



## Empowerment of Integrated Family Service Posts as Herbal Corners to Increase Community Immunity



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### Abstract

Current developments are also accompanied by an increase in the number of infectious diseases, especially tuberculosis (TB). Even though there has been a lot of research related to the treatment and management of TB, this has not been able to eliminate TB morbidity. Apart from treatment, preventing TB transmission and increasing community immunity are also determinants of TB morbidity rates. The Bangkingan Community Health Center's Traditional Medicine and Health Promotion Division, along with the Great Surabaya Cadre of Bangkingan Village, participated in community service projects in RW Hall 3, Bangkingan Village. Activities related to community service encompass mentoring, training, technology use, outreach, assessment, and program sustainability. The Bangkingan Village community has improved its knowledge, behavior, and proficiency in using herbs to boost immunity as a result of performing community service. creation of the Herbal Corner Web as a hub for herbal knowledge for preventative and promotional initiatives. Every RW has a herbal garden where one can grow therapeutic plants, and there is equipment available to make herbal remedies (powder/instant). The sustainability of the program depends on the motivation of the Great Surabaya Cadres of Bangkingan Village, so good cooperation between the Cadres is needed to continue the benefits of the program. Through the traditional medicine and health promotion division, it is necessary to provide assistance to the community regarding promotive and preventive efforts. Government support for community activities/programs in relation to improving health status needs to be increased.

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## INTRODUCTION

Bangkingan Village, Surabaya, is a village located in the westernmost section of Wiyung District, Surabaya, East Java. Large (1,505 m<sup>2</sup>) Bangkingan Village has a few Puskesmas (little health facilities). In 2022, the TB disease rate in this region will rank 53rd in Surabaya, this is due to people's misunderstanding of health condition. Health professionals are ignorant about the strategy of boosting community immunity to stop tuberculosis transmission. TB patients coughed and sneezed without covering their mouths, according to the author's observations in Bangkingan Village. Some of them covered their mouths with their hands after coughing or sneezing, but they neglected to wash their hands afterwards, which allowed bacteria to spread through inhaled. Since tuberculosis is actually difficult to spread, efforts must be made to boost immunity by employing herbal components. Other observations suggested that the number of toddlers and old individuals in the region was particularly high. The elderly and toddler populations are particularly susceptible to infection, particularly in the wake of COVID-19. Immunity is not fully developed in toddlers and is beginning to wane in older adults. It was determined by the facts that there were individuals in the toddler and senior groups who were suspected of having tuberculosis. Cough has been a symptom of suspected tuberculosis for the past two months ([Kristini & Hamidah, 2020](#)).

Based on the survey we conducted, there were 10 people suspected of having TB and the results of the follow-up examination showed that 1 was positive and diagnosed with TB, while the other 9 were currently in the observation phase by the local health center. This is because knowledge about increasing immunity is still very lacking ([Iskandar et al., 2023](#); [Zahroh et al., 2021](#)). The government has clearly regulated the management of treatment for TB patients, and starting in 2018, TB suspects must be treated like TB sufferers ([Baharuddin, 2018](#)). There has also been much talk about preventing transmission through health promotion, but efforts to increase people's immunity to avoid contracting TB are rarely carried out ([Zahroh et al., 2019](#)).

Public understanding of the use of herbs to boost immunity is still severely deficient. After a given amount of time, coughing is thought to be

normal and doesn't need to be treated. As the smallest social unit, the family plays a critical role in boosting the immunity of both society at large and the relatives of TB patients in particular ([Bao et al., 2023](#); [Das, 2020](#)). Families are unaware that common herbs like galangal, ginger, and turmeric can be blended into nutritious beverages ([Hatmanti et al., 2023](#)). This herbal ingredient's qualities have the ability to boost immunity ([Gasmi et al., 2023](#); [Hutuba et al., 2023](#)), which helps against the *Mycobacterium tuberculosis* bacteria.

