness of the community service program in transferring knowledge and skills.

To validate this observed increase statistically, the data's normality was assessed using the Shapiro-Wilk test, which indicated that both the pre-test (p -value =

0.001) and post-test (p-value = 0.000) results were non-normally distributed ($p < 0.05$). Consequently, the non-parametric Wilcoxon Signed-Rank Test was performed. The analysis yielded a highly significant p-value of 0.000. Since this p-value is substantially smaller than the conventional significance level of 0.05, the null hypothesis is rejected. This statistical finding demonstrates a significant difference between the participants' knowledge scores before and after the intervention, robustly proving the positive impact of the counseling and training activities.

Discussion

The success of the training is evidenced by the substantial leap in knowledge and skills among the 23 participants in Sumberglagah Hamlet. The selection of ginger as the primary focus is strategic, not only because of its availability but also due to its scientifically established benefits, including proven antioxidant and immunomodulatory effects. By converting locally sourced ginger into processed herbal products, the activity not only improves participants' health knowledge but also creates a valuable product with economic potential. Empowering vulnerable groups, such as the families of leprosy survivors, with productive skills like herbal drink processing, directly addresses the socio-economic barriers caused by persistent social stigma. The acquisition of these skills provides a tangible path toward income generation, which is key to fostering better social acceptance, reducing discrimination, and ultimately strengthening the economic independence of the community.

CONCLUSION

This community service program, conducted in Sumber Glagah, contributed to improving the knowledge and practical skills of families of leprosy survivors in ginger cultivation and the production of herbal ginger drink powder. Through training and hands-on practice, participants gained the ability to cultivate ginger and process it into value-added products that can be utilized for household consumption and small-scale income-generating activities. The program also increased participants' confidence and motivation to engage in economic empowerment initiatives. These outcomes demonstrate the potential of community-based skill development programs to support the economic independence of families affected by leprosy. Therefore, similar programs should be implemented sustainably through collaboration among academic institutions, local governments, health services, and community members to strengthen economic resilience and reduce leprosy-related stigma.

REFERENCES

- Adnyana, A. A. M. O., et al. (2020). Potential for Ginger (*Zingiber Officinale*) to Inhibit Replication of SARS-CoV-2 Virus in COVID-19. *Jurnal Ilmu Farmasi*, 17(1), 1-13. <https://doi.org/10.29354/jif.v17i1.309>
- Arikunto, S. (2019). *Prosedur Penelitian Suatu Pendekatan Praktik*. Rineka Cipta.
- Ayustaningwarno, F., Anjani, G., Ayu, A. M., & Fogliano, V. (2024). A critical review of Ginger's (*Zingiber officinale*) antioxidant, immunomodulatory activities.

