

Reporting Dynamics of Community Health Nursing Process through a Case Study of an Urban Community

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Abstract

Community Health Nursing is a highlighted part of curriculum and work of a nurse. Internationally there is a recognized and advanced role of nurses as CHS who are licensed to work in a selected and designated community area. In the following context of Pakistan the role is practiced and experienced but with not that much recognition and covered under registered nurse or midwife. The paper takes a case study of community to highlight its demographics, area wise demarcation and especial characteristics relating to the needs of community people regarding the health perspective. The complete academic project is segmented to provide a view of role of CHN and how their integration in community brings transformation. Role of community, significance of community engagement and participation is evident in various parts and the nursing care phase in community is discussed through integration of the case study of the assigned community.

Keywords: *Community; Nurse; Health*

Introduction and Background

One of major determinant of any country's development is the health status of its individuals. In light of this, Pakistan is among the countries with poor health indicators. The human development index ranks Pakistan on 146th position making it very low among all the countries [1]. The reasons are multi-factorial and one major reason is the low budget investment on health by the country. This small part of budget is mostly utilized in curative purpose rather than on preventive, which indirectly leads to poor health. This calls to address the current health needs and to identify ways that can be used to cater healthcare challenges. One way is involving community as partners. A Community is defined as a group of people with diverse characteristics who are connected by shared mutual perspectives, social ties and engage in joint action in a specified geographical location or setting [2]. A Community Health Nurse involves community to identify their health needs and empower and mobilize people to take actions for them [3].

Through the academic project of working as a CHN and programing the responsibilities and understanding the work domains, we took one of the communities in an urban city of Pakistan as our case study and worked on identifying their needs through community assessment and community engagement. Later, we got chance to work on solutions and interventions along with stakeholders and leaders through community partnership.

Case study of the community

A systematic observation of any community can be performed through the Windshield survey. It is a significant tool to access and comprehend the community holistically [4]. With the windshield survey, we simultaneously constructed the community map for us to easily understand and illustrate the community infrastructure. The community is located near the end of the city diverting towards

the highway road. It comprised of four residential colonies. These buildings are distinguished with defined boundaries. During the windshield survey, we met different people and explored the community and adjacent areas, in depth. Through the pioneer members of the community and the employees of Real State, we came to know that the first building established here was built around 10 to 12 years ago. The first ethnic groups who settled in this area were Sindhi and Northern people, but now it is diversified with more ethnic groups that entail Afghani, Gujrati and Punjabi. Moreover, majority of the population belongs to the Muslim community. The infra-structure of the buildings is very poor with inadequate ventilation and lightning. Cracks and leakages were observed on the buildings which needs immediate attention and maintenance. Only one of the four buildings has a park that is open for every member of the community, but it is barely utilized. Additionally, the building has a proper parking slot and adequate open space that is used for multiple purposes for community activities like marriages or events etc. There is a community school, home schools, tuition centers and Montessori schools. The community is located in such an area that makes the area prone to crimes and accidents. During the survey of the streets, we witnessed multiple public transports such as rickshaw and buses. On contrary, people also prefer private transports which mostly include bikes. Outside the residential area of the community, there is a commercial area where members can buy food, grocery, and household items. Inside the colony, a health center where members avail vaccination, counseling, and family planning facilities. The community area has multiple religious practice centers like mosques etc. One police station is located nearby providing services to every building equally. In our opinion, the members of the community are aware of the issues that are common around them and are enthusiastic to find the solution and to work on it. The windshield survey helped us to identify the issues that the community faces.

Assessment of the community

Community assessment is not an easy task. It requires a whole team work and commitment to do. As team we planned to utilize the complete nursing care planning technique to progress with assessment of the community as whole and figure out the major issues pertaining to health in the community. Later, the other steps of the planner are interlinked with the assessment to initiate planning and developing strategies. On basis so assessment the relevant strategies were also implemented to support the community under the health perspective and the implemented strategies were evaluated at the end to recommend for future community programs as well.

An Eco-map is a visual representation of the relationship between the members of a community and their environment. It provides the clear picture of community’s social system which is helpful for the analysis of the bond that the families share with the whole community and the surrounding [5]. This community was a very diverse community in terms of religion, ethnicity, and background of the people living there. With the help of windshield survey and modified family assessment tool, we constructed an Eco-map that displays the community’s social system. It is clear from the eco-map (Figure 1) that this community shares different levels of bond with different social groups. The community shares a strong bond (green) with utility stores, religious places, and senior citizen homes. It has an average (orange) bonding with families, friends, eating places, educational places etc. We observed that the community has the weakest (black) relationship with their neighborhood, clinics, and the community school, and has no recreational centers except one park that is always vacant.

