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Gender Mainstreaming Analysis of COVID-19 Vaccination Policy in Aceh: A Communication Perspective

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ABSTRACT

COVID-19 vaccination programs implemented under health emergency conditions risk reproducing gender inequities unless explicitly designed to accommodate the differentiated needs of men and women. This study examines Gender Mainstreaming (GM) in the implementation of COVID-19 vaccination services in Aceh Province, Indonesia, in 2021, with reference to Minister of Health Regulation No. 84 of 2020. The study aims to evaluate whether vaccination services were gender-responsive and to identify indicators of social inequality throughout the vaccination process. A concurrent mixed-methods design was employed, combining structured questionnaires, in-depth interviews, Focus Group Discussions, and documentary analysis. Data were collected from 320 respondents and 48 interviews across four sites — Banda Aceh City, Langsa City, Lhokseumawe City, and Bener Meriah Regency — and analyzed using the Gender Analysis Pathway (GAP) model across five dimensions: government commitment and policy, institutional framework, human resources, disaggregated data, and community participation. Findings indicate that COVID-19 vaccination in Aceh achieved an overall GM score of 85.84%, categorizing services as gender-sensitive and approaching gender-responsive. Nonetheless, indicators of social inequality were identified, particularly in the form of limited and uneven communication outreach, the absence of sex-disaggregated data presentation, and the reliance on administrative sanctions to mobilize participation rather than awareness-based approaches. These findings suggest that achieving genuinely gender-responsive health services requires not only regulatory compliance but also sustained capacity-building for field implementers and the adoption of equity-centered communication strategies at all levels of service delivery.

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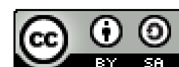

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INTRODUCTION

The COVID-19 pandemic has exposed and deepened pre-existing gender inequities in health systems worldwide, making gender-responsive policy implementation an urgent global concern. Public health emergencies disproportionately affect women and marginalized groups due to structural disparities in access to information, healthcare services, and institutional participation (Flor et al., 2022; Wenham et al., 2020). In Indonesia, the national COVID-19 vaccination program — targeting over 181 million people across 34 provinces between 2021 and 2022 — was implemented under significant time pressure, raising critical questions about whether service delivery was adequately designed to meet the differentiated needs of men and women. Gender Mainstreaming (GM) in the health sector, referred to as Health Sector Gender Mainstreaming (HSGM), serves as a key strategy to minimize social gaps arising from gender-based discrimination, with strategic indicators encompassing commitment, policy, human resources, institutional arrangements, disaggregated data, and community participation (Saputra et al., 2015; Wagner et al., 2025). HSGM is not merely a technical requirement but a shared commitment between men and women to address structural inequities in communities — including long-standing disparities in reproductive health, safe motherhood, and healthcare decision-making that have historically been treated as exclusively women's concerns, with men largely excluded from active participation (Hawkes et al., 2022; Morales et al., 2022; Tomsick et al., 2022). Despite the scale and urgency of the Indonesian vaccination rollout, systematic evaluations of its gender responsiveness remain limited, particularly at the provincial level, making this a critical area requiring empirical investigation.

Scholarly attention to gender and COVID-19 has grown considerably in recent years, yet significant gaps persist in the literature. Wenham et al. (2020) were among the first to document the gendered impacts of the pandemic, highlighting women's disproportionate burden as frontline healthcare workers and caregivers, and calling for gender-disaggregated data to inform policy responses. Building on this, Flor et al. (2022) quantified how the pandemic widened gender gaps across health, social, and economic dimensions from 2020 to 2021, providing cross-national evidence that vaccination rollouts were not immune to gendered inequities. Studies on COVID-19 vaccine hesitancy have further shown that gender interacts with socioeconomic status, cultural norms, and institutional trust to shape vaccination behavior in complex ways (Galasso et al., 2021; Toshkov, 2023; Zintel et al., 2022). Globally, Asi et al. (2022) assessed the gender responsiveness of COVID-19 response plans in conflict-affected settings, finding that most plans failed to systematically integrate gender considerations, while Moyano et al. (2022) identified persistent shortcomings in gender mainstreaming across social protection and health policies implemented during the pandemic. These studies collectively underscore that gender responsiveness cannot be assumed from the existence of policy frameworks alone — it must be verified through rigorous field-level evaluation (Amri et al., 2024; Caywood & Darmstadt, 2024).

