

# Influence of Sparshanam, a Medical Humanities Module on Personal and Professional Development among the First Batch of Medical Graduates in Lalitpur, Nepal: A Cross-Sectional Study

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## Abstract

**Background:** Medical humanities (MH) uses subjects like literature, music, drama, and painting for specific purposes in medical education. We aimed to assess its medium-term impact on medical alumni whose curriculum incorporated a module on MH which was named as Sparshanam.

**Methods:** After approval from the Institutional Review Committee of KIST Medical College, this cross-sectional online survey was performed from December 2020 to January 2021 on the 2008 batch medical alumni who had experienced Sparshanam in their medical education curriculum 10 years before. A mixed modal design (both qualitative and quantitative) was applied. The participants' perception of the module, like its strengths, weaknesses, and its contribution to personal and professional development were assessed.

**Results:** Out of the 75 first batch alumni, 39 (52%) participated. Most of them were working in the Kathmandu valley. The perceived strengths were teamwork, interactive group sessions, and imparting a holistic perspective of patients. The Sparshanam was perceived to enhance their teamwork, communication, leadership and clinical observation skills, and ability to empathize with patients. Participants perceived it to have an important influence on their development and recommended its introduction in the undergraduate and postgraduate clinical training.

**Conclusion:** The Sparshanam was perceived to have a significant impact on their personal and professional development.

**Keywords:** Communication; Humanities; Medical education; Nepal; Perception

## Declarations

**Ethics approval and consent to participate:** This study was conducted with prior ethical approval from Institutional review committee of KIST Medical College (Ref. No. 077/078/04) dated 27th November 2020. Informed consent has been obtained from participants prior to the enrollment.

**Consent for publication:** The participants were informed that the authors would publish the manuscript.

**Availability of data and materials:** Information from the study has been provided in the manuscript.

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**M**edical humanities (MH) use subjects traditionally known as the humanities for specific purposes in medical education. These programs are, however, not common in developing countries, especially in South Asia. In Nepal, a voluntary MH module was offered to interested students at the Manipal College of Medical Sciences (MCOMS), Pokhara and all first-year medical students at the KIST Medical College (KISTMC) in Lalitpur [1, 2]. The module was named Sparshnam, meaning touch in Sanskrit, an ancient language of South Asia. It used small group activities, case scenarios, role-plays, paintings, and debates to explore different aspects of MH. It was made interactive to create and maintain interest in the topics. It addressed different topics like empathy, the doctor, the patient, the doctor-patient relationship, dealing with the HIV-positive patients, the family and the healthcare team, and what it means to be sick in Nepal. The module was offered along with early clinical exposure over a period of six-months. Students visited the hospital once a week for their postings and the module was offered from 8 to 10 am on the day of the clinical posting. Each topic was covered in two sessions. Students co-facilitated certain sessions.

Incorporating MH into the medical curriculum is reported to produce more compassionate and empathetic doctors [3]. It promotes medical communication skills and professionalism, hones observational skills, and encourages reflection and self-care. Several studies evaluated the short-term impact of MH [4, 5]. At the University of New Mexico School of Medicine in the United States, the Healer's art curriculum improved empathy towards patients and peers, improved commitment to service, and reduced burnout [4]. At the Patan Academy of Health Sciences (PAHS), students had positive perceptions of the MH course, and believed it offered a different perspective about the disabled and the value of human life and death [5].

Studying the medium and long-term influence of MH is challenging. The process is complex and confounded by a variety of factors [6]. A study from the Stanford Medical School in the United States (US), showed that the benefits of bioethics and MH persisted into postgraduation [7]. A physician educator identifies five domains in which MH affects students' subsequent health professions training and practice [8]. These are context and complementarity, clinical relevance, reflective practice, professional preparedness, and vocational calling. The author mentions MH serves to

animate the basic sciences, emphasizes the personhood of both the patient and the practitioner, promotes students' ability to engage in reflective practice, and better prepares them for clinical education and professional training.

A survey in 2010 found that only nine studies had looked at the longer-term implications of MH interventions [9]. The present study aimed to obtain the perception of the first batch undergraduate medical students of KIST about the MH module they experienced 12 years back and its perceived influence on their personal and professional life.

## METHODS

**A**mixed model design (both qualitative and quantitative) was adopted in this online survey. The questions were open-ended and the responses to the questionnaires were noted. All the 75 alumni of the first batch of undergraduate medical (Bachelor of Medicine and Bachelor of Surgery (MBBS)) students who had joined the MH course during 2009-2010 at the KIST Medical College, Lalitpur, Nepal were invited to participate in an online survey.

