

Development Of Competency In Communication Skills In Third Year MBBS Students Based On AETCOM Module: A Pilot Study

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Abstract: Background: Good communications skills should be taught and practiced in medical curriculum to increase clinical competence. Objectives: To conduct and analyse Faculty Development Program (FDP) on communication skills and teach basic communication skills undergraduate students using modified AETCOM Module and assess improvement these skills. Material and Methods: An interventional study was carried out for 6months period. Twenty faculties including interns were trained followed by training of sixty 6th semester students during community medicine clinical posting at GMERS Medical College, Dharpur, Patan through consecutive sampling. A modified version of AETCOM (video clips) was used. Assessment was done using Pre-post-test structured SAQs for faculty and Pre-post-test structured SAQs, OSCE (Kalamazoo and SPIKES) and Reflections for students. Feedback was obtained from students, faculty and simulated patients. Statistical Analysis: Microsoft excel, Primer software were used. Paired-t test was used for before and after comparison. Thematic analysis of reflections was done. Results: There was significant improvement in communication skills of students with respect to Structured SAQs (Mean Diff=-30.83, t=18.88, p=0.001, df=33); OSCE for basic communication skills (Mean Diff=-3.44, t=6.380, t=6.380, p=0.002, df=33); OSCE for spikes (Mean Diff=-16.18, t=8.190, p=0.001, df=33). A positive feedback was obtained from majority (>80%) of students, faculty and simulated patients. Themes extracted from reflections were based on empathy, respect for doctors, violence, SPIKES, trust and competency. Conclusion: AETCOM module was effective and perceived well by all stakeholders. Its implementation would make a big impact. [Sharma Parul Natl J Integr Res Med, 2020; 11(1):35-40]

Key Words: Modified AETCOM, communication skills.

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Introduction: Effectual communication is the foundation stone of patient-based medicine and empathic behaviour, leading to a rich patient-physician relationship. It contributes to better patient compliance and improved patient outcomes and satisfaction, thus increasing the overall quality of health care systems.¹⁻⁴ Another effect frequently described in the literature is a decrease in patients' distress and susceptibility to symptoms of depression or anxiety.³⁻⁵

If knowledge of medicine, surgical skill, and clinical insight is the expertise of medical practice, the communications skills are the fine arts! Professionalism, which is a vital part of good medical practice, also demands effective communication skills along with knowledge, competence and ethics 5-7 Association of American Medical Colleges Cincinnati, expert panel identified seven components that are fundamental to the clinician and patient relationship: These are – build the relationship, open the discussion, gather information, understand the patient's perspective, share information, reach agreement on problems and plans, provide closure.^{5,7} Evidence shows that medical students are attentive, motivated and avidly develop clinical communication skills (CCS)

in conjunction with other medical skills.⁸⁻¹⁰ Poor communication has been the main reason for increasing violence against doctors in India.^{11,12}

Doctors are taught clinical behaviour as per the Traditional Medical curriculum but are not taught empathy inspite of the fact that in clinical practice, effective patient-doctor communication involving receiving an explanation for the occurrence of the symptom/sign, likely duration of treatment and empathy are associated with overall patient satisfaction with the services.^{13,14}

Many studies have pointed out the perceived need of such skills to become a competent doctor. Majority of the students agree that communication skills training is important and needed and acknowledge the importance of these skills.¹⁵ The Medical educators strongly feel that communication skills training is a missing link in the medical education curriculum.^{16,17}

