

Disaster S Awareness and Preparedness Among Families of Persons with Disabilities

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ABSTRACT: Disasters are unexpected events that disrupt communities, causing loss of life, property damage, and an urgent need for aid. This study explored the disaster awareness and preparedness of families of persons with disabilities (PWDs) living in a barangay in Bacolod, Lanao del Norte. The study utilized a descriptive-correlational research design, involving 100 families chosen through purposive sampling. Data were gathered using a researcher-made questionnaires. Results revealed that participants demonstrated a high level of both awareness and preparedness for disasters. Moreover, the study found a significant positive relationship between disaster awareness and preparedness among families. The study concluded that families of persons with disabilities (PWDs) are highly aware of disaster-related risks, which strengthens their emergency planning and communication. Despite this, their emotional preparedness is still lacking. The strong correlation between awareness and preparedness underscores the importance of incorporating emotional support to achieve more complete disaster readiness. It is recommended that government agencies, health workers, and families work together to strengthen both practical and emotional preparedness for disasters among households with persons with disabilities (PWDs).

KEYWORDS: disaster preparedness, family awareness, inclusive planning, persons with disabilities, psychosocial support

INTRODUCTION

Disasters are sudden and severe events that disrupt communities, causing loss of life, property damage, and urgent humanitarian needs. They may arise from natural hazards such as typhoons, earthquakes, and floods, or from human-induced incidents like fires and industrial accidents. Their effects become more devastating when communities are unprepared or highly vulnerable, emphasizing the importance of disaster readiness and risk reduction.

Persons with disabilities (PWDs) are among the most vulnerable groups during disasters due to physical, social, and environmental barriers. Families play a crucial role in ensuring their safety before, during, and after emergencies. However, many families lack sufficient knowledge, awareness, and preparedness plans, making it difficult to respond effectively. As a result, PWDs often face greater challenges in evacuation, access to medical care, and overall survival during disasters.

Globally, studies have shown that PWDs are frequently excluded from disaster planning, with more than 80% reporting lack of inclusion. Inaccessible warning systems, evacuation procedures, and shelters further increase their risk. Factors such as poverty, low education, and weak government support, especially in developing countries, worsen the situation. Although policies and frameworks exist to support disaster preparedness, their implementation remains inconsistent, leaving many families and PWDs inadequately protected.

In the Philippines, laws such as Republic Act No. 7277 and Republic Act No. 10121 aim to promote disaster awareness and preparedness among PWDs through inclusive communication systems and national disaster risk reduction strategies. Despite these legal frameworks, challenges persist in terms of implementation and actual awareness at the community level. Research findings also reveal that while some families possess basic knowledge or resources, many still lack concrete preparedness plans and the ability to respond effectively during emergencies.

A significant gap in existing literature is the limited focus on families of PWDs, particularly their level of awareness, preparedness, and challenges in disaster situations. Most studies emphasize government initiatives or the experiences of PWDs themselves, overlooking the family as the primary support system. This study is therefore important as it addresses this gap by examining the knowledge, preparedness, and needs of families with PWDs at the community level. Its findings can contribute to

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more inclusive and effective disaster planning, improved support systems, and targeted interventions that empower families to better protect their vulnerable members.

LITERATURE REVIEW

Disaster risks and hazards refer to the potential threats posed by natural or human-made events that can cause harm when communities are exposed and unprepared, highlighting both the hazard itself and the risk it creates (UNDRR, 2020). Understanding these concepts enables communities to plan effectively, reduce losses, and build safer environments. In this context, emergency resources and services for persons with disabilities (PWDs) include accessible shelters, medical assistance, transportation, communication tools, and trained responders who can address their specific needs (UN DESA, 2025). These services ensure inclusion, safety, and dignified recovery. At the same time, rights and policies such as the Magna Carta for Persons with Disabilities (RA 7277) and the UN Convention on the Rights of Persons with Disabilities uphold equal access, protection, and participation of PWDs, especially during emergencies (Magna Carta for Disabled Persons (Republic Act No. 7277), 1992). Families play a vital role in supporting these rights by advocating for PWDs, ensuring access to services, and actively participating in emergency planning.

