## ARTICLE IN PRESS

International Journal of Disaster Risk Reduction ■ (■■■) ■■■-■■■



Contents lists available at ScienceDirect

# International Journal of Disaster Risk Reduction

journal homepage: www.elsevier.com/locate/ijdrr



# Gender dimension in disaster situations: A case study of flood prone women in Malabon City, Metro Manila

Daniella Dominique Reyes<sup>a</sup>, Jinky Leilanie Lu<sup>b,\*</sup>

- <sup>a</sup> College of Arts and Sciences, University of the Philippines Manila, Philippines
- b Institute of Health Policy and Development Studies, National Institutes of Health, University of the Philippines Manila, Philippines

#### ARTICLE INFO

Article history: Received 31 August 2015 Received in revised form 9 November 2015 Accepted 9 November 2015

Keywords:
Disaster
Women in disasters
Gender dimension in disaster

#### ABSTRACT

This study looked into the gendered experiences of women in a disaster-prone area in Metro Manila, and at the relations of both the cultural, and socio-economic factors on women's vulnerability to disasters. The research strategy was sequential where understanding of the target area was done through situational analysis and interviews, and then quantitative data were gathered through a survey of 68 women. In this study, the women said that their responsibilities during disasters exceeded those of their partners. These were looking and providing food for the family (77.9%), keeping up hope for the family midst the disaster situation (70.6%), taking care of the sick or injured members of the family (55.9%), among others. Majority of the women belonged to the lower income group, and a considerable number were single parents. Being tied to the home while their male counterparts were away for work is detrimental to the women because they immediately encountered the brunt of the effects of the disaster. While men were recognized as the household heads and leaders, it is evident from the data gathered that women took more roles and responsibilities before, during, and after disasters. Both the poverty of the women, and their traditional roles at home put them in a vulnerable position. Hence, there is a need not only to include gender in disaster planning, but also to reconceptualize what gender means and how it should be applied in disaster reduction planning in particular, and in the development process in general.

© 2015 Elsevier Ltd. All rights reserved.

#### 1. Introduction

Disaster situations are disruptive and debilitating, and more so, have a gendered dimension. During disasters, women become more vulnerable, and this vulnerability emanates from the disaster itself, as well as from other factors and conditions that originate from women's general position in society [1]. In fact, it is during disaster situations when the gender imbalances in society are highlighted [2].

Social scientists differentiate between vulnerability and disaster risk. Vulnerability occurs when there is differential access to resources due to economic, social, geographic, demographic, cultural, institutional, governance, and environmental factors [3]. Disaster risk, on the other hand, is determined by vulnerability and its interaction with environmental factors called hazards [4]. Since vulnerability and disaster risk are social constructs, they could be averted, when structural and policy interventions are in place, including engendering disaster planning and management processes.

http://dx.doi.org/10.1016/j.ijdrr.2015.11.001 2212-4209/© 2015 Elsevier Ltd. All rights reserved. In the Philippines, disasters such as typhoons are common. The Philippines ranked 2nd on the Climate Risk Index in 2012, and 7th on the Long-term Climate Risk Index measured up to 2014 [5]. The study site which is Malabon City in Metro Manila was chosen because it is flood-prone area, and many residents are categorized as urban poor [6]. Malabon City was called by the Kyoto University in their study as the "local Venice" in the Philippines because it is constantly inundated by heavy rains, flooding, and storm surges [7]. The unit of analysis in this study consisted of the women in the community who were mostly housewives and operated small convenience stores. This study aimed at looking at two structural factors in society that contribute to the vulnerability of women which are the cultural, and socio-economic factors.

### 1.1. The gendered nature of disasters

The gendered nature of disasters manifests accordingly in two ways – women as the more vulnerable population, coupled with the additional difficulties that women face during disasters. Within the development context, disasters showcase and highlight gendered imbalances in society in which women are comparatively more vulnerable than men [2]. Two perspectives have been used in exploring the reason behind this: from the socio-cultural

<sup>\*</sup> Corresponding author. E-mail address: jinky\_lu@yahoo.com (J.L. Lu).

perspective, and the socioeconomic perspective. According to a study conducted by Plan International, women and children are 14 times more likely to die in a disaster situation due to the patriarchal belief that boys are more valuable in the family as they will "carry on the family line" [1]. This presents a more problematic situation in developing countries as they bear the brunt of 95% of the natural hazards that occur in the world [8]. In the public sphere, this patriarchal orientation in society is also manifested given the power relations hampering women from experiencing and accessing opportunities (e.g. better jobs, access to education) that would allow them to move towards a better standard of life [2].

