Participation of Village Health Nutrition and Sanitation Committees (VHNSC) on Social determinants of health (SDH) in a District in Maharashtra.

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Abstract

Introduction

Community participation is one of the core principles of Primary Health Care. VHNSC is an example of community participation and is formed to take collective actions on health issues and its social determinants of health (SDH). It is envisaged as being central to local level community action to support decentralized health planning. Work on actual participation of VHNSCs on SDH is almost negligible. Therefore, the present research study was conducted to find out the participation of VHNSC on SDH. Aim: To assess the involvement of VHNSC on SDH. Methods and Material: Knowledge on SDH and health actions of VHNSCs were studied using a questionnaire which was pretested and suitably modified. The study was conducted in all the 83 VHNSCs under 4 PHCs namely Waiphad, Anji, Kharangana Gode and Talegaon were chosen as per feasibility. Results: Members of all VHNSCs had knowledge about access to safe drinking water, sanitation and nutrition as SDH. Most had to be probed regarding knowledge about addiction to tobacco and alcohol; social deprivation and availability of emergency transport. Conclusions: VHNSC are moving in the right direction however they require continuous support, hand holding and monitoring from government and other NGOs.

Keywords

Health, Sanitation, Community Participation

Introduction

The unsatisfactory health conditions of the deprived sections of community may be attributed to poor social policies, unfair economic arrangements and decades of economic and social deprivation. In order to promote health and reduce inequalities, it is necessary to address SDH in a systematic manner.
The role of SDH in improving health status, prevention of morbidity and mortality, utilization of health services and addressing inequalities is also focused by the Commission on Social Determinants of Health (CSDH). (1) VHNSC are formed at revenue village level and are particularly envisaged as being central to the 'local level community health action' under NRHM to support the process of Decentralized Health Planning. VHNSCs are expected to improve awareness and access of community for health services, support the health care providers, develop village health plans specific to the local needs, and serve as a mechanism to promote community action. (2) World Health Organization suggested that the development in health outcomes should be more centered towards the people and should more directly promote people’s participation. (3) Thus, addressing SDH through local level community health actions would bring a great change in overall health of the community. However, there are negligible studies conducted to assess the actual participation of VHNSC on SDH.

**Aims & Objectives**

To assess the involvement of VHNSC on Social determinants of health.

**Material & Methods**

It was a cross sectional study and a questionnaire for assessment of awareness and actions on social determinants of health was prepared, pretested and suitably modified. The present study was conducted in 83 villages under 4 Primary Health Centre (PHC) areas in Wardha district of Maharashtra. These 4 PHCs namely PHC Waiphad, PHC Anji, PHC Kharangana Gode and PHC Talegaon were in the field practice area of the Department of Community Medicine of MGIMS, Sewagram and were chosen considering the feasibility for implementation of the present study. Study population comprised of members of all 83 VHNSCs under the 4 selected PHC. The study duration was one year. All the committees under 4 PHC were included in the study.

The participation of VHNSC on Social determinants of Health was studied with respect to knowledge of VHNSC on SDH and health actions related to SDH taken in the past one year. A tool to find out the participation of VHNSC on SDH was prepared. The tool was pilot tested and suitably modified before applying it to the VHNSCs. 9 SDH were selected to find out participation of VHNSC and the selection was with reference to guidelines for VHNSC by NRHM and feasibility to address the SDH. These SDH were –

1. Access to Safe drinking water
2. Access to basic Sanitation
3. Under nutrition
4. Literacy
5. Addiction to tobacco and alcohol
6. Gender discrimination
7. Availability of Emergency transport
8. Social deprivation
9. Others (Health check-up camps, health education programs etc.)

Knowledge on SDH was classified as being “spontaneous”, “on probing” and “don’t know”. VHNSC members were asked to tell about various social determinants that would have a direct or indirect effect on health and when they could explain SDH on their own without any form of probing, they were considered to have spontaneous knowledge. For extracting knowledge on other social determinants, they were probed using probes like for e.g. 1. Does any other social determinant have an effect on health? (“yacha vyatarikt ankhi kuthle samajik ghatak atet ka jyancha parinam aplya arogyavar padto?”) If yes, then which are those determinants? (Jar ho, tar kuthle?) 2. Can you comment on relation between education and health? (“Arogyacha ani shikshanchya sambandhat kahi vichar sangu shakta ka?”) If VHNSC members could answer on probing regarding a specific SDH then they were considered to have knowledge about that SDH on probing. And if they were not able to answer despite on probing then knowledge pertaining to that specific SDH was considered as “don’t know”. Further the members were asked if the VHNSC had undertaken any health action to address any of these SDH in past one year and accordingly the responses were recorded. The data was analyzed using Epi Info software.