In the Indonesian context, the discourse on gender mainstreaming and COVID-19 has been shaped by several important but limited contributions. Hunga & Dhewy (2021) emphasized the need for state intervention through gender-sensitive policies to protect women and vulnerable groups during the pandemic, documenting women's dual vulnerabilities as both health service users and informal caregivers. Lestyoningsih (2020), through a literature review, outlined concrete steps toward gender-responsive pandemic management, including inter-institutional awareness-building and equitable policy implementation across government and private sectors. Rusiah et al. (2018) operationalized gender mainstreaming — or *Pengarusutamaan Gender* (PUG) — as a comprehensive strategy that must be embedded across the entire policy cycle, from planning and formulation through to monitoring and

evaluation, with outcomes measured in terms of gender justice and equality in rights and needs. Fithriyah (2017) further demonstrated that Gender-Responsive Planning and Budgeting (GRBP) frameworks, when properly implemented, can serve as effective instruments for institutionalizing gender equity in Indonesia's development programs. However, these studies remain largely conceptual or national in scope, and empirical field-based assessments of how gender mainstreaming principles are actually operationalized in specific vaccination delivery contexts — accounting for local institutional capacity, community dynamics, and socio-cultural governance — are conspicuously absent from the existing literature (Pratama et al., 2022; Vélez et al., 2021).

Aceh Province presents a particularly compelling yet underexplored context for examining gender mainstreaming in public health service delivery. As the only province in Indonesia that formally implements Islamic Sharia law, Aceh's social structure — grounded in the Quran and Hadith and institutionally anchored by the Islamic Sharia Agency (DSI) — shapes gender roles, behavioral norms, and community expectations in ways that directly affect health service interactions (Alfiatunnur et al., 2024; Daffa & Purnamasari, 2024). Religious and cultural symbols that distinguish men and women — from the hijab and modest Islamic attire for women to the *kopiah* and *koko* shirt for men — are not merely aesthetic markers but reflect deeply embedded norms about appropriate interaction, physical space, and service provision. These norms raise specific and pressing questions about whether COVID-19 vaccination services in Aceh provided dedicated spaces for women, pregnant and breastfeeding mothers, and other vulnerable groups, whether healthcare worker assignments were responsive to these gendered comfort needs, and whether communication outreach strategies adequately reached all segments of the population (Pramiswari et al., 2023; Pratama et al., 2022). The intersection of national health policy mandates with Aceh's unique socio-religious governance structure creates a context that is both analytically distinct and practically significant, yet it has not been examined in the existing literature on gender and COVID-19 in Indonesia.

This study addresses that gap by providing a comprehensive empirical evaluation of Gender Mainstreaming in the implementation of COVID-19 vaccination services in Aceh Province in 2021, with specific reference to Minister of Health Regulation No. 84 of 2020 and the Gender-Responsive Planning and Budgeting (GRBP) framework mandated by Indonesian national policy. Unlike previous studies that address gender and COVID-19 at a macro or conceptual level, this paper focuses on ground-level implementation within a socio-religiously distinct governance context, employing the Gender Analysis Pathway (GAP) model across five core dimensions: government commitment and policy, institutional framework, human resources, disaggregated data, and community participation. The study is guided by two central research questions: whether COVID-19 vaccination services in Aceh were gender-responsive in 2021, and whether indicators of social inequality were present in the delivery of those services. The central argument tested is that while the regulatory frameworks governing vaccination in Aceh formally incorporate gender mainstreaming principles, actual implementation reveals persistent structural gaps — particularly in communication outreach, sex-disaggregated data management, and equity of community access and control — that constitute meaningful indicators of social inequality. By documenting these gaps through a rigorous mixed-methods design conducted across four strategically selected sites in Aceh, this study contributes original empirical evidence to the broader discourse on gender-responsive health policy in Muslim-majority regions and offers actionable recommendations for improving equity in future public health interventions (Amri et al., 2024; Fithriyah, 2017; Moyano et al., 2022).

METHODS

This study adopts a gender-based research framework that examines social phenomena from the perspective of men and women as socially and culturally constructed subjects, whose differentiated positions generate inequities in access to health services, political participation, economic opportunities, and education. Specifically, the research is situated within the epistemological tradition of feminist policy analysis, which posits that health policies are never gender-neutral and that their implementation may inadvertently reproduce structural inequities unless subjected to systematic gender scrutiny (Crenshaw, 1991; Vlassoff & Moreno, 2002). Within this framework, COVID-19 vaccination is treated not merely as a biomedical intervention but as a socially embedded service whose delivery conditions—including physical space, healthcare worker assignment, information access, and community mobilization—carry differential implications for men and women. The research is guided by two central questions: whether COVID-19 vaccination services in Aceh Province were gender-responsive in 2021, and whether social inequities were present in the delivery of these services. These questions are operationalized through five dimensions derived from the Gender-Responsive Planning and Budgeting (GRBP) framework mandated by Indonesian national policy: government commitment and policy, institutional capacity, human resources, disaggregated data management, and community participation.