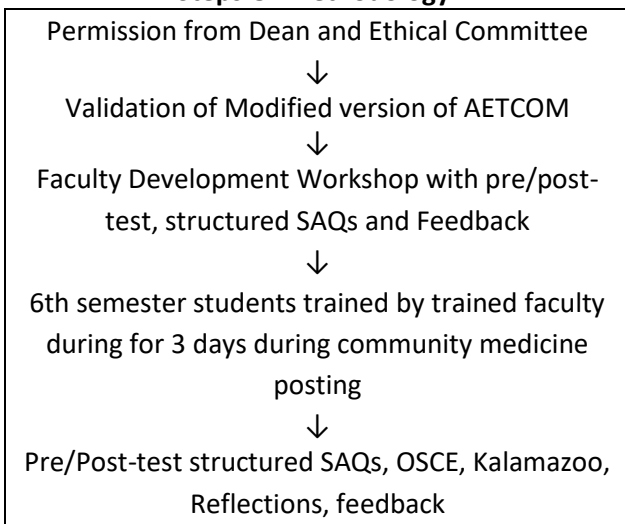
The Medical Council of India (MCI) has designed the Attitude, Ethics, and Communication module (AETCOM) module so as to integrate ethics, attitudes and professionalism in all phases of learning as a key curricular change to facilitate the Indian medical graduate to function

professionally.^{18,19} The module has been currently implemented in all medical colleges throughout India .This study aims at doing a pilot study on development of competency in communication skills in third year MBBS Students based on AETCOM Module and measuring any improvement in their skills.

Objectives: To conduct and analyse Faculty Development Program (FDP) on communication skills.To teach basic communication skills to sixth semester undergraduate students using modified AETCOM Module.To assess improvement in communication skills.To obtain feedback from students, faculty and simulated patients.

Material And Methods: Interventional study Study participants: All sixth semester MBBS Students attending community medicine posting during the study period. Sampling Technique: consecutive sampling Study Period: six months Study Tool: Modified version of AETCOM, interactive lectures, role plays, small group discussions. Assessment tool: Structured SAQs, two OSCE stations based on Kalamazoo checklist for “Basic communication skills” and SPIKES for “Breaking the bad news”, Reflections according to the Modified AETCOM module developed.

Steps Of Methodology:



Result: Knowledge (K) Domain: Pre and Post-test Structured SAQs for both the faculty (95% CI for difference: -28.18 to -23.72; paired t=-24.325 with 19 degree of freedom; P=0.000) and students (95% CI for difference: -34.16 to -27.5; paired t =-18.884 with 33 degree of freedom, P=0.000) showed a remarkable improvement in their knowledge (Table 1).

Reaction: Majority (>80%) of the faculty agreed that the sessions were adequate in terms of content, Design and Delivery but approximately 80% believed that the difficulty level was high. (Graph 1)

More than 80% students felt that the delivery and design of the sessions were adequate. (Graph 2) Almost all the simulated patients (n=6) were satisfied with the way they were communicated about the disease with full passion and personal connect (Graph 3).

Affective (AETCOM) Domain: A remarkable improvement in the communication skills of the students was seen in pre and post-test OSCE using Kalamazoo checklist 95% CI for difference:-20.19 to -12.16 ;paired t=-8.190 with 33 degree of freedom; P=0.000) and SPIKES scale (95% CI for difference:-4.538 to -2.344 ;paired t=-6.380 with 33 degree of freedom; P=0.000) for "Basic Communication Skills" and "Breaking the bad news respectively"(Table 1)

Reflections(N=60): The themes that were brought out were Effective Communications (Empathy 73%, Respect 67%), Doctor Patient Relationship (Trust 60%, Competency63%) and Breaking Bad news (violence issue 70%, Spike Model 63%).

Many students quoted "Sessions should be introduced early in curriculum", some said "Disclosure of bad news requires utmost empathy", "Helps to understand patient better" while others said "It is a vital skill which should not be overlooked," It helps us to deal with patients more effectively."(Table 2)

Table: 1 Assessment Of Students And Faculties

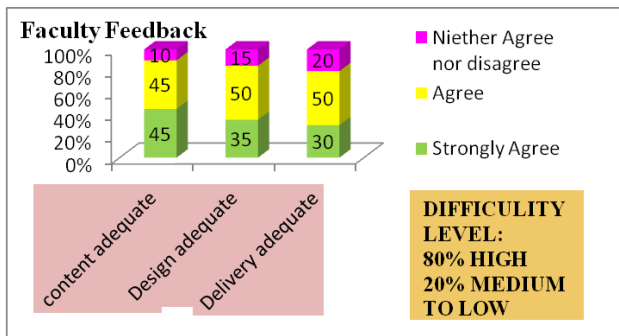
Student: Structured SAQs (N=60) - K domain			
	Pre-test	Post Test	Difference
Mean	2.88	2.536	-30.83
Std	33.66	9.681	9.235
SEM	0.4482	1.711	1.633
95% CI for difference: -34.16 to -27.5; paired t =-18.884 with 33 degree of freedom, P=0.000			
Student: SPIKES (N=60) - AETCOM			
	Pre-test	Post Test	Difference
Mean	7.176	10.62	-3.441
Std	3.512	3.085	3.145
SEM	0.6022	0.529	0.5393
95% CI for difference: -4.538 to -2.344; paired t=-6.380 with 33 degree of freedom; P=0.000			

