Perception of the stakeholders regarding the Community health programs conducted by B.P. Koirala Institute of Health Sciences in the Teaching Districts of Eastern Nepal

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Abstract
B P Koirala Institute of Health Sciences (BPKIHS) has implemented a community based medical curriculum as an innovative model in partnership with the district health system a concept known as teaching district. This paper aims to explore the perception of the stakeholders of the teaching district regarding the community health programs in the teaching districts of eastern Nepal. A qualitative study was conducted among the medical students, community people & district health service professionals in the teaching district of BPKIHS in eastern Nepal. Focus group discussion and in-depth interviews were conducted in Dhankuta, Sunsari, Morang, Jhapa, Illam and Saptari districts of eastern Nepal. A total of 17 focus group discussion was held in the 6 teaching districts of BPKIHS. Community people expressed optimism about the community health programs near to their homes. The health institutions expressed the programs to have contributed in patient services. However, the need to strengthen the communication between BPKIHS and the health institutions was expressed. The students feel that the community postings provide opportunities to get acquainted with health in rural areas. While there are more positive views on the community health programs of BPKIHS in eastern Nepal, there is a need to further explore the specific programs and their impact. Community health programs in the teaching district may need to be revisited to meet institutional, health services and student learning goals.

Keywords: Community based medical education, district health system strengthening, medical education reform, rural health, Nepal

Introduction
All teaching and learning activities that take place in the community settings are incorporated in the Community Based Education (CBE) (Magzoub & Schmidt 2000). The implementation of CBE in medical education provides an opportunity for the medical students to appreciate population health as well as the health of an individual focusing on the health needs of the community through the approach of primary, secondary and tertiary health care; all of this happening outside the specialty teaching hospital (Bor 2003; Magzoub & Schmidt 2000; Budhathoki et al. 2017).

Active participation of the medical students and the engagement of the teachers, clinicians, community members, health professionals provides opportunities for students to gain skills that are useful both at the hospital as well as community levels. The principle of CBE rests on contributing to universal health coverage by identifying local health needs, applying health interventions to improve the health of the people where the CBE is implemented (Talaat & Ladhani 2014). Medical education aims at training the physicians to gain public health skills to meet their societal obligations and linking the community health with the teaching & learning activities (Maeshiro et al. 2010). CBE has taken different forms in the countries around the world and has transformed through years of implementation in various universities (Frenk et al. 2010). The level of exposure in the community and the methods of delivery of CBE in medical schools are different which ranges from periodic community rotation to long term rotation in peripheral or district health facility experiences (Talaat & El-Wazir 2012).

Medical education in Nepal follows the principles of CBE with different institution having different models of delivery of CBE. The community experiences are the responsibilities of a specialized department named wither community medicine, community health or family practice (Marahatta et al. 2009). Started as the second medical school in Nepal, owned by the Ministry of Health and later upgraded to an autonomous Health sciences University, BPKIHS aimed at developing health professionals based on the need of the country. The community based education model of BPKIHS aimed to train the future professionals as well as to strengthen the existing district health system through which services that can be delivered to the people closer to their homes and student can learn

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medicine as close to the community as possible. B P Koirala of Health Sciences has referred to this as teaching district concept. A teaching district includes health institution, people and the infrastructure of the whole district. The District hospitals are referred to as teaching district hospital (B P Koirala Institute of Health Sciences 2000; Pokharel et al. 2003).

The Bachelor of Medicine and Bachelor of Surgery (MBBS) curriculum of BPKIHS outlines the implementation of CBE through different community health programs in the health facilities and community of the teaching districts. It is implemented to prepare technically competent, compassionate, and community health workforce able to work at community level in rural as well as urban areas. BPKIHS provides tertiary care health services to the community along with health security network in its pursuit of the practice of population based medicine. The community health program starts from the first year of MBBS course and continues throughout the five and half year until the end of the internship program. The field based teaching module is consisted of Community Diagnosis Program (CDP) in the first semester, different health institutional visits in third and fourth semesters, Family Health Exercise (FHE) in the fifth semester, Epidemiological Posting for Management (EPIDMAN) in the seventh semester and Health Management Skill (HEALTHMAN) in the eighth semester. Other programs include, the Learning in Field (LIF) program from the fifth to the ninth semester, where the students visit the district hospital and Field program (FIP) where the students are oriented to the different levels of the health care institutions along with other social organizations. One year internship includes 6 months of the posting in the district health facilities (Marahatta et al. 2009; Jha et al. 2005, 2002; B P Koirala Institute of Health Sciences 2014). The teaching districts include 8 eastern districts (Illam, Jhapa, Morang, Sunsari, Dhankuta, Saptari, Siraha and Udaypur) in Nepal (B P Koirala Institute of Health Sciences 2015).

