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**Original Research Article**

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**Training of Intern Doctors with Interpersonal Communication [IPC]: A Step towards better doctor patient relationship**

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**Abstract**

**Background:** Interpersonal communication [IPC] is important for good doctor patient relationship. Interpersonal communication [IPC] is taught informally in medical education. It is mostly left to the students with responsibility of getting learnt themselves through a hidden curriculum. To address this issue, we decided to innovate a training module on interpersonal communication [IPC] to train medical intern doctors.

**Aim and Objectives:** To do needs assessment of intern doctors about knowledge, skills and attitude of interpersonal communication [IPC] and evaluate impact of interpersonal communication training module in improving knowledge, skills and attitude of intern doctors about IPC

**Materials and methods:** Present study, a quasi-experimental study, was carried out in the department of surgery, Rural Medical College, Loni from February 2014 to January 2015. Thirty intern doctors were selected who gave consent to participate in the study. Interpersonal communication [IPC] module for training was developed. Assessment of participants was done with pre and post intervention objective structured clinical examination [OSCE].

**Observations:** By applying Student's Paired 't' test, there was highly significant difference of increase in post intervention OSCE scores [as compared to pre intervention] at all stations in 30 participants under the study ( $p < 0.01$ )

**Conclusion:** Interpersonal communication [IPC] training module is a useful tool to develop interpersonal relationship skills amongst intern doctors.

**Keywords:** Communication skills, doctor-patient relationship, interpersonal communication, training in interpersonal communication

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**1. Background**

Good Doctor patient relationship is a felt need of novel medical profession. A good doctor patient relationship should result into desired patient satisfaction. Patient satisfaction is an important criteria to decide quality of care given to the patient. Treating doctor should have knowledge, skills and attitude of interpersonal communication [IPC] to achieve this goal. Presently, Interpersonal communication is taught informally in medical education and mostly left to students with responsibility of getting learnt themselves. This

results into knowledge gap about IPC amongst medical students. To address this issue, we decided to innovate a training module on interpersonal communication [IPC] to train the medical interns and evaluate the impact by objective structured clinical examination [OSCE].

**1.1 Aims and objectives**

To do needs assessment of intern doctors about knowledge, skills and attitude of interpersonal communication [IPC]

To evaluate impact of interpersonal communication training module on improved knowledge, skills and attitude about interpersonal communication [IPC] amongst intern doctors

**2. Materials and methods**

A quasi-experimental study was carried out in the Department of Surgery, Rural Medical College, Loni from February 2014 to January 2015. Study participants were 30 intern doctors posted in the department of surgery.

Prior approval from institutional ethics committee was taken. Prior sensitization of the participants was done to alleviate their anxiety. Written informed consent was taken from each participant. Pre-intervention objective structured clinical examination [OSCE] was carried out to assess prior knowledge, skills and attitude of using interpersonal communication. Typical OSCE included total 10 stations; 5 procedure stations, 4 response stations and 1 rest station. Followed by,

participants underwent intervention with formal training in interpersonal communication which included; lectures and demonstrations, videos and role plays over a period of 15 days [3 hours per week]. The participants were again subjected to post intervention OSCE to evaluate increased knowledge, skills and attitude of interpersonal communication in a test condition. Data were collected in the form of pre and post intervention OSCE scores and analyzed using Student’s paired ‘t’ test, one-way ANOVA test and percentage increase in the mean of OSCE scores.

**3. Observations**

A quasi-experimental was carried out in the department of surgery, Rural Medical College, Loni from February 2014 to January 2015. Intervention was done with training module on interpersonal communication. Pre and post intervention OSCE were carried out.

