

Mini-research Observation on Current Internship Scenario based on British Medical Journal Questionnaire at Aurangabad

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Abstract: This study was undertaken by us, as interns for realizing the true status of the internship fruitfulness with regards to clinical bedside learning maneuvers and skills. British Medical Journal (BMJ) set 32 questions were arbitrarily sub-grouped into 8 categories with similar aspects. Analysis reveals significant fruitful observation of the rotatory internship program. In reality, when answers of the questions were reassessed with faculty members of the units, the results noted were just reciprocal. The discrepancies so noted is attributed chiefly to the ensuing post graduate entrance examination preparations. These preparations are undertaken during internship tenure utilizing 95% of the tenure period.

Keywords: internship, PG entrance, medical college, questionnaire, Aurangabad

1. Introduction

As of 2016, there are a total of 420 medical colleges in India that are approved by the Medical Council of India (MCI)¹. The MCI's motto is to provide quality medical care to all Indians through promotion and maintenance of excellence in medical education.

Nowadays, due to the soring competition most doctors, if not all, choose to focus more on their preparation for the PG entrance exams during internship rather than the internship curriculum. The present study is based on questionnaires of high standard which appeared in British Medical Journal (BMJ). For the simplicity, the questions were modified in 8 sub-groups as dealt in methods.

After the completion of the tenure of the internship, the doctors still lack most of the basic knowledge in the required clinical and administrative skills.

The present study is undertaken to find out the competency of the doctors with regard to the basic hospital procedures, clinical acumen and skills at the end of the tenure as an intern.

2. Aims & Objectives

This research was conducted to find out the capabilities of doctors in clinical and administrative skills achieved during internship. The research was focused on doctors who had recently completed their internship program, or have enrolled for a post graduate program in recent months (working as junior resident-1).

3. Limitations

- The study is subjective, hence has limitations.
- Despite limitations we tried to rely on the answers of the doctors about their knowledge and skills. Moreover, the relevant information from time to time was reconfirmed and assessed by dialoguing with the seniors in the working unit.

4. Description

- The questionnaire consisted of 32 questions based on various basic parameters of medical knowledge application and skills.
- These 32 questions were then divided into 8 sub-groups (A-H) for present analysis.
- The parameters for the sub-groups were as follows:

- a) Vitals
- b) Blood and swab cultures
- c) Urine investigations
- d) Blood transfusion & injectable medication related problems
- e) Respiratory tests & assistance
- f) Management & recording of ECG
- g) Minor surgical procedures
- h) Infection control measures

5. Methods and Instruments

- This study was conducted at Mahatma Gandhi Mission's Medical college and Government Medical College, Aurangabad, Maharashtra, India during March – June 2016.
- The sample size was of 150 of which 12 were discarded owing to incomplete information submitted. Therefore analysis was done on the remaining 138 subjects.
- Verbal consent of each subject was obtained prior to questioning.
- The questionnaire for this research was taken from British Medical Journal (BMJ), consisting of 32 questions, which were sub-divided arbitrarily into 8 groups, based on questions similarities.
- Answers to the questions so obtained were divided into 8 sub-groups for analytical purpose.
- The subjects were given a time of around 15 minutes to read and answer the questionnaire without any hesitations.

The 8 sub-groups are as under:

1. Group A (Vitals)

- Measuring body temperature

- Measuring pulse rate
- Transcutaneous monitoring of O2 saturation
- Nutritional assessment

2. Group B (Blood & swab cultures)

- Venepuncture
- Managing blood samples correctly
- Taking blood cultures
- Taking ENT swabs
- Establishing a peripheral IV access & setting up an infusion

3. Group C (Urine Investigations)

- Urine multi-dipstick test
- Advising patients on how to a collect midstream urine sample
- Pregnancy testing (UPT)
- Catheterization

4. Group D (Blood transfusion & injectable medication related problems)

- Making up drugs for parenteral administration
- Dosage & administration of insulin & use of sliding scales
- SC/IM Injections
- Blood transfusion
- Use of Local Anesthetics

5. Group E (Respiratory Tests & Assistance)

- Basic Respiratory Function Tests
- Administrating O2
- Instructing patients in the use of inhaled medications

6. Group F (Management & Recording ECG)

- Managing an ECG
- Performing & interpreting a 12-lead ECG

7. Group G (Minor Surgical Procedures)

- Skin suturing
- Wound care & basic wound dressing
- Giving information about the procedure & obtaining consent & ensuring appropriate aftercare

8. Group H (Infection Control Measures)

- Correct techniques for 'moving & handling', including patients
- Hand washing
- Use of personal protective equipment
- Infection control in relation to procedures
- Safe disposal of clinical wastes, needles and other sharps.

