



Enhancing the Competence of Qurban Committees through Technical Training on Halal and Thoyyib Slaughtering in Pekanbaru, Riau

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Abstract

Qurban is an annual Islamic ritual with profound spiritual and social significance; its proper implementation is essential to ensure that meat distributed to the public complies with halal and *thoyyib* principles. This study aimed to evaluate the effectiveness of an education- and practice-based training programme in improving participants' knowledge and technical skills across key domains of qurban implementation (animal eligibility, slaughterer qualifications, facilities and hygiene, animal welfare, documentation, distribution ethics, and community engagement). The programme combined counselling, hands-on training, live slaughter demonstrations, and pre- and post-test evaluations with 70 participants predominantly younger adults (19–22 years old), mostly senior high school educated, and largely employed in the private sector. Overall knowledge improved from a mean pre-test score of 3.90 to 4.11 on the post-test ($t = 3.35$, $p < 0.01$), with the largest gains in animal welfare and slaughter-facility standards (e.g., infrastructure: $\Delta = 0.59$; $t = 4.32$, $p < 0.01$). Several domains (e.g., hygiene, documentation, distribution, and ethical and community aspects) showed smaller, occasionally non-significant improvements, indicating areas for curricular strengthening through more structured modules, demonstration-rich sessions, and role-play simulations. The findings confirm that an education- and practice-led approach effectively enhances both knowledge and operational competence among qurban committee members. Sustainability is expected to be reinforced through collaboration with religious bodies, local authorities, and halal stakeholders to uplift community-level halal and *thoyyib* slaughter practices.

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INTRODUCTION

The practice of *qurban* is one of the most significant rituals in Islam, carrying profound spiritual value while simultaneously delivering important social benefits through the distribution of meat to the community (Akram et al., 2024; Ministry of Religious Affairs of the Republic of Indonesia, n.d.). Proper livestock handling, slaughtering procedures, and the equitable distribution of meat in accordance with Islamic law are essential to ensure halal integrity and to maintain the quality and safety of *qurban* meat (Saeed et al., 2023). Nevertheless, in practice, considerable gaps remain between theoretical guidelines and actual implementation in the field (Purnamasari, 2015b; Purnamasari et al., 2017). Instances such as the selection of animals that do not meet the prescribed religious criteria, inadequate handling, and non-compliant slaughtering techniques are still frequently observed (Muthoifin et al., 2024; Permana et al., 2018; Purnamasari, 2015a). These shortcomings not only risk undermining the halal status of the meat but also compromise quality and

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safety, which may lead to community dissatisfaction, doubts, and potential public health risks (Anjum et al., 2020).

The urgency of strengthening *qurban* practices is closely aligned with the Sustainable Development Goals (SDGs), particularly SDG 2 (Zero Hunger), SDG 3 (Good Health and Well-Being), and SDG 12 (Responsible Consumption and Production). Animal protein distributed through *qurban* represents a vital nutritional resource, especially for vulnerable groups with limited access to high-quality food. According to FAOSTAT, the average per capita supply of animal protein in Indonesia was approximately 20 g per day in 2021–2023, significantly lower than the global average of around 30 g per day (FAO, 2023). This shortfall directly correlates with persistent malnutrition challenges; the prevalence of undernourishment in Indonesia remained at 7.5% from 2021 to 2023, despite significant progress from nearly 18% at the beginning of the 2000s. (WHO, 2023) further stresses that adequate intake of animal-based protein is crucial for preventing malnutrition, supporting child growth, and reducing the risk of non-communicable diseases. In this context, the *qurban* ritual can serve not only as a spiritual obligation but also as a strategic intervention to enhance nutritional security and improve public health outcomes in Muslim-majority societies.

At the national level, the Ministry of Religious Affairs of Indonesia has repeatedly underlined the importance of conducting *qurban* in accordance with Shariah law while integrating principles of hygiene, safety, and environmental sustainability. This mandate is further reinforced by Government Regulation No. 39 of 2021 concerning Halal Product Assurance, which stipulates that animal-based products must comply with halal standards and meet quality, health, and environmental requirements. However, the challenges of inadequate infrastructure, lack of technical competence among *qurban* committees, and weak community awareness often limit the full realisation of these objectives.

Against this backdrop, the present community service programme was designed to bridge the gap between theoretical guidelines and local practice. This program differs from other programs in that it inherently combines Islamic law, livestock health science, food science, and halal slaughter SOPs with an educational and participatory approach, providing structured training and technical guidance to *qurban* committees and volunteers to ensure compliance with Islamic principles and animal welfare standards. In contrast to conventional *qurban* training programmes, this initiative adopted an integrated and evaluative design that combined structured education, pre- and post-test assessment, and supervised field practice covering animal handling, slaughtering procedures, meat handling, and distribution, thereby enabling the formulation of evidence-based recommendations for improving the governance and sustainability of *qurban* implementation at the community level. The programme also involved students of the Faculty of Agriculture and Animal Science at UIN Suska Riau, thereby enhancing community capacity while simultaneously providing students with invaluable experiential learning opportunities to apply their academic knowledge in real-world contexts. In line with Marshall et al. (2007), effective technical extension services must provide comprehensive guidance on animal selection, low-stress handling, and halal-compliant slaughtering and sanitation procedures. This integrated approach is expected not only to improve the quality and sustainability of *qurban* practices but also to empower students as agents of social change, capable of making meaningful contributions to both their local communities and the broader agenda to achieve the SDGs.