This research employs a concurrent mixed-methods design with concurrent triangulation strategy (Creswell & Clark, 2017; Sugiyono, 2015), enabling the simultaneous collection, comparison, and integration of quantitative and qualitative data to produce a comprehensive understanding of gender mainstreaming in COVID-19 vaccination. The mixed-methods approach was deemed necessary because gender analysis inherently requires both numerical evidence—such as vaccination coverage ratios disaggregated by sex—and interpretive depth, such as the lived experiences of vaccine recipients, healthcare workers, and local government officials in navigating gendered service dynamics. Quantitative data were collected using structured questionnaires designed to measure community comfort levels, access to information, perceptions of service quality, and compliance with Islamic law (*syari'at Islam*) norms during vaccination. Qualitative data were gathered through in-depth interviews and Focus Group Discussions (FGDs) with purposively selected informants, including vaccination team coordinators, public health officers, community leaders, and vaccine recipients. This triangulation enabled cross-validation of findings and ensured that quantitative trends were contextually grounded within the socio-religious landscape of Aceh.

The research was conducted across four strategically selected sites in Aceh Province: Bener Meriah Regency, Langsa City, Lhokseumawe City, and Banda Aceh City. Site selection followed a purposive criterion based on COVID-19 vaccination coverage data as of September 2021, specifically targeting locations representing the highest and lowest vaccination recipient percentages across the province (major and minor coverage sites). This multi-site design Yin (2018) allowed the researchers to capture variation in institutional implementation capacity, geographical accessibility, community demographic profiles, and the degree to which gender mainstreaming principles had been operationalized at the service delivery level. In total, 320 respondents completed the structured questionnaire across the four sites, with proportional distribution ensuring representation of both male and female vaccine recipients, healthcare workers of both sexes, and community committee members. For qualitative data collection, 48 in-depth interviews and 8 FGD sessions were conducted, with participants selected to represent diversity in age, educational background, professional role, and gender.

The primary analytical instrument applied in this study is the Gender Analysis Pathway (GAP) model, one of four established gender analysis frameworks—alongside the Harvard Model, the Moser

Model, and the SWOT Gender Model—used by the Indonesian government for evaluating gender responsiveness in public programs (Fariz, 2012). The GAP model operationalizes gender analysis through eight sequential steps; however, given the scope and focus of this study, the analysis was structured around five core dimensions: (1) government commitment and policy, assessed through the presence or absence of GRBP-aligned regulations, technical guidelines, and disaggregated data policies; (2) institutional framework, assessed through the coherence of inter-agency coordination and alignment of regional action plans with GRBP standards; (3) human resources, assessed through the gender composition and capacity of vaccination personnel relative to GRBP requirements; (4) disaggregated data, assessed through the availability and sex-stratified presentation of vaccination coverage data; and (5) community participation, assessed through access, control, and benefit dimensions of community engagement. Each dimension was scored on a percentage scale, with achievement levels determined through quantitative tabulation and qualitative corroboration. The overall GAP score was computed as the mean of all five dimension scores.

Data analysis followed a sequential integration approach in which quantitative data were first analyzed descriptively using frequency distributions and cross-tabulations, and qualitative data were analyzed thematically using an inductive coding process informed by the GAP dimensions (Miles et al., 2014). Codes were developed iteratively through open, axial, and selective coding, with emerging categories cross-referenced against quantitative patterns to identify convergence, complementarity, or divergence between data strands. Trustworthiness of qualitative findings was established through source triangulation (comparing accounts from vaccination officials, healthcare workers, and community members), method triangulation (comparing interview data with FGD outputs and documentary evidence such as vaccination decrees and technical guidelines), and member checking, whereby key informants reviewed preliminary findings for accuracy and representativeness. All questionnaire data were entered into SPSS for descriptive analysis, while qualitative data were managed using ATLAS.ti. Ethical clearance was obtained from the institutional review board, informed consent was secured from all participants, and data confidentiality was maintained through anonymization of all identifying information in the dataset.

FINDINGS AND DISCUSSION

Findings

Gender mainstreaming indicators in the implementation of COVID-19 vaccination in Aceh begin with commitment and policy. Commitment is the result of the implementation of policies in the form of regulations. The regulations governing the implementation of COVID-19 vaccination are set forth in Article 13(A) and (B), Paragraph 2, of Presidential Regulation of the Republic of Indonesia No. 99 of 2020. This provision stipulates that every individual listed in the vaccination registry must receive the COVID-19 vaccine. This regulation was subsequently amended into Presidential Regulation of the Republic of Indonesia No. 14 of 2021, with changes to accommodate the needs of vaccine procurement, coverage of force majeure circumstances, post-vaccination adverse events, and advance payments for the provision of COVID-19 vaccines. This regulation was subsequently amended again with additions tailored to the implementation and procurement of COVID-19 vaccines involving business entities or international institutions/agencies through Presidential Regulation of the Republic of Indonesia No. 50 of 2021.

