Research Article

Assessment of communication skills of interns in urban health centre

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ABSTRACT

Background: Communication skills for healthcare professionals are very important and there are no proper methods to formally assess the communication skills in doctors.
Methods: A cross sectional study was designed to assess the communication skills of Interns. The Interns were observed while communicating with the patients with a pretested proforma and the results were noted.
Results: Overall, all the Interns were poor in communicating with patients. Female Interns were better at group health education presentation (3.024 Vs 2.518). Interns who were in their early months of postings communicated better with patients compared to the Interns who completed more postings.
Conclusions: A formal assessment method must be devised to assess the communication skills of doctors/medical students for better delivery of healthcare.

Keywords: Communication, Skill, Interns, Health education

INTRODUCTION

Competence is the ability to perform a specific task in a manner that yields desirable outcomes. This implies the ability to apply knowledge and skill successfully to new situations, as well as to familiar tasks, for which prescribed standards exist. Health workers acquire competence over time.[1] Competence can also be defined as the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values and reflection in daily practice for the benefit of the individuals and communities being served.[2] Common contextual factors include the practice setting, the local prevalence of disease, the nature of the patient's presenting symptoms, the patient's educational level and other demographic characteristics of the patient and of the physician. A student's clinical reasoning may appear to be competent in areas in which his base of knowledge is well organized and accessible, but may appear to be much less competent in unfamiliar territory. Competence is also developmental.[2]

Competency in health care is the capability to perform acceptable duties directly related to patient care. Medical teaching has developed steeply in the past decade and had many facets being introduced to its portfolio. Assessment is one such area which was scrutinized for further development.[3]

While the graduates generally possess reasonably sound knowledge of medical science, they are often found deficient in the performance of clinical skills and problem-solving, which form the core of clinical competence.

In the traditional curricula, the stress has been laid on the acquisition of knowledge as against the development of skills. More attention needs to be given to the development of various skills, viz., problem-solving skills, psychomotor or performance skills, attitudinal and communication skills. The graduates should develop an ability to gather information with sensitivity and insight, to make sound judgment on the basis of probabilities.

The development of these skills need to be strengthened by introducing a clinical clerkship (where students actively take part in the management of patients) and reinforced during Internship. It is commonly observed that the period of Internship is not effectively utilized to develop and refine such skills.[4]

Studies have shown that there is a great need for training in the aspect of doctor-patient relationship. Obtaining informed consent of the patient or relatives, breaking unpleasant news to the significant relatives, informing about critical illnesses to patients, all require good amount of communication skills. It is a complex task, to be performed at critical moments when there are lot of uncertainties and when decision has to be taken without having opportunity and time to discuss with a colleague. Patient-doctor relationship itself has an important bearing on the healing process and better patient compliance. Its importance has become highly relevant with increasing awareness about consumer and human rights among patients and relatives, which is likely to pose a threat to the doctor, and proper training could ease stress of the doctor-in making.

Clinical empathy, which involves the ability to understand the patient's situation, perspective & feelings and the ability to communicate with the patient in an accurate and effective manner have a major role to play in patient care.[5]

Assessment is a systematic process that plays a significant role in effective teaching. Assessment is the process of gathering and discussing information from multiple and diverse sources in order to develop a deep understanding of what students know, understand and can do with their knowledge as a result of their educational experiences; the process culminates when assessment results are used to improve subsequent learning.[6]

Assessment of communication as a competence is not well tested by written examination or a viva in which the student-patient encounter is unobserved.[7]

The undergraduate student coming out of a medical institute should be able to identify community health problems and learn to work to resolve these by designing, instituting corrective steps and evaluating outcome of such measures. He should be able to work as a leading partner in health care teams and acquire proficiency in communicating skills.[8]

To correct, this new methods of assessment on clinical skills viz. communication skills, procedural skills and professional skills are tested.

In this context, the present study is planned to assess the competence of communication skills achieved among Interns at Urban Health Training Centre during Community Medicine postings. The main aim and objective of the study is to assess the competence of Interns across their course, on their communication skills and to analyse the level of competence achieved in health education with different phases in their curriculum.

METHODS

A cross sectional study to find out the professional competency achieved at the end of their course among the medical undergraduates of Rajah Muthiah Medical College was conducted for a period of 13 months from February 2010 to February 2011.

A list of selected competencies to be achieved as per the norms set by Medical council of India (1997 revised curriculum) was prepared which included three domains of learning namely Cognitive, Affective and Psychomotor.

Interns

During Internship, house surgeons apply most of the cognitive learning in solving clinical problems. As per the protocol, many of the psychomotor skills are learnt during Internship.