**Table No.1: Comparison of mean and SD of scores at pre and post intervention OSCE for 30 participants under the study**

Activities	Pre test	Post test	Student’s Paired ‘t’ test value	‘p’ value	Significance
	Mean ± SD	Mean ± SD			
S1	2.1±0.7	4.03±0.60	2.80	p<0.01	highly significant
S2	2.27±0.77	3.84±0.78	2.71	p<0.01	highly significant
S3	1.8±1.04	4.17±0.63	11.88	p<0.01	highly significant
S4	2.27±0.89	3.84±0.73	2.71	p<0.01	highly significant
S5	1.47±1.14	4.13±0.62	12.86	p<0.01	highly significant
S6	1.94±1.06	4.27±0.67	9.97	p<0.01	highly significant
S7	1.57±0.95	4.44±0.61	11.47	p<0.01	highly significant
S8	1.64±0.94	3.90±0.65	10.01	p<0.01	highly significant
S9	1.77±1.92	3.93±0.82	9.88	p<0.01	highly significant
<b>TOTAL</b>	<b>1.87±0.44</b>	<b>4.06±0.27</b>	<b>23.29</b>	p<0.01	highly significant

S1....9 denotes OSCE stations

By applying Student’s Paired ‘t’ test, there is a highly significant increase in scores in post intervention OSCE [as compared to pre intervention]

at all stations in 30 students under study (p<0.01) [Table No. 1].

**Table No. 2: One –Way ANOVA test**

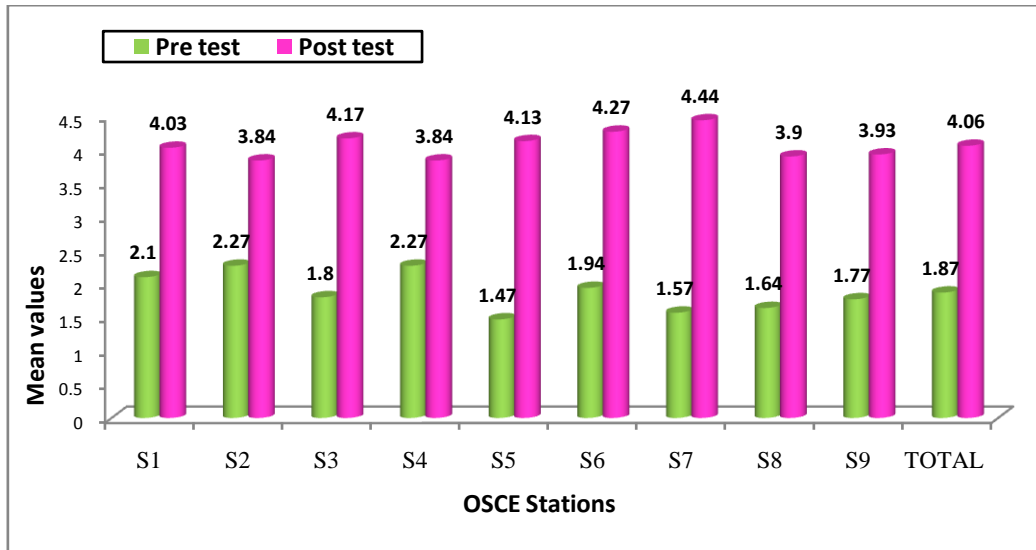
Source of variation	Degrees of freedom (d. f.)	Sum of squares	Mean square
Treatments (between columns)	29	57.333	2.293
Residuals (within columns)	240	289.76	1.393
<b>Total</b>	<b>264</b>	<b>347.11</b>	

Value of F = 2.646, p=0.0322, significant

By applying One –Way ANOVA test for repeated measures the variation among column means are significantly greater than expected than chance and by applying Tukey-Kramer multiple

comparison test, there is a significant difference between mean values of scores from pre to post intervention OSCE (S1 to S9) when compared together [Table No. 2].