A convenience sampling technique was used to select the participants for online survey and consent to participate was obtained from all respondents. They were assured about the confidentiality of the data collected. The Facebook Messenger was used to establish contact and encourage alumni participation in the survey. Data collection was mainly focused on the information about the study and the Sparshnam was provided to refresh their memory about important features of the MH module conducted in 2009. The topics covered during the MH module were empathy, what it means to be sick in Nepal, the doctor, the patient and the doctor-patient relationship. Study variables included in the data collection were: exposure to MH module and demographic characteristics (gender, place, country of work, and specialty). The questionnaire was related to their perception of the module in the medical curricula, and its perceived influence on their personal and professional development. The data collection tool was developed by the authors following a detailed review of the literature and consulting with the concerned experts.

A pilot testing of the data collection tool was done to assess the readability and ease of understanding among five respondents who were not associated with

the study. The data collection tool was revised and updated incorporating the feedback and suggestions made during the pilot testing. The online survey questionnaire was prepared using the Google form. The study protocol and data collection tool was approved by the institutional review committee of KIST Medical College.

## RESULTS

Thirty-nine of the 75 first batch students (52%) participated in the study; majority were male (74.3%). The alumni had specialized in internal medicine (n = 5), emergency medicine (n = 3), general Surgery (n = 3), obstetrics and gynecology (n = 3), orthopedics (n = 2), public health (n = 2), radiology (n = 2), hematology (n = 1), general practice (n = 1), anesthesiology (n = 1), neurology (n = 1), critical care (n = 1) and clinical pharmacology (n = 1). The majority were working in Nepal (n = 29), the remaining eight were working in various countries like the United States (n = 3), United Kingdom (n = 2), Australia (n = 1), Germany (n = 1), and the United Arab Emirates (n = 1).

Teamwork, importance of the patient-doctor relationship, interactive group sessions, and learning about a holistic approach to a patient were the most important perceived strengths of the module (Table 1). Among areas that may need strengthening were developing methods to involve each student during the

module and conducting modules during the clinical years. Most (n = 26) were not exposed to MH again while the remaining nine were again exposed to MH during residency. Ethical issues were also addressed during induction for a government job in many. Eight of them had completed MH course on their own.

The MH module was perceived to enhance teamwork and their ability to empathize with patients and help them to communicate better with patients (Table 2). The MH module was also perceived to help them to be better educators and counselors of patients at their clinical settings.

A respondent mentioned, "When it comes to the critically ill, and during and after my post-graduation prior to surgeries as a part of the consent process as well as in explaining the pros and cons of every specific thing we do. Breaking bad news was an important component of the Medical Humanities module and it has assisted me greatly. Also, empathy, its limitations, and putting on the professional hat to objectify treatment require a balance. Humanities, in ways, helped me achieve that balance." Another respondent mentioned, "It has helped me in my day-to-day patient-centered clinical care and my role as a Medical Doctor it has helped me a lot in my every walk. It has helped me in areas like dealing with empathy, respecting autonomy, proper counselling, breaking bad news, and so on. The communication and leadership skills we learnt and built was due to the MH module."

Table 1: Feedback about 'Sparshanam'

Questions asked	Replies	Number of responses
Looking back now in 2020 what in your opinion were THREE important strengths of the inaugural Medical Humanities module at KISTMC?	Teamwork	6
	Patient-doctor relationship	4
	Group interactive sessions	3
	Holistic approach to patient	3
	Link empathy with the medical care	2
	Communication skills, leadership and confidence	2
	Empathy, patient relationship, communication	2
	Imaginative and innovative	1
	Health and social care disciplines with arts and humanities	1
Looking back with the benefit of hindsight what are areas that may need strengthening?	Methods to involve each student	3
	Modules during clinical years	2
	Could be carried out throughout medical school, with visits to aged care/ palliative care facilities and others	1
	Include more scenarios regarding the current health situation in Nepal- poverty, LAMA, medical vandalism, and how to tackle these effectively	1
Emotion	Role plays, interactive sessions	8
	What do you see, what do you feel	6
	Group work and presentations	2
	Open space	1
	Discussion on euthanasia	1

**Table 2:** Perceived influence of the module on current work and personal and professional development

Questions asked	Replies	Number of responses
How has the medical humanities module influenced you and your professional life?	Enhancing teamwork, empathy	2
	Communicate better with patients	2
	Empathy, patients' right	2
	Balancing challenges of heavy patient load with empathic care	1
In which specific professional roles have the module supported you? Why do you say so?	Educator and counselor	5
	Breaking bad news	1
	Medical officer in cancer hospital	1
	Community outreach	1
	Taking consent from patients	1
Which of your talents or skills were supported and further developed by the module?	Communication	15
	Leadership	5
	Communication, presentation, acting	2
	Presentation skills	2
	Ethical considerations	1
How has the module impacted your ability to empathize with patients?	Improved my ability significantly	6
	I think about the patient's point of view in every situation	3
	Helped to interpret the human experience of illness in every aspect of life.	2
	Social cultural dimensions of disease are understood	2
How has it impacted your ability to communicate with patients and their family members?	Become better communicator	3
	More fluent and able to put across ideas better	3
	Become better at breaking bad news	1

Regarding the ability of respondents to empathize with their patients, a respondent mentioned, "The module gave the concept of empathy and made us realize the situation that patient and their care taker would go through during the difficult situation. I am now better at communicating during these difficult situations." With regards to the communication ability with patients, most of the respondents have mentioned that they have become better communicators. An alumnus mentioned, "I'm confident about what I say. I prepare my conversation with the family in my head beforehand and even when there is a difficult situation, I know I have the skill to tackle the problem. And if I cannot, I know when to seek help from seniors."

