

VIEWS AND FEELINGS OF RURAL PATIENTS ABOUT THEIR CLINICAL INTERACTION WITH MEDICAL STUDENTS OF REHMAN MEDICAL COLLEGE, PESHAWAR, PAKISTAN

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ABSTRACT

Introduction: The training of medical students involves incremental interaction with patients in both hospital and community environments, some aspects of which may not be acceptable to patients, especially females of rural communities. The present study was undertaken to identify issues related to such interaction in a rural outreach program of Rehman Medical College, Peshawar.

Materials & Methods: The cross sectional descriptive study was undertaken in April 2015 during the community outreach program of final year MBBS students of Rehman Medical College deployed in Nahaqi Emergency Satellite Hospital (NESH) of Charsadda, Khyber Pakhtunkhwa. Patients of both genders visiting the Out Patient Department (OPD) were interviewed through convenience sampling, based on a semi-structured questionnaire containing open and closed ended questions in the local language (Pashto) after obtaining informed consent. Data were analyzed by SPSS 15.0 for descriptive statistics; the Chi Square test was used to detect significant differences of frequencies between groups, keeping $p \leq 0.05$ as significant.

Results: A total of 108 patients were sampled; the majority of patients interviewed were females (74, 68.5%); most subjects (59, 54.6%) were in the age group of 21-40 years (range 15-75 years) and of unsatisfactory socio-economic status (75/106, 70.8%). Patients expressed very positive views regarding observation and examination by medical students (80-85%); moreover they agreed that such interactions were useful for learning by students (95-99%) and should be encouraged (80-85%). Regarding their feelings, most (61-77%) were comfortable being interviewed and examined by medical students; the gender of the student did not matter for 56.3%, but 48-58% felt uncomfortable if relatives were present during their clinical interaction due to reasons of privacy. Significant differences were obtained in gender responses to consent for being observed by medical students ($p=0.018$); students should routinely observe ($p=0.016$), and examine (0.015) patients; gender of students matters to them (0.044); and that students learn by examining patients (0.040).

Conclusion: Patients from a backward rural area of Khyber Pakhtunkhwa province had very positive and encouraging views and feelings about being observed and examined by medical students of Rehman Medical College, despite some reservations by female patients preferring examining students of their own gender.

Key Words: Physical Examination; Students, Medical; Community-Institutional Relations; Physician-Patient Relations.

The authors declared no conflict of interest. All authors contributed substantially to the planning of research (SA, IQ), data collection (SA, SI), data analysis (IQ) and write-up of the article (SA, IQ), and agreed to be accountable for all aspects of the work.

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INTRODUCTION

Much emphasis has been laid by the world health forums to shift the focus of traditional medical educational programs towards community based learning, as reflected in a recent WHO report

titled, "The Teaching of Medicine in Pakistan and the Emerging Role for Community Oriented Medical Education: The need for broader Partnership".¹ The rationale behind community

based learning is that with the basic health care facilities being gradually shifted away from tertiary care to primary health care centers, as a result of government and professional policies, the hospitals are becoming more of specialized centers for very ill patients and hence cannot provide a satisfactory basic medical education that is required by medical students.² Pakistan Medical and Dental Council, in an official order released on 27th November 2014, declared Family Medicine as a compulsory subject for final year MBBS.³ Family Medicine is a community based discipline and so the trend is toward an imminent rise in community based medical education in Pakistan. In order for this learning to be the most effective, there is a dire need of positive contribution by the three main participants involved in community based teaching i.e. consultants, students and the community patients.⁴ A continuing support is needed from the community patients in order for this type of learning to be more successful which in a positive vicious cycle will lead to the provision of better health care to the community in the form of better family physicians. Much is known about the perceptions of consultants and students who find community based learning to be much more effective than the usual models of learning. Students find it useful for improving their communication skills as well as learning about various psychosocial issues prevalent in the community.⁵ Until recently patients merely served as a passive tool in student's learning. For quite some time educators have been suggesting ways to improvise the knowledge and skills of undergraduate students, and Tomorrow's Doctors in 2009⁶ suggested that patient should be made the heart of learning with both students and patients working together in a partnership. This continuing and close contact between the students and patients will act as a motivating tool for the students by which they can get real life stories and demonstrate clinical signs to

enhance learning about cases in their proper social and professional context.