**Figure No. 1: Comparison of mean values of scores at pre and post intervention OSCE for 30 participants under the study**

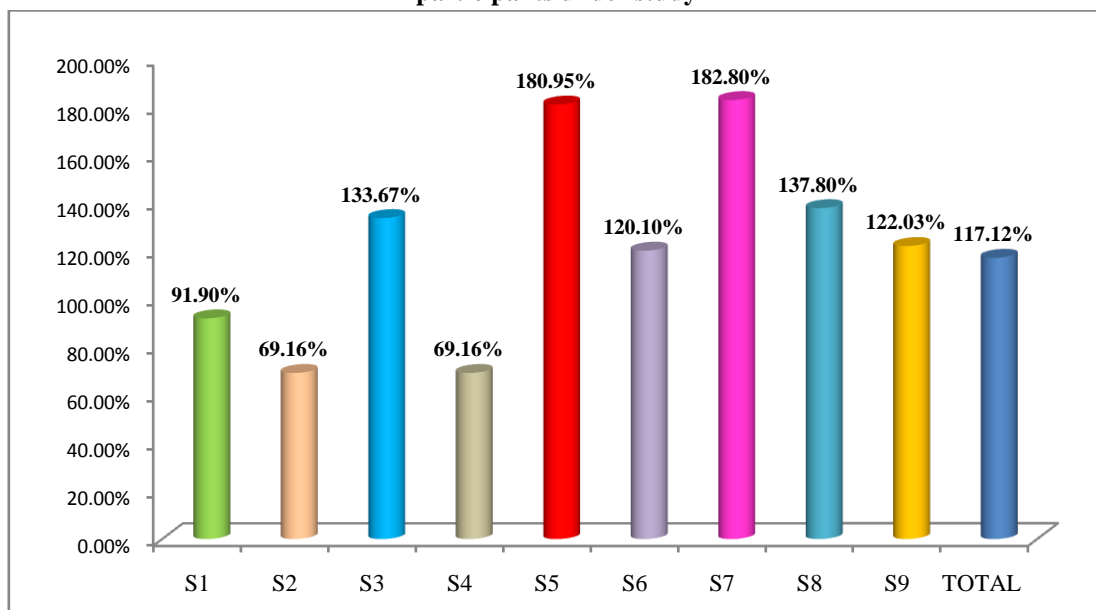


**Table No. 3: Percentage increase of mean values of OSCE scores from pre to post intervention for 30 participants**

OSCE Stations	Percentage increase (%) in OSCE scores from pre to post intervention
S1	91.90%
S2	69.16%
S3	133.67%
S4	69.16%
S5	180.95%
S6	120.10%
S7	182.80%
S8	137.8%
S9	122.03%
TOTAL	117.12%

Significant increase in percentage scores from pre to post intervention OSCE for 30 participants under the study [Table No. 3].

**Figure No. 2: Percentage increase of mean values of OSCE scores from pre to post intervention for 30 participants under study**



#### 4. Discussion

Communication skills are broadly divided in two categories viz. communication and interpersonal relationship. Proper communication is one of the prerequisites of good doctor patient relationship and satisfactory patient care. Communication skills are part of psychomotor domain e.g. eliciting history, taking consent, counselling, giving bad news etc.[1,2] While, interpersonal relationship skills are mostly part of affective domain and relates to behavioural aspects. Till now, there is lack of formal training of interpersonal communication in the present medical curriculum.

Interpersonal communication [IPC] is an important component of good doctor patient relationship. Interpersonal communication is mostly attitudinal. It is inherently relational and process oriented.[3] Interpersonal skills focus on the effect of communication on another person. This competency has been described as “humanistic qualities” by the American Board of Internal Medicine (ABIM).[4] Interpersonal skills build on basic communication skills, which alone are insufficient to create and sustain a therapeutic relationship. IPC includes paying attention to the patient by doctors using verbal, non-verbal and intuitive communication channels.[5] It means having a caring intent, not only to relieve suffering but also to be curious and interested in the patient’s ideas, values, and concern.[6]

