Social Mapping in Nursing Education- Steps and Implication

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Social Mapping in Nursing Education-
Steps and Implication

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ABSTRACT

Background: Social mapping, though an old approach in public health education and research, not practiced much in nursing education. This study was conducted to describe the social mapping process in a semi-urban area in the Chittoor district of Andhra Pradesh in India and to describe the implications of such social mapping from the students' perspective.

Methods: This participatory rural appraisal was conducted for the Bachelor of Nursing Students in a semi-urban settlement in the state of Andhra Pradesh in India. The social mapping process was conducted in three broad steps- classroom-based teaching of social mapping, conducting social mapping in the community and a debriefing session with the students. The major outcome of this educational activity was the social map. In addition, we also came up with the students' implications through group discussion.

Results: A facility map was constructed by the community members which was replicated by the teachers. The map was triangulated by the teachers through a transect walk in that area. The students came out with various academic, clinical, and administrative implications from this educational session.

Conclusion: Social mapping can be used as a potential tool in nursing education. More evidence is required on this learning approach before recommending it in the Community Nursing curriculum.

Keywords: Community-Based Participatory Research, India, Nursing Education, Social mapping

INTRODUCTION

Social mapping is one of the most popular methods in Participatory Rural Appraisal (PRA) studies. A social map is made by local people with limited stationaries and is not drawn to scale, illustrating what the local people believe to be relevant and essential for them.[1] Social mapping explores where and how people live and the spatial distribution of social infrastructure and resources like- schools, religious places, healthcare facilities, markets, and public utility structures (drinking-water facilities, drainage systems).[1] Besides, this method helps the public health practitioners develop a good rapport with the community to understand their culture, language, social structure, and the various determinants of the locally prevailing health conditions and diseases to facilitate the delivery of health-related programs.[2-4]

Social mapping has substantial importance in public health education. As an educational tool in public health, social mapping can improve students' cognitive, affective, and psychomotor domains.[1] The learners develop their knowledge about the spatial distribution of the social structure of the locality and learn about the socio-cultural determinants of health. They also understand the attitude and behavior of the community concerning health or diseases. Final-

ly, they develop participatory research skills and implement the finding in decision making for specific health-related conditions.[1,3]

Training for public health nursing requires a combination of education, research, and exposure to the various health problems of the community members in a real-life situation.[5,6] The community nurses work in diverse community settings during their practice.[7] Hence, promoting innovative community-based nursing education is required to understand the various population-level challenges in the community that are sometimes ignored.[8] It is crucial for the nursing institutions to develop a good rapport with the community, support them in identifying their health need and support nursing care in various health issues to achieve institutional sustainability in fostering quality nursing education and practice. Social mapping, in this context, can be an excellent learning tool to reach a community. Unfortunately, social mapping as a baseline tool to improve nursing practice is limited despite its multiple advantages.

In this article, we have described the social mapping process in a semi-urban area in the Chittoor district of Andhra Pradesh in India. We have also described the implications of such social mapping from the students' perspective.

METHODS

This was a qualitative study in the form of Participatory rural appraisal (PRA) conducted during December 2020

Study setting: The department of Community Nursing, Apollo College of Nursing, Chittoor, India, conducted a community mapping in a semi-urban settlement (Ward 2), as an educational session for the final year Bachelor of Nursing Students. The place is a service area of the community Nursing department. There were two wards in this urban settlement, namely- ward one and ward two. We purposively selected ward two for this educational activity.

Methodological orientation and theory: In this study, we aimed to understand the structure of the area in terms of physical distribution of the houses and the other components of the village through the active participation of the villagers. The teachers played the role of observers here. Subsequently, the social mapping is expected to serve as a learning tool for the students and the teachers. Besides, it will help us to strategize future service delivery plan from the institute to the community.

Implementation of the educational session: The teachers and the students played a role of observer and learner in this method. The villagers actively participated to develop the map. We conducted the social mapping in three broad steps. First, we organized a lecture session for the nursing students where we introduced the Participatory Rural Appraisal (PRA) to them with a focus on community

mapping. We briefed them on the methods of community mapping and the various advantages in public health and community nursing. As a continuation of the learning approach, we conducted a social mapping session in ward two. The students were involved as observers during the process of social mapping. The steps were as follows:

1. We consulted with the local community leaders to identify an appropriate time and place for the exercise. The village leader identified few community members to help in social mapping. We identified a convenient time and location (School for under-five children) for all the community members.

2. We explained the purpose of the exercise to the community members. For mapping, we allowed them to use materials like twigs and rocks or yarn on canvas on the ground to make it comfortable for them and as creative as possible.

3. At the outset, we asked the community members to begin by drawing the main physical features of their locality, like the schools, market, post office, bank, roads, and community centre(s).

4. After identifying the major places, we asked them to draw the houses and other minor details.

5. While the community members were drawing the maps, we instructed the students to observe the process and take detailed notes. We kept track of the extent of involvement of the participants. We encouraged those who were less active to get involved in the activities.

6. Therefore, we (including the students) only played the role of facilitators and intervened only, when necessary, like when the community members had major disputes among them. In most of the cases, they were solving the minor disputes in mapping.

7. We clarified few things from the participants which were unclear to us. For example, some community members used some symbols which were not known to us.

8. We copied the map made by community members onto a large sheet of paper immediately, with all details.

9. We triangulated the map with other community members. In addition, we had a transect walk in the village to finalize the map after the required modification.