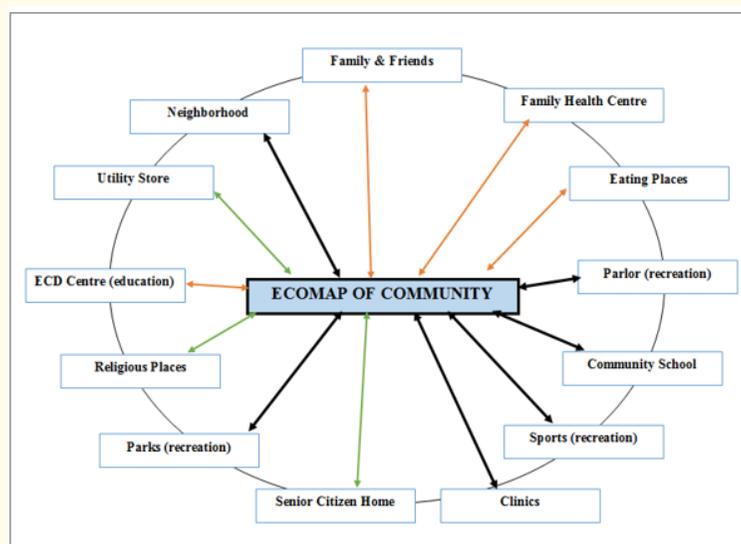


Figure 1

During assessment of a community, the silent features of a community include; people, area, relationships, mutuality, common values and beliefs, organized interaction, strong group feeling, and cultural diversity [6]. A population pyramid is a picture used to understand the composition of any population and involves graphical representation to depict its age, structure, and sex ratio. It is a useful tool in identifying the trends and changes that take place over the time in a particular group [7]. We approached and surveyed a total of 120 households in which a total of 623 individuals were living. There are 48.47% of females while 51.52% of males present in the households with male/female ratio of 1.06. According to our survey (Figure 2), a large number of people i.e. 67.09% lie in independent group (15 - 60 years) while 32.90% of population falls in dependent strata (below 15 years and above 61 years) with an age dependency ratio of 0.49. With this, the highest number of males and females fall under the age of 26-30 years followed by the age group of 21 - 25 which have the second highest population which indicates that the young adults is the group that can serve as a great resource for the community. Also, the population in the age group above 70 years was found to be very less.

