

# POST-DISASTER ACCESSIBILITY OF BASIC HEALTH AND SOCIAL SERVICES IN THE FIRST DISTRICT OF ZAMBOANGA DEL NORTE

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#### Abstract

Healthy and socially redeveloped community pertains to the degree to which health and social services are effectively accessed. However, it is not possible to work towards complete equality in health and social services during and after disasters, as there are some factors of rendering the services that are beyond human influence. It is for this reason that this study was conducted to look into the post-disaster accessibility of basic health and social services in the first district of Zamboanga del Norte. It involved 390 respondents from the seven municipalities and one city of the first district of the province, namely: Dapitan City, La Libertad, Rizal, Sergio Osmeña, Sibutad, Mutya, Polanco, and Piñan. Results showed that the basic health and social services were rendered to the communities but distribution disparities were observed. The province therefore should target staffing efforts on medical professionals including those that specialize in health and social services delivery. Linkages that specialize in health and social services should be enforced to increase the province's facility to address post-disaster issues.

**Keyword and Phrases:** post-disaster accessibility, basic health and social services

#### Introduction

A key determinant of a post-disaster recovery is the extent to which health and social services are effectively provided. To address the health and social needs of the exposed population to severe hazards, accessibility of the best possible services in such a situation is imperative. A significant component is ensuring the smooth transition of health and social services from recovery operations to redevelopment assistance. Most importantly, health and social protections of the affected communities should be unfolded as part of the disaster recovery.

According to hazard researchers Cutter and Emrich (2006) and Griffin (2009), social vulnerability is the product of social inequalities during disaster recovery. This pertains to the susceptibility of social groups to the impacts of hazards, as well as their resiliency, or ability to adequately recover from them. This susceptibility is not only a function of the characteristics of the population but also more complex constructs such as health care provision, social capital, and access to them (Hillsborough County Post-Disaster Redevelopment Plan (2014)). Health accessibility is equally important as ease of access to social services.

However, Runkle et. al (2012) posited that health disparities in vulnerable disaster populations involve systematic differences in access to care, such as entry into the health



system measured by health services utilization, across population subgroups both before and after a disaster. The degree to which a disaster disrupts a health system's ability to care for vulnerable communities is critical component in post-disaster recovery and redevelopment. On the other hand, disaster recovery efforts may improve social services by addressing disparities in social dimensions of community life.

In Zamboanga del Norte, the researchers believed that health and social disparities existed during and after a disaster. It is for this reason that this study was conducted to determine the post-disaster accessibility of basic social and health services in the first district of Zamboanga del Norte. It is in this context that post-disaster recovery plays an important role in the restoration of previously extant physical or economic systems within a community. Thus, health services, including public health, medical and social services are expected to supporting the overall community recovery.

#### **Materials and Methods**

The study utilized the descriptive method of research and questionnaire on post disaster accessibility of basic social and health services. To support and further verify the information gathered, a one-on-one interview with the randomly selected respondents was conducted. There were 390 respondents involved in the study of which 78 were from Dapitan City, 42 were from La Libertad, 47 were from Rizal, 48 were from Sergio Osmeña, 41 were from Sibutad, 41 from Mutya, 48 were from Polanco, and 45 were from Piñan. Frequency counting and percent were used to determine the post disaster accessibility of basic social and health services in the first district in Zamboanga del Norte. Moreover, Chi-square test was also employed to determine whether the profile of the respondents significantly influenced their post-disaster accessibility of basic health and social services.

#### **Results**

**Profile of the Respondents.** The figures divulge that respondents were generally male, adults in their productive ages with low level of education, married with a meager income from unattractive occupation, and resided in semi concrete houses mostly near river/seashore at more than 6 km radius from business center. Respondents also revealed that they commonly evacuated in schools during the occurrence of floods.

