LETTERS TO THE EDITOR

IMPACT OF A WORKSHOP ON THE KNOWLEDGE AND ATTITUDES OF MEDICAL STUDENTS REGARDING HEALTH RESEARCH

Dear Sir,

Health research training is an important part of medical education.¹ In recent past, the concern about lack of research activities among medical students has increased in South Asia.¹⁻³ This apprehension has been addressed by various strategies including mandatory and elective research assignments, student sections in indexed journals, organization of students' scientific conferences, molding of medical curriculum to integrate capacity building for research and holding of workshops on different aspects of conducting research.^{2,3} However, it is important to determine the efficacy of each intervention in enhancing the interest and skills of students in health research and identify the areas necessitating development. With this background, this study was conducted among medical students of Aga Khan University, Karachi, Pakistan, to determine the impact of a workshop on research skills, as a short-term intervention, on their knowledge and attitudes about health research before and after attending a one-week duration workshop on research skills, conducted in July 2005. The workshop consisted of a series of lectures, delivered by basic health sciences and clinical investigators from Research Office and Student Research Forum. The lectures covered project identification, epidemiological study designs, experimental study designs, science and scientific methods, research ethics, designing questionnaires, research statistics, an introduction to Statistical Package of Social Sciences (SPSS), scientific Information and literature search, manuscript preparation and evidence-based medicine.

The knowledge and attitudes were assessed using a standard validated questionnaire developed by Vodopivec et al.4 For each student, the percentage of correct multiple choice answers was calculated as a representative of knowledge score. Questions regarding attitudes of students towards health research were scored on a scale of 0.0 (unfavorable attitude) to 1.0 (favorable attitude). For each individual, score of individual questions was summed and then converted into percentage to represent the attitude score. A total of 20 students registered and attended the workshop. Sixteen (80% of the sample) students attended all lectures and were included in the analysis. Informed consent was obtained from all subjects included in the study. The data was entered and analyzed using Statistical Package for Social Sciences (SPSS 13.0). Paired sample t test was used to compare the mean knowledge and attitude scores before and after the workshop. A p-value of less than 0.05 was considered as the criteria for

statistical significance.

Table I compares the knowledge and attitude scores of students before and after the workshop. Significant improvement was observed in the mean knowledge score after the workshop (67.50% vs. 82.50%; p-value 0.002). However, no change was observed in the mean attitude score after the workshop (63.75% vs. 63.75%).

Involving medical students in research since the earliest

Table I:	Impact of an intervention on the knowledge and attitudes of
	Pakistani medical students regarding health research

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	Pre-Workshop%	PostWorkshop%	p-value	
Knowledge	67.50 <u>+</u> 20.5	82.50 <u>+</u> 18.8	0.002	
Attitude	63.75 <u>+</u> 14.1	63.75 <u>+</u> 13.6	NS*	

*NS: Not significant

phase of their training in health care is vital to ensure improvement in the future research output of the developing countries like Pakistan. Research experience as a medical student has been demonstrated to be associated with postgraduate research involvement.⁵ Therefore, interventions aimed to enhance the interest and skills of medical students in health research are imperative. This study investigated the impact of a workshop on research skills, as a short-term intervention, on the knowledge and attitudes of medical students regarding health research. Significant improvement was observed in the level of knowledge of medical students at the end of workshop. However, no change was observed in the attitude of students regarding health research. This indicates that though an intensive course may help develop the understanding of research methodology and technique, yet it might not be effective in improving the attitudes, for which long-term interventions or actual involvement could be more effective. Moreover, a large-scale study needs to be conducted to confirm these finding.

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bear Sir, 'KORO' IN A 13 YEARS OLD BOY OF INTERIOR SINDH - A MISTREATED CULTURAL SYNDROME

'Koro' is a culture-bound syndrome characterized by beliefs that genitals (penis in males or vulva/nipples in females) are shrinking; they will disappear into the abdomen and cause death. Two types are recognized – epidemic and isolated. Isolated forms have been reported in context of organic disorders^{1,2} or psychiatric illness³ in culturally unrelated parts of the world. Preventive maneuvers such as tying, clamping or grasping the penis⁴ have been used by the afflicted. Herein, we report one such case:

A 13-year-old student of 9th grade presented with two-month history of restlessness, clinging behavior and crying spells. His distress generated from fear of his penis retracting into the abdomen. He was convinced that he would die. This followed punishment in new school for absence because of an untreated middle ear infection. The boy had tried to confide his father, who instead advised not to hold his penis, look at it or expose it lest it retract further. The boy soon started to refuse schooling with resulting academic decline. Father sought spiritual treatment, to no benefit. He was taken to various neuro-physicians, investigated for temporal lobe epilepsy from routine blood tests to CT scan brain, then psychiatrists tried various anxiolytics, antidepressants, antipsychotics and mood-stabilizers in combinations, while his behaviour disturbances and agitation increased.

Physical examination showed tardive movements of tongue and dehydration. A bloody discharge was visible in left ear. On mental state examination, he was tremulous, restless and hard to engage in conversation; constantly seeking reassurance of father. A language barrier present, father was used for communication. He described his mood as sad, objectively he was anxious. He was preoccupied with fear and thought of penis shrinking in his abdomen. There was no evidence of psychosis. Cognitions and insight were retained.

The anti-convulsants and anti-psychotics, he was taking, were tapered off and healthy diet was advised. Father was encouraged to spend time with the child. In two weeks, the anxiety which was probably heightened by judicious psychotropic usage had abated and depressive symptoms of low mood, weeping, hopelessness and suicidal ideation were obvious. A diagnosis of depressive episode (moderate) with Koro syndrome was made. Treatment involved education of father about the nature of illness and return to school immediately. A low dose of Dothiepen 25 mg at night was given. Symptoms subsided in further two weeks.

Various cases of Koro have been reported from Southeast Asia. In this patient, two identifiable precipitants were ongoing physical illness and adjustment to new school. Literature also shows similar pattern of onset of illness that is usually stress related.²⁻⁴ Clinical syndrome confirmed to the classical diagnostic features.^{5,6}

Various explanations have been given for Koro and currently

accepted are the psychoanalytical and sociological perspective. Psychoanalytical school of thought regards it a classic example of 'castration anxiety'.⁷ Other contemporary interpretations look to sexual tensions, indigenous to Southeast Asia, to account for the Koro phenomenon and an Asian tendency to express mental health concerns in terms of somatic problems, arguing that koro is a form of "somatization of the castration fear."⁸ For this boy, the syndrome took place around onset of puberty. The sociological theory is used to explain epidemics.

The culture beliefs of some people from rural Sindh are variably shared by Indian population due to cultural and historical linkages. Several individual cases and epidemics of Koro have been reported in India.⁹

In our set-up, with rich cultural mores and traditional heritage, such cultural syndromes with psychological implications may be very common and necessitate further research.

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