SHORT COMMUNICATION

Strengthening the Delivery of Rural Medical Education: Identification of the Potential Challenges and Responding to Them with Feasible Solutions

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Abstract

The existing practice of training medical students in medical colleges is hospital driven, with limited and variable focus toward posting them in rural settings. However, in the global vision to produce a primary healthcare physician and attain universal health coverage, it is a must that all the medical students should be given exposure to rural medical education. The process of planning and implementing the delivery of rural medical education has multiple inherent challenges and each of these needs to be effectively addressed to ensure the accomplishment of the intended learning outcomes. It has been advocated that the outcome of rural medical education is much better once students are posted for longer durations and in settings wherein rural experience opportunities are well distributed throughout the training period. In conclusion, the delivery of rural medical education is the need of the hour and is based on the principle of training medical students in a community-oriented approach. The medical colleges and public health sector have to work with utmost collaboration to ensure that medical students are benefited, and in the long run, the prevailing issue of maldistribution of trained specialists is eliminated and an improvement in health indices is observed.

Keywords: Curriculum, Medical education, Rural.

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Introduction

In general, rural areas lack ready access to healthcare services, including medications, laboratory investigations, infrastructure support, and specialist services. The existing practice of training medical students in medical colleges is hospital driven, with limited and variable focus toward posting them in rural settings.[1] It is not an unusual fact that most of the medical colleges are located in urban settings and more often than not does not give an opportunity to medical students to become primary healthcare physician, as there is no practice in the curriculum itself to give adequate amount of learning experiences in a rural hospital or under the guidance of rural physicians.[1]

Rural Medical Education

In the global vision to produce a primary healthcare physician and attain universal health coverage, it is a must that all the medical students should be given exposure to rural medical education.[1,2] In fact, in order to accomplish this vision, over a period of time, multiple new medical colleges have been opened in the rural settings, and it is an important step to not only strengthen rural medical education but also gradually eliminate the public health inequality faced by rural people via overcoming the shortage of trained physicians.[1,2] The findings of a review depicted that in excess of 95% of the medical graduates who were trained in a medical school in rural areas, decided to work in the same rural location.[3]

Further, different medical colleges have initiated the practice of posting undergraduate medical students for a variable duration at any stage in their training period (Table 1).[2–4] For instance, in Shri Sathya Sai Medical College and Research Institute, a constituent unit of the Sri Balaji Vidyapeeth, Puducherry, students from the first professional year are posted in the local rural community for a period of one week to give them an understanding about the unique problems and challenges faced by rural segments of the community. Moving further, it has been observed that the delivery of rural medical education promotes the recruitment and retention of qualified health professionals and thus addresses the prevailing issue of physician maldistribution.[4]

Potential Challenges and Suggested Remedial Measures

The process of planning and implementing deliveries of rural medical education has multiple inherent challenges and each of these needs to be effectively addressed to ensure the accomplishment of the intended learning outcomes (Table 1).[4–6] From the administrative angle, there can be disputes about ownership of resources and sharing of space between the medical students and the health authorities. This issue can be sorted out by careful planning and proper dialogue with the concerned authorities and convincing them that the posted students can be utilized by them for managing the clinical workload.[4] The students often complain about the quality of the teaching to which they are

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Table 1: Potential challenges and the feasible solutions to plan and implement rural medical education