Based on the focus of this study, regulations regarding the Implementation and Procurement of COVID-19 Vaccination in Aceh will refer to Presidential Regulations of the Republic of Indonesia No. 14 and No. 50 of 2021 and the Decree of the Minister of Health of the Republic of Indonesia No.

HK.01.07/MENKES/4638/2021 regarding technical guidelines for the implementation of vaccination in the context of combating the COVID-19 pandemic. These technical guidelines for vaccination implementation state that: First, vaccination must be administered by doctors, nurses, and midwives who hold a valid registration certificate (STR); Second, room standards require a spacious area with good air circulation, cleanliness, and separate rooms; if this is not feasible, separate scheduling must be arranged, and vaccination is only administered to healthy individuals; Third, the vaccination process is adapted to the availability of each health care facility by applying the PPI (Guidelines, Prevention, and Infection Control) principles and maintaining a distance of 1–2 meters.

Institutional indicators for the implementation of COVID-19 vaccination in Aceh refer to Presidential Decree No. 7 of 2020, Article 11, paragraph (1), regarding the Task Force for the Acceleration of COVID-19 Response -19 as amended by Presidential Decree No. 7 of 2020 and the Ministry of Home Affairs Circular Letter No. 440/2622/SJ on the Formation of the Task Force for the Acceleration of Covid-19 Handling in the Regions. Based on these regulations, the Governor of Aceh issued an instruction to establish a task force for the accelerated handling of Covid-19 in Aceh through Aceh Governor's Decree No. 440/1021/2020 on the Formation of the Task Force for the Accelerated Handling of Covid-19 in Aceh, with an organizational structure comprising cross-sectoral representatives both vertically and horizontally. At the regency level, there are also task forces for the accelerated handling of Covid-19, where the organizational structure is established through a decision by the local regent with cross-sectoral cooperation and collaboration.

The availability of healthcare personnel for the implementation of the COVID-19 vaccination program, as outlined in Technical Guideline No. HK. 01.07/MENKES/4638/2021, consists of doctors, nurses, and midwives. Based on data as of August 1, 2022, the number of healthcare personnel in Aceh stands at 56,470. The availability of human resources is not only measured by the quantity available but also by the quality of the vaccination process, as well as the availability of budget, facilities, and infrastructure. Research findings on the implementation of the COVID-19 vaccination policy in Banda Aceh confirm that the availability of human resources in the city remains insufficient in terms of quantity. The availability of human resources is not aligned with the schedule for the simultaneous rollout of the COVID-19 vaccination program. On the other hand, budget allocation has not been efficient or effective enough to adequately support human resource performance.

Furthermore, field data from the regions of Langsa, Lhokseumawe, and Bener Meriah indicate that the human resources involved in delivering COVID-19 vaccination services are predominantly female healthcare workers. The dominance of female healthcare workers in the implementation of COVID-19 vaccination services is considered an indicator that can foster comfort among vaccine recipients, particularly women. This is reinforced by several field interview results with female vaccine recipients, who noted that COVID-19 vaccination services would be much more comfortable if administered by female healthcare workers. In contrast, male recipients of the COVID-19 vaccine do not seem to have any issue with the presence of healthcare workers during the vaccination process. Men remain comfortable being served by female healthcare workers. There are fewer male medical staff compared to female medical staff. In Aceh, the medical workforce is dominated by women, whether they are medical staff from the local government, medical staff from the Kesdam Hospital, or medical staff from the Bhayangkara Hospital of the Aceh Regional Police. The following are the results of media and web search data regarding gender mainstreaming in COVID-19 vaccination services in Aceh in 2021.

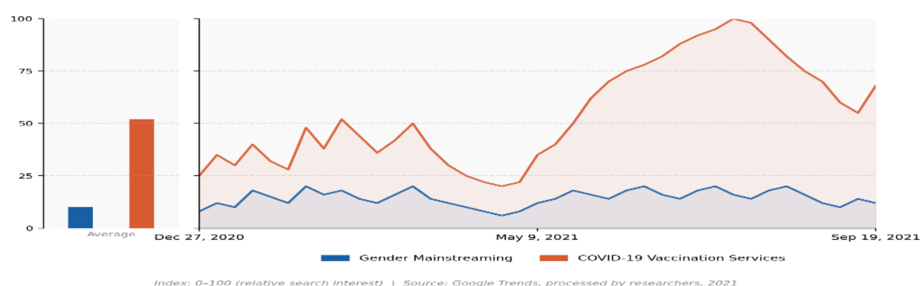

Figure 1. Search Interest Trends: "Gender Mainstreaming" vs "COVID-19 Vaccination Services" in Aceh, 2020–2021.

