Original Article

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Mentorship Programme for Undergraduate Medical Students

Sunil Kumar Daha,[1] Saurav Regmi,[2] Saurab Dahal,[2] Rishi Raj Jha[2] Rajesh Kumar Mandal[1]

[1]Government of Nepal, [2] Patan Academy of Health Sciences- School of Medicine.

ABSTRACT

Background: Mentorship is seen as a continuous journey of discovery, shared learning, and personal and professional development to achieve leadership and excellence. Medical schools can be monitored with respect to the provision of mentorships as a quality characteristic. So, the aim of our study was to know the prevalence and the impact of mentorship program in medical schools of Nepal and the need of this program in medical schools all over Nepal.

Methods: A descriptive cross-sectional study was conducted among medical students in medical schools in Nepal. Ethical approval from the Nepal Health Research Council (NHRC) was obtained (Ref. 667). The cumulative data obtained nationwide was entered in computerized spreadsheet software (Microsoft Excel) and analyzed using MS Excel and SPSS 16.0.

Results: Patan Academy of Health Sciences (PAHS) 131 (50.8%) had highest prevalence of mentorship program. Out of 258 students, 110 (42.6%) knew that there was mentorship program in their medical schools. The study found the role of mentors in building rapport with faculties (61.82%), developing professional skills (81.82%) and learning evidence-based medicine (74.55%). 98.8% participants soughed for the need of this program in their medical schools.

Conclusions: The prevalence of mentorship program among medical school in Nepal was found to be low. Individuals involved in the mentor-mentee relationship found the role of mentor not only on academics but also on their personal and social enterprises. Medical students who were familiar with the concept of this program reported its need in medical school.

Keywords: Medical students; mentor; mentorship program

INTRODUCTION

Mentoring is a steady, long-lasting relationship designed to promote the mentee's overall development including his personal level to his professional career.[1,2] Mentorship is considered to be a career training and developmental tool.[3-7] Despite this, little is known about the prevalence of mentoring programs for medical students. A study in Germany revealed 20 out of 36 medical schools in Germany a total of 5,843 (41%) medical students enrolled as mentees at the time of the survey.[8] Mentorship improves productivity, facilitates personal growth, and can rekindle our passion.[6-8] Similar studies conducted in India, Peru, Kenya and Mozambique showed that mentor's role is crucial in facilitating and guiding the mentees.[9-11] Nepal's medical education paradigm is yet to reap the benefits of mentorship program. So, the aim of our study was to find the prevalence of mentoring program and its impact in medical schools of Nepal and to know the need of this program. This study was conducted to make every single medical school aware of this program.

METHODS

In order to obtain a clearer insight into the prevalence and impact of mentorship programs and to evaluate its overall importance in medical schools throughout the country, our descriptive cross-sectional study employed the construction and subsequent administration of a questionnaire to elicit and record nationwide data from medical students.

In this context, we have defined medical schools as those Nepal based government approved educational institutes and institute of health sciences that currently offer an undergraduate degree in medicine after the completion of which students are eligible to work as board-certified

Correspondence: Dr Sunil Kumar Daha, Government of Nepal. Email:sunildaha58@gmail.com.

medical practitioners. Medical students were refered to those individuals who were enrolled in undergraduate medical courses in the aforementioned medical schools including both Nepali citizens and foreign nationals currently pursuing a degree in a Nepal based university.

The questionnaire was carefully designed after opinions from experts with broad knowledge and experience concerning the mentorship program and a review of literature about similar studies conducted in the past. A questionnaire was modified to make the tool compatible with the framework of our national medical education system. The first section of the questionnaire included respondents' information, second section included mentor's information, third section included impact of mentorship, fourth section included communication between mentor-mentee, fifth section included attitude towards mentorship and sixth section included need of mentorship. The face validity of the questionnaire content was done by the experts. It was then piloted in accessible medical colleges inside the Kathmandu valley. The feedback from the piloting analysis was incorporated to improve the questionnaire and was finalized. Approval from the National Health Research Council (NHRC) was received (Ref. 667).

