

BEHIND VEILS....ARAB WOMEN'S MEDICAL SCHOOL ENVIRONMENT

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Abstract— Educational environment is defined as everything that happens within the classroom, faculty or university. Motivated learners in supportive environments demonstrate high levels of self-efficacy and performance. The educational environment is therefore decisive in determining the success of medical education. This study recorded female student's perceptions regarding their learning environment at the newly established Jazan Women's Medical Faculty, in hope of identifying potential strengths and weakness to facilitate creating a conducive pedagogical ethos. Dundee Ready Educational Environment Measure (DREEM) was administered to 40 female medical students of 3rd year during 2011. Mean DREEM score was 91.36/ 200. The poorest scores were for Learning (19.28/ 48), Atmosphere(19.83/ 48) and Social (13.10/ 28) domains while best scores were for Teaching (22.80/ 44) and Academic(16.35/ 32) domains. Our score is lower than global DREEM scores of most medical institutions of other countries and lies within league of 'generally poor scores' of majority of contemporary Saudi med-schools despite their 'grandeur' infrastructure and 'amply blessed' logistics. This is a forewarning that several teaching-learning areas need to improve here. Knowledgeable teachers might not necessarily produce well-informed students if the learning atmosphere is not right. There are factors that go 'beyond' logistics, physical facilities and fiscal status in governing pedagogical environments. We need to probe into existing gaps in social and interpersonal domains; trim and emphasize core content and learning objectives of our curriculum and most importantly, develop our human resources with outreaching and nurturing policy models in order to ensure quality in educational standards and conductivity in environments.

Index Terms— Medical education, Environment, Teaching, Learning.

I. INTRODUCTION

The quality of educational climate in any medical school determines the success of curriculum transaction, learning outcomes and ultimately, the framing of medical students as proficient health care givers. This is exemplified by Roff's quote, "Considerations of medical school climate, along lines of continuous quality improvement and innovation, are likely to further the medical school as a learning organization with true attendant benefits"[1]. The contemporary medical education scenario of Saudi Arabia is witnessing an era of pedagogical revolution, with an up-sprouting of increased number of medical schools all over the country and a shift from traditional, didactic to integrated, problem based programs. In wake of currant Saudi educational trends with federal emphasis

on "females in higher education"; our study ascertains female student's perceptions regarding their learning environment at the newly established Jazan Women's Medical Faculty. An in-depth qualitative analysis such as this might identify potential strengths and weaknesses and aid in designing remedial measures towards establishing a conducive pedagogical ethos for our 'would be doctors'.

II. METHODS

We used a voluntary, self reported select response type structured survey instrument based on The Dundee Ready Educational Environment Measure, DREEM 1. Prior institutional ethical review board approval was taken. The questionnaire consisted of 50 items, rated on a 5 point Linkart scale, with a total score of 200 and consisting of the following subscales; Students' Perceptions of Learning (SPL) ; Students' Perceptions of Teachers (SPT) ; Students' Academic Self-Perceptions (SASP) ; Students' Perceptions of Atmosphere (SPA) ; Students' Social Self-Perceptions (SSSP). Each DREEM item was scored from 4 to 0 assigned for strongly agree, agree, uncertain, disagree and strongly disagree, respectively. Reverse scoring was used for negative items (number 25, 48, 8, 9, 39, 17, 35, 50, 4). Items with a mean score of 3 or above were taken as positive points and items with a mean score of 2 or below were taken as problem areas that needed rectification. Data was analyzed through statistical software SPSS version 17 (p value < 0.05 significant).

III. RESULTS

40 out of 45 female medical students of 3rd year took the survey. The overall mean DREEM score was 91.36 / 200. DREEM scores for the domains SPL, SPT, SASP, SPA and SSP were 19.28, 22.80, 16.35, 19.83, and 13.10 respectively. Poorest scores were for SPL, SPA ,SSSP domains while best scores were for SPT and SASP domains. (Table 1) The group scored less than 2 (poor) for 30 items and more than 3 (good) for just 2 items. (Table 2)

IV. DISCUSSION

Our Mean DREEM score of 96.57 is lower than scores of most medical institutions of India, Srilanka, Trinidad, Nepal,

Nigeria and UK (107,108, 109.9, 130, 118, and 139 respectively^{2,3}.) Published literature indicates overall mediocre median scores of around 60% or the like in most Saudi medical institutions⁴⁻⁸ (Table 3) which is a warning that some teaching-learning areas certainly need to improve here. Considering that Jazan women's medical college is relatively new; being established recently (in 2010 and just an year old at the time of this study), one might be tempted to assume that 'young' institutions are prone to such pedagogical lapses owing to 'in-experience'. However, another similar inventory at King Saud medical college of Riyadh,(which is one of the oldest medical institutions of the Kingdom), yielded similarly poor results [6]. This indicates that there are factors 'beyond' logistics, physical facilities and seniority status that govern educational environments.