Sampling

Entire batch of Interns (97 students) who passed out in February 2010 were included for the study. The Interns were assessed when they attended their posting for two weeks in Urban Health Centre, Chidambaram, as batches.

Study setting

The Interns posted in Urban Health Centre, Division of Community Medicine RMMC, during their two weeks of training were observed for their communication skills with the patients without the Intern's knowledge. A minimum of ten patients per Intern per day was observed for his communication skills without interrupting normal outpatient activities. These findings were matched with standard protocol/checklist.

On the first day of their Internship in Urban Health Centre, each Intern was given a topic for group health education. The topic on individual health education was given according to the patient's need and the disease diagnosed.

Study tool

Interns: Observation with a pretested questionnaire

Operationalisation of terms

Communication with the patients-Check list

1. Use of vernacular language.
2. Explaining diagnosis and cause of the disease to the patient.
3. Instructing them on drug dosage and duration of treatment.
4. Diet restrictions/precautions to be taken/specific protections against the disease.
5. Advice on follow up.

Health education-Check list

1. Content
2. Presentation
3. Feedback.

The scoring of assessment was given in nominal scale and negative statements were taken into consideration while awarding scores.

Statistical analysis

The data collected from Interns was analysed by simple proportions, ratio and non-parametric tests like Mann Whitney test and Kruskal Wallis test.

RESULTS

On analyzing the results obtained on comparison of communication patterns on health education with individual patients and in groups the following results were obtained.

As per Table 1, all Interns (100%) spoke in local vernacular language to the patients. None of the Interns explained the diagnosis and its cause to them. Only 8.24% of Interns gave instruction on diet restrictions/ precautions/ specific instructions pertaining to the disease they suffered and 91.76% did not. Instruction on duration and dosage of drug was given by only 2.06%. Follow up advice to the patients was given only by 1.03% of Interns.

As mentioned in the methodology, a nominal scoring from 1-5 on communication patterns was given. In scoring on assessment of communication pattern with individual patients, none of the Interns scored 4 or 5; 1.03% scored 3, 9.28% scored 2 and majority (89.69%) scored 1 (Table 2).

Table 1: Distribution of interns according to their practice of competency (communication pattern with the individual patient) frequency for each component.

Communication pattern	Yes		No	
	Frequency(Number)	%	Frequency(Number)	%
Use local vernacular language	97	100	0	0
Diagnosis and cause explained	0	0	97	100
Instruction on diet restrictions/precautions/specific instructions	8	8.24	89	91.76
Instruction on Duration and dosage of drug	2	2.06	95	97.94
Follow up advice given	1	1.03	96	98.97

All Interns spoke in local vernacular language, none explained the diagnosis or cause and only 1.03% have given the follow up advice as shown in Table 1.

Table 2: Assessment of communication pattern with individual patients-score*.

Score obtained	Frequency	Percentage
1	87	89.69
2	9	9.28
3	1	1.03
4	0	0
5	0	0
Total	97	100

*maximum score- 5; Majority of the Interns (99%) have scored two or less than two in communication pattern with the individual patient.

Individual health education (Table 3) was assessed, to measure the competency in communication, at one to one level. In individual health education skill assessment 98.97% of Interns used vernacular language, to communicate to the patient for better understanding by the patients. 1.03% of Interns covered all the essential information (content) and 5.15% gave nonspecific / unwanted information to the patients.

Regarding presentation on individual health education, 98.97% of Interns used simple language for communication and 74.29% covered the information with clarity. 4.12% of Interns explained the information in sequence and none of them provided a slow, steady flow of information. 1.03% used audio-visual aids for

communication and none of the Interns encouraged interaction and involved in the individual health education process.
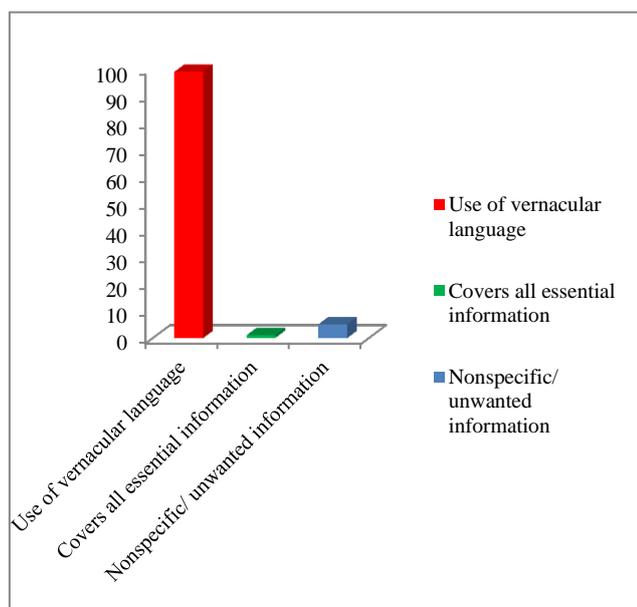
As per Table 4, the duration of individual health education provided, 84.54% of Interns communicated for less than one minute, 7.22% communicated for 1 minute, 5.15% for 1.5 minutes and 3.09% for 2 minutes.

