

Assessment of Common Health and Social Problems of the Residents in the Core Shelters of Tuguegarao City, Cagayan, Philippines

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ABSTRACT

Poor housing conditions of shelters provided to disaster-affected indigent families are associated with a wide range of health conditions. This study aimed to assess the common health and social problems of the residents in the core shelters of Tuguegarao City, located in Barangay Anafunan East, Cataggaman Pardo, and Namabalan. The mixed-method research design was employed wherein the Survey questionnaire, Key Informant Interview (KII), Focus Group Discussion (FGD), and Documents Review were the main tools for data gathering. The research concludes that infectious diseases, injuries, and social issues are common in all of the three core shelters. These problems intensify the link between housing and health; therefore, the core shelter community must be deemed a fundamental component of health promotion or disease prevention. Further, when planning relocation projects, the location of and access to community service facilities must be considered to provide liveable, sustainable communities.

KEYWORDS

Health, Social Problems, Mixed-method, Core shelters, mixed-method, Philippines

INTRODUCTION

One of the rehabilitation projects of the government implemented by the Department of Social Welfare and Development (DSWD) is the immediate provision of shelter to disaster-affected indigent families whose houses were totally damaged and blown down. The agency also provides relocation sites, which eventually can become permanent residents to families whose lots were reclaimed, and their houses were demolished as hi-ways, bridges, or any public-owned infrastructure needs to be erected. Region 02 is the second top implementer of the Core Shelter Assistance Program (CSAP) in the country with a total of 3,083 core shelter units. The province of Cagayan has 1,019 units situated in different towns (PIA, 2011).

In the province of Cagayan, the municipality of Tuguegarao is one of the low-lying areas which is frequently flooded during rainy seasons and typhoons. The worst typhoons which had gravely devastated the city were Typhoon Lawin in 2018 and Typhoon Ompong in 2019. There are three identified core shelters located in low-lying rural barangays of Tuguegarao, namely Anafunan East, which has 100 housing units, Cataggaman Pardo having 57 units, and Namabbalan having 51 units respectively. The city government of Tuguegarao provided the lot where the families were relocated as well as in the engineering and supervision of the construction and also the re-graveling of roads leading to the core shelter site.

The high risk of flooding, difficult transport facility and accessibility, substandard housing structure, large household size, improper waste disposal, poor sanitation, and extreme environmental condition are the different routes of exposure of the core shelter residents to health and social problems. According to Gray (2001), healthy housing is not just concerned with the sanitary and hygienic design of the shelter but with the whole health spectrum. Decent accommodation is a direct or indirect contributing factor to the promotion of the social well-being of the individual. In the World Health Organization Public Health Risk Assessment and Intervention in 2013, population displacement, overcrowding, poor shelter, exposure, lack of safe water, sanitation and hygiene facilities, vector breeding and poor nutritional status lead to increased infectious disease transmission and potential for outbreaks of diseases such as acute respiratory infections, measles, diarrhea, typhoid fever, and viral enteric diseases, increased exposure to vector-borne diseases such as dengue and chikungunya or malaria as well as non - communicable diseases and skin infections.

The majority of health-related and social problems are preventable, and the assessment of common health and social problems is essential to determine the health status and factors that could affect the health of the families in the core shelters.

OBJECTIVE OF THE STUDY

This study assessed the common health and social problems of the residents in the core shelters of Tuguegarao City, Cagayan, Philippines.

METHODOLOGY

This study employed a mixed-method research design. The research gathered and analyzed the profile of the three core shelters in Tuguegarao City as well as

the most common health and social problems experienced by the residents of the said core shelters.

Data Gathering Tools

Profiling of the core shelters and core shelter housing units involved in-depth interviews of the core shelter dwellers, City DSWD Staff, Barangay Council Officials, Barangay Health Worker in charge of the respective Core Shelter, Neighborhood Association for Shelter Assistance Officer assigned to manage the core shelter programs and the midwife in-charge of each barangay. Moreover, the identification of common health and social problems involved surveys, FGDs from representatives coming from the population of mothers, fathers, and adolescents in each of the core shelters and document review.