Integrated family service post must be empowered, In order to boost the Bangkingan community's immunity through the use of herbs. Types of herbal plants that can be used or utilized to increase immunity include ginger, ginger, turmeric, galangal and lemongrass ([Khanna et al., 2020](#)).

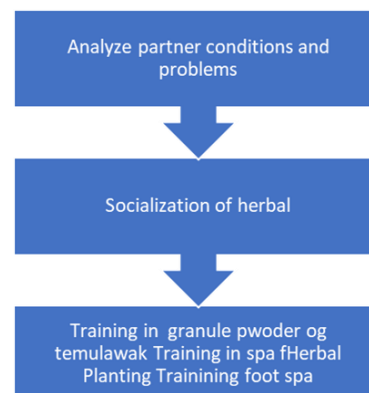
## METHOD

The following describes the participatory technology development and educational paradigm, which is used to implement solutions to health and management issues in community service activities:

### 1. The intended audience

Participants in community service have families and cadres as their goals. There are families with TB sufferers and 32 Integrated Family Service Post Health Cadres in Bangkingan Village. Participating actively in problem formulation and solution planning is the goal of community service projects. In all collaborative actions and programs that the proposer and the target have arranged, the target actively participates.

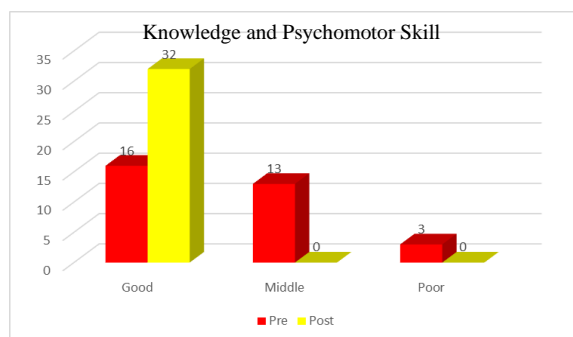
### 2. Implementation



(Source: stages of community service, 2024)

**Figure 1.** Implementation rute of Empowerment of Integrated Family Service Posts as Herbal Corners to Increase Community Immunity.

**RESULTS**



(Source: Results of community service in 2024)

**Figure 2.** Knowledge and psychomotor skills of the Bangkingan community before and after community service activities. After community service activities, it appears that community knowledge and behavior has increased 100%.

Knowledge and skills of cadres before carrying out activities to the community in the good category there were 16 people (50%), in the medium category there were 13 people (40%) and in the poor category there were 3 people (10%). Meanwhile, after implementing activities in the community, the knowledge and skills of all cadres increased to the good category (100%).

**DISCUSSION**

Bangkingan people actually use herbs for health, but their use is still limited to preparing drinks. Bangkingan people usually use herbs by simply boiling them. People do not know that herbs can be used in other forms, namely inhaled and applied topically.

**1. Socialization**

Socialization on the use of herbs to increase immunity was carried out at the beginning of September 2024. This activity was attended by all 32 Great Surabaya cadres (KHS). All KSH were enthusiastic and actively participated in this activity. Before taking part in the activity, all KSH filled in the pre-test that had been prepared. Material on the use of herbs includes definitions, using herbs based on age cycles, how to use medicinal plants, promotive and preventive measures, the immune system, as well as examples of herbal plants for treating a disease.



(Source: Results of community service in 2024)

**Figure 3.** The preparation of socialization



(Source: Results of community service in 2024)

**Figure 4.** implementation of herbal outreach

**2. Workshop**

Workshop activities are divided into 3 implementation times. The first workshop was about cultivating medicinal plants, the second workshop was about making herbal preparations in granule form, and the third workshop was about using herbs for foot soaks.

The medicinal plant cultivation workshop was attended by all KSH with enthusiasm and enthusiasm. Plants cultivated include: bay tree, ginger, galangal, ginger, and lemongrass. The availability of large empty land makes it possible to use it as a medicinal plant garden. Medicinal plant cultivation is intended to maintain the availability of herbal ingredients that can be used after harvest, meaning that the community is also empowered to grow their own medicinal plants.