The finalized questionnaire included 14 questions that respondents had to answer on a 4-point Likert scale and 16 multiple-choice questions. It was administered via Google form to a total of 258 medical students in various colleges throughout Nepal. Respondents were allocated 10 to 15 minutes for the complete filling of the questionnaire. The anonymity of all the participants in the study was maintained and there was no conflict of interest.

The cumulative data obtained nationwide was entered in computerized spreadsheet software (Microsoft Excel) and checked for missing and redundant replies as well as any outliers. Well defined non-numerical parameters were transcribed and coded for analysis. The data were analyzed using SPSS v16 (Statistical Package for Social Sciences) to obtain results.

RESULTS

All together 258 medical students (MS) responded to our study questionnaire throughout the nation. MS in this study were from Patan Academy of Health Sciences (PAHS) 131 (50.8%), Kathmandu university (KU) 35 (13.6%), Tribhuvan University (TU) 89 (34.5%), BP Koirala Institute of Health Sciences (BPKIHS) 3 (1.2%). Out of the total respondents, 154 were male (59.7%) and 104 (40.3%) were female.

More than one third of the respondents had official mentorship being implemented in their medical school, one third did not have and one fourth of them did not know about mentorship program. (Figure 1).

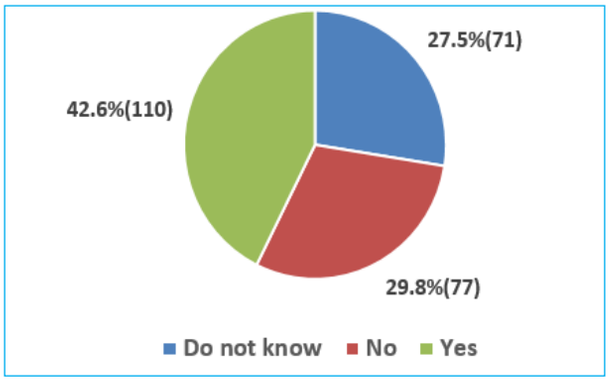

Figure 1. Prevalence of Mentorship Program.

Our study found maximum respondents from PAHS which is the leading university in implementing this program followed by TU, KU and BPKIHS (Table 1). The most of the mentors were faculty mentor 85(77.3%) followed by peer mentor 18(16.4%), resident mentor 6 (5.5%), senior 1 (0.9%).

Table 1. Awareness of the existence of mentorship program in different medical universities of Nepal.

Name of the University	Existence of Mentorship program	No existence of mentorship program	No idea about the existence of such program (Do not Know)	Total
PAHS	97 (74%)	11 (8.4%)	23 (17.6%)	131 (100%)
TU	6 (6.7%)	46 (51.7%)	37 (41.6%)	89 (100%)
KU	6 (17.1%)	18 (51.4%)	11 (31.4%)	35 (100%)
BPKIHS	1 (33.3%)	2 (66.7%)	0 (0 %)	3 (100%)

Around two third of the respondents agreed upon the impact of the program on building rapport with faculties. However around one third of them denied the help in building rapport with faculties. Similarly, most of the respondents agreed upon mentor helped them on developing professional skills and few of them denied the help in developing professional skills.

Majority voted for the positive impact on learning evidence-based medicine. Similarly, more than half respondents agreed upon its support during exam preparation. Most of the mentees were motivated for

studies by their mentor. Almost all of the respondents agreed that mentor(s) helped on cleared their doubts. Less than half of the mentor(s) provided study materials for their mentees. One third of the mentor guided their mentees about future career choices. Less than half mentees agreed that their mentor dealt with their personal problems (Table 2).

Among medical schools PAHS has highest prevalence of mentorship program. So, assessment of impact within the university leads to greater insight towards the program. Both data within PAHS and all medical schools combined, have shown high impact of the program. This indicates that even in medical schools having low prevalence of the program has high impact on various aspects of mentees overall development.