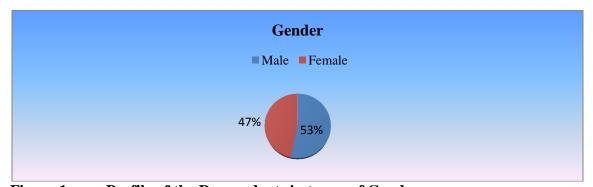


Figure 1 Profile of the Respondents in terms of Gender



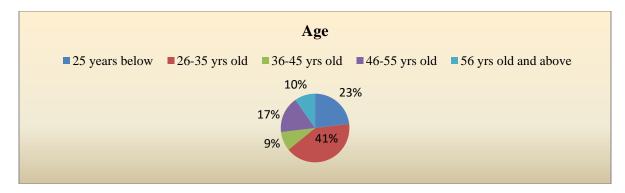


Figure 2 Profile of the Respondents in terms of Age

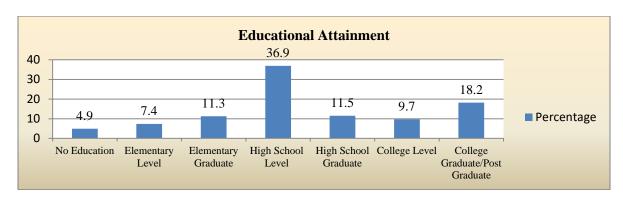


Figure 3 Profile of the Respondents in terms of Educational Attainment

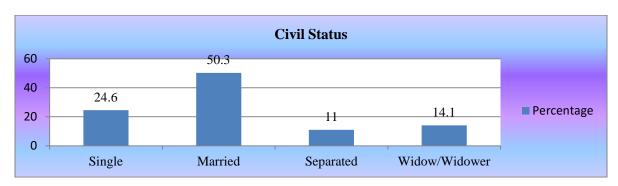


Figure 4 Profile of the Respondents in terms of Civil Status

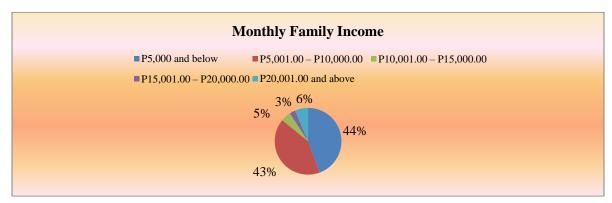


Figure 5 Profile of the Respondents in terms of Monthly Family Income



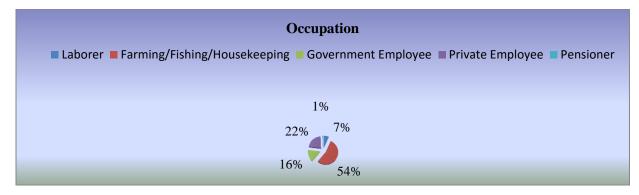


Figure 6 Profile of the Respondents in terms of Occupation

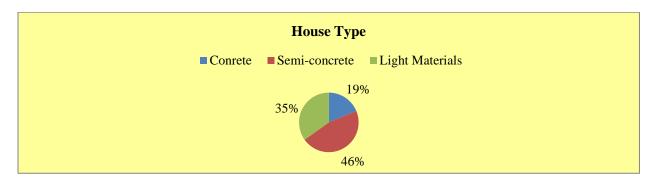


Figure 7 Profile of the Respondents in terms of House Type



Figure 8 Profile of the Respondents in terms of Home Location

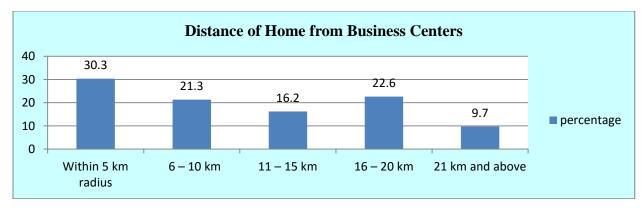


Figure 9 Profile of the Respondents in terms of Home Distance from Business Centers



