



EVALUATION OF IMPACT OF STRUCTURED ORIENTATION PROGRAM ON THE FIRST YEAR MEDICAL POSTGRADUATE RESIDENTS' KNOWLEDGE ABOUT CURRICULUM AND PATIENT CARE

Medical Education

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ABSTRACT

Purpose: Purpose of the study was to evaluate impact of an orientation program about curriculum and patient care on the knowledge of first year medical postgraduate residents.

Methods: Present study was a Quasi- experimental study done at Rural Medical College, PIMS-DU, Loni BK which is a tertiary care center. Participants included 55 newly admitted first year postgraduate degree and diploma residents from various clinical departments.

Results: The two-tailed P value was less than 0.0001. By conventional criteria, this difference was considered to be highly statistically significant. Highly significant statistical difference from pre to post test was quite assuring and showing the positive impact of the program on the participants.

Conclusion: Orientation program proved to be a good tool that increased knowledge about curriculum and patient care practices among newly admitted post graduate medical residents.

KEYWORDS

Orientation, curriculum, patient care, knowledge, students

Introduction

First year postgraduate residents' needs proper knowledge about hospital based patient care which is essential for doing assigned duties and responsibilities. Many of the occasions, postgraduate residents are unable to carry out the task given due to lack of proper knowledge about patient care. Further, they are not usually acknowledged about curricular aspects like teaching learning, dissertation, logbook and evaluation pattern.

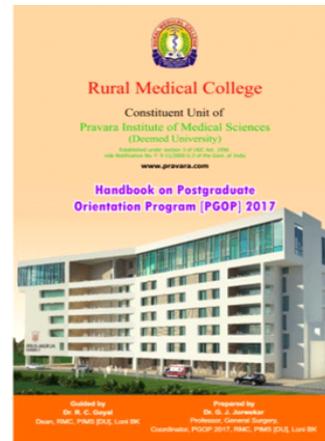
As a postgraduate resident of clinical speciality, first year residents are required to participate majorly in patient care services like outpatient, inpatient, casualty, operation theater, pre and postoperative care; proper documentation like case file writing especially Medicolegal cases and certifying death, referral, discharge, summary and writing operation notes; sending blood sample and procuring reports; preparing and sending postoperative tissue samples for histopathological examination.

At present, many of the postgraduate teaching institutes have started conducting formal structured orientation or training program to introduce first year post graduate residents to the various aspects of curriculum and assigned patient care responsibilities. Before existence of such dedicated programs, newly admitted post graduate residents used to learn most of these on the job which often results into gap between what is expected and what actually is done.

Methods

Present study was a Quasi- experimental study done at Rural Medical College, PIMS-DU, Loni BK which is a tertiary care center and multi speciality hospital. Prior approval and permission was taken from an Institutional Ethics Committee [IEC]. Participants included 55 first year postgraduate degree and diploma residents from various clinical departments. A structured orientation program was prepared of two and half day's duration. Teaching learning methods included were interactive lectures, group activity, demonstrations, video and web base with proper AV-aids using Microsoft PowerPoint. Topics included were code of conduct, teaching learning, examination, evaluation, log book and dissertation preparation, patient care practice essentials like hospital infrastructure, insurance facilities, documentation, ICD coding, MLC practices, guidelines for using histopathological and laboratory services, anti-ragging policy etc. Participants underwent an orientation program as per schedule. As a part of the program, participants were also given a handbook containing the essential information such as code of conduct, duties, responsibilities, infrastructure, rules and regulations of university etc [Fig. No 1].

Figure No. 1 Showing cover page of the handbook



Program evaluation was done using a pre and post test questionnaire with Likert Scale containing 10 items [Fig. No. 2].

Figure No. 2 Showing Pretest Questionnaire

Pretest

Name: _____

Age: _____ Gender: _____

Department: _____

Instructions: 1. Following is the questionnaire to assess knowledge of PG residents about the working environment and practices.
2. Please write your response in the space provided following the questions.
3. Responses to following questionnaire will be kept confidential and will only be used for research purpose.
4. Time allowed will be 10 minutes.

I have read and understood all the instruction. I am consenting to participate and write the test.

1. What is ICD-10 Coding?
2. Best chemical solution for hand hygiene is-?
3. International organization giving aseptic guideline is-?
4. First step to be taken in acute transfusion reaction-
5. Tutorial is a method of group teaching and learning
6. Case file of MLC should be maintained for yrs
7. Patient autonomy meaning-
8. Drug used for PEP is-
9. Essential skill required for eliciting history, breaking bad news
10. What are Schedule H drugs? What are prerequisites for writing prescription of Schedule H drugs?

Date: _____ Signature: _____

The pre and posttest included questions related to curriculum and various aspects of patient care. Data collected in the form of written responses of pre and post test by the participants. Data analysis was done by using Microsoft Excel version 2010 and Graph's software to calculate mean and standard deviation. P values were calculated using Paired 't' test.