The locale of the Study

The sites of the study were the three core shelters located in Barangay Annafunan East, Cataggaman Pardo, and Namabbalan of Tuguegarao City in the province of Cagayan. For the KIIs and FGDs, these were conducted at the barangay hall of each core shelter. The finalization of the research was carried out at Cagayan State University, Andrews Campus Audio-Visual Room of the College of Allied Health Sciences.

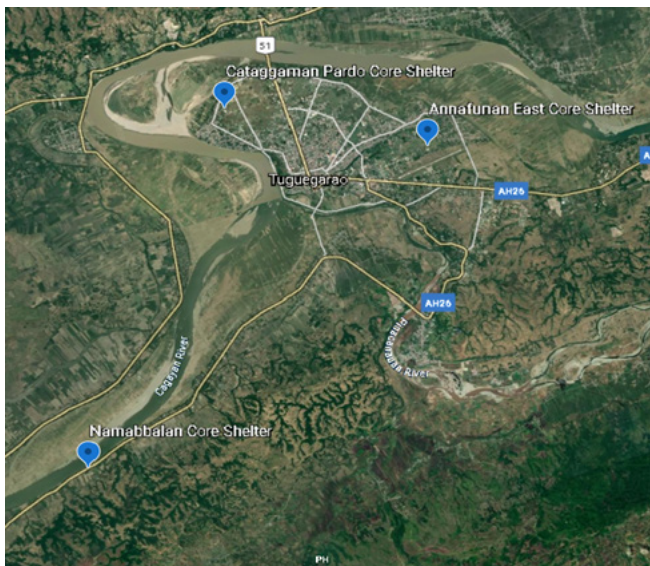


Figure 1. Spot Map of Tuguegarao City showing the three core shelters.

Research Population

Two hundred one (201) core shelter residents were visited in their homes and were derived from the profile of their core shelter units and their health and social conditions. Another 17 key informants were invited (two Barangay Officials which specifically included the Barangay Captain, the Barangay Councilor in charge of Health and Development and the Barangay Councilor in charge of Disaster Risk Reduction and Management; a Barangay Health Worker, a Member of the Neighborhood Association for Shelter Assistance Office, a City Health Staff, the Midwife in-charge of the barangay assigned of keeping the records of health problems in the core shelter) to be involved in an in-depth interview for the profiling of the individual core shelter and give us a clearer picture of why health and social turmoil occur. Additional informants were the two DSWD staff from the City Social Welfare and Development Unit.

A total of 99 residents from the three different core shelters were taken as participants in the FGDs. The number of respondents and the distribution of respondents in each of the core shelter was derived using proportional allocation. Specifically, the study included 48 participants from Barangay Anafunan East with 16 mothers, 16 fathers, and 16 adolescents; 27 participants from Barangay Catagaman Pardo with 9 mothers, 9 fathers, and 9 adolescents; and 24 participants from Barangay Namabbalan 8 mothers, 8 fathers, and 8 adolescents. The FGD was done in such a way that the groups of respondents from each core shelter were asked separately.

Methodological Flow

The study obtained ethical approval from the Research Ethics Review Committee of Cagayan Valley Medical Center (RERC- CVMC). An inception activity was also done to seek permission from the respective barangay captains and core shelter officials before the initiation of the research process.

The profiling of the core shelter as to its general characteristics and environmental conditions was gathered from Key Informants through an in-depth interview with closed and open-ended questions. While the assessment of the most common health and a social problem was through a survey, FGD involving mothers, fathers, and adolescents from the core shelters and documents review. The FGD used semi-structured, open-ended questions, and they were audio-recorded to improve data capture. The interview team debriefed after each FGD, and the audio recording was reviewed to determine edits before the data were coded. The recorded result of the interview was transcribed verbatim.

The transcripts were repeatedly read to determine statements that were significant and meaningful formulation so that they could be grouped into categories, subcategories, and themes. Responses were organized and analyzed using content analysis. After reviewing and identifying common issues, summary tables of the data for each question were made using a consensus approach.

