



Training on awareness of consuming halal and nutritious food among Indonesian migrant workers in Taiwan

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Submitted: 12/01/2025 | Accepted: 24/02/2025 | Online: 25/02/2025 | doi: 10.63088/ec8hfz88

Abstract:

Purpose: Awareness on consuming halal and nutritious food within the global Muslim community requires thorough more exploration. This activity aims to enhance understanding and practices of selecting halal and nutritious food among Indonesian migrant workers (IMWs) in Taiwan also to assess the knowledge level of consuming halal and nutritious food and examine its association with gender.

Methods: The community service method included delivering lectures and training for Indonesian migrant workers in Taiwan, with a total of 21 participants. To assess the success of the training, an evaluation was conducted by giving a post-test. The analysis included descriptive and Chi-Square to examine the association between gender and the knowledge level of consuming halal and nutritious food.

Results: Among the participants, 57.1% achieved high scores, while 42.9% were in the low-score regarding the knowledge level of halal and nutritious food consumption. The analysis result of this study revealed there was no statistically significant association between gender and the level of knowledge of consuming halal and nutritious food among Indonesian migrant workers in Taiwan, with a p-value of 0.350.

Conclusions: This study highlights the significant enhancement for Indonesian migrant workers' knowledge of halal and nutritious food in Taiwan through facilitator training, suggesting that future community programs should include continuous support, advanced training, and collaborations with local halal food providers to improve accessibility, with further research exploring the attitudes and preferences related to halal food consumption, including gender and cultural dynamics.

Keywords:

Nutritious food, Halal food, Halal awareness, Migrant workers.

1. Introduction

The importance of consuming halal and nutritious food is deeply embedded within the principles of the Muslim community, understanding halal food products is essential for all Muslims (Diah Permanasari et al., 2024). Halal refers to food that encompasses all aspects from agriculture to the dining table, ensuring it is free from any components prohibited for consumption by Muslims, commonly referred to as haram (Mohamed et al., 2020). Halal awareness and Knowledge are essential for individuals who follow the



Islamic faith, as it ensures that they can maintain their dietary restrictions and adhere to their religious beliefs. Factors such as halal awareness, can impact to consume halal products. (Ali & Ahmad, 2023).

Halal practices ensure compliance with Islamic principles, while a focus on nutrition is essential for mitigating risks associated with malnutrition and chronic diseases and potentially maintains a well-rounded health status (Khan, 2023), because the production of halal food prioritizes maintaining cleanliness and hygiene at every stage, from sourcing ingredients and ensuring the sanitation of facilities and equipment to the proper handling and distribution of food products (Al-Mahmood et al., 2021; Rezai et al., 2015).

International migrant workers encounter health issues similar to those affecting underserved communities, their struggles are often exacerbated by their migration status and the demands of cultural adaptation (Asri & Chuang, 2023). To increase access to nutritious food and strengthen food security for migrants, a range of global interventions has been introduced to tackle food security and nutrition issues within migrant populations. These initiatives include cash and food assistance, meal programs, urban farming, community gardens, and shared kitchens (Nisbet et al., 2022). In addition, health issues among Indonesian migrant workers are also a growing concern. According to Kantor Dagang dan Ekonomi Indonesia (KDEI) in Taipei (2024), there were 95 officially reported cases of illness among Indonesian migrant workers and 73 recorded deaths in Taiwan (Kantor Dagang dan Ekonomi Indonesia (KDEI), 2024). Both emphasis on halal and nutritious food is particularly relevant for Indonesian migrant workers in Taiwan, a group that constitutes a substantial portion of the Muslim diaspora in East Asia. Despite their significant contributions to Taiwan's economy, these workers often face challenges in accessing appropriate food that aligns with their religious and nutritional needs.

