

FOOD SAFETY AND HALAL ASSURANCE IN COMMUNITY-BASED KITCHEN MANAGEMENT: A CASE OF YAYASAN YATIM VILLAGE BOGOR

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ABSTRACT

Food safety and halal assurance are critical issues in food management, particularly in community-based institutions that serve vulnerable groups such as orphans. This study aimed to strengthen the capacity of kitchen managers at Yayasan Yatim Village Bogor through a participatory community development program. The intervention involved preliminary assessment, educational workshops, practical demonstrations, and continuous mentoring. A total of 30 participants, including cooks and kitchen assistants, joined the program. Evaluation was conducted using pre-test and post-test assessments, behavioral observations, and participant feedback. The results showed a substantial improvement in knowledge, with average scores increasing from 56% in the pre-test to 89.5% in the post-test. Furthermore, all participants achieved the minimum competency threshold after the intervention. Behavioral observations confirmed positive changes in hygiene practices, proper food storage, separation of raw and cooked items, and documentation of halal certificates. The findings highlight that participatory and practical approaches effectively enhance both knowledge and behavior regarding food safety and halal assurance in social institutions. This model can serve as a best practice for ensuring safe, nutritious, and halal-compliant meals in other community-based settings.

Keywords: Food Safety, Halal Assurance, Community Development, Institutional Kitchens, Participatory Training.

1. INTRODUCTION

Food safety and halal assurance are strategic issues that are increasingly important for food management in Indonesia. The World Health Organization (2020) reports that approximately 600 million people worldwide experience foodborne illnesses annually, with children being the most vulnerable group. In Indonesia, the Food and Drug Monitoring Agency (BPOM, 2021) noted that cases of food poisoning remain frequent due to the poor implementation of food hygiene and sanitation principles in handling raw materials and processing. This indicates that food safety remains a serious challenge at the community level (Putri, Santoso, & Rahman, 2021). Furthermore, the halal aspect is also a crucial factor, given that the majority of Indonesians are Muslim. According to the Halal Product Assurance Agency (BPJPH, 2022), demand for halal certification for food products continues to increase significantly, making halal assurance not only a spiritual need but also a standard of quality and consumer trust (Aziz & Chok, 2019; Rachman, Hasyim, & Wahyuni, 2022).

In the context of a social institution like the Bogor Yatim Village Foundation, which serves meals daily to orphans, safe, high-quality, and halal food management is a top priority. However, initial observations indicate that kitchen managers at this foundation still face limited knowledge and skills, particularly regarding operational standards for raw material handling, hygienic processing techniques, and recording halal-certified food ingredients. Previous research also revealed that most social institution kitchens have not fully implemented Good Handling Practices (GHP) and Good Manufacturing Practices (GMP), the foundation of modern food safety systems (Lestari, Sari, & Adi, 2019; Nurhadi & Setiawan, 2022; Gunawan, Lestari, & Rachman, 2021). This situation has the potential to create risks of cross-contamination, reduced nutritional quality, and uncertainty about the halal status of food (Sani & Siow, 2014; Hidayat, Fitriani, & Fauzi, 2020).

Given these challenges, educational community service activities are deemed essential to building the capacity of kitchen managers. These activities utilize a participatory community development approach, actively involving kitchen managers throughout the process. The stages of the activity include identifying problems through observation and interviews, providing classical training on hygiene, sanitation, and halal principles, providing hands-on demonstrations related to raw material handling and serving food according to standards, and providing ongoing mentoring to ensure the application of this knowledge in the field. This approach has proven effective in improving the knowledge and skills of kitchen managers at social institutions, as demonstrated by Pratiwi, Nugraha, and Firmansyah (2020) and Widodo and Susanto (2023), as well as supported by evidence that training and participatory mentoring significantly improve food safety behavior in institutional kitchens (Ismail, Chik, & Munir, 2016; Rahman, Yusoff, & Ali, 2021).