IPC is further divide in three types viz. overall socio-emotional communication, problem solving skills and counselling information and education communication. Overall socio-emotional communication includes Nine behaviours reinforce ways to make people feel comfortable during medical visits, welcome patient in a warm and culturally acceptable manner, use appropriate verbal and non-verbal communication (gestures, attitude, words), inquire about the patient’s feelings, acknowledge the patient’s initiative (to have come), enhance legitimizing (Reinforce feelings that are normal), show empathy, echo the patient’s emotions by encouraging him or her to express feelings freely (Paraphrase what patient says). Problem solving skills means systematic use of data gathering skills necessary for determining diagnosis. Seven behaviours include; Listen attentively (actively), encourage dialogue by asking open-ended questions, avoid interruptions, avoid premature diagnosis (Determine the problem only after all facts have been gathered), resist immediate follow up by listening carefully before making clinical decisions, Probe (explore) for more information, inquire into causes, difficulties and worries related to the problem.

Counselling and information education communication includes ten ways to explain health issues, treatment and decisions taken. Check the patient’s understanding of illness, correct misunderstandings about facts, use appropriate vocabulary, present (explain) what the patient needs to know or do in a logical way (in blocks), correct misconceptions, discuss and prescribe concrete behavioural changes that are appropriate for the patient, repeat, summarize key information, motivate the patient to follow the recommended treatment, check on acceptability/mutuality of decision making (if patient will follow the treatment), make sure patient knows when to return for a follow-up visit, ask patient if there is anything else he or she would like to know.

Communication failure within health care teams can cause mistakes and threaten patient safety. Communication and interpersonal competence within health care teams usually is learned through a hidden curriculum of on-the-job training, or not at all.[7, 8]

In the present study, efforts were made to understand gaps in the knowledge, skills and attitude of intern doctors about interpersonal communication. Objective structured clinical examination [OSCE] was used as an assessment tool. Evaluation showed deep gap in the knowledge, skills and attitude about IPC amongst participants. Intervention with IPC training module improved knowledge, skills and attitude of IPC amongst participants [p<0.01].

Literature review was done to find out effects of interpersonal communication on doctor patient relationship. In the study by Rotor *et al*, doctors trained in communication skills used more facilitators in their visits and more open-ended questions than other doctors.[9] Ross and Duff showed that positive experiences with the interpersonal, psychosocial aspects of the doctor-client interaction increase a client’s non-proclivity to return to the doctor, while negative doctor- client interactions decrease the probability of returning to the doctor.[10] Razavi *et al* found out that many health care professionals lack the psychosocial knowledge and communications skills needed to identify patients’ problems because general professional training focuses on technical care. Teaching strategies known as psychological training programs (PTP) are being developed to help improve health care professionals’ sensitivity to communication problems with patients and relatives. Cognitive (e.g., theoretical information), experiential (e.g., case history discussions), behavioral (e.g., role-playing exercise), and supportive (e.g., stressor identification) training techniques are used to teach the essential skills of good communication

(Listening, empathy, response to cues, and appropriate use of reassurance). [11]

According to Novack, physicians' personal characteristics, their past experiences, values, attitudes, and biases can have important effects on communication with patients; being aware of these characteristics can enhance communication. Because medical training and continuing education programs rarely undertake an organized approach to promoting personal awareness, need of a "curriculum" of four core topics e.g. physicians' beliefs and attitudes, physicians' feelings and emotional responses in patient care, challenging clinical situations, and physician self-care.[12] Henbest stated that patient-centeredness was found to be associated with the doctor having ascertained the patient's reasons for coming and with the resolution of the patient's concerns.[13] In the study conducted by Evans, trained students showed significantly improved consultation skills and techniques compared with a group of control students who displayed few changes in behaviour over the course of the study.[14] Dimettio showed that physician-patient relationship based on open information exchange, mutual respect, collaboration, negotiation, and the resolution of conflict can be expected to foster more satisfying and effective interchange, more positive health care outcomes, and a higher quality of health care for patients.[15]

Increased knowledge, skills and attitude of interpersonal communication should boost the confidence of participants and contribute to strong doctor patient relationship.

## 5. Conclusion

Interpersonal communication training module is a useful tool to develop interpersonal relationship skills amongst intern doctors.

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