According to Table 5, comparison of assessment of group health education skill for each component, in providing content, 94.85% of Interns used vernacular language to communicate with the patients and 20.61% of Interns covered all the essential information on the health education topics. 21.64% of Interns shared nonspecific/ unwanted information to the patients.
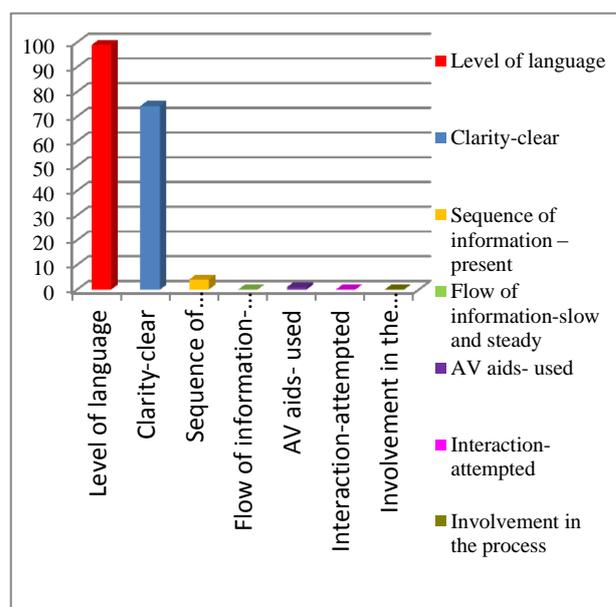
Table 3: Individual health education skill frequency for each component.

Competency in health education	Yes		No	
	Frequency (Number)	**%**	**Frequency (Number)**	**%**
Content				
Use of vernacular language	96	98.97	1	1.03
Covers all essential information	1	1.03	96	98.97
Nonspecific/ unwanted information	5	5.15	92	94.85
Presentation				
Level of language –simple	96	98.97	1	1.03
Clarity-clear	72	74.29	25	25.71
Sequence of information –present	4	4.12	93	95.88
Flow of information-slow and steady	0	0	97	100
AV aids- used	1	1.03	96	98.97
Interaction-attempted	0	0	97	100
Involvement in the process	0	0	97	100

As regards group health education, though majority (>90%) of Interns spoke in simple local vernacular language, only one fifth of the Interns have covered all the essential information. As far as the use of AV aids, interaction attempted and involvement in the process, the performance is found to be very poor (only 4.12%).

Figure 1: Bar diagram showing individual health education on content (frequency for each component).

Figure 2: Bar diagram showing individual health education on presentation (frequency for each component).

Table 4: Time duration of individual health education.

Time duration (minutes)	Frequency (number)	Percentage
<1	82	84.54
1	7	7.22
1.5	5	5.15
2	3	3.09
TOTAL	97	100

As regards the duration of individual health education majority (84.5%) of Interns spoke for less than one minute. There is no attempt to initiate feedback or interaction

On comparison of assessment of group health education skill regarding presentation 94.85% of Interns used simple language and 72.16% conveyed the information with clarity, 3.11% explained the information in sequence to the patients. 56.70% had a slow and steady flow of information. Out of 97 Interns, 4.12% used audio-visual aids for communication and 4.12% encouraged interaction. Only 4.12% of Interns were found to be involved in the process of health education given to the patients.

Health education should be precise to the point and it may extend beyond any time limit if there is interaction and queries raised by patients. As per Table 6, the time duration taken by the Interns for providing group health education was 59.79% took <3 minutes, 29.89% took 4-6 minutes and 10.32% took 7-10 minutes.

As per Table 7, there was a significant difference (P <0.005) noted in measuring the competency level in group health education presentation. Where, female Interns performed well (3.024 vs 2.518) when compared to male Interns. Among male and female Interns in rest of the competency areas like group health education content (2.018 vs 1.829), individual health education content (1.964 vs 1.927) and individual health education presentation (1.857 vs 1.878), there was no significant difference observed.