Various researches conducted worldwide to determine the perception of patients towards medical students show that overall the patients feel positive about their interactions with the students.^{7,8,9,11} One major reason behind their satisfaction and positive attitude seen was altruism i.e. patients feel good because they think they're paying back to the society by playing an active role in educating the students.⁹ One of the studies conducted in Islamabad on admitted patients showed religion to be another major reason.¹⁰ However a minority of patients in these researches have also expressed their dissatisfaction due to the inexperience of medical students.¹¹ Educators are of the view that by effective communications skills and by learning the art of displaying an understanding and empathetic behavior, a long lasting partnership between the students and patients can develop.¹²

In Pakistan very few researches have been conducted to know the patients' point of view about being involved in medical education. Majority of the population in our rural communities come from a poor socioeconomic background and have a low literacy rate. The current study can help us get the patients' perceptions about their interaction with medical students and also whether or not they have the desire of paying back to the society as seen among patients worldwide.

MATERIALS & METHODS

This study was carried out in April 2015 in Rehman Medical College (RMC), Peshawar and Nahaqi Emergency Satellite Hospital (NESH), Charsadda, a rural community hospital near Peshawar, selected as a teaching facility for RMC students since August 2014. The final year MBBS community outreach program included 04 weeks rotation per student in NESH,

allowing them to comprehend the special needs of patient care in a backward rural setting.

The patients visiting Out Patient Department (OPD) of seven practices i.e. Medicine, Surgery, Orthopedics, Pediatrics, Gynecology / Obstetrics, ENT and Eye were recruited for the study by convenience sampling. Only those willing to participate in the study after giving informed consent were included. The included patients belonged to both genders and were between the ages of 15 to 75 years.

Data were collected after approval of the study from the Rehman Medical Institute (RMI) Ethical Review Committee (REC), in April 2015 through a semi-structured interviewer-based questionnaire, designed indigenously for recording patients' views and feelings on community based teaching of undergraduate medical students. The questionnaire had both open and closed ended questions and was

administered after taking informed consent. The questions related to basic demographic data and 20 specific questions, of which 13 were about patients' views and 07 about their feelings. Medium of communication for the interviews was mainly Pashto (local language), which was translated to English for filling out the questionnaires.

Data were analyzed by SPSS version 15.0 for descriptive statistics. The Chi Square test was used for comparing differences of frequencies, taking $p \leq 0.05$ as significant.

RESULTS

A total of 108 subjects were included in the study. Demographic data of subjects are displayed in Table 1, which shows that the majority of subjects were females (68.5%); most subjects (54.6%) were between the ages of 21-40 years and 70.8% were of unsatisfactory socio-economic status.

Table 1: Demographic data of subjects (n=108).

#	Demographic variables	f (%)
1.	Gender	
	Male	34 (31.5)
	Female	74 (68.5)
2.	Age groups (years)	
	10-20	19 (17.6)
	21-30	38 (35.2)
	31-40	21 (19.4)
	41-50	16 (14.8)
	51-60	12 (11.1)
3.	Socio-economic status (n=106)	
	Satisfactory	31 (29.2)
	Unsatisfactory	75 (70.8)

Table 2 provides data about the views of patients regarding their examination by medical students. Most patients expressed positive views about being observed (84.9%) and examined (80.2%) by medical students. The number of medical students examining patients did not matter to 76.7% of patients; moreover 95.7% agreed that medical students

would learn better by doing their own observation of patients, and 98.9% agreed that students would learn better by examining patients themselves. Patients also expressed the views that they would like students to observe patients in routine (85.1%) and to examine them (80.6%) as well.

Table 2: Patients' views about being examined by medical students.