This programme strengthened local community capacity through the active involvement of residents from the Oke Regency, supported by adequate infrastructure and high community participation. By adopting an educational and participatory approach, the initiative addressed locally identified needs while simultaneously improving the quality of *qurban* implementation. In addition to delivering practical benefits to the community, the programme also provided opportunities for students to develop their roles as agents of social change by engaging directly with real-world community challenges. This approach is consistent with previous studies indicating that effective community service programmes are characterised by structured stages of education, training, and practical mentoring (Lybaert et al., 2024).

Accordingly, the objective of this community service program was to enhance participants' understanding and skills in organising *qurban* practices in accordance with Islamic law and animal welfare principles. The program was designed to strengthen participants' knowledge of the requirements for *qurban* animals, the qualifications of slaughtering personnel, and the facilities and

infrastructure that comply with Sharia standards. Additionally, the training focused on technical skills related to halal and thoyyib slaughtering practices, hygienic meat handling, and environmentally friendly waste management. The educational sessions proved effective in raising participants' awareness of the importance of animal welfare, as reflected in the improved post-test scores. The program also aims to optimise the distribution of qurban meat to ensure it is more equitable and accurately targeted. The program's success was evaluated through pre-test and post-test analysis, which demonstrated significant improvements in participants' understanding and technical skills across various aspects of qurban management.

METHOD

The Approach Used

The data-driven approach employed in this community service program for managing qurban slaughter emphasised the use of structured measurement to ensure the program's effectiveness (McDougall et al., 2024). The program began with a pre-test to assess the community's initial level of understanding regarding Sharia-compliant slaughtering procedures, principles of animal welfare, and hygienic practices. The pre-test was administered to all programme participants who were purposively selected from members of the qurban committee, volunteers, and supporting community members directly involved in qurban implementation at the study site. The pre-test findings were analysed descriptively and used as a needs-assessment tool to identify knowledge gaps and prioritise topics, thereby informing the design of targeted educational materials and practical training modules. Educational sessions were then conducted through lectures and interactive discussions.

Practical training was conducted in an intensive half-day session (approximately 4 hours) prior to the qurban event, focusing on hands-on instruction in halal slaughtering techniques, hygienic meat handling, and waste management. Field practice was implemented during the qurban day itself (approximately 6–8 hours), during which participants actively observed and directly participated in livestock handling, slaughter execution, meat processing, and distribution under supervision. Throughout the activities, demonstration methods and case studies were used to illustrate proper procedures, including the fair and accurate distribution of qurban meat (Abidin et al., 2024). A participatory approach was adopted by actively involving participants in every discussion and practice session. Monitoring and evaluation were conducted through a combination of structured pre- and post-test assessments, direct observation during training and field practice, and facilitator-led feedback sessions to assess changes in participants' knowledge, technical performance, and adherence to halal and animal welfare standards, and to identify areas for improvement.

Upon completion of all educational and training sessions, a post-test was administered to evaluate participants' improvements in knowledge and skills compared to the pre-test results. The programme's effectiveness was operationally defined as a statistically significant improvement in post-test scores relative to pre-test scores ($p < 0.05$), with an increase in mean scores across key indicators used as the minimum success threshold, thereby providing an objective basis for evaluating programme outcomes and informing future refinement. This approach not only ensured targeted education but also provided a strong scientific basis to support the sustainability of Sharia-compliant, hygienic, and halal-standard slaughtering practices within the community (Fuseini, 2023a). This structured flow of activities is illustrated in Figure 1.



Figure 1. Flow of Methods in the Community Service Programme on Qurban Implementation

Figure 1 illustrates the structured flow of methods employed in this community service programme. The process began with a pre-test to assess participants' initial knowledge of Shariah-compliant slaughtering, animal welfare, and hygiene practices. This was followed by educational sessions, which provided theoretical input through lectures and interactive discussions. Participants then engaged in practical training to acquire technical skills in halal slaughtering, hygienic meat handling, and waste management. The knowledge was reinforced during field practice, where participants applied their learning in actual *qurban* slaughtering activities. To ensure effectiveness, monitoring and evaluation were carried out throughout the programme, and finally, a post-test was administered to measure improvements in understanding and skills.