This phenomenon occurs because many people interpret the concept of halal merely as avoiding pork-based products (Rifa'i, 2018). Besides that, Indonesian migrant workers in Taiwan face cultural differences, including language barriers, lifestyle variations, norms, beliefs, and dietary habits (Wim et al., 2024). Despite the growing trend of Muslim tourists in Taiwan, Taiwan market remain primarily focused on catering to non-Muslim customers (Setyaningsih, 2021). These cultural and dietary challenges underscore the need for targeted support systems to facilitate the integration and well-being of Indonesian migrant workers in Taiwan.

In this context, gender also plays a critical role in shaping consuming halal and nutritious food, female consumed higher amounts of fruits, vegetables, cereals, and eggs compared to male, whereas men had a notably higher intake of meat than female (Egele & Stark, 2023). Ensuring access to halal food is a challenge as it is not easily available in Taiwan, and Indonesian female migrant workers often have to consume whatever is provided at their employer's residence. Most of the meals served at the employer's house are not halal (Gusman, 2024). In addition, adaptation to local dietary patterns, inadequate knowledge can have a negative impact on their health status, previous studies have highlighted that Indonesian female migrant workers are susceptible to health issues such as anemia, which can be influenced by dietary patterns and cooking methods (Palupi et al., 2017). On the other hand, male migrant workers, who may lack prior experience in food-related tasks, are often less equipped to navigate the challenges of maintaining halal



and nutritious diets in abroad. Households led by female are more susceptible to food insecurity compared to those led by male, highlighting the importance of empowering women in food production roles (Sun et al., 2021). These differences underscore the importance of understanding how gender dynamics influence food consumption patterns and knowledge levels.

Therefore, education and awareness on consuming halal and nutritious food needs to be strengthened to enhance understanding and support better decision-making when selecting safe and halal products for consumption (Azharita et al., 2023). Being aware of halal matters can enhance an individual's sensitivity toward halal-related concerns (Akin & Okumuş, 2021). This activity aims to enhance the understanding and practices related to selecting halal and nutritious food among Indonesian migrant workers in Taiwan. Additionally, this study also seeks to assess their knowledge levels regarding the halal and nutritious food consumption and to examine the association between their knowledge levels and gender.

2. Methods

Community service activities were carried out at Taipei City, Taiwan on July 21st 2024, Participants were selected through purposive sampling, with a total of 21 participants were participated in the lectures and training. The stages of service activities carried out include preparation, implementation, and evaluation stages.

Preparation

In the preparation stage, the team prepared everything needed during the training, such as determining the venue, schedule, and target of participants. Additionally, we prepared the required resources, such as equipment, materials, and support personnel, to ensure the community service activity could proceed as planned.

Implementation

During the implementation stage, we began by conducted lectures and training. It intended to provide information regarding awareness of consuming halal and nutritious food among Indonesian migrant workers in Taiwan. The lectures and training program were delivered with two main topics on halal and nutritious food education, first was "The Importance of Consuming Halal Food" second topic was "How to Maintain Proper Nutrition for Indonesian Migrant Workers in Taiwan". At the end of the session, participants were provided education by giving an online poster for further reference.

Evaluation

At this evaluation stage, we assessed the outcomes achieved by the participants of the community service program. The assessment was conducted through a post-test, where participants completed online multiple-choice questionnaire. The question related the conceptual understanding of healthy and halal food, including its definition, characteristics, and examples also it examines the religious guidelines and legal principles governing halal food consumption in Islam, highlighting its significance in maintaining both physical well-being and religious compliance. The questionnaire was evaluated by experts to enhance content validity before distribution. The expected outcome at the end of the program was an improvement in knowledge, as indicated by categorizing scores above 75 as high and those less than or equal 75 as low (Suparman, 2015). The data

analysis method used descriptive analysis and Chi-Square to examine the association between gender and the knowledge level of consuming halal and nutritious food using the Statistical Package for Social Science (SPSS) program software version 29.0 (IBM, SPSS, Armonk, NY, USA).

3. Results and Discussion

The community service activities were attended by 21 Indonesian migrant workers. The gender distribution of the participants, as presented in Table 1, shows that the 66.7% were female while 33.3% were males, this highlights that the program was predominantly attended by women.