According to Table 8, the communication skills of the Interns with the individual patients, at the beginning othe Community Medicine postings was good (mean score 1.471). As they complete every successive specialty posting, the mean score of Interns on communication skill with individual patients was unsatisfactory .The mean score with completion of OBG was 1.000, OBG & Surgery was 1.063, OBG, Surgery & Medicine was1.000 and after all the posting completed except Community Medicine was 1.000. Satisfactory communication skill with the individual patients was observed in those Interns who have completed OBG, Surgery, Medicine & ENT/ Ophthalmology (mean score 1.125). It is clearly evident that as the Interns complete their individual specialty postings their communication skills with the individual patients become unsatisfactory and the difference is statistically significant (p<0.001).

The key findings of the present study is presented as follows

- All Interns spoke in local vernacular language to patients but none of them explained the diagnosis or cause of the disease to the patient.
- Interns are poorly competent in both individual and group health education.
- Female Interns were better at giving presentation in group education (3.024 Vs 2.518) than male counterparts
- Interns entering fresh to postings communicate better with patients better than others.

Table 5: Assessment of group health education skill frequency for each component.

Competency in health education	Yes		No	
	Frequency (Number)	%	Frequency (Number)	%
Content				
Use of vernacular language	92	94.85	5	5.15
Covers all essential information	20	20.61	77	79.39
Nonspecific/ unwanted information	21	21.64	76	78.36
Presentation				
Level of language –simple	92	94.85	5	5.15
Clarity-clear	70	72.16	27	27.84
Sequence of information –present	36	37.11	61	62.89
Flow of information-slow and steady	55	56.70	42	43.30
AV aids- used	4	4.12	93	95.88
Interaction-attempted	4	4.12	93	95.88
Involvement in the process	4	4.12	93	95.88

As regards group health education, though majority (>90%) of Interns spoke in simple local vernacular language, only one fifth of the Interns have covered all the essential information. As far as the use of AV aids, interaction attempted and involvement in the process, the performance is found to be very poor (only 4.12%)

Table 6: Time duration of group education.

Time duration (min)	Frequency (Number)	Percentage
<3	58	59.79
4-6	29	29.89
7-10	10	10.32
Total	97	100

As regards time duration, majority of Interns (60%) give health education for less than three minutes.

Table 7: Comparison of health education practice among male and female interns.

Competency	Male		Female		M.W test value	P value
	Mean	SD	Mean	SD		
Group HE content	2.018	0.587	1.829	0.771	1318.5	0.154
Group HE presentation	2.518	1.465	3.024	1.107	865.5	0.034
Individual HE content	1.964	0.267	1.927	0.264	1189.5	0.499
Individual HE presentation	1.857	0.699	1.878	0.600	1126	0.845

M.W-Mann Whitney Test; There is no difference between males and females in the competencies measured except in group health education presentation where female Interns are good (3.024 Vs 2.518)

Table 8: Difference in mean score of interns on communication skill with individual patients after completion of different postings.

Postings completed	Mean	SD	K.W value	P value	Multiple comparison Test for K.W
Fresh to CM	1.471	0.624			
Completed OG	1.000	0.000			
Completed OG+ Surg	1.063	0.250	23.341	<0.000	Class 1 Vs all except class 5 is significant
Completed OG+ Sur+ Med	1.000	0.000			
Completed OG+ Sur+ Med+ ENT/Ophthal	1.125	0.342			
Completed all except CM	1.000	0.000			