This method can be categorised as a participatory education and training approach, combining extension activities, technical practice, mentoring, and evaluation. It not only strengthened the competence of the *qurban* committees but also provided students with valuable experiential learning, ensuring that the programme delivered sustainable benefits for both the community and the academic environment.

Type of Community Service

This community service program was designed using a scientific and evaluative approach, specifically based on data collection and impact analysis. The effectiveness of the program was evaluated through pre-tests and post-tests, which measured improvements in participants' knowledge and skills (McDougall et al., 2024). Activities included theoretical education through lectures, practical training, demonstrations, and case studies utilising a participatory approach (Abdallah et al., 2021). Monitoring and evaluation were conducted not only to assess participant achievements but also to provide a scientific foundation for the development of similar programs in the future. This community service initiative was designed to train and enhance the competencies of qurban committees, with a focus on empowering the community through education and technical skill development for halal-compliant and animal welfare-based qurban slaughtering practices.

Location of Community Service

The community service activities were conducted at Musholla Baitul Izzah, located in Air Putih Subdistrict, Tuah Madani District, Pekanbaru City, Riau Province. The location was selected based on the community's initiative and willingness to participate in the educational sessions, the community's active involvement in qurban practices, and the availability of facilities suitable for slaughtering, as recommended by Abidin et al. (2024) and Kelly & Given (2024).

Observed Variables

This study aimed to observe various variables related to the implementation of qurban, encompassing technical, procedural, and social aspects. The survey assessment was designed to measure respondents' understanding and perceptions of qurban practices through a series of key indicators.

Q1 assessed respondents' understanding of the requirements for animals eligible for qurban slaughter, while Q2 focused on their knowledge of the qualifications necessary for halal slaughter personnel. Q3 evaluated respondents' awareness of the facilities and infrastructure needed to support proper slaughtering processes. Q4 measured the extent of respondents' knowledge regarding the differences between slaughtering for daily consumption and slaughtering for religious qurban purposes.

Additionally, Q5 aimed to evaluate respondents' understanding of the healthy and safe handling and processing of qurban meat. Q6 measured perceptions of the application of animal welfare principles before and during the slaughter process. Q7 assessed whether waste resulting from slaughter activities was managed in an adequate and environmentally friendly manner. Q8 examined the effectiveness of socialisation and educational programs regarding correct qurban practices.

The distribution aspect was assessed through Q9, which measured the effectiveness of meat distribution to rightful recipients. Finally, Q10 evaluated the level of community compliance with Sharia procedures in the qurban slaughtering process. Each item (Q1–Q10) was measured on a 1–5 Likert scale, and the questionnaire was reviewed for content validity by two subject-matter experts (RD and SA) prior to administration. Internal consistency was subsequently assessed to ensure acceptable reliability for quantitative analysis. Numeric weights were assigned, where a value of 1 indicated "not relevant," "do not know," or "not effective," while a value of 5 indicated "good knowledge," "very effective," or "full compliance." For example, if a respondent chose "Slightly Knowledgeable" for Q1, the coded score was 3. If a respondent selected "Highly Adequate and Environmentally Friendly" for Q7, the coded score was 5.

Responses to the open-ended question (Q11) collected during the pre-test and post-test were analysed using a qualitative thematic analysis approach. All responses were manually coded, grouped into recurring categories, and synthesised into dominant themes reflecting community expectations, perceived gaps, and priority needs related to qurban implementation. A comparison between pre- and post-intervention responses was conducted to identify shifts in perspectives following the programme. The pre-test was administered prior to program implementation to capture the community's initial expectations and perceptions of the program. At the same time, the post-test was conducted after program completion to evaluate changes in perceptions and emerging needs. Open-ended questions allowed respondents to provide in-depth and unrestricted responses. Data were collected in written and digital form.

Data Collection and Analysis Techniques

Data were collected through questionnaires administered to participants to obtain quantitative information (Q1–Q10) regarding the effectiveness of the techniques applied. Question Q11 was analysed using thematic analysis to compare pre-test and post-test results, thereby identifying changes in participants' expectations and the program's effectiveness in meeting community needs.

The analysis tools used included Microsoft 365 Excel, which supported data processing with statistical functions such as mean, standard deviation, and paired-sample t-tests. The analytical approach encompassed both descriptive statistics and the general data profile, as well as inferential statistics, to test the significance of differences between pre-test (QE) and post-test (QO) scores.

Descriptive statistics were used to calculate the mean, standard deviation, and mean differences. The mean was calculated to describe the average pre-test and post-test scores for each variable, while the standard deviation measured the variation of scores among respondents. The mean difference between pre-test and post-test scores was calculated to indicate improvements in participants' understanding or skills after the program intervention.

Prior to conducting the paired-sample t-test, the normality of the difference scores between pre-test and post-test values was examined using the Shapiro–Wilk test. Upon meeting this

assumption, a paired-sample t-test was subsequently applied to assess the statistical significance of the mean differences (Ross et al., 2017). This test aimed to determine whether the observed changes were statistically significant. The significance levels used were 95% ($p < 0.05$) and 99% ($p < 0.01$). The t-value was calculated either manually or using Excel formulas, and the significance was determined by comparing the p-value to the established confidence levels. If the p-value was less than 0.05, the difference was considered statistically significant; if the p-value was greater than 0.05, the change was considered not important.