The purpose of this activity was to provide understanding to the kitchen managers of the Bogor Orphanage Foundation regarding the basic principles of food safety and halal assurance, to improve practical skills in handling raw materials,

storing, processing, and serving food safely and in accordance with Islamic law, and to encourage the development of a hygienic and halal kitchen work culture. By achieving these goals, it is hoped that the Bogor Orphanage Foundation kitchen can become a model for quality, safe, and halal food management, as well as a good practice that can be replicated in other social institutions (Kurniawan & Syahrul, 2020).

2. METHOD

2.1. Program Design

This community service activity employed a participatory community development approach, which emphasizes active involvement of participants in identifying problems, designing interventions, and evaluating outcomes. The program combined classroom-based training, hands-on practice, and continuous mentoring to strengthen food safety and halal compliance capacity among the kitchen managers at Yayasan Yatim Village Bogor.

2.2. Participants

The participants consisted of 15 kitchen staff members from Yayasan Yatim Village Bogor, including cooks, kitchen assistants, and food procurement officers. These participants were selected purposively, as they are directly responsible for handling raw materials, food preparation, and serving daily meals for orphaned children at the institution.

2.3. Intervention Procedures

The intervention was conducted in three main stages:

- Preliminary Assessment: Initial interviews and direct observations were conducted to identify gaps in knowledge, hygiene practices, and halal assurance procedures within the kitchen.
- Educational Workshops: The participants attended training sessions covering food safety principles, hygiene and sanitation practices, Good Handling Practices (GHP), Good Manufacturing Practices (GMP), and halal assurance requirements.
- Practical Demonstrations and Mentoring: Practical sessions demonstrated proper raw material washing, separation of raw and cooked foods, safe storage, cooking temperatures, and documentation of halal-certified products. This was followed by ongoing mentoring and monitoring to ensure that the knowledge and practices were applied consistently.

2.4. Evaluation and Data Collection

The effectiveness of the program was evaluated using a mixed-method approach:

Knowledge Assessment: Pre-test and post-test questionnaires were administered to measure participants' improvement in understanding food safety and halal assurance.

Behavioral Observation: Direct observation checklists were used to monitor changes in food handling practices during and after the program.

Feedback Sessions: Participants provided feedback regarding the relevance, applicability, and perceived impact of the training and mentoring activities.

2.5. Data Analysis

Quantitative data from pre-test and post-test scores were analyzed using descriptive statistics to identify knowledge improvement percentages. Qualitative data from observations and feedback sessions were thematically analyzed to identify recurring patterns in behavioral change and challenges faced by participants.

The method describes the stages of the research, including the research design, research procedures, and how to test and analyze the data. In describing the research method, it must be supported by references, so that the explanation can be accepted scientifically. Authors are required to present a literature review that is primary (references to journal articles and conference proceedings) and up to date (references published within the last 10 years).

3. RESULTS AND DISCUSSION

3.1. Knowledge Assessment

The knowledge assessment through pre-test and post-test revealed a substantial improvement among the 30 participants of the program. The pre-test average score was 11.2 out of 20 (56%), indicating limited baseline knowledge regarding food safety and halal assurance. In contrast, the post-test results showed a significant increase

with an average score of 17.9 out of 20 (89.5%). This reflects a 33.5% improvement in knowledge levels after the intervention.

Further analysis demonstrated that 98% of participants (29 out of 30) achieved higher scores in the post-test compared to the pre-test, while the remaining 2% maintained the same score without any decline. Importantly, while only 85% of participants achieved the passing grade ($\geq 70\%$) in the pre-test, all participants (100%) successfully passed in the post-test. This suggests that the educational intervention was effective not only in raising knowledge but also in ensuring that every participant reached the minimum competency level required.

These findings align with previous research showing that structured training and hands-on practice are effective strategies for improving food safety knowledge and behavior among community kitchen staff (Pratiwi et al., 2020; Lestari et al., 2019). Moreover, the integration of halal assurance into the training content enhanced participants' awareness of the importance of documenting halal certification, separating halal and non-halal products, and adhering to the concept of *halalan thayyiban* (Muflihah & Setyawan, 2021; Widodo & Susanto, 2023).