Since the implementation of the community health programs in its teaching districts and impact evaluation research cannot be found in the literature search. Thus, this study is conducted to explore the perception of the stakeholders of the BPKIHS teaching districts regarding the community health programs conducted by BPKIHS and to determine the magnitude of outbreak. We also analysed the outbreak in terms of time, place and person distribution and recommended preventive measures.

**Materials and methods**

**Design**

A qualitative study was conducted among the identified stakeholders (district health personnel, clinicians, medical interns, patients & community people) of the institutions and the community of the teaching districts of BPKIHS.

**Study setting**

B P Koirala Institute of Health Sciences (BPKIHS), established in 1993, as a public funded medical college was upgraded to an autonomous health sciences university in 1998. BPKIHS has implemented its curriculum based on the principles of community based education through collaboration with district health systems of eastern Nepal referred to as ‘Teaching district concept of BPKIHS’. The study area includes six teaching districts implemented up to 2011 which are Dhankuta, Sunsari, Morang, Jhapa, Illam and Saptari districts in the Eastern Nepal. The institutions include Zonal hospitals, district hospitals, Primary health center, health post & non-governmental organizations.

**Data Collection**

A total of 17 FGDs were conducted, in which 2 from each teaching district and 5 among different batches of MBBS students studying in BPKIHS. In six teaching districts, one FGD was done among the members work-

<table>
<thead>
<tr>
<th>Group</th>
<th>Participants</th>
<th>Number of FGDs</th>
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<tbody>
<tr>
<td>1</td>
<td>Local people/patients from the municipality/village of periphery of the health institutions in each of the six districts</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Members working in different health care delivery system like district hospital, District Public Health Office (DPHO) and other health institutions and members of NGOs/INGOs working in health sectors in that area.</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Second semester MBBS students who has just completed Community Diagnosis Program.</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Fifth semester MBBS students who have already visited in different health related NGOs/INGOs.</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Seventh semester MBBS students who has already completed Family Health Exercise (FHE) and Epidemiology for Health Management (EPIDMAN) program in teaching districts.</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Ninth semester MBBS students who has just completed the Management Skills for Health Service Program (HEALTHMAN).</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Interns doctors of BPKIHS serving the people in different Primary Health Centre (PHC), District Health Office (DHO), District Public Health Office (DPHO), Zonal Hospitals.</td>
<td>1</td>
</tr>
</tbody>
</table>
ing in different health care delivery system like district hospital, DPHO and other health institutions and another one among the local people/patients of the municipality/village of the periphery of the health institutions in each district where BPKIHS interns were posted. Five batches of MBBS students and interns were also participated separately in the 5 FGDS as mentioned above (Table 1). The findings from focus group discussion was analyzed using themes.

**Results**

The study team visited 24 institutions in six teaching districts of BPKIHS in eastern Nepal (Table 2). The students, clinicians and consultants from BPKIHS are posted for service, teaching and learning activities in different institutions in the teaching districts. The types of posting at various institution during the study period can be seen in table 3.

**Perception of local people of the teaching districts and MBBS students about the services of BPKIHS**

Regarding services at the BPKIHS hospital, the participants expressed not being aware about the services as well as perceiving some services as very effective. ‘I did not have much knowledge on the various services of BPKIHS’ (Respondent ID 1).

‘...dental services were highly effective’ (Respondent ID 2).

‘All the services in BPKIHS is good, but, there are many different department due to which unnecessary burden come to the patients’ (Respondent ID 3).

Regarding community posting, it was taken as a positive perception by the community people for interns to go to the community to interact with their family.

‘Posting of interns to the periphery is not bad as they come to learn among which our son, daughter might be there, so we have to help them in learning’ (Respondent ID 4)

‘...interns could help them to understand the treatment’ (respondent ID 3).

