










## Understanding the Perspectives and Influences on Pediatric Vaccination Among Meranao Parents in Community Health Settings, Philippines

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### ABSTRACT

**Background:** Pediatric vaccination is a cornerstone of public health, yet its acceptance and implementation are shaped by sociocultural, religious, and personal factors. Among Meranao parents, these factors significantly influence their discernment and decision-making regarding childhood immunizations.

**Objectives:** This study aims to explore the knowledge, attitudes, and influences shaping Meranao parents' decisions about pediatric vaccines, with the goal of identifying culturally relevant strategies to improve vaccine acceptance and uptake in the community.

**Methods:** A qualitative descriptive methodology was employed, involving one-on-one interviews with five Meranao parents in Basak Malutlut, Marawi City, Lanao del Sur. Data were collected using semi-structured interview guides and analyzed thematically to uncover patterns and insights.

**Results:** The findings revealed a varying levels of vaccine literacy among Meranao parents. Key themes included trust in healthcare providers, the influence of religious and cultural beliefs, and community-driven decision dynamics. While many parents acknowledged the importance of vaccines, hesitancy often stemmed from misinformation, fear of side effects, and conflicting cultural narratives. This study emphasizes the critical role of barangay health workers and community leaders in disseminating accurate vaccine information and addressing concerns.

**Conclusion:** Improving pediatric vaccination rates in Meranao communities requires practical strategies rooted in cultural and religious sensitivity. Public health initiatives should actively engage trusted community leaders, including religious and cultural figures, to address vaccine hesitancy and misinformation.

### KEYWORDS

Meranao parents, Pediatric vaccination, Vaccine literacy, Vaccine hesitancy, Community Health Nursing

### 1. INTRODUCTION

Vaccination remains one of the most effective public health interventions, reducing morbidity and mortality associated with preventable diseases (Montero et al., 2024; Toor et al., 2021). Despite its proven benefits, vaccine hesitancy poses a significant challenge worldwide, particularly in culturally diverse communities. Among the Meranao people in the Philippines, deeply rooted cultural and religious beliefs influence health-related decisions,

including childhood immunizations. Understanding these cultural contexts is vital for designing effective vaccination campaigns tailored to the community's unique perspectives.

The Meranao, predominantly Muslim, place strong emphasis on religious practices and cultural traditions, which often guide their attitudes and behaviors toward health and healthcare. While many parents recognize the importance of immunization, others remain hesitant due to concerns over vaccine safety, potential side effects, and misinformation (Lafnitzegger & Gaviria-Agudelo, 2022; Nguyen et al., 2022; Tankwanchi et al., 2021). Moreso, social dynamics within the community, such as the influence of local leaders and barangay health workers, play a crucial role in shaping parental decisions regarding vaccination (Dhaliwal et al., 2023; Salve & Pangandaman, 2024; Soriano et al., 2019).

This study explores the knowledge, attitudes, and decision-making processes of Meranao parents regarding pediatric vaccination. By examining the factors influencing vaccine acceptance or hesitancy, the research aims to identify culturally sensitive strategies to enhance immunization rates and protect children from preventable diseases. In doing so, this study contributes to a broader understanding of the intersection between culture, religion, and public health in marginalized communities.

## **2. METHODS**

### **2.1 Study Design**

This study employed a qualitative descriptive research design to explore the knowledge, attitudes, and decision-making processes of Meranao parents regarding pediatric vaccination. This design was chosen because it is flexible and widely used approach in nursing and health sciences that aims to explore and describe phenomena without relying on numerical data which then provide a detailed understanding of the participants' perspectives and experiences, capturing their cultural and religious influences, hesitations, and motivations toward childhood immunization (Oranga & Matere, 2023; Taskin, 2021). The approach facilitated a comprehensive exploration of the factors shaping vaccine acceptance and hesitancy within the community, offering practical insights into improving public health strategies in culturally sensitive contexts.

### **2.2 Participants and Study Setting**

The study was conducted in Purok 1, Basak Malutlut, Marawi City, Lanao del Sur, Philippines. It is an area of the city where vaccination campaign program is being instituted. The participants consisted of five parents, selected using purposive sampling based on specific criteria: being a parent of at least one child aged 1 to 17 years, residing in the study area, and willing to participate in the interviews. The setting was chosen due to its accessibility and relevance to the study's objectives, ensuring that the participants' views represented the local community's cultural and religious context.