Potential challenges	*Feasible solutions*
Fitting the component of rural exposure within the already packed curriculum	• Introduce rural exposure and learning opportunities in a longitudinal manner spread throughout the duration of the medical training. • Undertake a thorough curriculum planning exercise to define the entire program of rural education and decide about the following: ○ Batch of students to be posted/exposed ○ Duration ○ Nature of the exposure or posting ○ Targeted competencies in each such exposure ○ Learning experiences for the students ○ Mode of assessment to ascertain accomplishment of competencies, etc.
Lack of clarity among the teachers about the type of rural exposure to be planned for medical undergraduate students	• The rural exposure can be planned in a wide range of ways, some of which could be as the following: ○ As a part of the foundation course (before the start of the first professional phase) ○ Early community exposure by visits in village and interaction with panchayat or the rural people (in the first professional phase) ○ In the form of postings in rural hospitals during vacations ○ As a part of national social service wherein students stay in village settings and work together to solve some specific problem of the rural villagers (either in the second or third professional phase) ○ By encouraging medical institutions to enroll in the different initiatives of the national government (viz. Unnat Bharat Abhiyan for the upliftment of the rural parts of the India) ○ In the form of family surveys or allocation of a specific family to a medical student and asking them to follow up the same throughout their training period (across second and third professional phases) ○ Posting medical students in the primary health centers to expose them about the roles and responsibilities of a primary care physician ○ Exposing medical students to the functioning of Panchayati Raj and the hierarchy in the healthcare delivery system in rural areas (across second and third professional phases) ○ Posting medical interns in rural health and training center to understand the functioning of the center (during internship) ○ Involving the students in the commemoration of different days of national and local public health importance (throughout the undergraduate training period, including internship) ○ Developing liaison with rural practitioners (if any) ○ Training the students in participatory action research and qualitative methods to improve their communication skills and inclination towards bringing about a change in the life of rural people (preferably during the foundation course or as a part of early community exposure)
Ascertaining the effectiveness of the rural education initiatives	• This is an essential and indispensable component of the rural medical education initiative and has to be decided right at the stage of planning. The evaluation of the initiatives can be done by the following: ○ Obtaining feedback from the students about the rural exposure ○ Asking students to record their learning and reflect upon their learning ○ Feedback from the teachers/rural practitioners/medical officers about the program or the individual student (if feasible) ○ Obtaining inputs from the organizing departments about the problems encountered and the strategies which can be planned to deal with the challenges for the subsequent batches of students ○ Conducting a survey among the students to ascertain their inclination towards working in a rural area after completion of their training ○ Tracking of the alumni students (who have been exposed to the rural education) by the alumni cell to generate the statistics about a number of students who joined in the rural health sector (placement), etc.
Administrative concerns (viz. willingness, transport, accommodation, connectivity, ownership of resources, and sharing of space, etc.)	• The medical institutions have to realize their responsibility of being socially accountable and thus should take all initiatives to improve the number of rural exposures for the medical students to eventually produce a competent primary care physician • A team comprising of members from the Medical Education Unit, Curriculum Committee, coordinators from different phases can be constituted to supervise and monitor the planning and implementation of rural medical education • The department of Community Medicine should develop liaison with primary healthcare centers and the local leaders and streamline the seamless conduction of the rural exposures • The administrators should take care of the formalities and develop ties with the rural health sector • The public relations officer, housekeeping staff, and other ancillary staff should work together to address the issues of transport, accommodation, food, connectivity, and other basic requirements of students • Developing a sense of ownership among the medical officers of the primary health centers by making them believe that they can play an important role in shaping the career of the future doctors and simultaneously use the students for managing their workload

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Potential challenges	*Feasible solutions*
Reluctance of students to prefer rural exposure	• It is an expected challenge and the best approach will be to improve the kind of facilities available in the rural setup and eliminate the prevailing inequality (long-term) • Some of the medical institutions across the world have adopted the strategy ○ Enroll students from the rural backgrounds into the medical school after ascertaining their desire to work for the well-being of rural populations ○ Employ tools for personality assessment and assessing the aptitude of the students to work in rural settings • Sensitizing students about the need to get exposed to rural medical education and the ways in which such an exposure will help them to become a more complete and competent healthcare professional • Encouraging students to join in Youth Red Cross or National Social Service and involve them for various activities after college timings • Asking the students from senior batches to share their experiences with the junior batch of students and how the experience has been life-changing • Keep the overall learning experience as joyful and participatory • Role of teachers who are supervising the rural exposure is quite important and they should be motivated and have a positive outlook toward the entire set of planned activities • Provide better facilities to students during their rural exposure through good planning
Resistance from teachers	It can be overcome by the following: • Sensitizing them about the range of rural exposures and the ways in which it can help in the attainment of the competencies • Involving the teachers in the planning stage and developing a sense of ownership among them • Giving due recognition to their efforts and making them believe that such rural exposure improves their teamwork and leadership skills

subjected during their rural postings. This can be tackled either by posting a medical teacher or developing a liaison with a public health practitioner in the area (Table 1).[5,6]

In addition, there are issues pertaining to the transport, accommodation, and lack of connectivity in rural areas which cumulatively accounts for the feeling of anxiety and isolation from family members.[4,5] Once again, these are more of administrative concerns and just require careful planning, better communication, and infrastructure support, as the efforts taken in this regard will eventually determine the decision of medical students to practice in rural settings in the future. The overall success of the program will depend on the support offered by all the stakeholders and the commitment towards strengthening of the component of rural medical education.[1,5]

Additional Considerations

The medical college should clearly define the entire program (viz. batch of students to be posted, duration, nature of the posting, competencies to be covered, learning experiences, mode of assessment, curriculum mapping, standard operating procedures, etc.).[4,5] It is an encouraging practice to select students from rural backgrounds, especially those who have a desire to work for the well-being of rural populations.[3] It has been advocated that the outcome of rural medical education is much better once students are posted for longer durations and in settings wherein rural experience opportunities are well distributed throughout the training period.[3–5] Finally, there is a need to periodically evaluate the program to ensure its improvement based on the results of the evaluation.[5,6]

Conclusion

In conclusion, the delivery of rural medical education is the need of the hour and is based on the principle of training medical students in a community-oriented approach. The medical colleges and public health sector have to work with utmost collaboration to ensure that medical students are benefited and in the long run, the prevailing issue of maldistribution of trained specialists is eliminated, and an improvement in health indices is observed.

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