Workshop on making herbal granules. The herbal ingredient used is ginger rhizome. The ingredients needed are 0.5 kg of ginger, 0.5 kg of sugar and 800 ml of water. The ginger root is washed clean then sliced thinly and then blended with water. After that, filter the ginger water and separate it from the dregs. Boil the filtered ginger water over low heat, stirring continuously until the water reduces and the ginger becomes small and smooth balls. Store the preparation in a dry

container. The way to serve ginger powder can be brewed directly with water and ready to drink.



(Source: Results of community service in 2024)

**Figure 5.** The process of making granules from curcuma

The next workshop is about soaking feet with herbal ingredients. The ingredients used are ice cubes, salt, dry dlingu, and apple cider vinegar. This herbal ingredient is very effective in improving blood circulation, especially for people who often have tingling in the feet area. Soaking your feet should be done at night or before bed. This is because at night the muscle, skeletal and circulatory systems are in a relaxed state, giving rise to a comfortable feeling when you wake up.

### 3. Herbal Corner

Herbal corner is an effort to disseminate information about the use of herbs through the web and mini library. This website is equipped with several features that make it easier for people to find information about herbs.

The community needs to be consistently and sustainably socialized to the use of herbs. Antioxidants, intestinal health, performance, and endurance can all be enhanced by the compounds found in herbs ([Aminah et al., 2023](#); [Jamal, 2023](#); [Song et al., 2023](#)). Herbs can be used in a variety of methods, such as topical treatments, inhalation preparations, powder preparations, and tea

preparations ([Hutuba et al., 2023](#); [Istiowati et al., 2023](#); [Ningsih et al., 2020](#)).

### CONCLUSION

The community service program "development of family posyandu into a herbal corner to increase the immunity of the Bangkingan sub-district community" can increase knowledge, behavior, skills and digitize herbal information through the herbal corner.

### SUGGESTION

Based on the results of this community service, it can be suggested that the sustainability of the program depends on the motivation of the Great Surabaya Cadres of Bangkingan Village, so good cooperation between the Cadres is needed to continue the benefits of the program. Apart from that, through the traditional medicine and health promotion division, it is necessary to provide assistance to the community regarding promotional and preventive efforts. All programs can continue with full support from policy makers in the local area.

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### CONFLICTS OF INTEREST

The author states that there is no conflict of interest in the implementation of this community service.