Prior to analysis, data validation was conducted using Microsoft Excel (Microsoft 365) by systematically screening the dataset for missing values, duplicate entries, and input inconsistencies, followed by cross-checking responses against the original questionnaires to ensure data accuracy. Categorical data, such as gender, education, and occupation, were consistently coded to facilitate analysis. The results were presented in tables and graphs, utilising visualisation features such as pivot tables and bar charts, to facilitate interpretation. This approach provided a clear overview of the community service program's effectiveness and offered data-driven recommendations for developing similar programs in the future.

RESULTS AND DISCUSSION

Respondents in the community service program related to the implementation of qurban practices demonstrated diversity in terms of age, educational attainment, gender, marital status, and occupation type (Figure 2). The majority of respondents were between 19 and 22 years old (98.57%), reflecting the dominance of a younger age group. In terms of educational background, most respondents (82.86%) had completed high school, while the remaining respondents (17.14%) were college graduates.

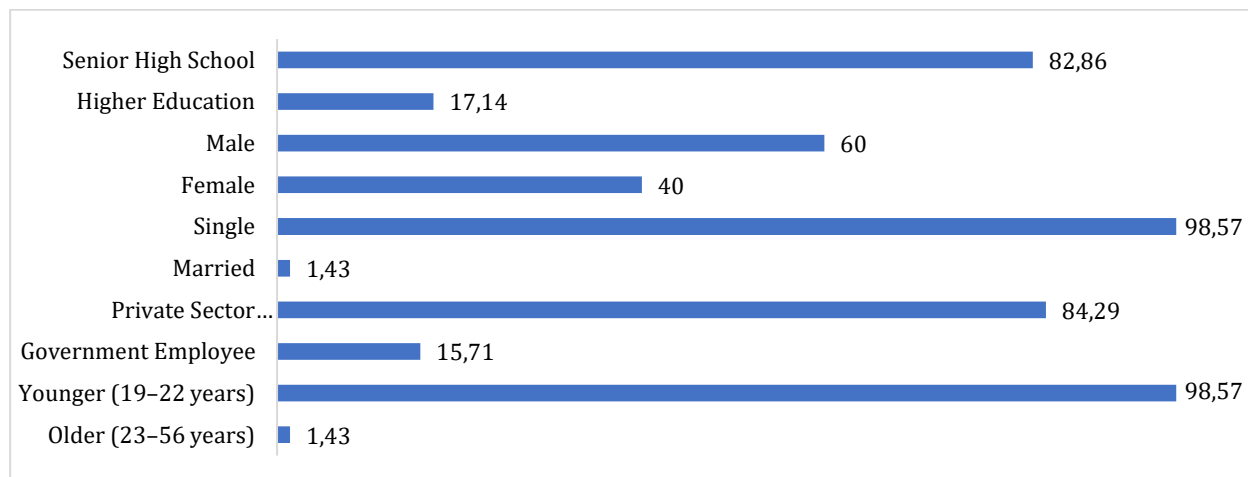


Figure 2. Sociodemographic Percentages of Respondents in the Community Service Program on Qurban Implementation (n = 70)

The gender composition showed that respondents consisted of 60% males and 40% females. In terms of marital status, the vast majority of respondents (98.57%) were unmarried, with only one respondent recorded as married. Based on employment type, most respondents (84.29%) were employed in the private sector, while the remaining 15.71% were government employees. This sociodemographic profile indicates that the community service program was dominated by young individuals with secondary to higher education levels, the majority of whom were employed in the private sector (84.29%).

Thus, the program had a strong potential to deliver direct benefits, particularly through theory- and practice-based education and training that matched the needs and potential competency development of the respondents in qurban management (Koskinen, 2024). The dominance of a young age group with a relatively high level of education was a key factor that enhanced the program's success (Kelly & Given, 2024). Individuals aged 19–22 typically have high learning

capabilities, are more open to innovation, and more readily absorb theory- and practice-based training materials compared to older age groups (Wu et al., 2017).

Furthermore, with most participants having at least a high school education, they were quicker to grasp technical concepts, such as halal standards, animal welfare, and Sharia-compliant slaughtering procedures (Erian et al., 2019). The fact that the majority of respondents worked in the private sector also represented a strategic advantage, as individuals in this sector tend to be more flexible in applying new skills and more receptive to efficiency-driven and industry-standard practices (Antunes et al., 2023). They could apply the skills they acquired in both their workplaces and social and religious community activities (Zsolnai & Flanagan, 2019).