#	Questions about Views	Yes	No
		f (%)	f (%)
1.	Give consent to doctor for being observed by medical students? (n=106)	90 (84.9)	16 (15.1)
2.	Give consent for being examined by medical students? (n=106)	85 (80.2)	21 (19.8)
3.	Does the number of medical students observing / examining you matter? (n=103)	24 (23.3)	79 (76.7)
4.	Do you agree that medical students would learn by observation? (n=94)	90 (95.7)	04 (04.3)
5.	Do you agree that medical students would learn by examination? (n=93)	92 (98.9)	01 (01.1)
6.	Would you like medical students to routinely observe patients? (n=101)	86 (85.1)	15 (14.9)
7.	Would you like medical students to routinely examine patients? (n=103)	83 (80.6)	20 (19.4)

The feelings of patients about being examined by medical students are given in Table 3. Once again, most patients were positive about being observed (77.4%) and examined (61.1%) by medical students; moreover 70.8% remained neutral about any change of feelings when

examined by students. Whereas the gender of examining student did not matter to 56.3% of patients, most felt negatively about the presence of a relative during observation (58.0%) and examination (48.5%) by students, for reasons of privacy.

Table 3: Patients' feelings about being examined by medical students.

#	Questions about feelings	Positive	Negative	Neutral
		f (%)	f (%)	f (%)
1.	How would you feel about history taking by medical student? (n=106)	82 (77.4)	06 (5.7)	18 (16.9)
2.	How did you or would you feel if ever examined by a doctor in presence of medical students?	76 (70.4)	21 (19.4)	11 (10.2)
3.	Did your feelings change when the students did the examination? (n=72)	17 (23.6)	04 (05.6)	51 (70.8)
4.	How do you or would you feel when examined by a medical student?	66 (61.1)	25 (23.2)	17 (15.7)
5.	Does the gender of a medical student matter to you? (n=103)	45 (43.7)	58 (56.3)	- (-)
6.	How would you feel if a relative was beside you during history taking by a medical student? (n=100)	18 (18.0)	58 (58.0)	24 (24.0)
7.	How would you feel if a relative was beside you during examination by a medical student? (n=103)	32 (31.1)	50 (48.5)	21 (20.4)

Data analyzed for gender-based differences in views and feeling about observation and examination by medical students gave significant differences as listed in Table 4. Almost all males (97.1%) agreed to giving consent to the consultant physician for being observed by students during the examination, compared to 69.6% females ($p=0.018$).

Similarly more males than females said that the consultant doctor had discussed their findings with accompanying students ($p=0.022$)

and that they had themselves taken part in the discussions ($p=0.001$). However all females (100%) agreed that students would learn by doing patient examinations themselves compared to 97% males ($p=0.040$). Females were more reluctant than males to allow medical students to observe ($p=0.016$) and examine ($p=0.015$) patients in routine, and the gender of examining student mattered more to females than males ($p=0.044$).

Table 4: Significant differences in patients' views and feelings based on gender.

#	Questions	Males (n=34)		Females (n=64)		p value
		Yes f (%)	No f (%)	Yes f (%)	No f (%)	
1.	Give consent to doctor for being observed by medical students? (n=106)	33(97.1)	01 (02.9)	57 (69.6)	15 (15.1)	0.018
2.	Did the doctor explain or discuss the findings with the students? (n=91)	22 (81.5)	05 (18.5)	38 (56.3)	26 (43.8)	0.022
3.	Did you take part in discussion? (n=90)	16 (61.5)	10 (38.5)	16 (25.0)	48 (75.0)	0.001
4.	Agree that students would learn by examination? (n=93)	32 (97.0)	01 (3.0)	60 (100)	- (-)	0.040
5.	Would you like the students to routinely observe the patients? (n=100)	33 (97.1)	01 (02.9)	53 (79.0)	14 (21.0)	0.016
6.	Would you like the students to routinely examine the patients? (n=103)	32 (94.1)	02 (05.9)	51 (74.0)	18 (26.0)	0.015
7.	Does gender of medical students matter to you? (n=102)	11 (34.4)	21 (65.6)	43 (61.4)	27 (38.6)	0.044

DISCUSSION

The present study, conducted on the uncommon but important topic of patients' views and feelings about the presence of medical students during their examination by physicians, or being examined by the students themselves, provided valuable insights into patients' thinking regarding medical examination. The study, being based in a rural setting of Charsadda, Khyber Pakhtunkhwa gave fairly unexpected findings that would be considered contrary to popular

concepts about the backward rural areas of Pakistan.