(K.W Test: Kruskal Wallis test) as the number of completed postings increases the communication of interns with the individual patients BECAME became unsatisfactory as shown in table and the difference is statistically significant (p<0.001).
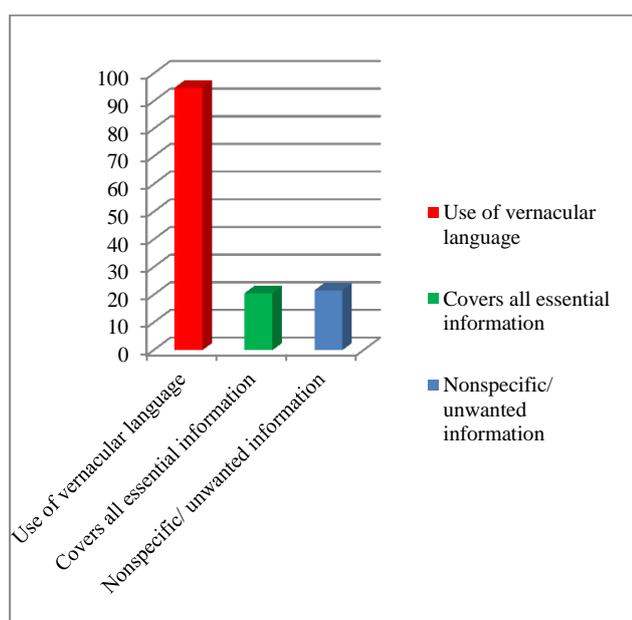
Figure 3: Bar diagram showing group health education on Content (frequency for each component).
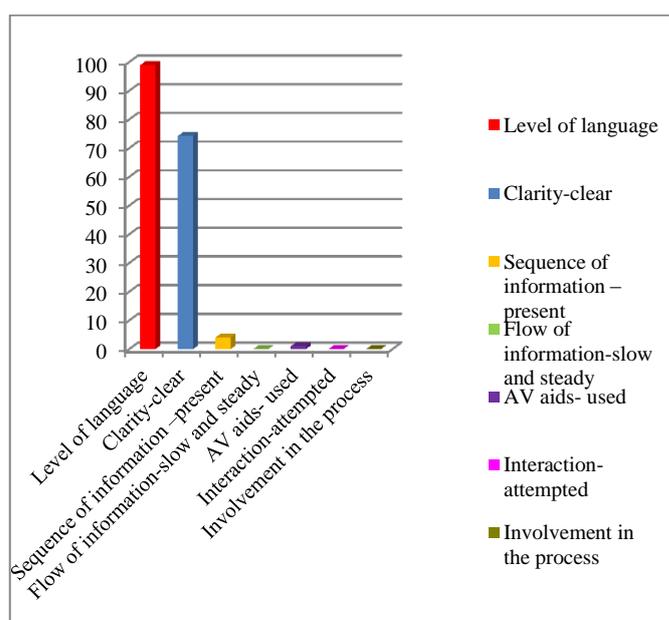
Figure 4: Bar diagram showing group health education on presentation (frequency for each component.

DISCUSSION

Competency in health care is the capability to perform acceptably those duties directly related to patient care. Competency is defined in the context of particular knowledge, skills and abilities. Skill is one of the expected functions of knowledge.

Majority of Interns (78.3%) scored ≤2 out of 5 in history taking and clinical examination. Similar finding was observed by Aminur Rahman.[9]

Though students are taught formally regarding history taking and clinical examination from the first clinical year, a lacuna still persists in recording the findings and documentation which may be due to time constraints and too many patients waiting to be seen.

Majority of Interns 69.1% scored ≤2 out of 5 in prescription pattern Communication with the patient is one of the basic competencies in clinical practice. To elicit a proper history, adequate communication skills are necessary. Lack of knowledge of communication skills, inability to use them effectively, can be distressing and is potentially harmful for the patients. Communication skill was assessed by observation and scoring system. Score chart was prepared prior to the start of the study.

In the present study, all the Interns spoke in local vernacular language; none of them explained the diagnosis or cause of the disease to the patients, 8.2% of the Interns gave instructions on diet restrictions/precautions to be taken/specific protections against the disease and advice on follow up. Only 2% of Interns gave instructions on drug dosage and duration of treatment and 1% of the Interns gave follow up advice. The possible explanation for not giving advice on duration and dosage may be that many of the Interns were under the impression that pharmacist and staff nurse would give instructions on the same. The other reasons could be time constraints, lack of interest and lack of orientation.

Majority of Interns (99%) scored ≤2 out of 5 in communications with individual patients.

Interns were also found to be poor in giving both individual health education and group health education. Similar findings were observed by Govindan VK.[10]

The present study shows that the female Interns are good in health education presentation only when compared to males (Table 7), though they are not different to males in other aspects. In contrast Mohsen et al in his study, on communication skills in Tehran University of Medical Sciences in Iran, observed that female Interns were poor in communication compared to males.[11]

Analysis was done to compare the communication skills of the Interns with individual patient and the order of other departmental completed postings. The finding is that, as the number of completed postings increase, the communication level of Interns with the individual patient decreases and became unsatisfactory. The difference is statistically significant (P <0.001). This may be mainly due to lack of commitment and loosing or deterioration of interest by Interns as they rotate through the postings over time.

There is no formal communication skill training program during the medical curriculum and the need for good communication skills is not stressed during the curriculum. Hence the attitude and skills of students and Interns in communication is poor. This might be one of the factors for poor communication skills by the Interns. Hence a communication skill workshop, simulation, role play and other training programs in undergraduate medical education could improve the existing situation

CONCLUSION

This study clearly shows the lacunae in the competencies of the medical Interns towards communication skills and health education. It is customary that the Interns should be appraised and formally trained at the beginning of every clinical posting to understand, acquire the skills of communication with clinical empathy and health education to become a responsible and successful medical practitioner. In health care, such Doctor-Patient relationship would improve patient compliance and improve healing process.

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