The significant improvement observed indicates that a participatory and practical approach is particularly effective for community-based institutions like Yayasan Yatim Village Bogor, where staff members often have limited formal training. Beyond knowledge acquisition, the intervention fostered a stronger sense of responsibility among participants in ensuring that the meals served to orphaned children are safe, nutritious, and halal-compliant.

3.2. Behavioral Observation

In addition to the knowledge assessment, behavioral observations were conducted using structured checklists to monitor food handling practices among the 30 kitchen staff during and after the training program. The observations focused on key aspects of food safety and halal assurance, including personal hygiene, separation of raw and cooked foods, proper storage, cooking procedures, and documentation of halal-certified products.

The initial observation, conducted prior to the program, revealed several gaps in daily practices. For example, some staff members did not consistently wash their hands before and after handling raw ingredients, raw and cooked foods were occasionally stored in close proximity, and there was limited record-keeping of halal certificates from suppliers. These findings are consistent with earlier studies reporting that institutional kitchens often struggle to implement proper hygiene and halal assurance due to limited training and monitoring systems (Lestari et al., 2019; Nurhadi & Setiawan, 2022).

Post-intervention observations showed a marked improvement across all measured indicators. Nearly all participants demonstrated proper handwashing techniques, the separation of raw and cooked foods was implemented consistently, and perishable items were stored at safe temperatures (0–5°C for cold storage). Additionally, kitchen staff began documenting sources of raw materials along with halal certification, ensuring compliance with both safety and religious requirements. This behavioral change aligns with WHO's "Five Keys to Safer Food" framework, which emphasizes cleanliness, separation, thorough cooking, safe storage, and use of safe raw materials (WHO, 2020).

The integration of halal assurance into food handling practices was also significant. Staff members expressed increased awareness of the importance of verifying halal status and avoiding cross-contamination with non-halal products. Similar findings were reported by Widodo & Susanto (2023), who observed that combining food safety and halal assurance training not only improved hygiene behavior but also strengthened consumer trust in institutional kitchens.

Overall, the behavioral observation confirmed that the program had a sustainable impact beyond theoretical knowledge. The visible adoption of safer and halal-compliant practices in daily routines demonstrated that participatory and hands-on training can effectively transform behavior in community-based food services.

3.3. Feedback Sessions

In addition to knowledge assessment and behavioral observation, feedback sessions were conducted to capture participants' perceptions of the training and mentoring program. The majority of participants expressed that the training materials were highly relevant to their daily responsibilities in managing the institutional kitchen. They emphasized that the focus on hygiene, sanitation, and halal assurance addressed the most pressing challenges they often encountered.

In terms of applicability, participants reported that the hands-on demonstrations and practical exercises were particularly beneficial, as they provided clear guidance on proper food handling techniques, safe storage methods, and documentation of halal certification. Several participants noted that these practices could be immediately implemented in their daily routines, thereby reducing the risk of contamination and ensuring halal compliance.

Regarding the perceived impact, participants highlighted an increased sense of confidence and responsibility in maintaining food safety and halal standards. Many acknowledged that the mentoring activities reinforced their

learning, helped them overcome initial difficulties in applying new procedures, and fostered a stronger culture of teamwork within the kitchen. Overall, the feedback confirmed that the participatory and practice-oriented approach not only improved knowledge and behavior but also enhanced the sustainability of food safety and halal assurance practices in the institution.

4. CONCLUSION

This study demonstrated that participatory education and mentoring significantly improved food safety and halal assurance practices among kitchen staff at Yayasan Yatim Village Bogor. Knowledge assessments indicated a marked increase in participants' understanding, while behavioral observations confirmed the adoption of safer and more halal-compliant practices in daily kitchen routines. The integration of structured training, hands-on demonstrations, and continuous mentoring proved to be an effective strategy for addressing knowledge gaps and transforming behavior. Beyond improving food handling skills, the program fostered a stronger commitment among staff to provide meals that are not only safe and nutritious but also in line with Islamic dietary requirements. These results suggest that the approach can be replicated in other social institutions to strengthen community food management systems, contributing to broader efforts in promoting food safety, public health, and halal assurance in Indonesia.

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