Family emergency planning involves preparing households for disasters through organized actions such as identifying evacuation routes, preparing emergency kits, and establishing communication plans (FEMA, 2021). This preparation reduces panic, promotes quick response, and improves survival, especially when PWDs are actively included. In addition, psychological and emotional preparedness strengthens individuals' ability to cope with stress, remain calm, and make sound decisions during crises, which is particularly important for vulnerable groups (WHO, 2025). Effective communication strategies further enhance disaster response by ensuring that information is clear, timely, and accessible to all, including PWDs, through tools such as early warning systems, visual aids, and inclusive language (CDC, 2018). Together, these elements contribute to a more inclusive, responsive, and resilient disaster preparedness system.

Objectives of the Study

This study determined the levels of disaster awareness and preparedness of families of persons with disabilities. Specifically, it sought to:

1. Determine the level of the respondents' disaster awareness in terms of disaster risks and hazards, emergency resources and services for persons with disabilities, rights and policies for persons with disabilities, and the family's role in disaster.
2. Determine the level of the respondents' disaster preparedness in terms of family emergency planning, psychological and emotional preparedness, and communication strategies.
3. Explore the significant relationship between the levels of the respondents' disaster awareness and preparedness.

METHODOLOGY

This study employed a descriptive-correlational research design to determine the level of disaster awareness and preparedness among families of persons with disabilities (PWDs) in a selected barangay in Bacolod, Lanao del Norte, an area vulnerable to natural hazards such as typhoons and floods. A total of 100 families with at least one member with a disability were selected through purposive random sampling, ensuring that respondents met specific criteria. Data were collected using validated researcher-made questionnaires covering awareness (disaster risks, emergency resources, rights and policies, and family roles) and preparedness (family emergency planning, psychological readiness, and communication strategies), with high reliability confirmed through Cronbach's Alpha (0.941). The instruments underwent expert validation and pilot testing to ensure clarity and relevance. Data gathering followed proper procedures, including securing permissions, obtaining informed consent, and ensuring confidentiality, while statistical tools such as weighted mean and Pearson correlation were used for analysis. Throughout the process, strict ethical standards were observed to protect participants' rights, ensure voluntary participation, and maintain the integrity and confidentiality of the data.

RESULTS AND DISCUSSIONS

Level of Respondent's Disaster Awareness

Table 1 presents the level of respondents' disaster awareness in terms of disaster risks and hazards, emergency resources and services for persons with disabilities, rights and policies for persons with disabilities, and the family's role in disaster. Based on the results, families of persons with disabilities show a high level of awareness about disasters. They are most aware of the emergency resources and services available for PWDs, with a mean score of 3.32 (*High*). They also have a strong understanding of disaster risk hazards, which has a mean of 3.31 (*High*). On the other hand, awareness of rights policies and the family's role during

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disaster was a slightly lower mean of 3.24 (*High*). Overall, with the total mean of 3.29, evaluated as “*High*”, the respondents show good understanding and they are truly aware of how to respond during disasters.

The results indicated that families of persons with disabilities had a strong understanding of disaster-related situations. They recognized potential risks and knew how to access available support and resources, as well as how to take action to safeguard their loved ones with disabilities during emergencies. This awareness allowed them to respond more effectively and with greater confidence when faced with disasters. However, the findings also pointed out a gap in their knowledge regarding the rights of persons with disabilities and the policies connected to disaster response. This highlighted the need for further education and training in this area to enhance their preparedness and ensure the safety and well-being of individuals with disabilities during such events.

The findings of this study were supported by the Republic Act No. 7277, also known as the Magna Carta for Disabled Persons, which includes measures to support disaster awareness among PWDs. Section 22 encourages TV stations to include sign-language interpreters or subtitles in at least one daily newscast and special broadcasts about important national events. This helps individuals with hearing impairments stay updated, especially during disasters. Section 23 also promotes better communication by requiring telephone companies to provide special devices for the hearing-impaired, making it easier for them to access emergency information and respond properly in critical situations.

Aside from that, Gunarathna and Premarathne (2024) highlighted the importance of increasing awareness in disaster relief efforts to better support Persons with Disabilities (PWDs). Their study in Sri Lanka showed that PWDs were not simply dependent during emergencies but were often actively involved in their evacuation and even assisted others. However, the findings also revealed a lack of awareness and preparedness in many areas, such as the inaccessibility of shelters, transportation difficulties, loss of mobility aids, and poor access to vital information. The authors stressed that raising awareness among disaster responders and communities about the needs and capabilities of PWDs is essential.