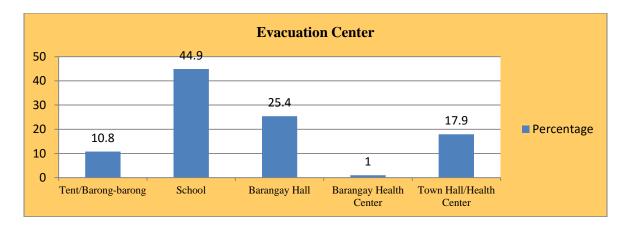


Figure 10 Profile of the Respondents in terms of Evacuation Center

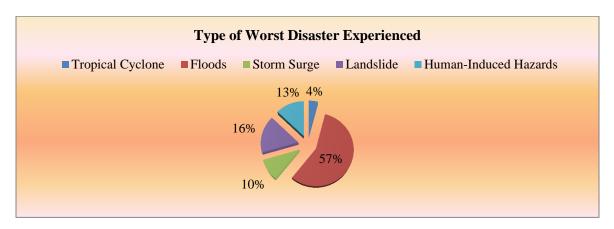


Figure 11 Profile of the Respondents in terms of Type of Worst Disaster Experienced

**Post-Disaster Accessibility of Basic Health Services.** Table 1 depicts that bulk of the respondents least accessed basic health services, namely: "Mass of bed-nets is distributed", "Access to psychological first aid to people in acute distress is ensured", and "Hypertension, diabetes and infectious diseases treatment are provided". On the other hand, other descriptors were favorably accessed by the respondents. In totality, however, greater percentage of the respondents were served with basic health services, yet, a considerable percentage of the respondents indicated basic health services inaccessible. It can be inferred that inaccessibility to basic health services could be attributed to understaffing of health services provider.

Health service provider creates a healthy community that continuously creates and improves both its physical and social environments, helping people to support one another in aspects of daily life, and develop individually to their fullest potential. It is advocated that healthy places are those designed and built to improve the quality of life for all people who live, work, worship, learn, and play within their borders – where every person is free to make choices amid a variety of healthy, available, accessible, and affordable options (Centers for Disease Control, 2009).



 Table 1
 Post-Disaster Accessibility of Basic Health Services

| Descriptors  | Yes | Percent | No  | Percent |
|--|-----|---------|-----|---------|
| 1. Temporary pre-hospital units to treat injuries, |     |         |     |         |
| and/or medical evacuation are in place.            | 356 | 91.3    | 34  | 8.7     |
| 2. Supplementary and therapeutic feeding           |     |         |     |         |
| activities are conducted.                          | 252 | 64.6    | 138 | 35.4    |
| 3. Mass of bed-nets is distributed.                | 2   | 0.5     | 388 | 99.5    |
| 4. Appropriate communicable diseases prevention    |     |         |     |         |
| measures in the evacuation centers are ensured.    | 207 | 53.1    | 183 | 46.9    |
| 5. Hypertension, diabetes and infectious diseases  |     |         |     |         |
| treatment are provided.                            | 173 | 44.4    | 217 | 55.6    |
| 6. Vaccination campaigns to include tetanus are    |     |         |     |         |
| disseminated.                                      | 380 | 97.4    | 10  | 2.6     |
| 7. Access to psychological first aid to people in  |     |         |     |         |
| acute distress is ensured.                         | 168 | 43.1    | 222 | 56.9    |
| 8. Safe drinking water, and wastewater, solid      |     |         |     |         |
| waste and medical waste disposal is ensured.       | 218 | 55.9    | 172 | 44.1    |
| 9. Trained community outreach workers are          |     |         |     |         |
| deployed.  | 368 | 94.4    | 22  | 5.6     |
| 10. Free health services and access to essential   |     |         |     |         |
| medicines are provided.                            | 380 | 97.4    | 10  | 2.6     |
| 11. Free access to medicines during the emergency  |     |         |     |         |
| phase is served.                                   | 348 | 89.2    | 42  | 10.8    |
| 12. Medical kits, medicines, medical inputs and    |     |         |     |         |
| replacement of drug kits/vital medicines are       |     |         |     |         |
| given.   | 390 | 100     | -   | -       |
| 13. Early warning system including disease         |     |         |     |         |
| surveillance is strengthened.                      | 284 | 72.8    | 106 | 27.2    |
| 14. Health workforce is replaced, strengthened,    |     |         |     |         |
| and/or reactivated when necessary.                 | 349 | 89.5    | 41  | 10.5    |
| 15. Health safety, basic needs and rights of the   |     |         |     |         |
| victims are addressed.                             | 237 | 60.8    | 153 | 39.2    |
| Overall  | 326 | 83.6    | 64  | 16.4    |