- Frontiers in Nutrition, 11, 1364836.
<https://doi.org/10.3389/fnut.2024.1364836>
- Banihani SA. (2018). Ginger and Testosterone. *Biomolecules*, 8(4), 119. doi:10.3390/biom8040119
- Choironi, N. A., Wulandari, M., & Susilowati, S. S. (2019). Pengaruh edukasi terhadap pemanfaatan dan peningkatan produktivitas tanaman obat keluarga (TOGA) sebagai minuman herbal instan di Desa Ketenger Baturraden. *Kartika: Jurnal Ilmiah Farmasi*, 6(1), 1–5. <https://doi.org/10.26874/kjif.v6i1.115>
- Handayani, A. D. S., Winarningsih, S., & Azmi, M. R. (2024). Community-Based Approach for Reducing Social Stigma in Leprosy Patients. *Journal of Public Health Research and Development*, 4(2), 1-9. <https://doi.org/10.47708/jphrd.v4i2.219>
- Handayani, Ardyarini D. S., Renny Novi P., AUFAR Z. Z. A. H., Rifky Dwi A. I., Syahrul Gusnaldi P. A. S., Miftah R. P. (2022). Antioxidant potential effect combination of the bitter, red ginger, and turmeric extract with the DPPH method. *Bali Medical Journal*, 11(3), 2071-2074. <https://doi.org/10.15562/bmj.v11i3.3882>
- Handayani, Renny Novi, Andik Ferdiantoro, Afira F. S. W., Rifky D. A. I., Diaz S. A., Rahadian Zainul, Arif Nur M. A., Mochammad A. H. (2024). Combination bitter, ginger, turmeric extract in mice: acute and sub acute toxicity analysis. *Pharmacognosy Journal*, 16(4), 916-922. <https://doi.org/10.5530/pj.2024.16.148>
- Krisnawan, A. H., et al. (2021). Pemberdayaan Masyarakat Melalui Pelatihan Pembuatan Minuman Fungsional dari Tanaman Herbal Lokal. *Jurnal Abdimas Indonesia*, 1(2), 52-59. <https://doi.org/10.54259/jai.v1i2.251>
- Manggau, A. P., & Setiawan, A. S. (2023). Peningkatan Pengetahuan Keluarga Penderita Kusta Melalui Penyuluhan Kesehatan Tentang Pencegahan Kecacatan Kusta di Wilayah Kerja Puskesmas Mangarabombang. *Journal of Health Science and Prevention*, 7(1), 1-5. <https://doi.org/10.29080/jhsp.v7i1.1009>
- Osira Yessilia, Sriwanti Hilsa. (2024). Pemberdayaan Lanjut Usia Potensial Melalui Pelatihan Pembuatan Minuman Herbal Di Lembaga Kesejahteraan Sosial Lanjut Usia (LKSLU) Payung Besurek Kota Bengkulu. *Community Service and Empowerment Journal*, 2(1), 41-47. Doi: <https://doi.org/10.36728/scsej.v2i1.23>
- Pertiwi, P. D., et al. (2024). Pemberdayaan Masyarakat Desa Ranoeya Melalui Pelatihan Pembuatan Cemilan Churros Daun Salam (*Syzygium Polyanthum* Wight) Bagi Penderita Diabetes Di Kecamatan Wawotobi Kabupaten Konawe. *Jurnal Abdi Masyarakat Kita*, 4(1), 96–110. <https://doi.org/10.33759/asta.v4i1.493>
- Quraisy, N. B. (2020). *Statistik Non Parametrik* (1st ed.). CV Budi Utama.

- Ramadhan Ali, Damanik Rabukit. (2024). Pemberdayaan Masyarakat Melalui Pelatihan Pembuatan Minuman Herbal Instan Sebagai Upaya Meningkatkan Ekonomi Warga Di Kelurahan Sicanang Kecamatan Medan Belawan. *Jurnal Pengabdian Masyarakat Edukasi*, 4(1), 7-13. <https://doi.org/10.36499/jpme.v4i1.3090>
- Santoso, R., Handayani, D., & Prasetiyo, A. (2024). Pemanfaatan Jahe Merah (*Zingiber officinale* Rosc. var. *Rubrum*) Sebagai Minuman Herbal Instan Untuk Meningkatkan Imun Tubuh. *Jurnal Abdimas Kesehatan (JAK)*, 6(1), 10-18. <https://doi.org/10.36565/jak.v6i1.545>
- Siregar, B. S., et al. (2023). Peningkatan Pengetahuan Keluarga Penderita Kusta Melalui Penyuluhan Kesehatan Tentang Pencegahan Kecacatan Kusta. *Jurnal Abdi Mas Dewantara*, 4(2), 1-8.
- Yaghoubi A, et al. (2015). Correlation of Serum Levels of Vitronectin, Malondialdehyde and Hs-CRP With Disease Severity in Coronary Artery Disease. *J Cardiovasc Thorac Res*, 7(3), 113-117. [doi:10.15171/jcvtr.2015.24](https://doi.org/10.15171/jcvtr.2015.24)