Student: KALAMAZOO (N=60) - AETCOM			
	Pre-test	Post-Test	Difference
Mean	14.35	30.53	-16.18
Std	6.129	8.265	11.52
SEM	1.051	1.418	1.975
95% CI for difference: -20.19 to -12.16; paired t=-8.190 with 33 degree of freedom; P=0.000			
Faculty: Structured SAQs (N=20) – K domain			
	Pre-test	Post-Test	Difference
Mean	11.18	37.12	-25.95
Std	3.113	3.124	4.771
SEM	0.6961	0.6986	1.067
95% CI for difference: -28.18 to -23.72; paired t=-24.325 with 19 degree of freedom; P=0.000			

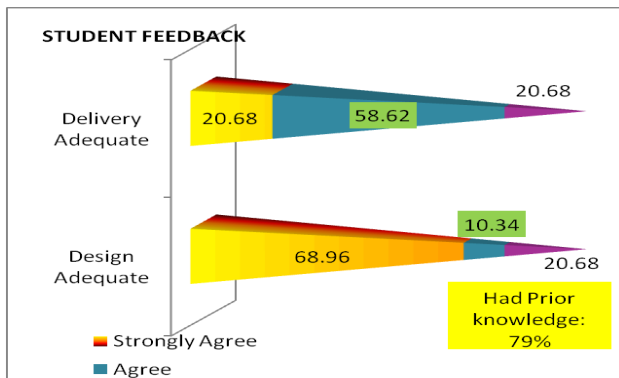
Table 2: Them Based Analysis Of Reflections By Students On The Module

Theme-1: Basic of effective communication	Theme-2: Doctor patient relationship	Theme-2: Breaking bad news
1 Empathy- 22 (73%)	1 Trust- 18 (60%)	1 Violence issue- 21(70%)
2 Mutual Respect- 20 (67%)	2 Physician’s Competency- 19 (63%)	2 Spike model- 19 (63%)

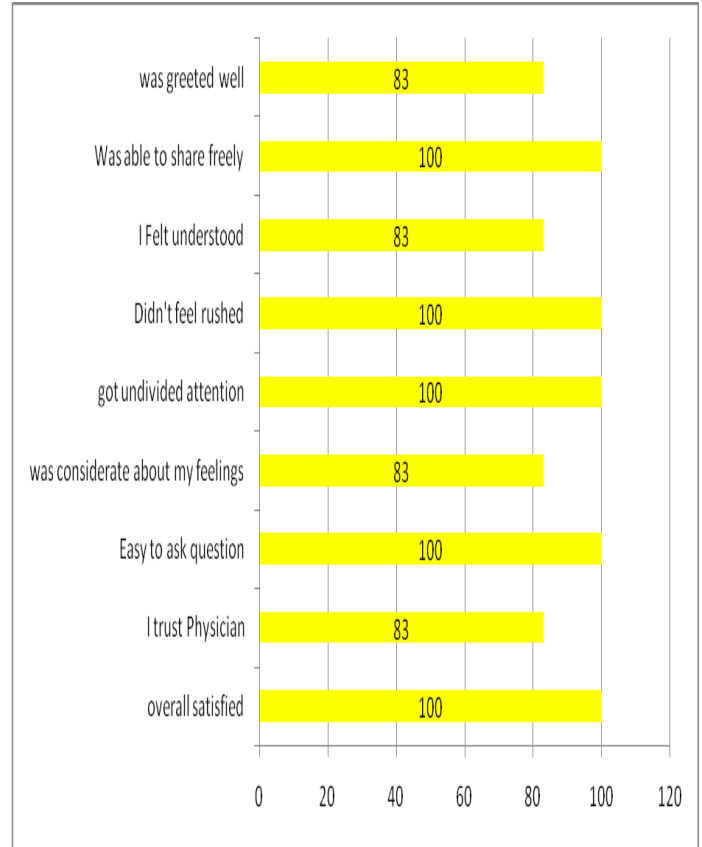
Graph- 1: Reaction Of The Faculties For The Module