RESULTS AND DISCUSSION

Themes	Sub-themes
Common Health Problems	
Infection-related problem	Vector-borne infection (dengue, chikungunya) Waterborne infections (loose bowel movement, amoebiasis)
Injury-related problem	Respiratory infections (cough, colds, flu, asthma, tuberculosis, pneumonia) Skin infections (eczema, boils, fungal infection) Dog bite Fall Drowning
Common Social Problem	
Social vices	Alcohol drinking Cigarette smoking
Assault	Quarrel between married couples Small fights or petty disputes between neighbors
Poverty	Difficulty in sustaining financial needs and schooling of children Absence of permanent jobs

Infection-related problem

Vector-borne infection

The majority of the respondents reported cases of dengue and chikungunya. They attributed it to the lack of drainage systems in their area and also with frequent flooding. Some even mentioned about untidy surroundings and the existence of tall grasses. One of the respondents said, *“My children suffered from dengue fever because there are so plenty of mosquitoes, especially after heavy rains. The flood caused the drainage to be filled with stagnant water that become breeding ground for the mosquitoes.”* According to Parkinson (2003), poorly drained areas like slum communities with inadequate sanitation allow an increasing risk to health from various waterborne diseases. The potential sources of such infection and illness are open drainages where most children play. The researchers observed through environmental scanning that there were lots of mosquitoes in the community,

most notably during episodes of rain. One shared a personal experience saying, *“I had dengue when I was in high school, similar to my aunt and her daughter. They both had dengue first before me... and everyone else in our family had been sick of dengue.”* Another explained, *“Since drainage is clogged and some are dysfunctional, water becomes stagnant, and it is where mosquitoes are seen.”*

Waterborne infection

All the participants in the FGD agreed about the frequent occurrence of Loose Bowel Movement (LBM) in the community. Most of the respondents claimed to have suffered from it. Amoebiasis is also very common as an answer in their discussions. When they were asked about the causes of LBM, they were pointing to the source of water. A mother respondent said, *“We doubt the potability of the water supply from the faucet because they must be contaminated during flooding, especially so that it takes several weeks before the flood subsides.”* One of the father respondents also explained, *“I think that the reason why we have a loose bowel movement is the dirty and contaminated water supply that we have... especially during typhoons when we get flooded since our area is low-lying.”*

Another father respondent mentioned that *“The smell of the drainage where garbage is dumped is irritating and unpleasant. Water cannot flow in the drainage because they are clogged because garbage is all thrown and stocked in the drainage.”* Within one’s domestic domain and the public domain, diarrheal pathogens are transmitted, rendering household and open sanitary conditions crucial for diarrheal disease control (Lou et al., 2017). A recent 12 – city study by the Water and Sanitation Program indicated that neighborhood sanitation is compromised by poor fecal sludge and wastewater management infrastructure, the authors reported that, although 98% of urban households had access to household sanitation on average, 78% of the households discharged untreated fecal waste into the immediate environment without systematic management (Jung et al., 2017). Despite that, mothers and adolescents have poor knowledge of the grounds of these waterborne diseases.

Respiratory Infections

The participants likewise revealed that there had been plenty of Respiratory Infections happening in their area. The adolescents repeatedly told about the occurrence of cough, colds, and flu. One of the mothers said that *“Most children in our core shelter suffer from flu and colds. The reason is the sudden change in weather. There are times that after a heavy downpour, it will be again very hot.”*

Two mothers also shared their family's experiences on pneumonia, and they are bewildered as to where they get pneumonia. One mother stated that perchance it has caused by climate change, and one also sounded out that maybe due to hot weather that triggers asthma and could have a higher risk of developing pneumonia. From the father respondents, one said, *"I thought that I had tuberculosis similar to that of our neighbor. When I went to the doctor, he said that it was pneumonia. I am sure that I got it from the dirty air."*

Disturbingly, a mother confessed about her being a cured Pulmonary Tuberculosis case but did not wish to elaborate more of it. One of the adolescent respondents also shared that, *"I heard that some of our neighbors had tuberculosis, and I was diagnosed with another type of tuberculosis which involved my brain. I was brought only to the hospital when my condition worsened."* One of the fathers also shared that there is a suspect case of Pulmonary Tuberculosis in their area but haven't picked up any treatment because laboratory results are not so far out. The father respondent emphasized, *"I had been telling my sick neighbors who have tuberculosis to leave the core shelter first because they are infectious, and I am a little scared, but they would not have any more house to stay."*

Acute Respiratory Infection is linked to overcrowding, unventilated construction, insufficient light, indoor air pollution from smoking and cooking, and ambient air pollution (Gordon et al., 2014).