A study on Iranian students [9] did not show statistically significant differences between males and females for the DREEM subscales and total scores. This is in common with some other reports [2,6,10]. But it contradicts the Argentinean study where a statistically significant difference among genders was observed; with women being generally more critical about the quality of teaching and general climate of the school. Interestingly, women were reported as being far less satisfied with their social lives in college than men [9]. Our female students were stressed, with low confidence levels and poor social and academic support systems, similar to medical undergraduates of Sri Lanka, India and Birmingham, UK [2,3]. This could be due to pressure, fatigue, apathy of an overtly busy, burdened system trying to cover 'too much in limited time'. However, we could not explore any existing differences in opinions of male students owing to lack of cooperation from male teachers regarding this inventory and the researchers plan to tackle this gap in another future research with more collaborated participation from the male faculty.

Our Teaching domain (SPT) reflected that teachers were generally viewed by students as well-informed and erudite but sarcastic and authoritarian. Such student disconnection with teachers might ring a bell considering that positive perceptions of teachers and academic atmosphere directly contributes to immersive, interactive and achievement oriented learning. The irritable, attitude of faculty prompts delving into underlying reasons; Could pressure of an elaborate "Basic with Clinical teaching framework of Today's integrated curriculum" be responsible for impatient attitudes among senior teachers? Or should the "Student –Teacher ratio" be revisited in an Era where student overload is an eminent problem. The 'learner influx' that portrays the popularity of modern medical education and its scientifically designed integrated curriculum need revisiting in terms of 'Staff sufficiency' and outlining of 'Core content' to carry on these best laid plans .

The other two poor scoring domains of our study group were learning (SPL) and atmosphere (SPA); indicating that teaching was viewed negatively by many students and the

educational environment did not adequately involve or motivate students. Students expressed social discomfort, inability to clarify doubts, cheating problems and lack of interpersonal cohesiveness. Similar lags in social support systems have characteristically plagued medical undergraduates in other studies [3,10] ;while it has been expressed as quite adequate and sustaining by fortunate others [2]. Perhaps 'scholastic overburden' coupled with 'Laissez-faire' attitudes among key stake holders attributes to inadequate interpersonal bonding patterns and 'burn-out' amongst our community of scholars. Practicable solutions to strengthen the social and emotional ethos of the institution may lie in the form of frequent interpersonal / social skills workshops.

The students in this study complained of an overemphasis on factual, teacher centered learning which corroborates the views of Iranian and Sri-Lankan students [10]. Not being able to memorize 'all they need' and being 'unclear about learning objectives' was a general problem ,which proposes a need for focused efforts in outlining core knowledge and trimming down superfluous details by course organizers. It has been documented that students in traditional medical curricula perceive learning as dogmatic and over emphasizing on 'rote memorization' leading to subsequent attrition. However, the Jazan medical curriculum is innovative, integrated and problem based and such divergence in learner behaviors needs further exploration for better understanding of student's insights. Ambiguous learning objectives and lack of explicitness in outlining core content by teachers seems the likely culprit. On a more positive note, our students agreed that course organizers were knowledgeable and came well prepared for the class. Likewise, favorable perception of teacher's competence has been observed among Saudi diploma trainees [5]. This contradictory pattern of opinions also goes on to show how 'knowledgeable teachers' might still leave behind confused students who do not know 'what to learn' from that teacher. Students were confident of their scholarly status and passing with good grades. They felt that they had gained relevant knowledge and professional empathy. This confidence boost appears to stem from growing familiarity and maturity in the medical field and has been observed among other senior year students [2,3,10].

Continuous quality improvement and pedagogical innovation are essential in any medical institution and diagnostic inventories like the DREEM act as a guiding resource for pedagogic planning and instructional innovation. This study specifically concentrated on female students; a facet that holds prime importance in the development and evaluation of modern medical curricula with current Saudi educational trends with federal emphasis on 'female' higher education.

Despite assembling advanced educational delivery facilities, especially in terms of material resources, our scores were uniformly low; which necessitates probing into underlying reasons. Merely accumulating amenities and affluent physical infrastructure is not enough to build

conductive pedagogical environments; we need to develop our human resources and policy models in order to ensure quality in educational standards. A mutually interactive, outreaching model might work better towards facilitating the process of learning and assimilation of knowledge as compared to a grandeur, yet closed box system. Remedial measures like student research projects, participatory and immersive teaching models, constructive feedback approach, personal and professional development programs or counseling sessions and nurturing environments for evolving interpersonal and social skills could develop students into independent learners, emotionally intelligent social beings, dedicated team workers and practical problem solvers. Teachers need to evolve from their 'staunch roles' as linear transmitters of knowledge into friends, mentors and guides. Clarifying core content and frequent revisiting of intended learning outcomes 'for and with' the students might avoid creating a confused mass of learners who know that their teacher is 'knowledgeable' but still don't know 'what to learn' from that teacher.

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