91% of the responded agreed that mentorship program was helpful and 95% of them were ready to accept the opportunity to become a mentor in future.

Almost all the mentees agreed that their mentor created a safe environment to encourage them to express difficulties. It was easy to schedule a meeting with mentor among 70% of mentees and it was difficult among 30% of them (Table 3).

Out of the total medical students, majority agreed that this program should be or continue in their medical schools and wanted to involve in such program in future.

Table 2. Impact of Mentorship program II.

Role of mentor/mentorship on	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
Building rapport with faculties	10 (9.1%)	58 (52.7%)	37 (33.6%)	5 (4.5%)	110
Developing professional skills	10 (9.1%)	80 (72.7%)	19 (17.3%)	1 (0.9%)	110
Teaching evidence-based medicine	19 (17.3%)	63 (57.3%)	28 (25.5%)	0 (0%)	110
Providing proper guidance during exam preparation.	16 (14.5%)	47 (42.7%)	38 (34.5%)	9 (8.2%)	110
Motivating for studies	26 (23.6%)	67 (60.9%)	13 (11.8%)	4 (3.6%)	110
Clearing doubts	23 (20.9%)	72 (65.5%)	13 (11.8)	2 (1.8%)	110
Providing study materials	10 (9.1%)	38 (34.5%)	50 (45.5%)	12 (10.9%)	110
Guiding about future career choices.	5 (4.5%)	29 (26.4%)	64 (58.2%)	12 (10.9%)	110
Dealing with your personal problems	5 (4.5%)	24 (21.8%)	54 (49.1%)	27 (24.5%)	110

Table 3. Impact of Mentorship program in PAHS.

Role of mentor/mentorship on	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
Building rapport with faculties	7 (7.2%)	52 (53.6%)	33 (34.1 %)	5 (5.1%)	97
Developing professional skills	8 (8.2%)	74 (76.3%)	14 (14.4 %)	1(1.1%)	97
Teaching evidence-based medicine	15(15.4 %)	58 (59.9%)	24 (24.7%)	0(0%)	97
Providing proper guidance during exam preparation.	10 (10.3 %)	43 (44.4 %)	35(36.1%)	9 (9.2%)	97
Motivating for studies	19 (19.7%)	63 (64.9 %)	11(11.3%)	4 (4.1%)	97
Clearing doubts	16 (16.5 %)	67 (67.1 %)	12 (12.4%)	2(2%)	97
Providing study materials	8(8.2%)	38(39.2 %)	50 (51.5 %)	12(12.4 %)	97
Guiding about future career choices.	4 (4.1 %)	22 (22.7%)	59 (60.8%)	12(12.4 %)	97
Dealing with your personal problems	3 (3.1%)	19 (19.6%)	48 (49.5%)	27 (27.8 %)	97

Table 4. Impact of Mentorship program II.

Responses	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
Do you think mentorship program is helpful?	28(25.5%)	72(65.5%)	9(8.2%)	1(0.9%)	110
If you were given a chance to become mentor in future, you will accept it.	36(32.7%)	69(62.7%)	4(3.6%)	1(0.9%)	110
Mentor creates safe environment to encourage you to express your difficulties.	19(17.3%)	75(68.2%)	15(13.6%)	1(0.9%)	110
It is easy to schedule a meeting with your mentor	14(12.7%)	62(56.4%)	27(24.5%)	7(6.4%)	110

(Table 4).

Table 5. Perception and need of this program in medical schools.

Responses	Strongly Agree	Agree	Disagree	Strongly Disagree
Mentorship program is needed in medical schools	123 (47.9%)	128 (49.7%)	2(0.8%)	4(1.6%)
You like to be involved in such program in future	100 (38.9%)	148 (57.6%)	7(2.7%)	2(0.8%)

Adjustment in medical schools included coping of stress, solving personal to family problems and ability to take decisions. Among the respondents who had official mentorship implemented in their medical schools, around 80% found adjustment with mentor's aid easy whereas it was difficult for 20% of them. For 40% of the respondents who did not have mentorship, adjustment was difficult.