The answers of the questionnaires were analyzed under 3 sub-groups viz:

- Can't Do
- Can do with some help
- Can do independently

Inclusion Criteria

Doctors who have completed tenure of internship in recent months and also those who joined as residents for PG courses recently.

Exclusion Criteria

Doctors' unwillingness.
 Those interns who have not completed the tenure of internship and residents working in super specialty units.

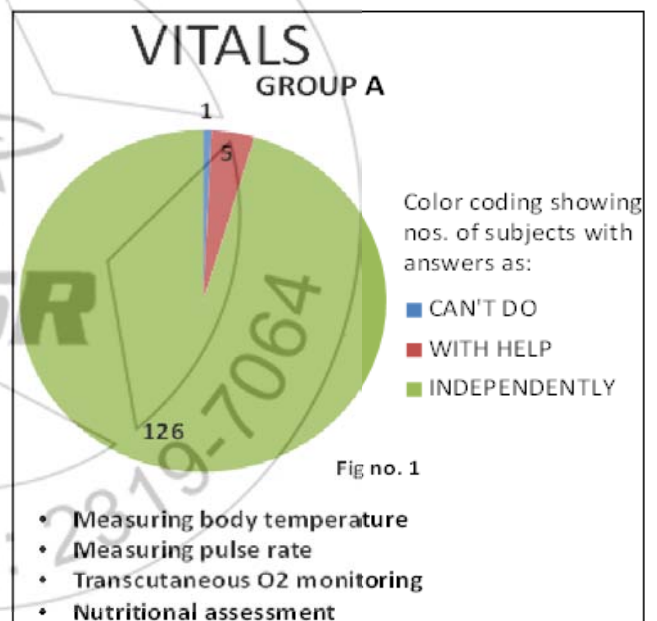
6. Results & Interpretation

Table 1: Showing various groups and their findings as per questionnaire.

	Group	Can't Do (n)	With Help (n)	Independently (n)
A	Vitals	1	5	126
B	Blood & Swab Cultures	2	30	100
C	Urine Investigation	5	33	94
D	Blood Tranfusion & Medication Related Problems	6	46	80
E	Respiratory Test & Assistance	12	47	73
F	Management and Recording of ECG	16	44	72
G	Minor Surgical Procedures	11	12	109
H	Infection Control Measures	8	25	99

n= number of subjects

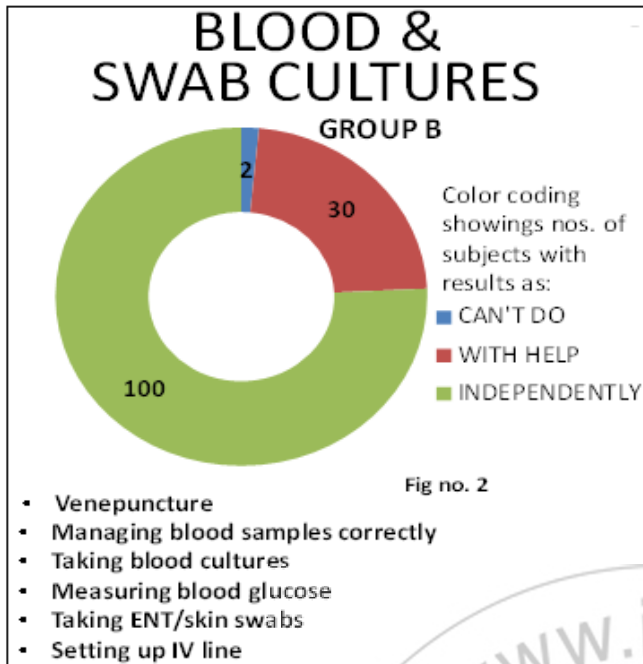
Vitals (Refer fig.1)



- 95.45% - performed independently
- 3.78% - needed help
- 0.75% - couldn't perform

The clinical skills required in this group are mostly taught in during clinical postings, that is why 95.45% doctors were able to perform it independently, only 3.78% needed assistance probably due to lack of attention during their college or lack of interest, 0.75% weren't able to do it all probably.