Table 1: Level of Respondents’ Disaster Awareness

Constructs	Mean	Interpretation
Disaster Risk Hazards	3.31	High
Emergency Resources and Services for PWDs	3.32	High
Right and Policies for PWDs and the Family’s Role in Disaster	3.24	High
Overall Mean	3.29	High

Legend: 3.6- 4.0 (Very High); 2.6- 3.5 (High); 1.6- 2.5 (Low); 1.0- 1.5 (Very Low)

Level of the Respondents’ Disaster Preparedness

Table 2 describes the level of respondents’ preparedness in terms of family emergency planning, psychological and emotional preparedness, and communication strategies. Based on the results, the families of persons with disabilities show a high level of preparedness for disasters. The construct family emergency planning indicates a mean of 3.15 (*High*), and communication strategies have a mean of 3.13 (*High*). However, the psychological and emotional preparedness has a mean of 2.99 (*High*).

The findings implied that families of persons with disabilities were mostly ready to face disaster situations. They had clear emergency plans, knew how to communicate important information, and felt emotionally prepared to handle emergencies. This level of preparedness helped them take quick and proper action to protect their loved ones with disabilities. However, emotional and psychological readiness was slightly lower, meaning this area needed more attention. Giving families training and support on how to manage stress and stay emotionally strong during emergencies could have helped them stay calm, make good decisions, and care for their loved ones better. Improving this part of preparedness would have also helped create a more inclusive and effective response in the community during disasters.

The results of this study were supported by the study of Riviwanto et al. (2021), which assessed the disaster preparedness of families with children with disabilities in Padang, Indonesia. Using the LIPI UNESCO/ISDR tool, they found that while 42.2% had sufficient disaster knowledge and 82.2% could mobilize resources, only 37.8% had proper preparedness plans, and 46.7% were unready to respond to warnings. With an overall preparedness score of 57%, the study highlighted major gaps in planning and awareness, urging local governments to provide targeted training and simulations.

Thus, Kolaç et al. (2024) found that mothers who underwent earthquake preparedness training had noticeably higher levels of awareness and stronger psychological resilience. Their actions toward disaster readiness also improved, showing a clear connection between being informed and being prepared. The study highlights that providing disaster awareness training can

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significantly boost preparedness in families of persons with disabilities (PWDs), as it not only increases their knowledge but also encourages them to take concrete measures to ensure their loved ones' safety.

Table 2: Level of the Respondents' Disaster Preparedness

Constructs	Mean	Interpretation
Family Emergency Planning	3.15	High
Psychological and Emotional Preparedness	2.99	High
Communication Strategies	3.13	High
Overall Mean	3.09	High

Scale: 3.6- 4.0 (Very High); 2.6- 3.5 (High); 1.6- 2.5 (Low); 1.0- 1.5 (Very Low)

Significant Relationship between the Levels of the Respondents' Disaster Awareness and Preparedness

The Table presents the significant relationship between families' awareness and preparedness during disasters, in terms of Family Emergency Planning (FEP), Psychological and Emotional Preparedness (PEP), and Communication Strategies (CS). The results show that Disaster Risks and Hazards (DRH) has a statistically significant positive correlation with Family Emergency Planning (FEP) ($r = 0.267$, $p = .007$), Psychological and Emotional Preparedness (PEP) ($r = 0.203$, $p = .042$), and Communication Strategies (CS) ($r = 0.238$, $p = .017$), indicating that families with greater awareness of disaster risks tend to be more prepared in all three areas. On the other hand, Emergency Resources and Services (ERS) is significantly related to FEP ($r = 0.213$, $p = .033$) and CS ($r = 0.234$, $p = .019$), but not to Psychological and Emotional Preparedness (PEP) ($r = 0.185$, $p = .066$), suggesting that awareness of support services helps with planning and communication, but has less impact on emotional preparedness. Thus, Rights and Policies for PWDs (RPP) also shows significant relationships with FEP ($r = 0.299$, $p = .002$) and CS ($r = 0.372$, $p < .001$), but not with Psychological and Emotional Preparedness (PEP) ($r = 0.098$, $p = .332$). This means families who are aware of their rights and roles in disaster situations are better at planning and communication, but may still need emotional support. Overall, most relationships are statistically significant, leading to the rejection of the null hypothesis (H_0). This confirms that a higher level of awareness is significantly linked to a higher level of preparedness among families of persons with disabilities during disasters.