Table 6. Adjustment in medical schools

Responses	Very easy	Easy	Difficult	Very Difficult
With mentor	10 (9.1%)	79 (71.8%)	19 (17.3%)	2 (1.8%)
Without mentor	3 (1.5%)	57 (28.4%)	128 (63.6%)	13 (6.5%)

Out of total respondents, 220 (85.3%) had no gender preferences on choosing mentor. However, 38 (14.7%) does have. Among those who had gender preferences on selecting mentor, 53% preferred the opposite gender and 47% preferred the same gender. Regarding help-seeking behaviour, most of them desired to seek help from mentor (57.7%) followed by peer circle (53.8%), faculty (43%), self-solving (42.2%), internet (31%) and family (17.4%).

DISCUSSION

The practice of supporting the growth of the mentee is definitely a precious program that can ignite the contribution of universities for their students. In literature, the practice of faculty mentor and peer mentor are studied.[3,7,8,12,13] Mentorship is the cornerstone of professional development and career satisfaction.[7] Medical schools can be monitored with respect to the provision of mentorships as a quality characteristic. Hereby, this study surveyed faculty mentorship only. As we hypothesized that there is a very low prevalence of mentorship program in medical schools of Nepal. Unlike studies from high-income countries, our study found an overall high prevalence (42%) of mentorship program in medical schools of Nepal.[8] In our study mentorship program was under official implementation in 42.6% which corresponded with that of high-income countries. But analysis revealed only a university (PAHS) to have high prevalence compared to other universities which have < 1% prevalence.

Some medical students from medical schools having official mentorship implemented did not know about the mentor-mentee practice, which might have occurred due to lack of proper communication and follow up of from the mentor or student's ignorance. Our study showed showed 27.5% medical students who did not know about mentorship program being implemented in their medical schools.

Mentoring is often identified as a crucial step in achieving career success.[14] Mentors provide to proteges, including vocational and psychosocial support.[3] Mentors were seen as fulfilling a socializing role as they passed on norms of behaviour and ward routines. This study foundthat there is help on building rapport with faculties, developing professional skills, learning evidence-based medicine, getting proper guidance during exam preparation, motivation for studies, clearing doubts, guidance on future carrier, and also on dealing with personal problems by incorporating mentorship program. Similar factors have been linked to successful mentorship like mentee career choices, faculty advancement, research productivity, and overall well-being.[3,15-17] Our study found a similar impact of the program on the mentees and among the mentors most were the faculty mentors, followed by peer mentor. Our study revealed that mentor-mentee relationship was beyond the teaching classroom and ward. Similar study done by Joshi et al in 2019 and Sood Et al in 2020 showed that the mentees of faculty mentor had shown scientific self-efficacy, scientific identity, and scholarly productivity.[2,18-20]

Almost all medical students (98.8%) involved in this study felt the need of this program in the medical schools and most of them were interested to contribute to such program in future. Nevertheless, the students did not become dependent on their mentors and as training progressed, they noticed the relationship became more equal.[21] This offered a means to further enhance workforce performance and engagement, promote learning opportunities and encourage multidisciplinary collaboration.[14,22]

Our study found that mentorship program confers multi-dimensional benefits in medical schools of Nepal. Not only in medical schools, its importance relevant to many

other disciplines as well.[1,23,24]

The only limitation of our study was that since this was a Google form questionnaire-based study, the study population was less.

CONCLUSIONS

There was implementation of official mentorship in small fraction of medical schools in Nepal. In some medical schools the program existed but students were unaware of the program. For those individuals involved in a mentor-mentee relationship, this program had impact on academic life and in personal and social. Medical students all over the nation strongly expressed the need of mentorship program and wanted to involve in the program in future.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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