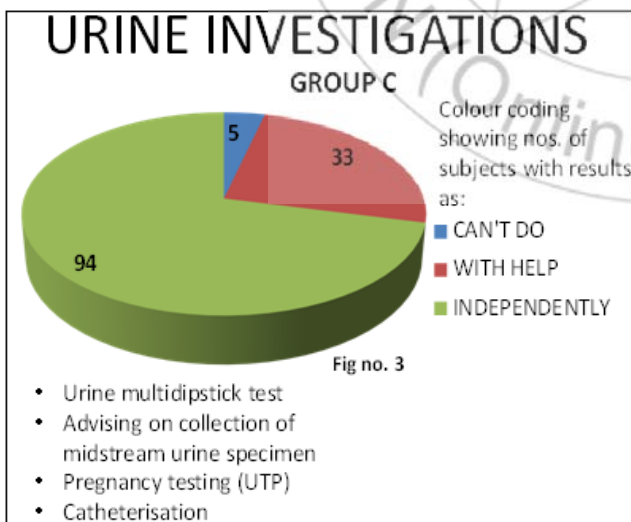
Blood & Swab Cultures



- Blood and swab cultures (Refer Fig. 2)
- 75.75% - performed independently
- 22.72% - needed help
- 1.51% - couldn't perform

The results in the group shows 75.75% of people could perform these skills independently, 22.72% of people needed assistance probably due to lack of confidence or experience, or teaching methods weren't right. 1.51% couldn't perform probably due to lack of interest during internship.

Urine Investigations



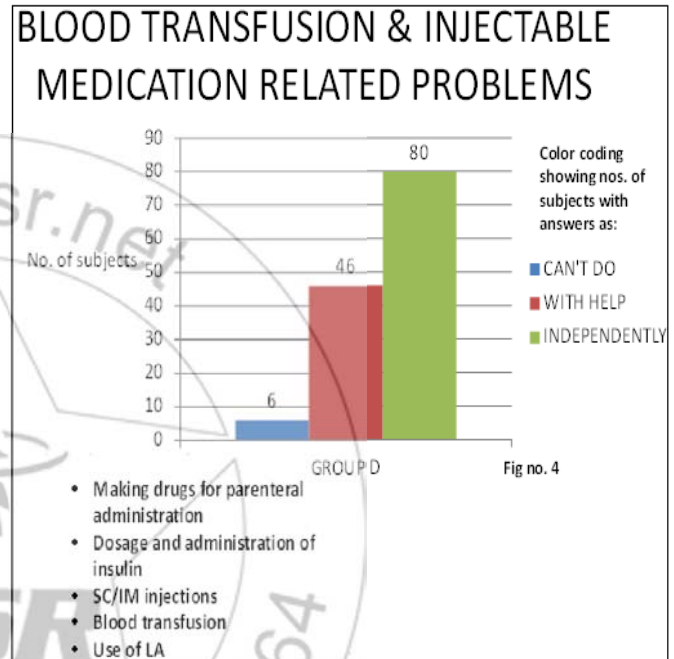
- Urine investigations (Refer fig. 3)
- 71.21% - performed independently
- 25% - needed help
- 3.78% - couldn't perform

71.21% of people could perform it independently, while 25% needed help & 3.78% couldn't perform it.

The reason that most could do it independently was because these investigations are carried out quite frequently in the hospital and all the students have been exposed to it on a daily basis.

Like the previous group, the reason that few needed help was because they either weren't taught properly or lacked confidence in the same.

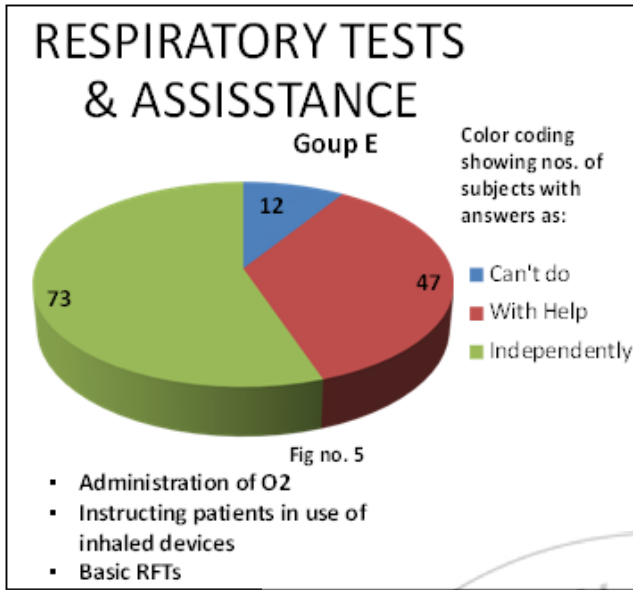
Blood Transfusion & Injectable Medication Related Problems



- Blood transfusions & Injectable Medication related problems (Refer fig 4)
- 60.60% - performed independently
- 34.84% - performed with help
- 4.54% - couldn't perform

Reasons that 34.84% of subjects needed help and 4.54% couldn't perform it at all is because the no. of patients needing blood transfusions is not very high or even if the patients are available, the junior residents perform the procedures themselves.