On December 27, 2020, the number of COVID-19 cases in Aceh was 3,207, with 51.4% (1,649 cases) being male and 48.6% (1,558 cases) being female. On May 9, 2021, the number of COVID-19 cases in Aceh rose to 21,139, with 52.2% (10,958 cases) being male and 47.8% (10,181 cases) being female. On September 19, 2021, the number of COVID-19 cases in Aceh rose to 46,088, with 52.4% (24,137 cases) among males and 47.6% (21,951 cases) among females. Based on this data, it can be concluded that the ratio of COVID-19 cases between men and women in Aceh is relatively stable, with men accounting for slightly more cases. This indicates that gender mainstreaming in COVID-19 services in Aceh has been implemented effectively.

However, there are still several issues that need to be addressed to improve the effectiveness of gender mainstreaming in COVID-19 services in Aceh, namely:

1. A more in-depth gender analysis is needed to identify the factors causing disparities in COVID-19 case rates between men and women.
2. Efforts are needed to improve access to and the quality of COVID-19 services for women, particularly those in remote and vulnerable areas.

Based on the data above, the following measures can be taken to improve access to and the quality of COVID-19 services for women:

1. Increase the availability of female healthcare workers in remote and vulnerable areas.
2. Providing telemedicine and teleconsultation services for women who have difficulty accessing in-person healthcare services.
3. Disseminating gender-responsive information and education about COVID-19.

These measures can enhance gender equality and equity in COVID-19 services in Aceh. And based on research data, the availability of healthcare resources during the COVID-19 response in Aceh is as follows:

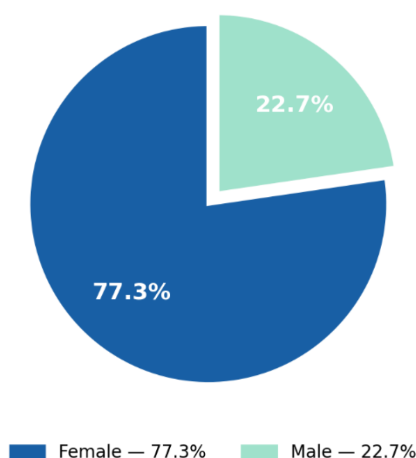

Figure 2. Gender Distribution of Healthcare Workers in COVID-19 Vaccination Services in Aceh, 2021. Source: Qualitative data from questionnaire survey, 2021.

In addition to the indicators mentioned above, participation is one of the keys to the success of the COVID-19 vaccination program in Aceh. Under Law No. 25 of 2004 on the National Development Planning System, Article 2, Paragraph 2, Letter d, participation is defined as the involvement of the community in ensuring their interests are accommodated in the process of drafting development plans. Community participation in the implementation of COVID-19 prevention is clearly evident, all because each individual bears a responsibility for creating a safe and healthy community. As for the forms of community involvement, Rusidi states there are four types of participation: First, contributions of ideas; Second, material contributions (goods, funds, and equipment); Third, contributions of labor (working); and Fourth, utilizing development service delivery. Community participation can help break the chain of transmission of the COVID-19 virus. In this regard, the community can play a pivotal role in the implementation of the COVID-19 vaccination program. They can assist the government in raising awareness and communicating information regarding COVID-19; thus, in addition to public outreach, the community must also be provided with a comfortable space for participation. Consequently, the level of community comfort during the COVID-19 vaccination process—which is being rolled out across the entire province of Aceh—has become one of the key indicators being monitored.

Field data indicates the following levels of public satisfaction:

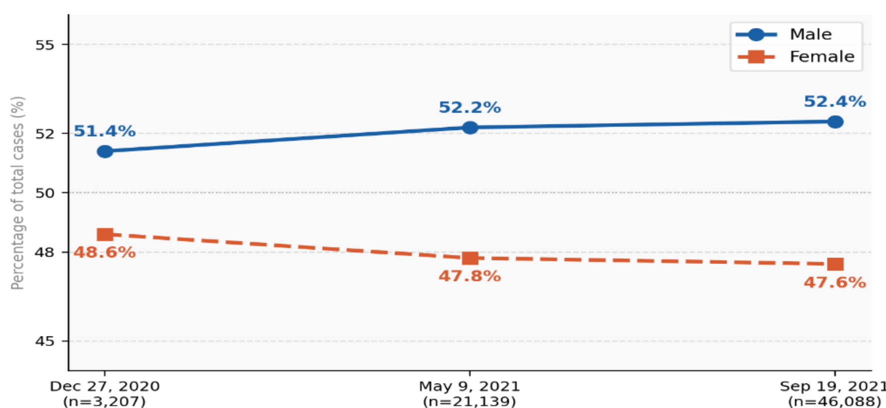

Figure 3. COVID-19 Cases by Sex in Aceh: Three Observation Points, 2020–2021.