Thus, the participants' sociodemographic profiles indicated that they were the most ready and potentially the most capable group to gain direct benefits from the program, while also being able to develop their competencies independently in the future (Kassin, 2025). This phenomenon made the approach of theory- and practice-based education and training highly appropriate and effective in improving the quality of qurban implementation (Mellor & Uldahl, 2025).

Based on the analysis of the pre-test and post-test data (Table 1), the average pre-test score of 3.90 increased to 4.11 in the post-test, with a mean difference of 0.21. This increase indicated an improvement in participants' knowledge and understanding of the material delivered during the community service program.

Table 1. Comparison of Average Pre-Test (QE) and Post-Test (QO) Scores in the Community Service Program on Qurban Implementation

No	QE (Pre-Test) (n=70)	QO (Post-Test) (n=70)	Mean Difference	Std. Dev.	t-value	Significance
1	4.07	4.24	0.17	0.70	2.04	*
2	3.94	4.16	0.21	1.13	1.59	ns
3	3.91	4.16	0.24	0.84	2.41	*
4	3.83	4.21	0.39	0.92	3.50	**
5	4.03	4.14	0.11	0.84	1.13	ns
6	3.70	4.29	0.59	1.14	4.32	**
7	3.87	3.96	0.09	0.99	0.73	ns
8	3.70	3.76	0.06	0.85	0.56	ns
9	4.04	4.16	0.11	1.03	0.93	ns
10	3.91	4.01	0.10	1.01	0.83	ns
Mean	3.90	4.11	0.21	0.52	3.35	**

In Q1, which evaluated participants' understanding of the eligibility criteria for animals to be slaughtered, the score increased from 4.07 to 4.24 ($t = 2.04$; $p < 0.05$). This result indicates that the educational sessions effectively strengthened participants' understanding of the Sharia-compliant criteria for qurban animals, including minimum age, physical condition, and freedom from defects. Such knowledge is crucial as it directly affects the validity of the qurban ritual. These findings support the principle of experiential learning as outlined by Tan & Ostler (2025), who argue that direct involvement in field practices enhances information retention. The improvement in Q1 scores demonstrates that practice-based education is effective in reinforcing participants' understanding of eligible qurban animals.

The implication of this finding is the necessity to maintain and expand experiential learning approaches in qurban training. Training that involves direct identification of eligible animal traits such as minimum age, physical condition, and absence of defects has been proven to significantly enhance essential knowledge for the valid execution of qurban rituals. Furthermore, this success can serve as a foundation for standardised visual education modules and field practice guidelines for qurban committees across various regions. At the policy level, these results support the integration of educational content on qurban animal criteria into community-based training programs organised by religious and academic institutions, local governments, and religious organisations. This approach could reduce the risk of non-compliant animal slaughter, ensuring that qurban practices are not only valid under Islamic law but also socially and spiritually accepted by the community (Ulfa et al., 2025).

In Q2, which addressed the qualifications for halal slaughterers, the score increased from 3.94 to 4.16, although the change was not statistically significant ($t = 1.59$; $p > 0.05$). This result suggests that participants still have a varied understanding of what it means to be authorised to perform qurban slaughter. Research by [Gaznur et al. \(2020\)](#) suggests that halal training and certification programs can enhance slaughterers' competencies, underscoring the need for more standardised training content to ensure a consistent understanding among participants.

This finding implies the necessity for a more structured and in-depth focus on the qualifications and ethics of slaughterers, including requirements such as being a practising Muslim, being of sound mind and maturity, and understanding the intention and procedures of Sharia-compliant slaughter. It also highlights the importance of standardisation in training programs and a greater emphasis on halal slaughterer certification, as recommended by [Gaznur et al. \(2020\)](#), to enhance the competency and accountability of qurban practitioners. Additionally, training modules could be supplemented with case studies or role-play simulations to deepen participants' understanding of the slaughterer's responsibilities from the perspectives of Islamic law, food safety, and animal welfare. Institutionally, these results suggest the need for stronger collaboration between training providers, halal certification bodies, and local governments to ensure that only qualified individuals are authorised to perform qurban slaughter, thereby maintaining the ritual's quality and strengthening public trust.

In Q3, the score improved from 3.91 to 4.16 ($t = 2.41$; $p < 0.05$), indicating increased understanding among participants of the importance of Sharia-compliant slaughter facilities and infrastructure. Education sessions that incorporated direct demonstrations of cutting tools, slaughtering sites, and hygiene procedures played a critical role in this improvement. A key element of this training was the use of hands-on demonstrations, as illustrated in Figure 3, where the instructor provided detailed explanations of the types of knives used in halal slaughtering practices.



Figure 3. The instructor explained the types of knives used for halal slaughtering in accordance with Sharia standards

They emphasised several crucial technical aspects, including knife sharpness, tip shape, blade length, and the material used for the cutting tool. The instructor also explained that the cutting instrument must be capable of performing swift and effective slaughter to minimise the animal's pain, in line with the principles of animal welfare in Islamic law. Such visualisation was shown to be highly effective in helping participants understand not only the function but also the philosophy behind selecting the appropriate tool, namely preserving the integrity of the slaughtering process from both a Sharia and ethical perspective.