**Results**

**Access to Safe drinking water** : All the interviewed members of all the 83 VHNSCs had knowledge about access to safe drinking water as SDH wherein most of the members replied spontaneously while some had to be probed for the same (Figure 1). Almost all the VHNSCs took health actions such as regular and periodic chlorination, “nal yojana”, motivating for use of jeevan drops, “dawla” , hand washing
practices, setting up of filter, health education etc. to ensure access to safe drinking water (Table 1).

**Access to basic Sanitation**: Members from most of the VHNSCs replied spontaneously regarding knowledge about access to basic sanitation as SDH while only few (6%) had to be probed. Majority 78 (94.0%) of VHNSCs took health actions like organizing cleanliness drives, supporting CBOs in cleanliness activities Gram swachta mohim, provision of dust bins, Health awareness programs, provision of net over toilet vents, Dry day implementation, cleaning of drainage system etc. to improve access to basic sanitation (Table 1). Access to basic sanitation was the most spontaneously answered determinant of health followed by access to safe drinking water and Under nutrition.

**Under nutrition**: Around half of the VHNSCs had to be probed regarding Under nutrition as SDH while half replied spontaneously. Almost all (96.4%) VHNSCs took health actions in terms of providing diet to malnourished children through VHNSC, organizing health check-up camps, monitoring of health programs, “adoption of malnourished child”, Development of kitchen garden etc. to curb Under nutrition.

**Literacy**: (Figure1) shows that members from only few (3.6%) VHNSCs responded spontaneously and majority had to be probed on literacy as SDH, while members from some (7.2%) VHNSCs could not relate literacy with health. Only 13 (15.6%) VHNSCs had taken actions in terms of awareness programs and conducting parenting workshops along with CBOs in past one year to improve literacy rates of the village. Literacy was the second most ignored social determinant of health after gender discrimination in terms of actions taken by the VHNSCs (Table 1).

**Addiction to tobacco and alcohol**: (Figure 2) shows that all the interviewed members from all the 83 VHNSCs considered addiction to tobacco and alcohol as SDH but most (73.5%) had to be probed. In the past one year 50 (60.3%) VHNSCs had taken actions like supporting CBOs, formation of “daru bandi samiti”, organizing rallies and health education programmes and check over illegal supply of alcohol in activities against addiction to tobacco and alcohol.

**Gender discrimination**: Gender discrimination was the most ignored SDH in terms of health action as only 11 (13.3%) VHNSCs had taken action to reduce gender discrimination. No VHNSC member responded spontaneously about gender discrimination as SDH however members from 78 (94%) VHNSCs responded on probing. Members from 5 (6%) VHNSCs could not relate gender discrimination with health.

**Availability of Emergency transport**: Some (34.9%) responded spontaneously and most (63.9%) on probing, when asked about the availability of emergency transport as SDH. Almost half of the VHNSCs (55.5%) had a plan for availability of emergency transport in the village (Table 1).

**Social deprivation**: Interviewed members from all the 83 VHNSCs had to be probed when talking about social deprivation as determinant of health, wherein members from 82 (98.8%) VHNSCs responded positively while members of 1 (1.2%) VHNSC could not relate social deprivation with health. Around one third of VHNSCs (33.7%) had taken actions like household visits, supervision over health care providers, addressing issue in gram sabha etc. in past one year against social deprivation. Almost all the interviewed members of VHNSC had to be probed for knowing their knowledge about social deprivation as social determinant of health.

**Others**: Apart from the above eight social determinants of health, other determinants answered by the interviewed members were also recorded and included in “others”. These determinants were mainly improving access to health care services, health literacy in terms of understanding health messages and incorporating same for positive outcomes, poverty and caste-based discrimination.