On the other hand, based on the focus of gender mainstreaming (GM) analysis, the assessment looks not only at the level of comfort but also at the actions/treatment received by the community from the personnel administering the COVID-19 vaccine in order to identify issues in detail. The data below measures the actions/treatment during the implementation of COVID-19 vaccination in Aceh, namely;

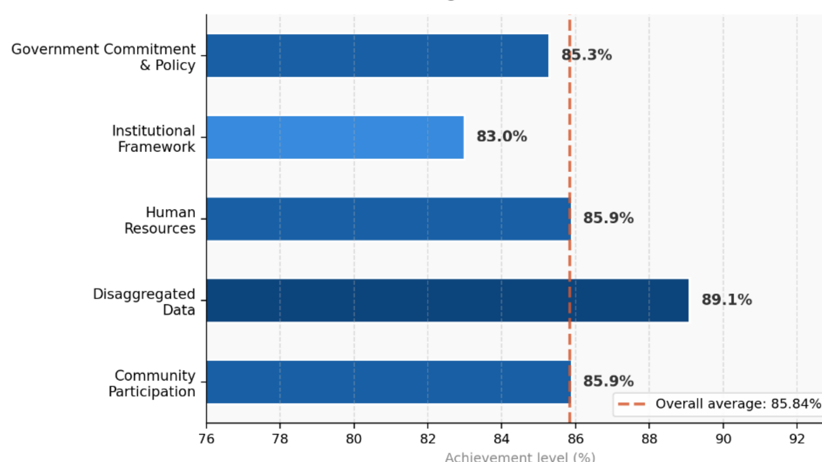

Figure 4. GAP Achievement Level by Dimension — Gender Mainstreaming in COVID-19 Vaccination, Aceh 2021.

In addition, the role of Islamic Sharia in the implementation of COVID-19 vaccination is also the subject of analysis, based on the argument that the application of Sharia shapes the social structure of society. Social structure can be defined as the distinctive characteristics possessed by a society that govern its internal social order. George C. Human asserts that social structure is fundamental to daily life. This social structure solidifies into customs that influence well-being. One of the efforts in human resource development must consider various measures to improve the quality of life for both women and men, so that they can equally access services and play an optimal role in development and in achieving a more advanced and prosperous nation. This is accompanied by the spirit and commitment to elevate the dignity and status of women, as enshrined in Law of the Republic of Indonesia No. 7 of 1984, regarding the Ratification of the Convention on the Elimination of All Forms of Discrimination against Women. Sharia elements serve as a key indicator analyzed in this study. Field data indicates that;

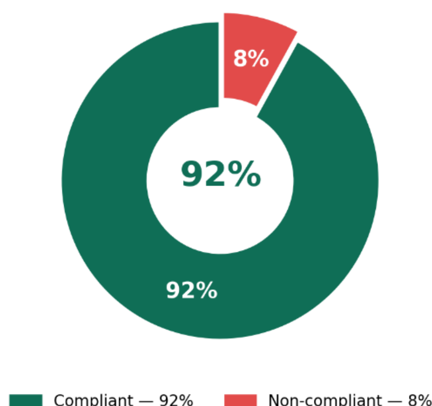

Figure 5. Compliance of COVID-19 Vaccination Implementation with Islamic Sharia Law, Aceh 2021.

The data above indicates that the implementation of COVID-19 vaccination in Aceh is in accordance with Islamic Sharia law, with a compliance rate of 92% and a non-compliance rate of 8%. This non-compliance is attributed to the limited space available, which means that the spacing between vaccination stations does not provide sufficient comfort for vaccine recipients. Based on interview data with various informants, it is evident that the role of the Islamic Sharia Agency (DSI) in the vaccination program includes supervision, monitoring, and providing instructions to Islamic boarding schools to conduct outreach and communication with the general public. One form of outreach and communication initiated by the local government involves addressing COVID-19 issues during Friday sermon sermons. In this regard, supervision and monitoring are aligned with central technical guidelines.