According to [Handley et al. \(2006\)](#) participatory learning methods like this are more effective than passive lectures, as they provide participants with direct, hands-on experience. These results

confirm that technical training, complemented by real-world demonstrations, is more effective than passive learning approaches. Therefore, future programs prioritise visual and demonstrative approaches to internalise operational standards for halal and thoyyib slaughtering practices.

At the community level, these findings also encourage the development of practical and accessible guidelines for slaughter facilities, which qurban committees in mosques, musallas, and other simple slaughtering locations can readily implement. This way, participants not only understand Sharia concepts theoretically but are also able to implement them in practice according to halal, hygienic, and animal welfare standards (Lewis & Peters, 2012).

In Q4, which assessed participants' understanding of animal welfare principles, the score increased from 3.83 to 4.21 ($t = 3.50$; $p < 0.01$). This finding is consistent with earlier research demonstrating that training programmes combining theoretical instruction and practical exposure can improve participants' awareness of animal welfare and humane slaughter practices (Erian et al., 2019; Khan et al., 2018). This finding implies that educational approaches emphasising humane treatment are highly effective in fostering ethical participant behaviour.

This knowledge is crucial not only from the Sharia perspective but also scientifically justified, as Khan et al. (2018) note that animal stress before and during slaughter can degrade meat quality and violate ethical slaughtering principles. By raising participants' awareness, the program has the potential to cultivate future qurban practitioners who not only understand technical procedures but also embody compassion for animal welfare as an integral Islamic value.

Practically, this suggests that animal welfare content should be incorporated more explicitly into the training curriculum, including demonstrations of non-violent handling techniques, comfortable animal placement, and procedures for visual and auditory separation between animals to be slaughtered (Erian et al., 2019). These findings also highlight the need for synergy among training institutions, religious organisations, and related government agencies (such as livestock departments) to develop operational standards for slaughter that are not only halal but also animal-welfare friendly. Thus, qurban practices at the community level can be comprehensively enhanced to address Sharia compliance, public health, and ethical concerns.

Q5 focused on participants' understanding of hygienic qurban meat processing and storage. The score increased from 4.03 to 4.14; however, this increase was not statistically significant ($t = 1.13$; $p > 0.05$). This non-significant change is attributable to the high pre-test scores for hygienic meat storage, indicating that participants had already attained a strong baseline level of knowledge prior to the intervention, thereby constraining the magnitude of measurable post-test improvement (Marshall et al., 2007; Ross et al., 2017).

This initial condition led to relatively small knowledge gain after training, as little of the information was perceived as entirely "new" or groundbreaking suggesting a potential ceiling effect in which high initial scores limited the magnitude of post-training improvements.

Nevertheless, the findings still imply the need to strengthen hygiene-related education delivery, including extending the duration, deepening the content, and adopting more effective outreach methods. Hygiene materials should not only be conveyed verbally but also supplemented with demonstrations of best practices, such as using sealed containers, separating meat from offal, and maintaining safe storage temperatures.

Furthermore, advanced materials on cross-contamination risks, frozen meat handling, and cold chain maintenance should be included, especially for communities with limited access to modern storage facilities. This insight would not only reinforce basic knowledge but also expand participants' awareness of sustainable meat storage practices that meet public health standards (Zelpina et al., 2023).

Content related to equipment cleanliness, storage temperatures, and packaging techniques should be presented in a practical and repeated manner to ensure a thorough understanding and effective application. Although the training included demonstrations, the less-than-optimal improvement suggests that methods could be enhanced through more visual interaction, direct practice, or case-based simulations. This result aligns with (Sebe, 2024) who emphasised that field demonstrations are more effective for building awareness than passive lectures.

Practically, these results underscore the importance of integrating meat processing and storage topics into the core training modules, rather than treating them as supplementary topics. At the community level, a strong understanding of hygiene principles will not only maintain the quality

and safety of qurban meat but also help prevent potential zoonotic diseases or foodborne illnesses. Thus, strengthening participant capacity in this area directly contributes to public health and reinforces community trust in qurban practices. Figure 4 from the training documentation illustrates a session where proper meat storage conditions and temperature maintenance were explained.



Figure 4. An educational session on hygienic and halal-compliant storage of qurban meat

Figure 4 illustrates an educational session on hygienic and halal-compliant practices for storing qurban meat. The material delivered aimed to ensure that qurban meat remains safe, healthy, and of high quality until it is consumed. In line with the evaluation of Q5 in the pre-test and post-test, the session focused on enhancing respondents' understanding of meat processing and handling. Pre-test results indicated that participants' initial understanding was still limited; however, after the educational session, scores increased, demonstrating the training's effectiveness in raising participants' awareness of proper storage techniques.