Results

Thirty seven out of 55 postgraduate residents responded to the pre and post test. Data collected included written responses to the 10 item questionnaire. Pre and post test responded by participants were checked manually. Scores were given for out of 10 marks. Correct response was given score of 1 and wrong answer was given no score. Statistical analysis was done by using Graph pad software. Mean value of pretest group was 3.70 against that of posttest was 6.43. Standard deviation of pretest group was 1.60 to that of posttest was 1.32. [Table 1] 95% confidence interval of difference of two means was -3.25 to -2.20 and t-value was 10.5427. The two-tailed P value was less than 0.0001. By conventional criteria, this difference was considered to be extremely statistically significant.

Table No. 1 Statistical Analysis

Group	Pre test	Post test
Mean	3.70	6.43
SD	1.60	1.32
SEM	0.26	0.22
N	37	37
t-value	10.5427	
P Value	<0.0001	Highly Significant

Discussion

Postgraduate resident training in clinical subjects usually starts at the end of internship program. Newly admitted postgraduate residents, before selection, are usually busy with preparation for qualifying examinations. Most often, due to busy clinical schedules, hardly any time left for introducing the new environment to them. This is further contributed by lack of formal training or an orientation program.

Need of orientation programs has been highlighted by the regulatory bodies like Medical Council of India [MCI]. These programmes aim to familiarize the residents with the campus environment, curriculum, and teaching programs, so as to help them to face the academic challenges. [1]

An orientation program would definitely help the new postgraduate residents coming from different backgrounds to alley anxiety and acquire knowledge about patient care. [2]

Success of any orientation program depends upon thorough and active participation from the participants. This purpose can be fulfilled by including more of interactive sessions in an orientation program where residents do active discussion. Another important criterion for successful orientation program is structure; many of such programs might fail due to unstructured format. [3] Orientation programs are usually organized by the medical colleges for interns to increase their knowledge and efficacy. Orientation program usually lack training in professional competence, personal characteristics, and formal education. [4] Orientation programmes for incoming residents are offered in many forms: as a set of lectures in one day, as provision of "resident's manuals", as practical demonstrations, as computer simulations or as simulated clinical "calls." [5, 6] In some countries, formal courses like Basic Life Support, Advanced Cardiac Life Support and Basic Surgical Skills courses are mandatory for new residents. [5] Inconsistencies in quality of training during internship ensure that incoming surgical trainees frequently are underconfident and poorly prepared to assume the different responsibilities that comprise patient care. [7]

In the present study, an orientation program with interactive lectures and demonstration based on post graduate curriculum and patient care practice essentials was developed. Major responsibility given the newly admitted post graduate residents includes blood collection,

sampling, filling laboratory requisition forms, requesting histopathological examination, documentation and record keeping like writing case files, operation notes, summary and discharge. The residents aren't able to fulfill and understand the duty due to lack of prior knowledge and practices. Newly admitted residents are also taking part in patient care at various levels like outpatient as well as admitted. Residents usually need to prescribe and write medicines. Most of the occasions, residents don't have proper knowledge of prescription writing and pharmacovigilance, basic communication and interpersonal relationship skills, knowledge about available infrastructure and facilities, practice of blood transfusion and practice of asepsis.

It was decided to align the program topics with the observed gaps in the actual and desired practices. Major topics included curricular aspects like teaching learning methods, examination and evaluation, dissertation and log book; patient care practice essentials including hospital infrastructure and services, casualty management and Medicolegal aspects, documentation, prescription writing, laboratory services, sending histopathology specimen and most importantly basic communication and interpersonal skills required for patient care. Pre and posttest was developed which included questions to test the knowledge about curricular and patient care practice essential.

As per the schedule, an orientation program was conducted. Fifty five newly admitted post graduate residents attended the program. Thirty seven out of 55 residents responded to the pre and post tests. Statistical analysis of data showed highly significant statistical difference in the p-value from pre to post test. This suggested an increase in the knowledge level of newly admitted postgraduate residents about the various aspects curriculum and patient care. Highly significant statistical difference from pre to post test was quite assuring about the positive impact of the program on the participants.

Off course, the result of the statistical analysis has really boosted our confidence. As an organizer, initially, we were doubtful about the overall utility and impact of the program on the participants. Idea and genesis of orientation program came into reality from nowhere situation. Platform raised through an orientation program would surely help to bridge the gap and create conducive working environment for the new residents without any bias or fear.

We could feel a new energy and satisfaction due to success of the program. The momentum gained through this program surely would guide us to conduct this program routinely for newly admitted post graduate residents. At last, we feel happy, as we could change the present scenario and create a difference by introducing a structured program to meet the introductory requirements needed before assigning newly admitted post graduate residents to the course.

Real success of the program, still, will depend upon further how participant residents apply and use the knowledge in actual practice.

Conclusion

Orientation program proved to be a good tool that increased knowledge about curriculum and patient care practices among newly admitted post graduate medical residents. But, exact impact of this tool will be decided by how postgraduate residents actually apply new knowledge during patient care while on the job. Further, it might be more trustworthy if we use 360 degree feedback.

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