**Post-Disaster Accessibility of Basic Social Services**. Table 2 shows that all of the descriptors of post-disaster accessibility of basic social services were massively served with "Psycho-educational teaching about typical stress responses and useful coping mechanisms that provide a framework for understanding the traumatic event are enforced" as the most rendered by the social services provider. However, a considerable percentage of the respondents denied on their access to basic social services. In general, 73.8 percent of the respondents received the basic social services while denying their counterpart. This means that basic social services were not rendered fairly to the needy. It can be concluded that social services provider may be under staff or scarcity of the services could be put on blame. It is imperative, therefore, that there must be linkages in services and emergency planning to address the needs and inequalities during and after disasters (Aldrich and Benson, 2008).

 Table 2
 Post-Disaster Accessibility of Basic Social Services



|     | Descriptors                                     | Yes | Percent | No   | Percent |
|-----|---|-----|---------|------|---------|
| 1.  | Access to food, shelter, water, etc. by         |     |         |      |         |
|     | concerned government agencies is facilitated.   | 265 | 67.9    | 125  | 32.1    |
| 2.  | Linkages between vulnerable populations and     |     |         |      |         |
|     | service systems are created.                    | 230 | 59.0    | 160  | 41.0    |
| 3.  | Linkages among service systems to make          |     |         |      |         |
|     | resources more accessible to people are         |     |         |      |         |
|     | formulated.                                     | 266 | 68.2    | 124  | 31.8    |
| 4.  | Community has preparations to respond for       |     |         |      |         |
|     | chaotic disasters.                              | 255 | 65.4    | 135  | 34.6    |
| 5.  | Safe evacuation facilities are provided.        | 256 | 65.6    | 134  | 34.4    |
| 6.  | Logistics and transportation are provided.      | 287 | 73.6    | 103  | 26.4    |
| 7.  | Communication access between field and          |     |         |      |         |
|     | headquarters is ensured.                        | 267 | 68.5    | 123  | 31.5    |
| 8.  | Communication with accurate media               |     |         |      |         |
|     | coverage is elicited.                           | 228 | 58.5    | 162  | 41.5    |
| 9.  |   |     |         |      |         |
|     | with social work's orientation.                 | 232 | 59.5    | 158  | 40.5    |
| 10. | Debriefing emphasizes coping mechanisms is      |     |         |      |         |
|     | conducted.                                      | 239 | 61.3    | 151  | 38.7    |
| 11. | Debriefing is conducted on community social     |     |         |      |         |
|     | support   | 241 | 61.8    | 149  | 38.2    |
| 12. | Debriefing stresses social connections through  |     |         |      |         |
|     | networking.                                     | 287 | 73.6    | 103  | 26.4    |
| 13. | Psycho-educational teaching about typical       |     |         |      |         |
|     | stress responses and useful coping mechanisms   |     |         |      |         |
|     | that provide a framework for understanding      |     |         | 0.7  |         |
| L.  | the traumatic event are enforced.               | 305 | 78.2    | 85   | 21.8    |
| 14. | Ideas and plans for healing, self-care, and     | 220 |         | 4.50 |         |
|     | mutual aid and support are elicited.            | 228 | 58.5    | 162  | 41.5    |
| 15. | Services are provided for the physical, social, |     |         |      |         |
|     | emotional and financial needs of those          | 222 | 50.5    | 1.55 | 40.2    |
|     | affected.                                       | 233 | 59.7    | 157  | 40.3    |
|     | Overall   | 288 | 73.8    | 102  | 26.2    |

Test of Difference of Post-Disaster Accessibility of Basic Social and Health Services as to Profile. Table 3 shows that the profile of the respondents in terms of educational qualification, civil status, monthly family income, occupation, house type, home location, distance of home from business centers, evacuation center, and type of worst disaster experienced significantly differed in the post-disaster accessibility of the respondents to basic social and health services. It is safe to say that educational qualification, civil status, monthly family income, occupation, house type, home location, distance of home from business centers, evacuation center, and type of worst disaster experienced are indicators for a difference in basic social and health services accessibility among the respondents.