Figure 5 shows a hands-on demonstration activity conducted by training participants during the meat handling process, carried out in an open and collaborative field setting. This activity reflects the implementation of experiential learning principles (Tan & Ostler, 2025), where participants were not only exposed to theoretical material but also engaged in direct practical application. The activities involved sorting, cutting, and placing the meat into clean containers in accordance with hygienic standards and Sharia requirements.



Figure 5. Hands-on field demonstration of qurban meat handling by training participants

The implications of this activity are highly significant for strengthening participants' technical skills, particularly in the areas of sanitation, time efficiency, and accurately differentiating between meat parts and waste. This practice-based approach also supports the internalisation of halal and thoyyib values in qurban activities. Through direct involvement, participants became more aware of

the importance of maintaining the cleanliness of tools and work surfaces, using gloves and preventing cross-contamination between meat and non-edible parts.

Furthermore, this activity demonstrated that active participant engagement in post-slaughter meat handling fosters a collective awareness of food safety and the ethical distribution of meat. Such engagement contributes to long-term efforts to build a community that is independent and responsible for organising and promoting qurban practices. Thus, the hands-on demonstration illustrated in Figure 5 not only enhanced technical skills but also strengthened participants' roles as agents of change capable of applying and disseminating qurban practices aligned with Sharia principles and public health standards.

The 0.59 increase in understanding of slaughter facility infrastructure (QE6 and QO6), with a t-value of 4.32 ($p < 0.01$), indicates that the training significantly improved participants' awareness of the importance of adequate facilities in halal slaughtering processes. This finding is crucial for enhancing community-level organisation standards and reinforcing Sharia and animal welfare principles.

Participants' enhanced understanding opens opportunities for communities especially training participants to advocate for physical and technical improvements at slaughter sites, including non-slip flooring, blood drainage channels, shaded and separate animal waiting areas, and hygienic cutting surfaces. Furthermore, this improvement suggests that participants have the potential to become agents of change, promoting and implementing slaughtering practices that meet both Sharia requirements and public health and animal welfare standards.

At the local policy level, these results can serve as a reference for village authorities or mosque committees in designing minimum standards for proper and safe qurban slaughtering facilities. Moreover, the finding emphasises the importance of cross-sectoral collaboration involving livestock departments, veterinary health officers, and halal certification bodies to ensure the availability of slaughter infrastructure that upholds the principles of *halal tayyib*. Thus, these results confirm that technical education, combined with visualisation and field demonstrations, is highly effective in promoting the transformation of community slaughter facilities. In line with Fuseini (2023a) findings, the provision of adequate facilities is a crucial indicator of humane and efficient halal slaughter practices.

In Q7, which assessed understanding of qurban administrative procedures or documentation, scores increased from 3.87 to 3.96, but the change was not statistically significant ($t = 0.73$; $p > 0.05$). This modest improvement is likely due to the limited attention given to administrative aspects during the training sessions. The training primarily focused on technical slaughtering and meat handling aspects, with less emphasis on documentation tasks such as recording the number of animals, identifying beneficiaries (*mustahik*)*, and activity reporting.

This limited understanding suggests that participants have not recognised administration as a critical component of successful qurban management. However, accurate documentation is crucial for ensuring transparency, accountability, and efficient distribution, particularly in communities with numerous committees and beneficiaries.

The implications include training on manual and digital record-keeping, workflow simulations, and a clear delineation of administrative roles and responsibilities. This approach would increase participants' awareness of the importance of data management in qurban practices and encourage them to apply good governance principles in future social and religious activities.

Further, administrative training could foster habits of orderly documentation, ultimately supporting the evaluation of annual qurban programs and enhancing committee professionalism at both local and institutional levels.

However, some aspects, such as the effectiveness of meat distribution (QE8 and QO8), showed only a small increase (0.06) with a non-significant p-value (> 0.05), indicating a need for greater emphasis on this area in future outreach efforts. Although the effectiveness of meat distribution (Q8) increased from 3.70 to 3.76, the change was not statistically significant ($t = 0.56$; $p > 0.05$).

* In the context of Qurban ritual animal slaughtering, the term *mustahik* refers to the eligible recipients of the meat from the Qurban sacrifice. Derived from Arabic, *mustahik* means "one who is entitled to receive," and it is commonly used in Islamic law to describe those who have the right to receive certain forms of charity or religious distributions, such as zakat or qurban meat.

This finding suggests that participants' understanding of distribution principles and practices remains limited. The limited improvement observed in this indicator is directly supported by the quantitative pre-test and post-test results, which show minimal score change. The contributing explanations discussed below represent the authors' interpretation of these empirical findings. First, qurban meat distribution involves complex logistical challenges that were not technically addressed during training, as the focus was more on slaughtering than on post-slaughter management. Second, most participants were young individuals without direct experience in meat distribution processes, which involve registering *mustahik*, packaging, and ensuring fair and equitable delivery. Third, the social aspects of qurban such as fairness in distribution and prioritisation of recipients were not a major focus of the training module.