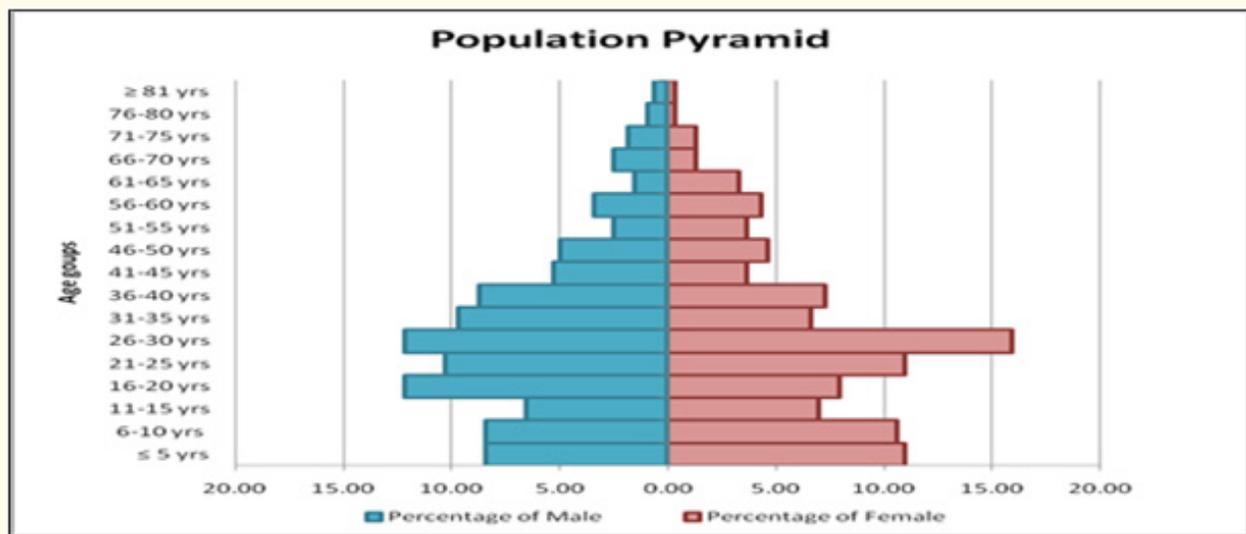


Figure 2

Upon further analysis of the community through the Demographic survey tool [8], the data was as following. 51% of individuals are living in extended families while 49% are those living in nuclear families. Moreover, it was found that major languages spoken by these families are Urdu (21%), Sindhi (13%), Punjabi (7%), Gujrati (3%), and Memoni (2%). There were 54% individuals that speak other languages like Khuwar, Chitralli, Brushaski etc. This makes it evident that the community consists of people from diverse cultural backgrounds. There were 44.7% of married individuals while 51.6% were unmarried. The survey also shows that 90% of the population was literate while only 10% individuals were illiterate. On analysis of the employment status, we got to know that 63% population was unemployed, whereas only 37% were employed. It was found that majority of the population were student (36.3%) or housewife (18.1%). The employment status also reveals the economic challenges of the community and its major impact on their health. Most of the population i.e. 77.7% prefers private health services whereas 22.3% individuals uses public health sector.

We also assessed the health issues that were prevalent among community members (Figure 3). The analysis was done by finding the percentages which were calculated on the basis of number of cases identified divided by population at risk. On analysis, we found that the hypertension was most prevalent with a total percentage of 64.10% followed by bone related problems (33.33%) and diabetes (33.33%). We also found that the individuals were also suffering from psychological issues and substance abuse with a prevalence of 18.11% and

13.79% respectively. Besides, there were issues that were identified by community members and also reinforced by stakeholders like unemployment and poverty which is eventually affecting the physical and mental health of community individuals.

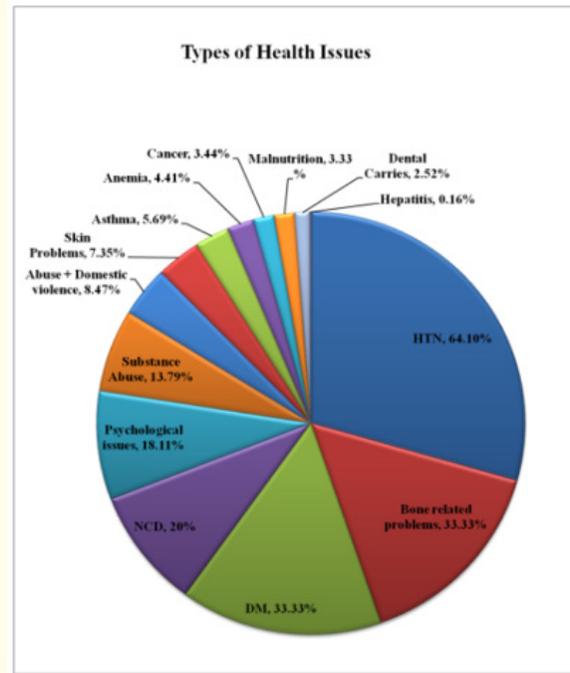


Figure 3

Planning phase through problem prioritization

Prioritizing activity is a significant step in determining the major health issues in the community. Identifying the priorities could be beneficial and effective measure for improving the current health practices in different communities. These practices and issues can be resolved by mutual contribution with the community in identifying the solutions keeping overall population, available resources, and need of the community in mind. In addition, community concern, magnitude and seriousness of the problem is also need to be considered. Community engagement and partnership are effective concept working in community [9]. The readiness of community is very significant as they have to sustain after the pilot activity and without their readiness and eagerness they will never continue to see this problem as very important thing [10,11].

There are four main components of priority setting during the planning phase. It is very important to understand those four phases. (A) Prevalence estimates the burden of a particular disease, and the extent to which it is affecting the community. We have included inter/national data and estimated prevalence for the issues identified by the survey and stakeholder respectively. (B) Seriousness highlights the severity of consequences of the identified issues on both individual and community level. (C) Community concern emphasizes the perceptions of the community regarding the problems that the community needs to settle at the first place. (D) Susceptibility to manage means to which extent the problem can be manage in term of time, material, human resource [12].

Using the public involvement concept, as discussed above, a community exercise on priority setting was held. The exercise included the presence of stakeholders, health center team, the project team, community leaders, head of the households, family members, significant

people for residential committees and community people from families and especially youth volunteers. All of the actively participated in the priority setting exercise to support the identification and prioritization of important issues in the community that needs to be tackle with support of leaders, stake holder and community people along with the project team of young CHNs.