However, gender did not differ in the post-disaster accessibility of the basic social and health services among the respondents. This means that males and females have accessed differently to the basic social and health services. It can be concluded that the males may have better accessed to basic social and health services than their counterpart. On the other hand, age did not also differ in the post-disaster accessibility of the basic health services among the respondents, yet, a significant difference occurred in basic social services.

Table 3 Test of Difference of Post-Disaster Accessibility of Basic Social and Health Services as to Profile

| Factors           | Health  | р-    | Interpretation  | Social  | р-    | Interpretation  |
|-------------------|---------|-------|-----------------|---------|-------|-----------------|
|                   | $(X^2)$ | value |                 | $(X^2)$ | value |                 |
| Gender            | 2.825   | 0.093 | Not Significant | 1.451   | 0.484 | Not Significant |
| Age               | 4.587   | 0.332 | Not Significant | 19.042  | 0.015 | Significant     |
| Educational       |         |       |                 |         |       |                 |
| Attainment        | 60.789  | 0.000 | Significant     | 86.096  | 0.000 | Significant     |
| Civil Status      | 33.670  | 0.000 | Significant     | 36.130  | 0.000 | Significant     |
| Monthly Family    |         |       |                 |         |       |                 |
| Income            | 12.649  | 0.013 | Significant     | 42.266  | 0.000 | Significant     |
| Occupation        | 46.317  | 0.000 | Significant     | 53.053  | 0.000 | Significant     |
| House Type        | 94.395  | 0.000 | Significant     | 80.819  | 0.000 | Significant     |
| Home Location     | 194.029 | 0.000 | Significant     | 192.452 | 0.000 | Significant     |
| Distance of Home  |         |       |                 |         |       |                 |
| from Business     |         |       |                 |         |       |                 |
| Centers           | 133.577 | 0.000 | Significant     | 154.922 | 0.000 | Significant     |
| Evacuation Center | 30.904  | 0.000 | Significant     | 51.909  | 0.000 | Significant     |
| Type of Worst     |         |       |                 |         |       |                 |
| Disaster          |         |       |                 |         |       |                 |
| Experienced       | 45.770  | 0.000 | Significant     | 55.867  | 0.000 | Significant     |

## **Discussion**

The post disaster accessibility of basic health services in the first district in Zamboanga del Norte was actually carried out. The gap, however, could be pointed out in the service providers who were deployed and provided the community health needs. World Health Organization (2014)stressed that it is not possible to work towards complete equality in health, as there are some factors of health that are beyond human influence. Doty et. al (2002) asserted that access to medical care can be limited due to the scarcity of primary care practitioners, specialists, and diagnostic facilities.

The social services were served but not rendered fairly to the needy community. Yet, observation showed that the province has a considerable number of health and social service agencies and organizations that can provide a various range of programs to different parts of the district. It is obvious that, in every disaster, the number of individuals in need of support and health services raises making health and social services fundamental to expand capacity to reach a greater number of affected residents.



New staffing scheme and training programs are ways to ensure that agencies and organizations have adequate workers to meet an increased need. The province therefore should target staffing efforts on medical professionals including those that specialize in health and social services delivery.

Moreover, post-disaster accessibility of basic health and social services is a concern of the province and residents. The formation of health and social partnership promotes teamwork among a variety of professionals and allows the province to address specific issues concerning health and social needs of the affected community. Linkages that specialize in health and social services should be enforced to increase the province's facility to address post-disaster issues. The linkages could lead further to public outreach, implementation of education programs, and ascertain long-term monitoring procedures.

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