Data are more representative of rural females as they comprise about 69% of subjects (Table 1), most (about 55%) of whom were between the ages of 21-40 years; almost 71% of the study population belonged to lower socio-economic class.

Overall the patients' views are positive regarding presence of medical students

during clinical encounters with doctors as well as for history taking and examination by the students themselves (Table 2). Positive responses were seen in the consent for, and actual presence of students for observation (nearly 85%).

A study from Sri Lanka (2012),¹² very similar to the present study, conducted on 85 patients (81.3% females) mentions that 88.6% respondents said that they benefitted from interaction with medical students, and 93.8% said they thought students understood their problems.

In another study from Sudan (2014)¹³ on 432 responding patients, 95.2% approved the presence of medical students during medical consultation.

These findings compare favorably with a study from Damascus (2012)⁷ on 400 interviewed patients, where 67.8% patients approved the presence of medical students during medical consultation; 58.2% of them felt comfortable in the presence of students, most of whom were patients of higher socio-economic status.

Consent by patients to be examined by students themselves (without supervisor or doctor) in the present study was high (80%, Table 2); this figure is much higher than those quoted by other regional studies. In the Damascus study,⁷ 81.5% of patients agreed to clinical examination by students while a supervisor was present, while 40.2% agreed to it even if supervisor was absent. The factor most important for patients' reluctance to examination by students was privacy, which was offset by the relative safety and comfort of the availability of a supervisor. In the Sudanese study, 79.8% patients agreed to be examined by students while a doctor was present, while 33.5% agreed even if a doctor was not present.

In response to inquiry regarding the students learning by observation and examination the respondents were strongly in favor (>95%). Response regarding the number of students present was also in favor of students' presence (76%). The study from Sudan shows that over half of the patients thought it was important that students examine patients for their training while 18% were not sure about such importance. In the Sri Lankan study,¹² it was felt that most patients felt positive about having contributed to the learning and training of medical students.

Patients' feelings regarding involvement of medical students during their visit to the consultants are also positive in most cases (Table 3). However the gender of medical students appears to be a factor in non-acceptance of students as examiners, mattering to about 44% of respondents, most of whom were females. More importantly, the presence of a relative during history taking or examination appears to be non-acceptable to most patients; this may have to do with issue of discussing private confidential matters with the examining student or exposing body parts in front of relatives. Similar observations were noted in the studies conducted in Damascus⁷ (almost 60% females preferring female students) and Sudan¹³ (74% preferred their own gender); however the study from Sri Lanka¹² showed only 26% of patients preferring their own gender. This wide disparity may be reflective of local cultures and traditions, with the middle ground finding (44%) in a backward rural area of Pakistan denoting a fairly good indicator of gender acceptance by rural females.

Gender based significant differences in males vs. females (Table 4) were noted in certain areas such as consent (97% vs. 69.6%), agreement that students learn by examination (97% vs. 100%) and patients would like the students to routinely observe them (97%

vs.79%). The question of whether genders of observing/examining students mattered to them showed a fairly sharp divide among the respondents (Males 34.4%, Females 61.4%, $p=0.044$), with more females giving importance to this issue. Here although study population being young rural females show their modernity and liberal thinking that students will learn by examination however when it involves their own selves then the response changes.

The Damascus study⁷ revealed that though 60% of females did not care for gender of examining person, one of the four hospitals (a Maternity Hospital) in the study gave similar findings, with 59.7% females preferring to be examined by medical students of their own gender. On the other hand, the study from Sudan¹³ showed that 74% of respondents (56.3% males, 43.7% females) preferred the examining person to be of the same gender

as their own, with more females opting for this choice than males. A study from Ethiopia (2013)¹⁴ on 422 patients (59.7% females) showed that the majority (about 71%) did not care about the gender of examining medical students. Similarly, data from the Sri Lanka study,¹² mostly on female respondents, also showed that only about 26% females preferred examining students to be of the same gender.

CONCLUSION

Patients from a backward rural setting of Khyber Pakhtunkhwa province of Pakistan displayed positive attitudes towards being examined by medical students, as well as encouraging them to learn clinical skills based on individual or supervised training, as part of a community outreach program. Female patients had some reservations regarding being examined by male students and preferred students of their own gender.

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