Skin Infections

Alipunga, buni, and an-an are mostly the skin diseases identified by the core shelter residents. They knew about these fungal infections, eczema, and boils. A lot of the children suffered from fungal infections and boils. But despite skin diseases are very common, they have inadequate knowledge as to the causes of these skin diseases. They seem to be confused as regards allergies and fungal infections. All the while, they claim to have suffered skin diseases because of the most common food they eat like that of eggs and chicken. Still, most mothers were sure, though, that they acquired the skin diseases because of their being in contact with dirty water, especially during floods. Most had been suffering from fungal diseases for such a long time already. They seldom seek medical attention for this type of condition. An adolescent respondent mentioned, *"I had a fungal infection in my hands and my face. It started when I was in grade 5. I still have the infection now that I am 1st year High School."* Another adolescent respondent added, *"I really don't know how I got the fungal disease...and my family cannot afford to bring me to a doctor, and so I am just ignoring it"*.

An adolescent respondent even told, *“I normally pinch my boils slowly until the pus comes out. Sometimes, my mother does it for me.”* Another adolescent shared, *“I remember my father when he places cotton in my boil, places an empty bottle’s mouth on it, and immediately will smash it hard so that the boil will come out. It will be applied of iodine soon after all pus is gone.”*

One of the mother respondents explained, *“Because we live far from the health facilities and it will cost us much to travel aside from the expensive cost of medical consultation, most of the people here are undergoing self-medication for not serious type of diseases. Sometimes, we ask the experiences of our neighbors.”* A father respondent also said, *“We resort to alternative medication as such, using crushed leaves of bitter gourd to treat fungal infections. Our grandmother taught us to mix oil and kerosene and apply it to our boils and any skin disease.”*

Injury-related Problem

Dog bites

The majority of the respondents from the adolescents’ group shared their experiences of dog bites. They reiterated that stray dogs are everywhere in their community. One of the mother respondents said, *“A lot of dog bites happen every day in our community. Our dogs had bitten us, but sometimes, we feel passive about it because some employees from the agricultural sector came here to vaccinate the dogs, and they told us that they are rabies-free already.”*

According to an article by Madeline Shannon (2015), dogs kept on chains can become bored, lonely, depressed, and often aggressive. Almost all pet owners agree on this fact, which makes it a reason for them to let their pets roam around, and hence the high tendency of biting somebody else. Respondents knew that dog bites could lead to rabies. The group of father respondents shared that some personnel from the government visited their homes to vaccinate the dogs mostly during the summer months. Some of the residents were skeptical of the idea, and they also publicized that barangay officials do not pay attention to ordinances about stray dogs. It was likewise a common observation that even with the existence of RA 9482 known as the Anti-Rabies Act of 2007, pet owners do not play cognizant interest on it, as evidenced by plenty of stray dogs in the area. One of the father respondents said, *“I have told my neighbors several times to tie their dogs, and they won’t listen. By this time, when stray dogs bite a lot of people, our neighbors might listen already to the barangay officials who order dog owners to cage their dogs.”* One father respondent explained, *“We do not tie our dogs because they guard our house, especially when we go to the farm ... and we are just used seem them untied.”*

Since there had been numerous cases of dog bites happening in the community, the core shelter respondents showed to be fully aware of the existence of an Animal Bite Center in the Provincial Health Office, but with the scarcity of anti-rabies supply, patients usually are advised to be observed for at least 14 days before they can be immunized. The mother and adolescent respondents also disclosed the practice of going to the *tanduks* (fate healers who are told to cut dog bites and through a horn, will suck rabies away) of which they claim to be effective. An adolescent respondent shared that, *“Every time that a dog bites me, my parents bring me to fate healers in a nearby community. Sometimes, I feel that the procedure they do is effective because I did not acquire rabies...”*

Fall

Falls, accordingly happen, because of the dim surroundings. Adolescents usually are victims of falls. They claim that there are no street lights available. Some of the core shelter dwellers spoke much about incidents of falls due to standing on chairs while fixing busted light bulbs at home and climbing trees and sometimes mountains where they gather wood.