‘...it is nice that BPKIHS support our hospital by providing interns and consultants’.

**Perception of the members of Hospitals/NGOs and INGOs towards Community health programs of BPKIH**

The respondents acknowledged that BPKIHS is contributing through their community health programs in the teaching districts.

‘the support to the district hospital from BPKIHS is worth a praise. However it is not being implemented effectively. The Learning in Field (LIF) program is one programs that can directly benefit people here. The consultants are not regular though’ (Sunsari, Respondent ID 15)

‘...something is better than nothing’ (Bhadrapur, Respondent ID 5).

‘while some consultants of the public hospitals moonlight in their private clinics, the interns, residents and faculties of BPKIHS have helped run the regular service’(Bhadrapur, respondent ID 6).

**Table 2. Institutions taken from different districts**

<table>
<thead>
<tr>
<th>Types of Institutions</th>
<th>Districts</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Jhapa</td>
<td>Dhankuta</td>
<td>Illam</td>
<td>Sunsari</td>
<td>Morang</td>
<td>Saptari</td>
</tr>
<tr>
<td>Zonal Hospital</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>District Health Office</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>District Public Health Office</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>NGOs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>INGOs</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>24</td>
</tr>
</tbody>
</table>

**Table 3. Types of students/residents posting at different Institutions from BPKIHS**

<table>
<thead>
<tr>
<th>Sl no</th>
<th>Posting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Medical/Dental Internship posting</td>
</tr>
<tr>
<td>2</td>
<td>Clinical Faculty/Resident posting</td>
</tr>
<tr>
<td>3</td>
<td>Nursing students posting</td>
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<tr>
<td>4</td>
<td>MPH program posting</td>
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<tr>
<td>5</td>
<td>Medical students Residential Posting</td>
</tr>
</tbody>
</table>
having interns has help bridge the gap between the doctors and the community. The interns have made it easy for patients to communicate and ask their health related query. This was not possible with the working doctors (Illam, respondent ID 11) (Illam, Respondent ID 14) ‘interns are easy to approach for patients for discussions on diagnosis and treatment’ (Dhankuta, respondent ID 18) ‘there is a gap in correspondence between BPKIHS and our center... information don’t reach on time’ (Bhadrapur, respondent ID 7) ‘it would be better for the hospital and the local community if specialists are also posted regularly along with the interns’ (Illam, respondent ID 12) ‘the program from BPKIHS has helped to fill some gaps of the chronic manpower shortage in our hospital’ (Sunsari, Respondent ID 16) ‘the programs from BPKIHS is beneficial to hospital and community. It needs to be strengthened’ (Saptari, respondent ID 17) ‘Having interns have helped us share the patient load’ (Dhankuta, Respondent ID 18); (Rangeli, Respondent ID 20) ‘having interns provides opportunities for patient to interact more regarding their health concerns’ (Rangeli, Respondent ID 19)

The respondents expressed concerns over the possible lack of learning activities for the interns at the district health facilities. ‘The interns are useful to the hospital and patient services. The interns posted here lack supervision. They are not of much concern for the hospital staff in terms of their learning. I fear they might not learn everything they came to learn’ (Bhadrapur, respondent ID 8); (Illam, respondent ID 13) ‘The program seems worthwhile the way it is designed to post interns along with the consultants as supervisor’ (Bhadrapur, Respondent ID 9) ‘We are not sure under whose supervision, the interns are working’ (Bhadrapur, respondent ID 10).

Perception of the medical students

The respondents gave mixed opinions regarding the community health programs of BPKIHS. The experience ranged from a novel experience of the community to an interesting and unexpected learning experience. They seem to find it very useful. The medical students have appreciate the experience gained from the community health programs. The students report that interactions with people, building rapport and learning communication skills are possible in these visits.

‘it was amazing to see overwhelming faces of the community people to welcome us to their house’ (Student Year 1, Respondent ID 1).