### **2.3 Instruments or Tool**

Data were collected using semi-structured interview guides designed to elicit in-depth responses about participants' understanding of pediatric vaccines, sources of vaccine information, and personal and community influences on vaccination decisions. The interview guide included open-ended questions to explore cultural beliefs, religious considerations, and past experiences with vaccination. Audio recorders were used, with participants' consent, to ensure accuracy and reliability during data analysis. Field notes were also taken to document non-verbal cues and contextual observations.

### **2.4 Data Collection**

Data collection was conducted using semi-structured interview guides designed to elicit detailed insights into participants' understanding of pediatric vaccines, their sources of vaccine information, and the personal and community factors influencing their vaccination decisions. For instance, participants were asked questions such as, "Can you share your thoughts on what pediatric vaccines are and why you think they might be important for children?" to explore their basic understanding of vaccination. To identify trusted sources of information, they were queried, "Where do you usually get information about vaccines for your children? Are there specific people, places, or platforms you trust for this information?" Open-ended questions like "How do your cultural or family traditions affect your decision to vaccinate your children?" and "As a Muslim parent, how does your faith influence your view on vaccinating your children?" were used to delve into cultural beliefs and religious considerations, while questions about past experiences, such as "Can you tell me about any positive or negative experiences you've had with vaccinating your children? How did those experiences shape your current opinions?" provided additional context. To ensure data accuracy and reliability, audio recorders were used with participants' consent, and field notes were taken to document non-verbal cues, contextual factors, and any significant observations during the interviews. These approaches facilitated a rich and comprehensive understanding of the participants' perspectives.

### 2.5 Data Analysis

Thematic analysis was used to analyze the data, following Braun and Clarke’s (2006) six-step framework. The analysis began with familiarization, where the researchers repeatedly reviewed the transcripts to identify significant patterns. Initial codes were generated to capture key ideas and phrases related to vaccine literacy, cultural influences, and decision-making. These codes were organized into themes, which were reviewed and refined to ensure coherence and relevance. Finally, the themes were defined and contextualized to provide a comprehensive narrative of the participants’ perspectives on pediatric vaccination.

### 2.6 Ethical Consideration

Ethical approval for the study was obtained from the College of Health Sciences Research Ethics Committee, Mindanao State University, under clearance code CHS-REC 2024-26. Informed consent was secured from all participants prior to data collection, ensuring they were fully informed about the study’s purpose, procedures, potential risks, and benefits. Participants were assured of their right to withdraw at any time without penalty and were provided with opportunities to ask questions about the study. Confidentiality and anonymity were strictly maintained, with all identifying information removed and data securely stored, accessible only to the research team. The study adhered to the ethical principles outlined in the Declaration of Helsinki, prioritizing the rights, dignity, and well-being of participants throughout the research process.

## 3. RESULTS

Five Meranao parents participated in this study, each representing unique perspectives shaped by their cultural and religious beliefs. The participants included four females (80%) and one male (20%), aged between 38 and 64 years. All participants were residents of Purok 1, Basak Malutlut, Marawi City, and had children aged between 1 and 17 years. Their educational backgrounds varied, with most being college graduates, and one participant being employed in a government position. The study identified three major themes: Vaccine Literacy, Cultural and Religious Influences, and Decision-Making Dynamics.

**Table 1. Participants Profile**

Participant ID	Gender	Age (years)	Number of Children	Children’s Age Range	Educational Background	Employment Status
1	Female	38	3	1-10	College Graduate	Unemployed
2	Female	45	2	5-15	High School Graduate	Unemployed
3	Female	50	4	7-17	College Graduate	Unemployed
4	Female	64	2	2-8	College Graduate	Unemployed
5	Male	40	5	3-14	College Graduate	Government Employee

**Table 2. Summary of Themes, Subthemes, and Categories**

Theme	Subtheme	Categories
I. Vaccine Literacy	a. Knowledge of Pediatric Vaccines	Understanding of vaccine types, benefits, and risks
	b. Sources of Vaccine Information	Role of healthcare providers, social media, and community members
	c. Impact of Misinformation	Concerns about safety, side effects, and vaccine myths
II. Cultural and	a. Religious Beliefs and Practices	Islamic guidance on healthcare decisions, reliance on Allah