Table 1: Gender distribution of participants

Gender	n	%
Female	14	66.7
Male	7	33.3

The lectures presented through interactive, making it easier for participants to understand the practical applications of the materials introduced. This approach facilitated a deeper understanding of the content and encouraged active participation. The participants appeared to be enthusiastic while listening to the lecture from the speaker, as shown in Figure 1.



Figure 1: Participants listen to the lectures

The next activity is evaluation to assess the effectiveness of the training conducted. This evaluation is done by distributing online questionnaire survey related to the training implementation. Table 2 shows the post-test results of assessing the knowledge awareness of consuming halal and nutritious food, 57.1% of participants achieved high scores, while 42.9% were in the low-score, this indicates that a majority of participants performed in the high-score category following the test.

Table 2: Score of the knowledge level of consuming halal and nutritious food

Score	n	%
Low	9	42.9
High	12	57.1

Table 3 shows the association between gender and the knowledge level of consuming halal and nutritious food among Indonesian migrant workers in Taiwan. The Chi-Square test results revealed that among female respondents 50.0% had a low knowledge level, while 50.0% had a high knowledge level. Among male respondents, 28.6% demonstrated a low knowledge level, and 71.4% male respondents had a high knowledge level. The p-value of 0.350 indicates no statistically significant association between gender and the knowledge level of consuming halal and nutritious food among Indonesian migrant workers in Taiwan. This finding aligns with previous studies that have found no significant differences between genders in terms of knowledge and attitudes toward halal products consumption (Sawari et al., 2018). This lack of significant association suggests that factors other than gender may play a more pivotal role in influencing knowledge levels regarding halal and nutritious food consumption.

Table 3: Association between gender and knowledge level of consuming halal and nutritious food

Gender	Score				Total		<i>P</i>
	Low		High				
	n	%	n	%	n	%	
Female	7	50.0	7	50.0	14	100	0.350
Male	2	28.6	5	71.4	7	100	
Total	9	42.9	12	57.1	21	100	

At the end of the session, participants were given educational materials an online poster for future reference, which summarized the key points discussed and included additional resources for deeper understanding as shown in Figure 2.



Figure 2: Poster delivery to participants



4. Conclusion

The training delivered by the facilitators has led enhancement in participants' knowledge regarding the importance of consuming halal and nutritious food among Indonesian migrant workers in Taiwan. As a subsequent measure, future community engagement programs could incorporate regular support through healthy lifestyle training, that facilitate easy access to information. Additionally, advanced training on halal and nutritious food among Indonesian migrant workers in Taiwan could help expand educational outreach, while collaboration with local food providers offering halal options would ease their access to suitable meals. Through periodic evaluations, these programs can be continuously improved to remain relevant and effective for migrant workers in Taiwan.

This study reveals that Indonesian migrant workers in Taiwan exhibit a high level of awareness regarding the consumption of halal and nutritious food. Although no significant correlation was found between knowledge levels and gender, these findings lay the groundwork for future research. Specifically, further studies could delve into the attitudes and preferences of Muslims concerning halal food consumption, with a focus on gender differences. Future research should consider these cultural dynamics and explore how factors beyond gender, these insights could inform policies and practices aimed at promoting inclusivity and meeting the needs of diverse populations. Additionally, Future interventions should focus on policy recommendations, such as integrating halal food options in workplace meal plans, strengthening awareness campaigns, and advocating for culturally inclusive food policies, by addressing these factors, future studies can contribute to developing more comprehensive strategies that promote health and well-being among Indonesian migrant workers in Taiwan.

Acknowledgement

Our deepest gratitude goes to Lembaga Pengabdian dan Pemberdayaan Masyarakat (LPPM) UHAMKA for funding this activity. We also extend our thanks to Pimpinan Cabang Istimewa Muhammadiyah (PCIM) Taiwan as a partner who has contributed to the smooth implementation of the training program.

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