Respiratory Tests & Assistance

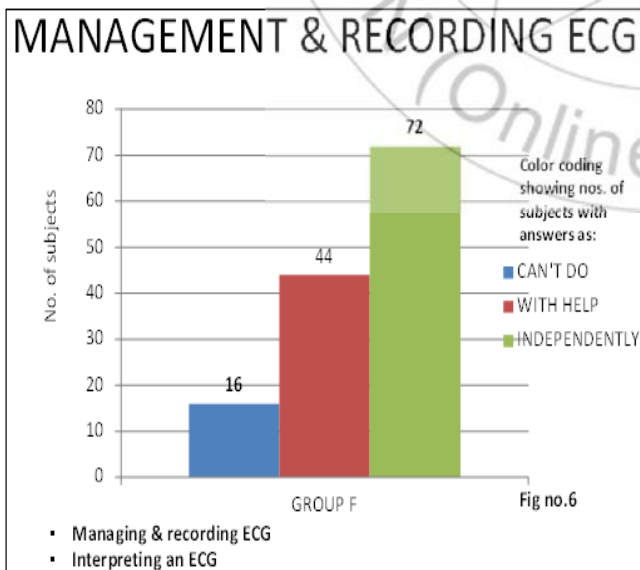


- Respiratory Tests & Assistance (Refer fig. 5)
- 55.30%- performed independently
- 35.60% - performed with help
- 9.09% - couldn't perform

In this category, we found that only 55.30% could do it independently while the remaining 44.70% either needed help or couldn't perform it at all.

The reason behind this could be attributed to that most of the students have the theoretical knowledge about these tests, however, they haven't ever been taught practically.

Management & Recording ECG

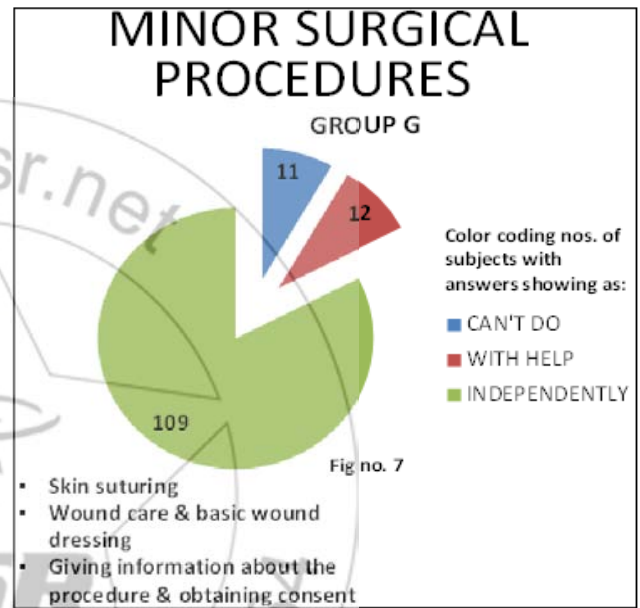


- Management and Recording of ECG (Refer fig. 6)
- 54.54% - performed independently
- 33.33% - performed with help
- 12.12% - couldn't perform

This category had the least amount of subjects that could perform it independently

Reason for this is that most of the subjects said that they could perform an ECG, however, when it came to interpreting the results, they either lacked the knowledge or lacked the confidence.