	Religious Influences	b.	Community Norms and Traditions	Peer influence, societal expectations
		c.	Traditional Healing vs. Modern Medicine	Integration of cultural healing practices with vaccination
		a.	Trust in Healthcare Providers	Role of barangay health workers and local leaders in fostering trust
III.	Decision-Making Dynamics	b.	Hesitancy and Barriers	Emotional and logistical challenges
		c.	Strategies for Decision-Making	Rationalizing health benefits, peer recommendations

### ***Theme 1: Vaccine Literacy***

The participants' understanding of pediatric vaccines varied, with most recognizing their role in preventing severe illnesses. However, gaps in knowledge persisted, often due to misinformation and limited access to reliable sources.

#### ***Subtheme 1: Knowledge of Pediatric Vaccines***

Most participants acknowledged the benefits of vaccines in protecting children from diseases such as measles and polio. One participant noted, "Vaccines are important because they shield children from illnesses, even when there are outbreaks" (Participant 3). However, some parents expressed uncertainty about how vaccines work or their long-term effects.

#### ***Subtheme 2: Sources of Vaccine Information***

Participants relied on various sources, including barangay health workers, social media, and healthcare providers. However, the information was not always consistent or accurate. For example, one participant shared, "I trust the nurses at the health center, but I also hear things online that make me doubt" (Participant 1).

#### ***Subtheme 3: Impact of Misinformation***

Misinformation, particularly from social media, fueled vaccine hesitancy among some parents. Concerns about side effects, such as fever, were common. As one participant explained, "I was hesitant at first because I heard that vaccines might cause serious illnesses, but the nurse explained otherwise" (Participant 2).

### ***Theme 2: Cultural and Religious Influences***

Cultural and religious beliefs played a critical role in shaping parental attitudes toward vaccination, often serving as either a barrier or a facilitator.

#### ***Subtheme 1: Religious Beliefs and Practices***

Most participants viewed vaccines as compatible with Islamic teachings, provided they adhered to halal standards. One participant stated, "I believe in Allah's guidance and that vaccines are part of His plan to protect us" (Participant 5).

#### ***Subtheme 2: Community Norms and Traditions***

Peer influence and societal expectations were significant in shaping vaccine decisions. Some parents admitted being swayed by community norms, both positively and negatively. "When others in the community vaccinate their children, it gives me confidence to do the same," one participant shared (Participant 4).

#### ***Subtheme 3: Traditional Healing vs. Modern Medicine***

Traditional healing practices were often used alongside modern medicine. While participants valued cultural healers, they also trusted healthcare providers for vaccinations. "I believe in both; traditional medicine is for certain conditions, but vaccines are necessary for my child's health," a participant explained (Participant 3).

### ***Theme 3: Decision-Making Dynamics***

Participants' decisions were shaped by their level of trust in healthcare providers, emotional concerns, and logistical factors.

#### ***Subtheme 1: Trust in Healthcare Providers***

The role of barangay health workers was pivotal in fostering trust. One participant shared, "The health workers explained everything clearly and encouraged me to vaccinate my child" (Participant 1).

### ***Subtheme 2: Hesitancy and Barriers***

Barriers included fear of side effects, lack of clear information, and logistical challenges like transportation. “I wanted to vaccinate my child, but I was scared of what might happen after the injection,” one participant admitted (Participant 4).

### ***Subtheme 3: Strategies for Decision-Making***

Parents often weighed the benefits of vaccines against their concerns, relying on peer advice and healthcare guidance. As one participant stated, “After hearing from others who vaccinated their children, I realized it was the best decision” (Participant 5).

## **4. DISCUSSION**

The findings of this study provide valuable insights into the complex interplay of cultural, religious, and social factors influencing the vaccine-related decisions of Meranao parents. The themes identified—vaccine literacy, cultural and religious influences, and decision-making dynamics—highlight the multifaceted nature of vaccine acceptance and hesitancy in this community. These findings align with existing literature emphasizing the critical role of cultural competence in public health initiatives, particularly in regions with strong cultural and religious identities (Alsuwaidi et al., 2023; Dhaliwal et al., 2023; Nagar & Ashaye, 2022).