Drowning

A mother respondent also revealed that there are also circumstances when children get wounded because they were nearly drowned during floods as the water level can reach as high as their ceiling.

Social Vices

Alcohol drinking and Cigarette Smoking

Nearly every household reported smoking cigarettes and drinking alcohol of a family member. The respondents themselves claim to have been indulged with the vices because of the influence of peers, parents, and neighbors. Some fathers insisted that they occasionally drink so that they can sleep tight. Adolescents and mothers seconded the claim.

One of the adolescents explained, *“I drink liquor when I am feeling stressed, and when I have lots of problems.”* Another adolescent responded, *“As early as 16 years old, people here start smoking and drinking liquor because that is what they see from their parents and their neighbors. My father says he has to drink to get a good sleep...or just to have bonding moments with his friends.”* From the mother respondents, one said, *“I often quarrel with my husband because he consumes three packs of cigarettes per day. Even when we are both earning, it won't be enough because he spends too much with is vices.”*

Assault

There have been rampant cases of assault- couples quarreling, small fights, especially among drunk adolescents and mature men, and petty quarrels among neighbors. One adolescent said, *“If people go drunk, that is the time that they beat their children and their wives. Sometimes, drunk people even quarrel among themselves.”* A father respondent stated, *“If people become drunk, they will also amok and will be the start of fights. My neighbors always throw stones at my house, either during the night or daylight. I frequently complain to the barangay officials... but they keep on doing it.”* One of the adolescent respondents said, *“Some residents here drink too much and will are too noisy shouting at each other...we could hardly sleep.”*

Poverty

All of the participants of the FGD are claiming to be poor and that their families can hardly afford to sustain their financial needs. The mother’s group of respondents shared that poverty is commonly the reason why married couples fight. It also had been the reason why their children quarrel with their parents, generally of unserved demands. As quarrel scenarios are ordinarily happening, they wimble, and one of the adolescent respondents said, *“it is just like we are watching a making of a movie.”*

Even adolescent respondents can feel that their parents are financially burdened. At some points, they have to sacrifice their schooling and is the reason why there are cases of teenage pregnancies (as early as 13 years old) in the area. One of the adolescent respondents said, *“I know that our parents’ earning is not enough...last week, they cut our electric supply because we weren’t able to pay our bill.”* Another adolescent added that *“Some children here do not go to school because their family could hardly afford it. We just look for jobs to help our parents buy food for the family.”*

All of the respondents said that people in the core shelter are all indigent, and the trouble is that they don’t have permanent jobs. Lack of education hinders children and youth from accessing good livelihood opportunities, improving their quality of life, and progress. Unfortunately, in the Philippines, poor children leave school because of a lack of finances, and this vicious cycle of poverty continues (UNESCAP 2019). Being out of school can also be the factor, while youth indulges in early sexual experience and results in teenage pregnancy (Mathewos & Mekuria, 2018).

CONCLUSIONS

The status of the core shelters in Tuguegarao City is generally poor. Residents experience various health and social issues aside from the poor location of the core shelter and poor quality of housing as well. The frequent flooding and the lack of drainage system brought widespread effects. Through Survey, Focus Group Discussions, supplemented by Key Informant Interview, survey, and document review, this paper has shown that infectious diseases, injuries, and social problems are common in all of the three core shelters (Annafunan East, Cataggaman Pardo, and Namabbalan). Infectious diseases result mostly from vector-borne followed by water-borne, then respiratory and skin infections. Common vector-borne conditions are dengue and chikungunya. Loose bowel movement and amoebiasis are usual cases of water-borne diseases, while cough, colds, flu, tuberculosis, pneumonia, and asthma are common respiratory diseases. Fungal infections and eczema are common skin diseases experienced. However, injuries result mostly from dog bites followed by minor falls and burns, and few cases assault, which usually happens under the influence of liquor. Vices such as cigarette smoking and drinking alcohol are the chief social problem followed closely by poverty, and few cases of teenage pregnancy.

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