Minor Surgical Procedures

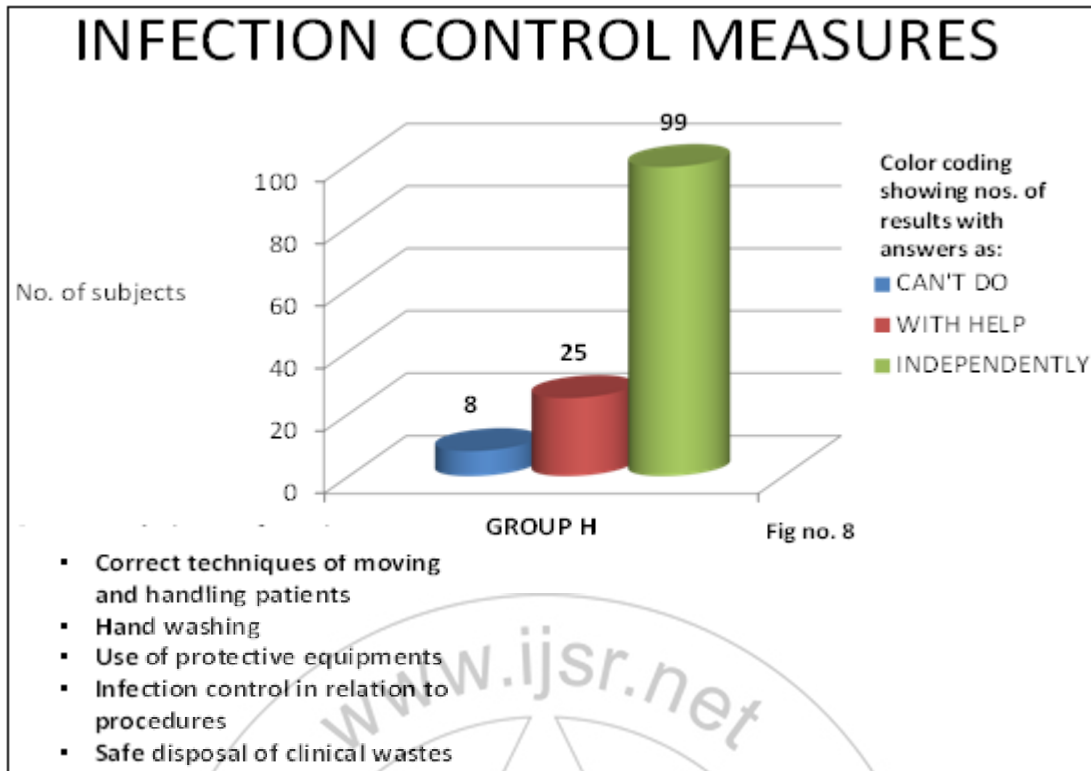


- Minor Surgical Procedures (Refer Fig. 7)
- 82.57% - performed independently
- 9.09% - performed with help
- 8.33% - couldn't perform

82.87% of subjects could perform it independently because they showed enthusiasm in performing the procedures since it was the first time that they had hands on experience in the same.

The few remaining subjects either didn't show up for their internship program or weren't interested in the surgical procedures.

Infection Control Measures



- Infection Control Measures (Refer fig. 8)
- 75% - performed independently
- 18.93% - performed with help
- 6.06% - couldn't perform

Most of our subjects could perform it independently because they have good theoretical knowledge on this subject and didn't need actual practical teaching in the same.

7. Discussion

The Medical profession is like no other, the studying that occurs takes place both in classrooms as well as bed side. The M.B.B.S. graduates are expected to be well equipped with all the theoretical knowledge as well as the basic required clinical skills at the time of graduation.

Our internship programs are designed by the Medical Council of India in such a way they expose the students' to each department for a fixed period of time, thus allowing the students' to get acquainted and accustomed to the procedures and functioning of each department.

The results, we found indicated that of people 71.30% were capable of performing all the tasks required by an undergraduate doctor and only 28.7% needed help or could not perform.

This data shows the quality of the current internship training program in an Indian Hospital.

Only a few categories namely Respiratory Tests and Assistance and Management and Recording of an ECG and Blood Transfusion and Injectable Medication Related problems needed a little more attention to better the results.

However this study completely relied on the word of the students' and not the actual observation of them.

In reality however, there is a vast disparity between the result and the current scenario. The main reason for this disparity is because most of the interns are more focused on preparing for their post-graduate entrance exams. Either they are busy attending classes or studying at home for the same. Similar studies were conducted abroad having similar observation but having different reasons like poor leadership within the healthcare system and ill education curriculum.^{2,3,4,5}

On further questioning, if given a choice, most of the students' chose to attend classes rather than attending their internship program. Therefore, even by making internship attendance compulsory, the students' don't show interest in learning new skills as they are busy preparing for the PG entrances even while on duty. Due to this problem, most of them are lacking in attaining the basic skills expected from an MBBS doctor.

At this stage the professors, more than the students' realize a glimpse of what the future has in store for the public. For the said reasons, the questionnaire provided by BMJ is not helpful in precluding or assessing the true status of the current internship program. The questionnaire needs to be modified in the present scenario with amalgamating answers from interns and their observers. The answers ascertained by the interns are dubbed with erroneous answers provided by them merely to hide their knowledge ignorance in clinical medicine.

8. Conclusion

- This research showed that the current internship program is a success in training our doctors in the required clinical and administrative skills. However, there is a lot of disparity between the result and the current scenario in the hospital on dialoguing with the seniors and observation in the working unit.
- Main reason for this disparity is because of the students' choose to give preference to the PG entrance preparation rather than the internship program.
- According to this study, the only category that needs further attention is the training in the ECG and Respiratory Assistance fields and Blood transfusion and Injectable medication problems.

9. Acknowledgements

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