Discussion

Gender Mainstreaming Analysis (GM) is a strategy implemented to achieve gender equality and well-being through the planning, implementation, monitoring, and evaluation of all development policies, programs, and activities. The process of applying this strategy requires tools that serve as the foundation for every GMA to analyze policies, programs, and activities. Gender analysis tools are categorized into four models: the Harvard Model, the Moser Model, the SWOT Model, and the Gender Analysis Pathway (GAP) Model (Fariz, 2012). The gender analysis method used in this study is the Gender Analysis Pathway (GAP) Model, which is employed to comprehensively identify gender gaps. The GAP Model's analysis indicators are typically assessed across eight stages; however, in this study, the analysis mapping focuses on government commitment/policy, institutional capacity, human resources, disaggregated data, and community participation. The results of this analysis can be viewed in the following table:

Table 1. GAP Analysis Results of Gender Mainstreaming in COVID-19 Vaccination in Aceh, 2021

No.	Aspect	Operational Definition	Achievement Indicators	Achievement Level
1	Government Commitment / Policy	Forms of commitment and policy formulated and implemented by local government to support Gender Mainstreaming (GM) or GRBP in COVID-19 vaccination in Aceh	Presence/Absence of: Regulations aligned with GRBP; Guidelines in accordance with GRBP; Technical implementation guidelines per GRBP; Policy on disaggregated data availability; Implementing sector understanding of GRBP	85.3%
2	Institutional Framework	GM institutional mechanisms and working instruments established at the regional level to support GM/GRBP implementation	Presence/Absence of: Work plans aligned with GM/GRBP; Technical implementation per GM/GRBP; Implementation understanding per GM/GRBP; Regional Action Plan (RAD) not yet aligned with GM/GRBP	83%
3	Human Resources (HR)	Allocation of HR with understanding of GM implementation in COVID-19 vaccination in Aceh	Availability/Absence of: Vaccination planners and implementers with GM capacity (per regulations and technical SOP); Adequate HR ratio per GM requirements	85.9%
4	Disaggregated Data	Gender data management in the form of disaggregated	Availability/Absence of: General and specific disaggregated data during implementation;	89.1%

		data on COVID-19 vaccine recipients by sex and status, as well as specific data reflecting situational needs	Data to measure comfort level per GM requirements	
5	Community Participation	Community involvement and understanding of COVID-19 vaccination implementation in accordance with GM	Availability/Absence of: Access to COVID-19 vaccination per GM; Control over vaccination process per GM; Community understanding of GM-compliant vaccination services	85.9%
Overall GM Achievement in COVID-19 Vaccination in Aceh, 2021				**85.84%**

Based on the achievement rates shown above, it is evident that "presence" has not yet been maximized; therefore, the mapping of "absence" will be described based on field data collected through a qualitative approach, specifically interviews and opinion surveys conducted via Focus Group Discussions, including: (a) Commitment and Policy Stages: Achievement indicators in the process of determining regulations, guidelines, and technical guidelines generally meet gender analysis standards. "Absence" achievement indicators can be observed in the concept of disaggregated data presentation, where gender categorization is presented comprehensively within the categories of Health Workers, the Elderly, Public Officials, the General Public, and Adolescents. On the other hand, the overall understanding of implementing agencies at the provincial, district, and sub-district levels regarding Covid-19 vaccination regulations in Aceh is lacking, resulting in field implementation that does not yet meet GRBP standards; (b) Institutional Phase: Institutionally, the "absence" achievement indicator is evident in the lack of shared understanding across sectors. Challenges encountered in the field indicate that the process of delivering COVID-19 vaccination services across sectors does not follow technical guidelines; (c) Human Resources Stage: The predominance of women as healthcare workers in COVID-19 vaccination services is not balanced with the population of vaccination recipients, resulting in men also being served by female healthcare workers during COVID-19 vaccination administration.

This imbalance is considered a disparity in meeting comfort needs in a gender-neutral manner; (d) Disaggregated Data: The presentation of disaggregated data on COVID-19 vaccination in Aceh is conducted transparently and is easily accessible to the public. However, the absence of data disaggregation by sex is not addressed by those responsible for the database, so the vaccination population cannot be mapped in accordance with gender-responsive development planning (GRBP); (e) Community Participation Phase: This phase is measured through the factors of access, control, and benefits. The "absence" indicator of community access to COVID-19 vaccination services can be observed in information access. The outreach phase was not implemented uniformly. Consequently, limited information access has impacted public awareness regarding COVID-19 vaccination. Field data indicates that insufficient outreach led to mass mobilization through sanctions, one of which is administrative bureaucratic sanctions. This indicator of "lack of" achievement can be analyzed in terms of social inequality in the implementation of COVID-19 vaccination in Aceh in 2021.

