What is required is cogent and comprehensive consideration of the issues plaguing medical education by well meaning educationists of repute to evolve solutions that may take care of the root of the problems and solutions which can be implemented in the short, intermediate and long term to restore medical education to the pinnacle it had once reached. It is surprising that outside of academia, there are no shrill voices of protest and professional organizations are conspicuous by their unawareness or lack of interest in the problem.

The questions to be asked are: 'Who will apply the brakes, is there still time to stop and reverse, and more importantly, is there a political will to do so?'

# **POSTSCRIPT**

Two circulars on the MCI website indicate that there are now 329 (236 approved and 93 which are new/in the process of approval) medical colleges (www.mciindia.org/circulars/circular\_93\_ colleges.pdf and .../circular\_236\_colleges.pdf). Also, the Government of India plans to increase the intake of students in colleges with ≥1000 beds from 150 to 200. It is not clear whether this will also be accompanied with an increase in infrastructure such as faculty, laboratory and library facilities, hostels, etc. (www.hindu.com/2010/05/31/stories/20100531 58331300.htm)

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# Structured internship orientation programme for undergraduate students: Easy transition to clinical work

ASHISH GOEL, R. VENKAT, A. KUMAR, B. V. ADKOLI, RITA SOOD

# **ABSTRACT**

**Background.** Internship is a phase of training when a new graduate is expected to acquire skills under supervision, so that he/she may become capable of functioning independently. Often, new graduates go through this period without a clear aim. We conducted an orientation programme before fresh graduates started their 1-year internship to familiarize them with their clinical tasks and their role in the community.

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**Methods.** Interns were invited to participate in a one-anda-half day programme conducted by faculty members and administrators that included interactive lectures, structured panel discussions, group discussions and role plays. The participants provided feedback using a structured questionnaire and during informal group discussions. They were also evaluated by a pre-test and post-test questionnaire.

**Results.** Of the 41 interns who attended the programme on day 1 and the 28 who completed it on day 2, 19 completed the post-test questionnaire. The post-test score (median 14.5; range 10–18) represented a significant improvement over the pre-test score (median 13, range 3–16). All participants felt that the workshop was successful in achieving its objectives.

**Conclusion.** A brief and structured orientation programme

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before internship offers a practical means of making the transition of new graduates from students to practising doctors smoother.

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# INTRODUCTION

After four-and-a-half years of undergraduate training, newly graduated students undergo 1-year internship, in which they rotate through various departments and receive hands-on training. The degree of Bachelor of Medicine and Bachelor of Surgery (MB,BS) is awarded and a doctor is registered with the Medical Council of India (MCI) after completion of the compulsory rotating internship. Internship is a phase of training in which a new graduate is expected to acquire skills under supervision so that she/he may be able to work independently. It provides an opportunity to learn some aspects of (medical and surgical) clinical skills for future professional work.

At the end of internship, a doctor is expected to diagnose common clinical conditions and make timely decisions for referral; use discreetly the essential drugs, infusions, blood or its substitutes and laboratory services; and manage all types of emergencies by rendering first-level care. She/he is expected to have the skills to monitor national health programmes and schemes, and provide preventive and promotive healthcare services to the community. During this period, an intern is also expected to develop qualities to function effectively as a leader of the healthcare team to deliver health and family welfare services in the existing socioeconomic, political and cultural environment, render services to the chronically sick and disabled, and communicate effectively with the patient and community.<sup>1</sup>

Often, interns remain unaware of what is expected of them during this period and work without a clear aim. We have observed that in the past few years, interns spend their time preparing for postgraduate entrance examinations at the expense of ward work and acquisition of clinical skills.<sup>2</sup> Also, the largely hospital-based training probably makes interns insensitive to the needs of society and possibly contributes to brain drain. Medical graduates perhaps find themselves more at home abroad, a feeling which hampers the realization of the objectives stipulated by the MCI.3 The present undergraduate curriculum has no place for the teaching of effective communication skills for interaction with patients. Nor does it touch upon the ethical and legal issues involved in patient care, standard universal precautions and biomedical waste management. Further, many interns have voiced their apprehension in writing prescriptions, filling requisition slips for diagnostic and therapeutic purposes, and writing discharge summaries and patient progress notes.

To familiarize new interns with their tasks in wards and their role in the community, we conducted an orientation programme before they started their internship. The objectives were to enable the interns to (i) appreciate the need for developing good communication skills for better doctor–patient interactions; (ii) assess the psychosocial needs of patients while providing patient care; (iii) identify the ethical and medico-legal issues involved in patient care; (iv) enhance their written communication skills; (v) appreciate the principles of rational drug therapy; (vi) familiarize themselves with universal precautions and biomedical waste management; (vii) develop and refine the skills of writing requisitions for investigations and collection and transport of samples for effective use of laboratory services; (viii) identify

their role in a multidisciplinary team; and (ix) develop a sense of belonging, responsibility and accountability.