The below table (Table 1) indicates the community’s responses under the concept of priority setting and its components. The responses were scored and the priority themes were identified with help of attends.

#	Problems	Prevalence		Seriousness	Susceptibility to manage	Community Concern	Total
		National/ international	Community (Graph placed above)				
1.	NCDS (HTN, DM etc.)	80 Million +		++	+	++	8
2.	Bones related problems	10 Million (World) +		+	+	+	4
3.	Psychological Issues	50 Million +		+++	+++	++++	19
4.	Substance Abuse	76 Million +		++++	+++	++++	21
5.	Domestic Violence and Child Abuse	11 Children per day +		+	+++	+++	12
6.	Parenting	Unable to find		---			12
7.	Environmental Hygiene	200 Death per 100,000 Population +		+++	+++	++++	20

Table 1

Highlights on the major identified issue

The highest priority theme and theme taken over by our team of CHNs was substance abuse. This was also community’s major concern as it was prevalent, common and health hazard for their people. Also, it was highlighted by the members of community health center and the stakeholders to be taken into consideration. It is important to note that the community people were also able to identify a place in the community where young people and other community residents are routinely practicing substance abuse.

As we see the literature, Substance abuse is the harmful use of the psychoactive substances, such as alcohol and illicit drugs etc. The substances commonly used by the people are alcohol, cannabis, heroin, tobacco, cocaine and betel nuts. The abuse of the substance has deleterious effects on the health of individuals and the community. Unfortunately, the greatest point of concern is the use of substance among the youth and adolescent, who is the future of the community and perhaps the leading light for the future of nation. The international, regional and national data that we see regarding substance abuse highlights that 38.3% of global population uses alcohol which means that each user is consuming an average of 17 liters annually. With this, approximately 275 million individuals have once used illicit drugs in 2016. It is estimated that tobacco smoking in 2015 was prevalent in 15.2% of population daily worldwide [13]. In Asia, the drug abuse cases were reported as; alcohol 77%, tobacco 50%, cannabis 0.9% and, cocaine 0.3% [14]. According to the National Study Drug Use in Pakistan, it is found that substance abuse among the age of 15 to 39 years is prevalent. This study revealed that 6.7 million populations is involved in any kind of substance abuse, and cannabis is the most commonly used drug with the prevalence of 4 million people nationwide. Overall the highest prevalence was found in Khyber Pakhtunkhwa where 10.9 % of the population had used an illicit substance. With this, the use of smokeless tobacco in Pakistani male and female is found to be 21.3% and 19.3% respectively which makes Pakistan the second prominent country where tobacco products are consumed [15].

Based on our community assessment, the prevalence of substance abuse is 13.79% among the total household surveyed. This figure may not represent the true picture of the community because only few people from the community reported the cases of substance abuse properly, but the seriousness of this problem was much highlighted by stakeholders than those of other issues.

Substance abuse has many short term and long-term, direct and indirect effects on an individual's health, their families and community. The effect depends on which substance is used, in what quantity and how is it consumed. It has been a source of major concern both for the individual and for their community. A review of the literature shows that many individual experiences the consequences of substance abuse, including mental health disorders, effects on physical health and society. These conditions are linked to increased likelihood of poor health, higher mortality rates, poor treatment outcomes, lifelong legal problems, serious irreversible health problems like AIDS, Cancer and Hepatitis C, adding into the higher health care costs [16]. It is estimated that every year the harmful use of alcohol cause 3.3 million deaths [13]. In addition, alcohol is found to have a casual role in 60 types of diseases [17]. The death rate related with tobacco smoking was 110.7 deaths per 100,000 individuals while rate is 6.9 deaths per 100,000 individuals for illicit drugs [18]. In Pakistan, the oral cancer associated with tobacco use is found to be the third most prevalent cancer [15]. Moreover, these individual users are often not playing a productive role in the community's social functioning rather creating further problems in the society e.g. theft, robbery or sexual abuse [16].

The further assessment and analysis of the community prioritized issue was done using the survey tool (adapted from WHO - ASSIST V3.0). The tool highlighted that use of substances is found to be 47% prevalent. Among the substances used, tobacco products are used in 44% of respondent's families, followed by alcohol (10%), cocaine (7%) and sedatives use (3%). The use of cannabis, hallucinogens and opioids were found to be each 1%. It was found that use of other substances that respondents unable to identify for their family or community members is 23%. This highlights the general perception and stigma associated with substance abuse which often makes individuals hide their use of substances. A large part of individuals (31%) used these substances on a daily basis. It was found that desire to use these substances on daily basis among individuals was found to be 26%. Also, it was reported that 18% had faced some problem once or twice due to substance abuse while 2% face issues on daily basis. Moreover, it was highlighted that individuals involved in substance abuse failed to fulfill expectations on daily (12%), weekly (2%) or monthly basis (2%). Many respondents highlighted that their or family member's use of substances raised concerns among family on daily (9%) or weekly (7%) basis.