Participants demonstrated varying levels of vaccine literacy, with most acknowledging the protective benefits of pediatric vaccines against severe illnesses such as measles and polio. However, misinformation and gaps in knowledge persisted, contributing to vaccine hesitancy. This is consistent with previous research showing that low health literacy and misinformation can undermine vaccine uptake, even in communities with access to immunization services (Soriano et al., 2019). The role of trusted sources, such as barangay health workers, was significant in improving understanding and dispelling myths. However, the reliance on social media as a source of vaccine information posed challenges due to the prevalence of unverified content, a trend observed in other vaccine-hesitant populations globally (Al-Uqdah et al., 2022; Puri et al., 2020; Steffens et al., 2020; Steven Lloyd & Charles, 2020).

Cultural and religious beliefs played a dual role, acting as both barriers and facilitators to vaccine acceptance. Many participants viewed vaccination as aligned with Islamic teachings, particularly when framed as a means of preserving life and health, which are paramount in Islam. This finding aligns with studies highlighting the importance of integrating religious guidance into health education to improve vaccine acceptance in Muslim communities (Nagar & Ashaye, 2022; Tankwanchi et al., 2021). However, traditional healing practices, while respected, sometimes conflicted with modern medical approaches. Participants often sought a balance, relying on both cultural healers and biomedical providers. This interplay between traditional and modern practices is well-documented in the literature, particularly in settings where cultural traditions remain deeply ingrained (Lafnitzegger & Gaviria-Agudelo, 2022; Soriano et al., 2019).

Decision-making regarding vaccination was influenced by a combination of trust in healthcare providers, emotional concerns, and logistical challenges. Trust emerged as a pivotal factor, with participants emphasizing the importance of clear, empathetic communication from health workers. This finding supports the role of trust in healthcare systems as a cornerstone of public health efforts, as trust mitigates hesitancy and fosters compliance (Dasch et al., 2023; Karafillakis et al., 2021; Yoon et al., 2022). However, barriers such as fear of side effects, logistical difficulties, and conflicting information continued to pose challenges (Soriano et al., 2019). These obstacles highlighted a need for inclusive interventions addressing specific concerns and improving accessibility to vaccination services.

The findings underscore the necessity of culturally tailored public health strategies to improve vaccine uptake among Meranao parents. Effective strategies include leveraging trusted community figures, such as religious leaders and barangay health workers, to disseminate accurate information and address vaccine-related concerns. Additionally, health campaigns should integrate religious and cultural contexts to foster acceptance and trust. This approach aligns with global recommendations emphasizing culturally sensitive interventions in addressing vaccine hesitancy (Alsuwaidi et al., 2023; Nagar & Ashaye, 2022; Soriano et al., 2019).

Despite the challenges, many participants demonstrated resilience in navigating conflicting information and societal pressures. Peer influence, community engagement, and spiritual beliefs played significant roles in shaping their decisions. The importance of involving communities in vaccine campaigns cannot be overstated, as grassroots efforts often resonate more effectively than top-down approaches (Abdulmalik & Pangandaman, 2024; Soriano et al., 2019).

## **5. CONCLUSION**

The findings of this study provide valuable insights into the factors influencing Meranao parents’ perspectives and decisions regarding pediatric vaccination. The themes of vaccine literacy, cultural and religious influences, and decision-making dynamics illustrate the complexities involved in vaccine acceptance. While many parents recognized the importance of vaccines in protecting their children from preventable diseases, barriers such as misinformation, fear of side effects, and logistical challenges persisted. Cultural and religious beliefs emerged as

both barriers and facilitators, with participants often balancing traditional practices with modern medical recommendations. Trust in healthcare providers, particularly barangay health workers, played a critical role in fostering vaccine acceptance, highlighting the need for targeted health education and community-based interventions.

To improve pediatric vaccination rates in Meranao communities, public health strategies must address these multifaceted factors. Efforts should focus on integrating cultural and religious contexts into health campaigns, leveraging trusted community figures such as religious leaders, and ensuring consistent and accurate vaccine information. Enhanced accessibility through community-centered vaccination services and addressing logistical challenges can further encourage uptake. This culturally sensitive approach, combined with active community engagement, has the potential to bridge gaps in vaccine understanding and acceptance, ultimately contributing to better health outcomes for children in the Meranao community.

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## 7. Conflict of Interest

The authors declare that they have no competing interests.

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