**Discussion**
Addressing SDH in a systematic and sustainable manner is necessary to promote health and reduce health inequalities. The role of living conditions in prevention of morbidity and mortality, improvement of health status, reduction of inequalities in health outcomes and utilization of health services has also been highlighted in a report by The Commission on Social Determinants of Health (CSDH).(1) In a decentralized health care system, VHNSCs are expected to serve as a mechanism to promote community participation and eventually health services covering the social determinants of health.(2)

The present study showed all the 83 VHNSCs had knowledge about access to safe drinking water, access to basic sanitation and Under-nutrition as social determinants of health amongst which most members replied spontaneously and some on
Similar findings were found in a study from eastern India where VHNSCs focused largely on strengthening village sanitation, conducting health awareness activities, and supporting medical treatment for ill or malnourished children and pregnant mothers. Similar in a study from Maharashtra found that most of the fund was utilized for supplementary diets to anganwadi children to improve nutritional status. State Health Resource Centre, Chattisgarh, reported that activities related to water and sanitation, malnutrition and immunization are carried out by majority of VHNSCs and activities related to ration shop, literacy, violence against women, addiction are undertaken by only a few VHNSCs. The present study showed that most had to be probed regarding knowledge about addiction to tobacco and alcohol; social deprivation and availability of emergency transport and members from very few VHNSCs could not relate literacy with health. According to a study conducted in Chandigarh, very few VHNSCs spend the untied funds on water and sanitation activities and on health and nutrition, while much was spent on whitewashing, repair of electricity and furniture etc. However, a study from Punjab reported that issues related to drug supplies and purchase of furniture and equipment’s were rarely brought up in VHNSC meeting while environmental sanitation and hygiene were frequently discussed. Guidelines for VHNSC by NHM incorporates SDH to be addressed however there should be mechanism for the committee to know the areas that are not covered. A study in rural Maharashtra, developed a VHNSC Maturity Index (VMI): a tool which could be easily administered to identify areas requiring improvement in VHNSCs and help in the proper delivery of healthcare services covering many of the social determinants of health. Some of the examples where community was used to address SDH are Local Health Administration Communities “CLAS” in Peru and ‘KHOJ’ projects by Voluntary Health Association of India (VHAI). In a study by Cowling K et al on analyses of trends in SDH in India over the past two decades, five issues emerged as the most urgent to address: air pollution (both indoor and outdoor), Under nutrition, poor sanitation, employment conditions, and gender inequality. The present study shows that many VHNSCs are aware of determinants of health and are also taking actions related to them, however support from government and NGOs for desired health outcomes.

However, the findings of the study should be interpreted considering the limitations that the study was conducted in field practice area of MGIMS, Sewagram where the Department of Community Medicine has already been working on community mobilization and so these VHNSCs may not be a representative of other VHNSCs of rural India.

Conclusion

Thus, it can be concluded that most VHNSCs are moving in right direction by addressing social determinants of health which reflects their knowledge about these factors being important in improving the health of the community as a whole, however they require continuous support, hand holding and monitoring from different government sectors.

Recommendation

To increase the community participation and reducing inequalities in health outcomes, the decentralized planning requires continuous monitoring, hand holding, supervision and support from the government and NGOs.

Limitation of the study

As the study was conducted in 23 PHCs, selected for feasibility, in the field practice area of the DCM which has already been working on community mobilization, and hence, these VHNSCs may not be a representative of other VHNSCs of rural India.

Relevance of the study

Though VHNSCs are envisaged to address SDH; gender discrimination, social deprivation and availability of emergency transport remain invisible as determinant of health in the community.

Authors Contribution

All authors have contributed equally in this research.

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**Tables**

**TABLE 1 HEALTH ACTIONS RELATED TO SDH OF VHNCS**

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Social determinants of health (SDH)</th>
<th>Health actions related to SDH (in last one year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Present</td>
</tr>
<tr>
<td>1</td>
<td>Access to Safe drinking water</td>
<td>80 (96.4)</td>
</tr>
<tr>
<td>2</td>
<td>Access to basic Sanitation</td>
<td>78 (94.0)</td>
</tr>
<tr>
<td>3</td>
<td>Under nutrition</td>
<td>80 (96.4)</td>
</tr>
<tr>
<td>4</td>
<td>Literacy</td>
<td>13 (15.6)</td>
</tr>
<tr>
<td>5</td>
<td>Addiction to tobacco and alcohol</td>
<td>50 (60.3)</td>
</tr>
<tr>
<td>6</td>
<td>Gender discrimination</td>
<td>11 (13.3)</td>
</tr>
<tr>
<td>7</td>
<td>Availability of Emergency transport</td>
<td>46 (55.5)</td>
</tr>
<tr>
<td>8</td>
<td>Social deprivation</td>
<td>28 (33.8)</td>
</tr>
<tr>
<td>9</td>
<td>Others</td>
<td>59 (71.0)</td>
</tr>
</tbody>
</table>
Figures

FIGURE 1 KNOWLEDGE OF VHNSC ON SDH - LITERACY

FIGURE 2 KNOWLEDGE OF VHNSC ON SDH - ADDICTION TO TOBACCO AND ALCOHOL