#### **METHODS**

A one-and-a-half day orientation programme was held at the All India Institute of Medical Sciences, New Delhi over a weekend in January 2008, for all students who passed their final professional MB,BS examinations in December 2007. New graduates were invited to attend the programme. The faculty for the programme included heads of various departments and administrators, who apprised the interns about the expectations from them and their responsibilities. The faculty also helped to clear any doubts or misconceptions. The programme included interactive lectures, structured panel discussions, group discussions, and ethical and clinical role plays and case scenarios. Adult learning principles were used to involve the interns in a highly interactive process in a non-threatening environment.

Evaluation of the programme was done using a feedback questionnaire, an interactive session between the interns and the coordinating faculty, and a pre- and post-test evaluation. The questionnaire involved subjective assessment of the quality of the programme, the faculty and time management, and invited the interns to suggest ways of improving the programme and making it more target-oriented. A qualitative assessment was done by the faculty members involved and the interns were encouraged to express their opinions in an informal environment. The pre- and post-test evaluation consisted of 20 questions that tested theoretical knowledge and clinical problem-solving skills. The questions were derived from the content covered during the programme. Issues such as blood transfusion and medico-legal and ethical concerns were included. Case scenarios involving real-life situations were also included to assess the participants' analytical skills.

The data were analysed using SPSS software, version 11.1 of the SPSS Inc. Individual pre- and post-test question responses were compared using the non-parametric t-test for comparing two related samples. The difference between scores was considered significant if the p value was <0.05.

# **RESULTS**

Of the 44 eligible students, 41 attended the programme on day 1 and 28 participated on day 2. Of those who attended on day 1, 19 completed the feedback questionnaires on day 2. The final analysis was done on the pre- and post-test responses of these 19 interns.

A significant change was observed in the mean score of the respondents before and after the programme. The mean (SD) score of 11.8 (3.2) obtained on the pre-test evaluation improved significantly to 14.7 (2.4) in the post-test evaluation (p=0.01).

The responses from the feedback questionnaires of the interns who completed the programme and the interactive evaluation session suggested that the workshop was successful in achieving its objectives, and was useful for each individual's professional activities. Most interns suggested that the programme should be held on the first day of internship. All participants felt that the workshop had an adequate balance of theoretical and practical training sessions. Four (21%) interns felt that the workshop should have been more relaxed and more free time should have been incorporated into the schedule. Role plays were seen as having been the most effective in achieving the objectives. The participants also favoured demonstration of standard precautions and panel discussions. They suggested

that the programme should be made mandatory and be held during the week and not on weekends. It was felt that handouts and printed manuals or compact diskettes should be provided as supplements to the programme.

## DISCUSSION

Our study suggests that the participation of fresh interns in an orientation programme, conducted before their clinical postings, significantly changes their knowledge and attitude towards patient care.

Medical education in India has come a long way during the past half a century. The number of medical colleges has gone up from 30 at the time of Independence to over 300 and over 30 000 doctors graduate every year. The hospital-oriented western mode of medical education has been criticized and several reports have recommended changes. However, it remains unaltered in India.4 Hannon showed that 91% of newly graduating doctors were not prepared for all the skills needed as an intern in Ireland. While history-taking and examination are well covered during undergraduate teaching, training in professional competence, personal characteristics and formal education during the intern year were found to be lacking.5 Rangan and Uplekar found that recent medical graduates from Mumbai lacked basic health information, and had an apathy towards matters of public health importance, besides gaps in their knowledge of curative care and rational prescribing.6

The aim of professional education in health must be the production of a cadre of professionals who would have competence as well as motivation to serve the health needs of the country. Interactive sessions help to provide an informal environment for interns to raise questions, and hold discussions with their colleagues and teachers to allay their fears and anxieties; this makes for active participation, which is necessary, since the objectives of any training programme cannot be achieved unless the participants involve themselves actively. Although some medical colleges in India conduct such programmes for interns, no evaluation has been reported. Our programme could be adopted as a model by other medical institutions to increase the participation and efficiency of interns.

Our programme was held a few days after the start of internship. It was felt that it should be conducted before the interns start their clinical postings. A reorientation and evaluation during the course of internship may be useful in making the programme more effective. Baker and Gray-Starner felt that such training programmes should be spread over 6 months. We had a high drop-out rate for the post-programme analysis and we believe this was because it was scheduled as the last event on day 2 of the programme. In fact, it would be interesting to ask participants who attended a substantial duration of the programme after they have completed their internship, although we did not do this.

In conclusion, we feel that a brief, structured programme before the commencement of internship helps orient fresh graduates to the hospital milieu. We feel that a follow up subjective and objective assessment of interns during the internship is essential to assess the actual impact of the orientation programme on medical education in the long term.

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