Graph- 2: Reaction Of The Students For The Module



Graph- 3: Reaction Of The Simulated Patient For The Module



Discussion: Capacity Building: New competency-based assessment module for undergraduate medical education training program, 2019 by medical council of India mentions about capacity building 20. Capacity building emphasises on utilization of faculty’s full potential for student’s learning. In this process faculty development program can play a significant role. The module also recommends to take students into the loop and in the process.

Present study is conducted in a medical college situated in remote area near Dharpur, Gujarat. The college has staff crunch to an extent. In view of this situation, along with recommendation of new competency-based assessment module, capacity building is tired. Twenty faculty including fourteen interns were trained and then used as facilitator.

In the present study a remarkable improvement in the communication skills of the students was seen in pre and post-test OSCE using Kalamazoo checklist 95% CI for difference:-20.19 to -12.16 ;paired t=-8.190 with 33 degree of freedom; P=0.000) and SPIKES scale (95% CI for difference:-4.538 to -2.344 ;paired t=-6.380 with 33 degree of freedom; P=0.000) for "Basic Communication

Skills" and "Breaking the bad news respectively". Similar results were obtained by Yedidia et al.

while studying Effect of communications training on medical student performance and found that teaching communications skills using an established educational model significantly improved third-year students' overall communications competence, as well as their skills in relationship building, time management with increased clinical competence²¹.

In yet another study done by Joekes et al., students received a curriculum based on communication skills training integrated into a "professional development" vertical module, and found that students receiving the professional development training showed significant improvements in certain communication skills and achieved higher ratings for use of silence, not interrupting the patient, and keeping the discussion relevant, compared to students receiving the traditional curriculum²². We noticed a similar improvement in the use of verbal and nonverbal communication skills by our students after the training.

Deveugele et al. in their efforts to teach communication skills to medical students used various methods like group discussions in small groups (10–15 students), with focus on role playing with colleagues and simulated patients and showing videotapes of real consultations etc., observed a positive effect in the communication skills of students²³. Karlberg and Lindgren incorporated a continuous and structured training in communication skills during the early phase of medical studies. As a result of these programs, they noticed significantly higher satisfaction in medical encounters among patients. In our study too almost all the simulated patients were satisfied with the way they were communicated about the disease with full passion and personal connect.

This study also highlights that including patient-oriented communication skill teaching improves the competency of medical students, increases patient satisfaction and clinical outcome. These results agree with our findings²⁴. These skills can be imparted to medical students by the faculty and can be practiced to increase competency, a robust doctor-patient relationship and positive health outcomes²⁵.

We noticed that our findings were in agreement with earlier studies done by He studied students and compared the attitudes in first- and fourth-year students towards learning these skills and found that that fourth-year medical students have significantly higher confidence scores about communicating with patients²⁶.

In a study by Isabel Taveira-Gomes et al. on Communication skills in medical students majority perceived these skills as "Is important" (68%), "Affects Doctor's efficacy/competence" (67%), "Affects professional satisfaction" (65%). Similarly in our study majority of the students reflected that "Sessions should be introduced early in curriculum", some said "Disclosure of bad news requires utmost empathy", "Helps to understand patient better" while others said "It is a vital skill which should not be overlooked"²⁷.

Conclusion: The present study highlights statistically significant improvement in communication skills highlighted. It also brings into focus that Interns and Health workers can also be trained to impart these skills effectively to the students in remote Medical Colleges which face the problem of paucity of resources in terms of manpower.

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doctor-patient relationships and enhance health outcomes.

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