In the third and final step of the learning method, we returned to the lecture hall and debriefed the whole process students observed in the community. Besides, we discussed with the students to come up with the various implications of social mapping from the learners' and the institutions' perspective.

The major outcome of this educational activity was the social map. In addition, we also came up with the students' implications through group discussion.

Ethical standard: The social mapping process was an educational activity, and all the community members voluntarily took part in it. We did not use any individual-level data in this process. Hence, the Institutional Ethics Committee exempted this educational activity from Ethics Committee review.

RESULTS

Social map: We could come up with the final social map, which is copied from what was developed by the community members. (Figure 1) We could understand from the map that the area is well connected by major roads traversing through it. The railway track also runs parallel to the major road. The houses are concentrated within a small area and surrounded by fields. Most of the facilities like shops, rice mills, small scale industry, petrol pump were located around the periphery or along the major road of the ward. A few structures like- school, and ration shop were within the ward.
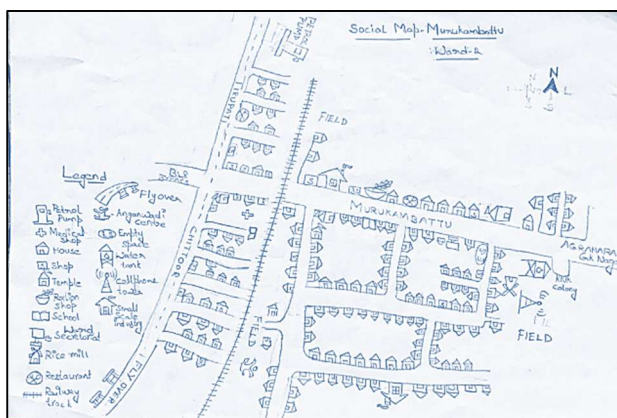
(Map not in scale)

Figure 1: Social map of Ward 2, semi-urban settlement, Chittoor, Andhra Pradesh

At the end of the social mapping, we came up with the following implications from the discussion of the students:

1. **Rapport building with the community**: The learning process created first-hand rapport building with the community as the community members actively developed the map. It created an opportunity to foster community-based learning for the students in future. The students felt that the community members were pleased to interact with them and therefore, they could easily take part in the future community-based learning programs.

2. **Physical and social structure of the village**: The students could identify the various structural components of the locality. Overall, the students agreed that the existence of major road, market, schools, post-office, and healthcare facilities in proximity had created a good impression about the place. They expressed that the co-existence of paddy field and modern amenities like a restaurant in the locality indicates a transformation of the socio-economic structure in the area.

3. **Identification of community needs**: The map revealed issues that can directly impact health. For example, a national highway traverses through the middle of the village. A newly built flyover has ended on this highway at one end of the village. While drawing the road, the community members expressed their fear of possible road traffic accidents. Thus, social mapping can be utilized for identifying the community need also.

4. **Community nursing services**: Such a social map can be utilized for various health services like tracking various health conditions during community nursing services. Besides, it can help us in delivering any healthcare-related program from our end. For example, the school is located in the middle of the ward. Thus, knowledge on the location of important structures will be helpful to deliver any emergency health service from this place.

5. **Administrative implication**: The map allows us to make a micro-plan for community-based nursing training. As we are currently practicing the community-based care of various NCDs like diabetic foot care, it will be easy for the team to move logistics within the village as even the smaller lane within the area is known. So, medical and nursing services can be delivered at the doorsteps for those needy people, like the disabled, who cannot come to clinic for their regular medicines.

DISCUSSION

In this article, we have described the steps of conducting social mapping as an educational tool. From observation of a community-based participatory learning approach, we have shown that students can observe the various steps of the learning method and collectively identify the implications of such a learning tool. In this exercise, we attempted to enhance the cognitive domain of the students as they learnt about the spatial distribution of the social structure and the institutions.

The implication of social mapping is used extensively in social sciences. The broader use of social mapping is to address the social problems that need first-hand interventions. Community nursing is often involved in identifying and solving various health-related complex issues in the community.[7] Therefore, efforts should be directed towards improving the competency of public health nurses. In nursing education, social mapping is one tool through which problem-solving approaches can be taught. As a field exercise, social mapping can generate life experiences, which allows the researcher or a learner to identify the re-

search question that can generate new research ideas. For example, in our exercise, students understood that a potential accident-prone area exists in the village. It is expected that a question will arise in their mind that how to solve such a problem. Therefore, this exercise also helped in identifying the community's needs. Each community has different requirements as per their social status. This need could be health-related or non-health-related. Social mapping has been used to identify various health need or health condition, especially in low-resource settings.[2,9-11]

We had a few limitations in this exercise. We restricted the educational activity only in understanding the physical structure of the village and how it can help in the various academic and administrative activities. As this was only an initial attempt to learn social mapping in the community context, we did not explore the social structure within the village and the inter-relationship of the various socio-economic determinants of health that are achievable from a social mapping. Moreover, students played the role of observers in this exercise. Hence, we expected that the exercise will increase their knowledge domain mostly. We could not aim to develop the other two domains of learning described by Bloom- affective and psychomotor domain through this exercise. However, we expect them to gain those domains when they plan to implement social mapping exercise during their nursing practice.

CONCLUSION

Social mapping can be used as a potential tool in nursing education. It can bring a learner closer to the community that can help the learner's future practice. However, we require more evidence and experience on this learning approach before recommending it in the Community Nursing curriculum.

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