Regarding the teaching of MH in medical colleges in Nepal, ten respondents mentioned that teaching the MH module to medical undergraduate should be mandatory while six strongly recommended it for inclusion in academic curriculum. Three respondents expressed their thoughts that MH to be implemented during all stages of the medical program including postgraduation.

Regarding how the module improved their clinical observation skills, the observations of the respondents were "Three aspects of the module what I see, what I feel and what I think is the basis for every clinical observation", "These modules taught us to see the

patient as a whole and not only the disease but also its impact in his/her life.", and "Supported to understand the importance of observation to move ahead in the clinical examination hence focus on observation during clinical practice." The skills of reflection were developed through the exercises and activities associated with the module.

About how the module has influenced their teamwork abilities, the respondents' comments were "The module has influenced the team work abilities a lot. The groups and the teamwork we did during those sessions have taught me how different minds can be utilized to generate ideas and solutions to tackle the situations.", "Group work and discussions in the medical humanities helped me understand and respect the difference between individuals", and "Teamwork was one of the pillars of this program. It has always emphasized how each member is valuable and respecting each other's ideas and company."

## DISCUSSION

We found a positive feedback from the first batch of MBBS alumni from KIST who had participated in the module in 2009. Teamwork and interactive group sessions were the most important perceived strengths. Respondents believed the module enhanced their ability to see a patient as a whole and to empathize and

communicate with patients. They opined that it also strengthened their observation and leadership skills. Most respondents wanted MH to be introduced in all medical colleges.

According to the respondents, teamwork, the importance of the patient-doctor relationship, interactive group sessions, and learning about a holistic approach towards a patient were the most important strengths of the module. These individuals had been involved in both supervised and independent clinical practice for over a decade and they opined that the module helped them during their clinical work. In a study at the Stanford Medical School, respondents reported being more comfortable discussing autonomy, and ambiguity and being better at facilitating team communication [7]. Respondents also believed the module helped them better empathize and communicate with patients and to become better educators and counselors.

Promoting and maintaining empathy are important objectives of MH. Most medicine emphasizes pathophysiology but MH emphasizes the personhood of both the patient and the practitioner and can act as a ballast to the dominance of science [8]. Recently our concept of empathy has changed from a static inborn trait to a learnable neurobiological competency [10].

MH is still not common in medical colleges in Nepal. To the best of our knowledge, the module is also applied in PAHS in addition to our own initiatives at KISTMC and MCOMS. From informal discussions, a few other initiatives are underway like a general book club at the Institute of Medicine, the oldest medical school in the country. A recent review reveals that results consistently indicate that participants find that the incorporation of art into medical curricula was beneficial [11]. Changes in empathy among this cohort of students were examined before and after the module using the interpersonal reactivity index [12]. The empathy scores increased significantly following the module.

Teamwork and leadership skills are important and in Nepal many medical graduates may have to administer a primary healthcare center or a community hospital after graduation. Teamwork and leadership skills learned during the module are further strengthened during the community diagnosis and other postings and pre-service training. Understanding and respecting the perspective of other individuals (including team members, administrators, and patients) is especially

important in Nepal which is a very diverse country with a variety of ethnic and caste groups. During their rural service, doctors may be posted in communities and environments which are significantly different from their own.

The long-term effect of MH is difficult to measure due to a variety of factors. A review examined 245 published studies between 2000 and 2008 on the humanities in undergraduate medical education [9]. Only nine articles showed evidence of attempts to measure long-term impact. DiLalla LF et al. claimed in their study that exposure to educational activities in empathy, philosophical values and meaning, and wellness during medical school may increase these in practice [13].

Our study has some limitations. The response rate was low. It was challenging to involve students in an online study as they found it difficult to commit time due to their other commitments and the ongoing COVID-19 pandemic. We did not objectively measure empathy and other traits among the respondents whose perception was measured using a questionnaire and not triangulated with information obtained from other sources. We were not able to isolate the impact of our MH module from other factors which contributed to the respondents' personal and professional development. The respondents' development probably was influenced holistically by several factors. MH modules are still not common in Nepal so the results from this module may serve as a facilitating factor to introduce MH into the undergraduate medical curriculum.

## CONCLUSION

Participants' feedback about the module continues to be positive over a decade after it was offered. They were not exposed to a formal course on MH after the module. Respondents opined that the module had a significant impact on their group working, leadership, and clinical diagnostic skills. They were able to obtain a holistic perspective on the patient and be better educators and counselors. They wanted an MH module to be introduced at all medical schools in Nepal. They opined that the module had a significant effect on their long-term personal and professional development.

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