In addition, a focus group discussion with adolescent in the community school was done and it was revealed that many adolescents were also involved in substance abuse. These substances mostly include cigarette and bettele nut (chalia) and both sexes were involved. The main reason highlighted in the discussion was aggression and mental frustration leading to substance abuse. In the meeting with stakeholders and community leaders later the reasons and the impacts were verified and they shared similar kind of ideas. Alcohol use in adults due to stress of unemployment in the community was another significant contributing factor. This comprehensive in-depth analysis gave the project team and CHNs a pathway to put the project forward with the help of community participation.

Implementation of strategies

Keeping the severity and need in mind there were diverse plans for motivating community and transforming their concepts and values regarding substance abuse through different activities. Following strategies were planned to work on identified issue in relation to the perspective of health promotion and prevention.

Community awareness session

Community health nurses are constantly working to inform, to educate and to empower communities about health issues to encourage a better and healthy way of living. Through effective health education interventions, public health workers can create impact on community's health and knowledge [19]. In this regard, an awareness session is an interactive communication process of sharing

knowledge to reach a common level of understanding of the community. Therefore, we planned to cover parents, children and teacher triangle and create awareness among them to make it more effective and sustainable.

Another awareness and education session was planned later in collaboration of different NGOs and substance abuse support groups for adolescent population of school.

Capacity building workshop

In capacity building workshop we worked with people in their communities to make them more confident, self-reliant and effective in addressing community issues and building their strengths. Capacity-building interventions of community volunteers are helpful in enhancing knowledge, developing skills for educating others, and bringing changes in practice or behavior thus empowering their own community [20]. To develop skills of community members and to empower them for working for themselves, we decided to plan a capacity building workshop that can develop their knowledge and appropriate skills needed to work in community.

Another capacity building workshop with help of an NGO was done by our team, including the participation of Nursing students, Nursing faculty, health care providers living in the community where we were working, and also our future CHNs.

Street act

Street act is a kind of presentation and theatre performance which can be held at outdoor public places like corners of the streets, parking areas, grocery stores, courtyard of community receiving a large number of interactive populations from the community. The major concept is to highlight the controversial and difficult messages for community through an interactive art piece like drama or role play [21]. It is not solely for the purpose of entertainment that we usually seek from other art pieces but learning and working on our attitudes and practices from these creative representations is the basic goal [22]. So, the team decided to use this strategy as well to provide them the current scenario of the community regarding substance abuse and how to get rid of it is necessary.

Theatre performance and shadow act

Studies also reveal that community theatre is an effective way of communicating sensitive issues without the attending antagonism that would have normally occurred in direct realistic situations. Theatre mirrors the exact situation of any community, which makes them able to criticize themselves, analyze situations and draw conclusions leading to effective change [23]. Keeping this in mind a shadow act was planned and a team of artists from nearby community were invited to do the performance voluntarily. The purpose of this strategy was to sensitize community regarding substance abuse, its causes and impacts on our physical, mental and social wellbeing through artistic illustration.

Health fair

Health fair is popular, acceptable and effective way of communication in the context we live. The communities are more receptive to take services and education under one umbrella and at a same time along with recreation. Our another successful activity was Health fair, which included recreation, entertainment, learning, health education, services of screening and psychology, services of CHNs and physicians etc.

Recommendations and Conclusion

Over all, the project was a great learning for us with lot of challenges. On the basis of these learning we highlight the recommendations holistically as working nurses that, there is a dire need of licensed and education CHNs in Pakistan. Who has a degree in nursing and specialization in community or public health. In addition, there must be government based health related funds to overlook the issues and find solutions. Resilience building in community and young people is necessary so that positive coping takes over use of substance.

Education and employment opportunity and mentorship is very much significant. Continuous awareness along with cheaper consultation services is highly required.

In conclusion, it is very significant to see the role of CHNs as a particular practicing health care provider in Pakistan with license to improve the indicators of health in the country. It is very much evident from the current situation and project experience that a common person cannot do this alone without particular education, credentials, license and authority. The project was over all a learning adventure for us and motivates us to pursue future in community health either professional nurses or volunteer health care providers.

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