Besides the cultural factors, the socioeconomic status of women also contributes to their vulnerability. According to a study conducted by the World Bank, women whose socio-economic status are lower than men were "disproportionately" more vulnerable to damages [9]. In everyday life, women are found to earn comparatively less than men, and work in smaller businesses or even in the informal sector [5,10]. This is exacerbated in disaster situations where there is loss of livelihood. A person's socioeconomic status is determined by (and composed of) a person's educational level, occupation, and income level. This places a person in a particular standing in a society where one standing has comparatively more opportunities than the other [11].

As far as the gender component of disaster risk processes, there is gender gap since women are excluded from policy-making processes, and thus, the exclusion of their interests and needs [2]. The gender imbalance that women face in the institutional responses to disasters is only a reflection of the gender gap that they face and experience in their everyday lives [5].

#### 2. Research methodology

#### 2.1. Research design

This is a case study with a number of data collection techniques such as the use of survey questionnaire, key informant interview, and secondary data.

The research strategy for the study is sequential where understanding of the target area was done through situational analysis and key informant interviews, and then quantitative data were gathered from the target population. This was then followed and supplemented by key informant interviews as part of the qualitative data collection. Key informants were interviewed to look into the unique experiences of women during disasters.

In a sequential strategy for a mixed method research, the data collection process is described to be "iterative" where the information gathered in one aspect contributes to the information gathered in the other aspects [12].

#### 2.2. Target population and unit of analysis

The target population in the study is one of the most flood prone areas in Metro, Manila, Philippines which is the City of Malabon, particularly Barangay Catmon [6]. The City of Malabon is a low-lying, coastal city surrounded by three rivers – the Tullahan, Malabon, and Navotas Rivers. The city is also susceptible to earthquakes, liquefaction, and storm surges [6].

The objectives of the study were to look into the vulnerability of women during disaster situations in Malabon City in the Philippines, and to look into the cultural and socio-economic factors that contribute to the vulnerability of the women during disaster situation. The goal of this study is to make the plans and projects of the community more gender sensitive.

#### 2.3. Sample size, sampling method and data analysis

For the qualitative aspect, purposive and criterion sampling methods were done [13]. The inclusion criteria included women who have (1) experienced disasters in their locality, but have (2) survived it, (3) now part of community-based disaster response programs or the local government, and are (4) mothers.

For the qualitative aspect, interview was done among ten women. For the quantitative aspect, a simple random sampling within the community was done. The sample size for the target population was 68 which was computed using 90% margin of error. The sample size calculation for the survey was computed using the following equation [14]:

$$ss = \frac{Z^2 * p * (1 - p)}{C^2}$$

where:

Ss = Sample size

Z = Degree of reliability (1.645 for 90% margin of error)

p = True proportion of getting a good sample (0.5)

C = Margin of error (0.10 for 90%).

The above equation generated a total sample of 68. The data provided by the local city government for the population size of the entire Malabon City was 353,337 as of 2010 (latest data available) wherein 176,817 were women, and 176,073 were males (representing almost a 1:1 female:male ratio). In the specific target area, Barangay Catmon, the most flooded among all the communities in Malabon, the population is 36,420 (no gender-disaggregated data, however, the mean household size is 5). The survey targeted the households as the unit of analysis.

The survey data were encoded and analyzed using SPSS 13.0. The key informant interviews were encoded thematically based on the variables being investigated in this study.

The core ethical principles of respect and beneficence were complied with. Confidentiality agreement elucidated in the Informed Consent Form was followed. The study protocol underwent evaluation by the Research Ethics Board (REB) of the University of the Philippines Manila which is accredited by the Forum for Ethical Review Committees in Asia and the Western Pacific (FERCAP). The study was also registered with the Research Grants Administration Office.

#### 3. Theory

The classical works of Barbara Ehrenreich (1976) provide a lens in understanding the gender difference in the experience of disasters [15]. Ehrenreich highlights both the cultural and economic factors in the vulnerability of women in society. According to Ehrenreich, there is unpaid surplus labor of women through both their productive and reproductive capabilities. Skills that are usually associated with the woman (e.g. reproductive skills, healing, midwifery) are devalued [15]. Women's pacification towards the structure confines them to "feminine" responsibilities such as being "culture bearers" even if they participate in the productive process (as workers) themselves. The economic aspect manifests in the devaluation of work done by women, as well as in the tendency to prohibit women from participating in the formal economic processes. The study looked into the women's vulnerabilities to disasters as well as the cultural and socio-economic factors that may interplay with the women's vulnerabilities.

Gender planning is also a useful framework in understanding disaster as it argues how contributions of women would make a difference in the aftermath of disaster, and that the representation

## Download English Version:

# https://daneshyari.com/en/article/7472835

Download Persian Version:

https://daneshyari.com/article/7472835

<u>Daneshyari.com</u>