Social inequality refers to a situation that does not align with desired performance indicators. Indications of social inequality in the Covid-19 vaccination service in Aceh include: First, the lack of access to information available to the public, which aligns with the uneven dissemination of information carried out by the Covid-19 vaccination implementation team; Second, the lack of a comprehensive understanding of technical guidelines, thereby affecting the comfort of the public

during the Covid-19 vaccination process; Third, the vaccination implementation process is not based on raising public awareness but rather on the application of bureaucratic administrative sanctions. This approach is viewed as a solution to accelerate the breaking of the COVID-19 transmission chain. On the other hand, priorities that need to be addressed in achieving gender equality include: First, improving the quality of life and the role of women in development; Second, protecting women from various forms of violence; and Third, strengthening the institutional capacity for Gender Mainstreaming (GM) and women's empowerment at both the policy and implementation levels.

CONCLUSION

This study set out to evaluate the extent to which COVID-19 vaccination services in Aceh Province, Indonesia, were implemented in a gender-responsive manner in 2021. The most important finding to emerge from this analysis is that while the overall Gender Mainstreaming (GM) achievement score of 85.84% formally places Aceh's vaccination services in the gender-sensitive category, this aggregate figure conceals critical implementation gaps that would not have been visible without field-level empirical investigation. Most notably, the study found that community mobilization for vaccination was driven primarily through administrative and bureaucratic sanctions rather than awareness-based communication — a finding that directly contradicts the spirit of gender-responsive health programming, which requires voluntary, informed, and equitable participation. Furthermore, the near-total absence of sex-disaggregated data presentation in official vaccination records meant that gender disparities in access, control, and benefit could not be systematically monitored or addressed by implementing agencies. The dominance of female healthcare workers across all four sites, while generally perceived positively by female vaccine recipients, simultaneously created comfort gaps for male recipients and highlighted an unresolved tension between workforce composition and gender-neutral service standards. These findings were unexpected in the sense that regulatory compliance — evidenced by formal policy alignment with GRBP standards — did not translate into substantively gender-responsive practice at the point of service delivery.

In terms of academic contribution, this study both confirms and challenges existing research. It confirms the findings of Wenham et al. (2020), Flor et al. (2022), and Asi et al. (2022) that gender responsiveness in public health emergency responses cannot be assumed from policy frameworks alone and must be verified through systematic field evaluation. It also reinforces Lestyoningsih (2020) and Rusiah et al. (2018) in demonstrating that gender mainstreaming requires not only institutional commitment but sustained capacity-building at the implementation level. However, this study challenges the prevailing assumption in the Indonesian gender mainstreaming literature — reflected in Fithriyah (2017) and Amri et al. (2024) — that high GRBP compliance scores are sufficient indicators of gender-responsive outcomes. By disaggregating the GAP model scores across five dimensions and cross-validating them with qualitative field data, this study reveals that aggregate achievement levels can mask dimension-specific deficits, particularly in community participation and disaggregated data management. More broadly, this study offers a new empirical perspective by demonstrating that socio-religious governance structures — specifically Aceh's implementation of Islamic Sharia law — function as a distinct contextual variable that shapes the gender dynamics of health service delivery in ways not captured by existing national-level frameworks. This represents a conceptual contribution to the literature on gender-responsive health policy in Muslim-majority contexts that warrants further theoretical elaboration.

This study is not without limitations. First, the data were collected in 2021 during an active public health emergency, which constrained the depth and scope of community engagement possible during fieldwork and may have introduced response biases related to social desirability and institutional

sensitivity. Second, while the four-site design was purposively selected to capture variation in vaccination coverage, the sample remains geographically bounded within Aceh Province and cannot be generalized to other provinces in Indonesia or to other Muslim-majority contexts with different governance arrangements. Third, the application of the GAP model, while appropriate and widely used in the Indonesian policy context, operationalizes gender analysis through a fixed set of five dimensions that may not fully capture emerging or intersectional dimensions of gender inequality — such as those related to disability, ethnicity, or economic marginalization — that were evident in the qualitative data but could not be systematically quantified within the existing framework. Future research should expand the sample to include comparisons across multiple provinces with varying levels of Sharia governance, integrate intersectionality frameworks to capture overlapping dimensions of vulnerability, and employ longitudinal designs to assess whether gender mainstreaming improvements in policy are eventually reflected in service delivery outcomes. As Indonesia continues to develop its post-pandemic health infrastructure, evidence-based gender audits of health service delivery — conducted at the regional level with disaggregated data — will be essential for ensuring that universal health coverage translates into genuinely equitable outcomes for all citizens.

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