However, as Purnamasari (2015b) emphasised, fair distribution of qurban meat is not only a religious command but also part of efforts to promote food security and nutritional equity within the community. Animal protein distribution through religious mechanisms, such as qurban, can serve as a strategic intervention for addressing malnutrition in vulnerable communities.

In Q9, which measured participants' understanding of ethical slaughtering practices in Islam, scores increased from 4.04 to 4.16. However, the increase was not statistically significant ($t = 0.93$; $p > 0.05$). Similarly, for Q10, which assessed community engagement in qurban implementation, the score rose only slightly from 3.91 to 4.01 ($t = 0.83$; $p > 0.05$).

Several factors can explain the low significance of these two indicators. First, both ethical values and community involvement are often seen as normative and assumed to be "commonly understood," thus receiving less emphasis during training. The sessions focused primarily on technical skills, such as halal slaughter procedures, meat processing, and hygiene practices. Consequently, the reinforcement of ethical and social values was not emphasised.

Second, Q9 and Q10 address aspects that require a reflective understanding and long-term behavioural change, which are typically not achievable through a single educational intervention. As Muthiah et al. (2013) noted, value-based and ethically driven behavioural changes require repeated, culturally reinforced educational efforts.

Nevertheless, these findings have important implications for the development of future community service programs. Education on ethical slaughtering including prohibitions against slaughtering animals in front of each other, the importance of avoiding cruelty, and fostering empathy toward living beings needs to be contextualised and made more applicable so that participants understand not only the legal rulings but also the humanitarian values underlying qurban practices.

This result aligns with Khan et al. (2018) who argue that animal welfare in Islam is not merely a technical requirement but a manifestation of justice and compassion in religious practices. Meanwhile, the low improvement in Q10 highlights the importance of building an understanding of qurban as a collective activity that requires participation from all community members. Therefore, training should include simulations of teamwork, collaborative planning exercises, and discussions across roles (e.g., committee members, slaughterers, volunteers, and community leaders).

Based on the present findings, particularly the limited improvements observed in the distribution and community engagement indicators, this study demonstrates that effective qurban implementation depends not only on technical competence but also on the quality of social coordination among involved actors. Although Q9 and Q10 did not show statistically significant improvement, these indicators remain essential and warrant continued attention in the design of future training programmes. Accordingly, the findings underscore the need to integrate a simple, practical, and participant-appropriate qurban administration management module, complemented by thematic and narrative learning approaches grounded in Islamic values and community experiences, to strengthen collective understanding and coordination in qurban practices.

LIMITATION

This study has several limitations that should be acknowledged. First, the activities were conducted in a single community setting, with participants largely dominated by young individuals aged 19–22, which limits the generalisability of the findings to older practitioners or other regions with different socio-cultural and infrastructural contexts. The use of a pre- and post-test design

without a control group also restricts causal attribution, as improvements may have been influenced by factors such as test familiarity or social desirability bias. In addition, the assessment focused on short-term knowledge gains rather than long-term retention, behavioural change, or objective outcomes such as meat safety, animal welfare indicators, or equitable distribution. Several items, particularly those related to hygiene, exhibited high baseline scores, indicating ceiling effects that limited the ability to measure improvements. The reliance on self-report instruments without reported validation or reliability testing further weakens the robustness of the results. At the same time, the use of multiple t-tests without correction raises the risk of inflated significance. Moreover, certain aspects, such as administration and distribution practices, were given less emphasis during training, resulting in only modest improvements in these areas. Finally, the programme's scalability, cost-effectiveness, and implementation fidelity were not systematically assessed. These limitations underscore the need for future studies to employ multi-site controlled designs, validated tools, objective processes, and outcome measures, as well as longer follow-up periods, to generate stronger evidence for policy and community application.

CONCLUSION

This community service program successfully enhanced participants' understanding and skills in organising Qurban rituals in accordance with Islamic law and animal welfare principles. Through an education-based approach and practical training, participants gained knowledge of the requirements for Qurban animals, halal and tayyib slaughter techniques, and hygienic meat-handling procedures. The results of pre-test and post-test evaluations indicated a significant improvement in participants' comprehension of the technical and operational aspects of Qurban, particularly regarding slaughtering facilities and animal welfare. The participatory approach proved more effective at improving understanding than passive lecture methods.

This program also provided long-term benefits by building community capacity in better Qurban practices. Moreover, the students involved gained valuable field experience in applying the theories they had learned. Nevertheless, certain aspects require improvement, such as optimising the distribution of Qurban meat to ensure fairness and proper targeting. Therefore, further education is necessary to enhance the understanding and implementation of more effective distribution principles.

Overall, this program serves as an effective model for enhancing community competence and can be sustainably implemented across various communities to support better Qurban practices in the future.

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