## REFERENCES

- Aminah, S., Mukholidah, A., Salsabila, A. N., Rahman, M. F. W., Nihaya, I. U., & Kautsar, A. (2023). Sosialisasi Pemanfaatan Tanaman Herbal Sebagai Imonomodulator Untuk Meningkatkan Imunitas Tubuh Masyarakat Gubeng. *Abimanyu: Journal of Community Engagement*, 4(1), 45–51. <https://doi.org/10.26740/abi.v4n1.p45-51>
- Baharuddin, R. M. (2018). Perbandingan Panduan Nasional Tatalaksana Tuberkulosis Tahun 2014 di Indonesia dan Panduan Terbaru Terapi Untuk Terduga TB Menurut WHO Tahun 2017. *Jurnal Ilmiah Mahasiswa Kedokteran Indonesia*, 6(1), 1–8.
- Bao, M. Y., Li, M., Bu, Q. R., Yang, Y., Song, H., Wang, C. Z., Wang, T. M., & Li, N. (2023). The effect of herbal medicine in innate immunity to *Candida albicans*. *Frontiers in Immunology*, 14(March), 1–17. <https://doi.org/10.3389/fimmu.2023.1096383>
- Das, K. (2020). *Herbal plants as immunity modulators against COVID-19: A primary preventive measure during home quarantine*. January.
- Gasmi, A., Shanaida, M., Oleshchuk, O., Semenova, Y., Mujawdiya, P. K., Ivankiv, Y., Pokryshko, O., Noor, S., Piscopo, S., Adamiv, S., & Bjørklund, G. (2023). Natural Ingredients to Improve Immunity. *Pharmaceuticals*, 16(4), 1–28. <https://doi.org/10.3390/ph16040528>
- Hatmanti, N. M., Siti Nurjanah, Ratna Yunita Sari, Umdatul Soleha, & Chilyatiz Zahro. (2023). Upaya peningkatan konsumsi minuman sehat melalui program konservasi tanaman herbal. *BEMAS: Jurnal Bermasyarakat*, 4(1), 48–54. <https://doi.org/10.37373/bemas.v4i1.548>
- Hutuba, A., Madania, M., & Nurfadillah, A. R. (2023). Pembuatan Serbuk Jahe Herbal (SEJA) Untuk Pencegahan Stunting Di Desa Lomaya. *Jurnal Pengabdian Masyarakat Farmasi: Pharmacare Society*, 2(1), 44–48. <https://doi.org/10.37905/phar.soc.v2i1.18595>
- Iskandar, J., Setiyowati, E., & Zahroh, C. (2023). Medication adherence and visiting compliance: interventions self-management education based on health belief model. *Bali Medical Journal*, 12(2), 1211–1216. <https://doi.org/10.15562/bmj.v12i2.4302>
- Istiowati, O., Zahroh, C., Fitriasari, A., & ... (2023). Analisis Pengetahuan Dan Cara Pengolahan Herbal Tradisional Temulawak Sebagai Penambah Nafsu Makan Pada Anak Usia Toddler .... *Jasmani Olahraga Dan ...*. <http://jurnal.anfa.co.id/index.php/PJKR/article/view/536%0Ahttp://jurnal.anfa.co.id/index.php/PJKR/article/download/536/523>
- Jamal, A. (2023). Embracing Nature's Therapeutic Potential: Herbal Medicine. *International Journal of Multidisciplinary Sciences and Arts*, 2(3), 117–126. <https://doi.org/10.47709/ijmdsa.v2i1.2620>
- Khanna, K., Kaur, S., Kaur, R., Bhardwaj, A., & Bhardwaj, V. (2020). *Herbal immune-boosters: Substantial warriors of pandemic Covid-19 battle*. January.
- Kristini, T., & Hamidah, R. (2020). Potential for Pulmonary Tuberculosis Transmission to Patients Family. *Indonesian Journal of Public Health*, 15(1), 24.
- Ningsih, A. W., Nisak, A., & Faniliyarani. (2020). Pengolahan Minuman Teh Herbal Peningkat Imunitas dengan Komposisi Jahe-Kunyit-Temulawak Di Desa Jembul Kecamatan Jatirejo Kabupaten Mojokerto. *Prosiding Seminar Nasional Abdimas Ma Chung*, 288–295. <https://ocs.machung.ac.id/index.php/senam/article/view/32>
- Song, W., Zou, Z., Chen, X., Tan, J., Liu, L., Wei, Q., Xiong, P., Song, Q., Chen, J., Su, W., & Xu, C. (2023). Effects of traditional Chinese herbal feed supplement on growth performance, immunity, antioxidant levels, and intestinal health in chickens: a study on Ningdu yellow chickens. *Poultry Science*, 102(10), 102986. <https://doi.org/10.1016/j.psj.2023.102986>
- Zahroh, C., Nurjanah, S., Kamariyah, N., Ainiyah, N., Nur Hasina, S., & Kusuma, E. (2021). An overview of the physical, psychological, and social responses of adolescents during the COVID-19 pandemic in urban area. *Volatiles & Essent. Oils*, 8(5), 12393–12399.
- Zahroh, C., Yusuf, A., Ketut Sudiana, I., & Taat Putra, S. (2019). Effect of Nursing Therapeutic Communication (Spiritual Approach) Onperception, Cortisol and HSP70 Family Members with High Risk of TB Infection. *Journal of Engineering and Applied Sciences*, 15(1), 279–282. <https://doi.org/10.36478/jeasci.2020.279.282>