‘it was shocking to also get some aggression against BPKIHS from a household. They had some dissatisfaction of regarding their experience at the teaching hospital of BPKIHS’ (Student Year 1, Respondent ID 2)

‘it was good to find out small details of the regular practice of an individual like brushing teeth, hand-washing. The posting made me conceptualise that these small practice are also worth asking’ (Student Year 1, Respondent ID 3)

‘early exposure seems a good idea, as we don’t know much about medicine, we ask more social and behavioral questions’ (Student Year 1, Respondent ID 4)

‘it was interesting for me to learn that social organizations also contribute to health sectors. The visit to the NGO working on orphan children was an eye opener for me’ (Student year 3, Respondent ID 5)

‘Family health exercise is an interesting posting for us. We were puzzled in the beginning visits. However, it all makes sense when we complete our log-book to make recommendations’ (Student Year 3, Respondent ID 6)

‘Visiting their homes, people expect some service in return of their time for us. I felt that on the last day when the evaluation took place and they were given a small financial incentive as part of the examination support... the patient said, some medicines would be better from doctors than some money’ (Student Year 3, Respondent ID 7)

‘I now got the glimpse of whether the patients take medicines regularly or not..... it is nice to see patient being more interactive when we visit their homes’ (Student year 3, Respondent ID 8)

The visit was found helpful for them in clinics also, to prescribe the medicine and investigation. The students feel that visiting patients’ homes exposed them to the living conditions of the patients. This is expected to help the students to be able to better advice the patients in the future. Further the students report that the role of socio-economic & cultural condition on the health and disease can be better appreciated in field visits.

‘While treating the patients, we must think, can they afford before telling them to eat meat, fruit, milk?’ (Student Year 3, Respondent ID 9)

The students appreciate the EPIMMAN posting as they fell they have been given opportunity to apply the bio-statistics and epidemiology that they are taught in class.

‘this was a first step in the field of research for me. I now feel that research implementing in community is possible. This was a great learning experience.’ (Student Year 4, Respondent ID 10)

‘We learnt basic skills on building rapport with new people, asking questions and getting the answers based on research objectives’ (Student year 4, Re-
The interns feel it is a great opportunity to be posted in community through various community health programs of BPKIHS. It has made them more confident towards patient communication and helped them understand the socio-cultural aspects of the patients. They however feel that they could have learnt better and served better with some more guided supervision during the posting.

'Sometimes we feel that we are only assisting the consultants or residents but not learning as we do not know the barrier between meeting our learning goal and assisting to meet the service goal towards the patients.' (Medical Intern, Respondent ID 12)

'For many simple procedures to learn and appreciate as an intern, the postings in district health facilities teach us more skills than at the hospital of BPKIHS.' (Medical Intern, Respondent ID 13)

**Discussion**

The community health programs are a way to deliver the community based medical education to the students and a way to serve the people and support the public health institutions in the teaching districts of BPKIHS. Since its inception, more than 20 years ago, BPKIHS has been serving as a tertiary referral center for medical care as well as service at the primary and secondary care level through the peripheral health institution and the community activities. The model for teaching district is possible with the collaboration between BPKIHS as public funded health Sciences University and the district health system as implemented by Ministry of Health. This is a model of public-public partnership between the University and the health system.

The findings show that the community health programs have more positive than negative responses from institutions, community and the students. The health programs need to be strengthened through supervision and involvement of the stakeholders.

The respondents had more to say regarding the service delivery and its perceived impact. However, the study also shows that the community, institutions and the students are also concerned that the teaching and learning part may be lagging behind. Further research on how this can be improved to benefit the people through service and the student through strengthened teaching learning activities may be needed.

**Conclusion**

The community health programs of BPKIHS in its teaching district have a place in the minds of the stakeholders. While there seems more positive perceptions from the stakeholders, there is a need to identify ways to further explore ways to improve the benefit of the people, students and the district health system through the community health programs. The teaching district concept needs some revisits to strengthen the partnership to achieve the service, the academic and the research goal of BPKIHS.

**Acknowledgement**

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**Competing interest**

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

**References**


Maeshiro, R, Johnson, I, Koo, D, Parboosingh, J, Carney, JK, Gesundheit, N, Ho, ET, Butler-Jones, D, Donovan, D, Finkelstein, J a, Bennett, NM, Shore, B, McCurdy, S a, Novick, LF, Velarde, LD, Dent,


Talaat, W & Ladhani, Z 2014, Community Based Education in Health Professions: Global Perspectives, World Health Organisation Regional Office for for the Eastern Mediterranean, Cairo.