The findings revealed that there was a significant relationship between the level of awareness and the level of preparedness among families of persons with disabilities during disasters. Specifically, awareness of disaster risks and hazards was strongly linked to all three areas of preparedness: family emergency planning, psychological and emotional preparedness, and communication strategies. This indicated that families who were more informed about the dangers of disasters tended to be more prepared in terms of planning, emotional readiness, and effective communication during emergencies. Additionally, awareness of emergency resources and services was significantly related to both emergency planning and communication strategies, showing that knowledge of available support helped families organize and share important information, although it did not have a strong impact on emotional preparedness. Furthermore, awareness of rights and policies concerning persons with disabilities was also significantly related to emergency planning and communication strategies, emphasizing the importance of understanding family roles and legal protections in enhancing disaster preparedness. Overall, the results supported the rejection of the null hypothesis, confirming that greater awareness generally led to better preparedness among these families.

The result was supported by the study of Obnial et al. (2023), which highlights the urgent need for a more inclusive approach to disaster response in the Philippines, especially for persons with disabilities (PWDs) and the elderly, who are at greater risk due to the lack of suitable emergency procedures. The study reveals that current systems often fail to consider the specific needs of these vulnerable groups and calls for reforms based on the principle of "disaster justice," which ensures equal support and accessibility for all individuals. It also emphasizes that raising awareness within families and communities plays a crucial role in strengthening disaster preparedness. As people become more informed about the particular challenges faced by PWDs, they are better able to create appropriate and responsive disaster plans, showing a strong and significant relationship between awareness and effective preparedness.

Table 3: Significant Relationship Between the Levels of the Respondents' Disaster Awareness and Preparedness

Constructs	Family Emergency Planning (FEP)	Psychological and Emotional Preparedness (PEP)	Communication Strategies (CS)
Disaster Risks and Hazards (DRH)	$r = 0.267^{**}$ ($p = .007$) Reject H_0	$r = 0.203^*$ ($p = .042$) Reject H_0	$r = 0.238^*$ ($p = .017$) Reject H_0

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Emergency Resources and Services for PWDs (ERS)	$r = 0.213^*$ ($p = .033$) Reject H_0	$r = 0.185$ ($p = .066$) Do Not Reject H_0	$r = 0.234^*$ ($p = .019$) Reject H_0
Rights and Policies for PWDs and Family's Role in Disaster (RPP)	$r = 0.299^{**}$ ($p = .002$) Reject H_0	$r = 0.098$ ($p = .332$) Do Not Reject H_0	$r = 0.372^{**}$ ($p < .001$) Reject H_0

H_{02} : There is no significant relationship between the level of the respondents' disaster awareness and preparedness.

0.00- 0.01**Highly Significant, 0.02- 0.05*Significant, above 0.05 Not Significant

CONCLUSION

The study concludes that families of persons with disabilities (PWDs) demonstrate a high level of disaster awareness, which enables them to respond effectively and protect their vulnerable members during emergencies. They are generally well-prepared in practical aspects such as planning and communication; however, their emotional and psychological readiness remains insufficient and requires further support. Moreover, the study confirms a significant positive relationship between disaster awareness and preparedness, showing that increased knowledge of risks, resources, and rights leads to improved preparedness, particularly in planning, communication, and emotional aspects.

RECOMMENDATIONS

It is recommended that local government units and disaster management offices strengthen awareness programs and provide inclusive training for families of PWDs, while agencies such as the DSWD offer mental health and stress management support to enhance emotional preparedness. Health and social workers should conduct regular home visits, counseling, and training on first aid and emergency practices tailored to PWD needs. Families are also encouraged to actively participate in disaster preparedness activities, develop customized emergency plans, and engage in support networks. Future researchers should expand this study to other areas, include larger samples, and further explore emotional preparedness and inclusive disaster strategies for vulnerable populations.

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