

Health and spirituality 'walk along' in wellness journey of medical students

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Abstract

Objective: To assess and compare knowledge, attitudes and practices of male and female medical students of Karachi in the context of physical, emotional and spiritual wellness.

Methods: The cross-sectional questionnaire-based survey was conducted from January to December 2010, comprising randomly selected 800 male/female medical students in eight medical colleges of Karachi. The responses - 'never,' 'sometimes,' 'mostly' and 'always' (numbered 0-4) - were analysed in terms of frequency, proportion and percentages by Predictive Analysis Software (PASW) version 18. Chi-square test was applied for comparison of categorical aspects of wellness, and results were declared significant at $p < 0.05$.

Results: Of the 800 questionnaires, 736 (92%) fully-completed questionnaires comprised the study universe. According to the survey, 503 (68.37%), 504 (68.45%) and 658 (89.35%) medical students were aware of the concept of physical, emotional and spiritual wellness respectively. Males had greater involvement in physical activity ($p < 0.001$), while females selected healthy diet ($p < 0.03$). The dimensions of physical and emotional wellness on an aggregate did not differ significantly in both genders, but knowledge and practices of spiritual wellness in females gave them direction to face episodes of anxiety for which males had to take help from mentors and psychologists ($p < 0.034$, $p < 0.0001$).

Conclusion: Spirituality, the key success factor in better wellness management, was found to be greater among female medical students.

Keywords: Wellness wheel, Physical wellness, Emotional wellness, Spiritual wellness, Mentors. (JPMA 63: 495; 2013)

Introduction

Wellness, peace and happiness are the messages delivered by The Creator to the human beings for the attainment of balance and harmony in life. A human being has three well-integrated essential elements; body, mind and spirit, which are held in a dynamic balance. A number of external forces acting as multidimensional nature of existence, such as family ties, socioeconomic conditions, community and cultural pressures, access to healthcare as well as attitude and behaviour towards health, either support or disrupt this dynamic balance.¹

Health is perceived as complex, multidimensional concept and not just the absence of disease.² Having good health and being well at workplace and in life are issues that affect people mentally, emotionally, physically as well as financially. The term wellness is generally used to mean a healthy balance of mind, body and spirit in an overall feeling of wellbeing, also defined as "a state of being in good health especially as an actively sought goal."³

Awareness about wellness is a self-directed effort of lifelong learning and decision-making for optimal health and successful balanced existence and is derived from wellness wheel, an indicator of wellbeing in health that aims to promote perfect functioning of body with heart, mind and soul for the welfare of society.⁴ The wheel comprises six spokes (dimensions) with aspects of physical, emotional, spiritual, intellectual, social and environmental wellbeing. If areas (spokes) of one's wellness are under-developed or neglected, the 'wheel' (i.e. wellness) will be off-balance, which often remains unnoticed. Thus it is imperative to identify the disturbances and find out ways to correct them to maintain the equilibrium. The concept of wellness gives awareness about life choices and making decisions to solve health and social problems, by taking care of; body (Physical wellness), mind (Emotional wellness), and values and beliefs (Spiritual wellness).²

Physical wellness is related to physical health i.e. internal safety and involves understanding that eating well, exercise and healthy lifestyle choices are important.⁵ Mental or emotional wellness is attained by relaxation techniques, meditation, yoga, and techniques for cultivating relationships. Spiritual wellness focuses on the concept that human beings should be respected, valued

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as sacred and whole of the creations should be connected to The Creator by prayers and religion. The invisible spiritual world and the visible material world are not separate entities; rather, the dominant spiritual influences in our society interact with all elements in the flow of physical life. Thus our spirituality is a vital element that pervades every aspect of life and influences deeply our physical and mental status.⁴

Wellness issues may arise whenever individuals are exposed to an adjustment. However, the knowledge about one's wellness helps to provide guidance and direction to adopt strategies, and to cope with unfavourable circumstances. First year medical students also face wellness issues, who experience a change in curriculum, study approach (which has become student-centred rather than teacher-centred), as well as lifestyle modifications in order to acclimatise into a new era of medical education. They fail to organise information overload and conceptual understanding of course objectives with proper time management, thus getting unnecessarily stressed.⁶

The stress levels are hazardous to the physical and mental (psychological) wellbeing of students⁷ which may impair their behaviour, diminish learning, destroy personal relationships, and ultimately affect their overall performances;⁸ even suicidal attempts have been reported. The National Institute of Health (NIH) estimates that, regardless of the cause, 80% of all diseases are caused by accumulated, unmanaged stress, whose levels are increasing at a phenomenal rate. People fail to realise how insidious and accumulative stress can be, damaging their physical, mental and emotional wellbeing, manifested by headaches, hypertension, anxiety, sleeplessness, mood swings up to the extent of mind-body breakdown. Unfortunately, the medical schools educate students to care for their patients, but do not prepare them to care for themselves and to monitor their own wellness.

The physician should have a sound mind and body with awareness to accept the responsibility of his behaviour to himself, family, community and society; to see the whole life at a glance and to promote wellbeing for self and others. This is only possible when he has well-defined awareness about the concept of wellness. Thus to educate the students about wellness is important, as it serves to enhance their physical and mental wellbeing, by facilitating to identify personal relationships, provide techniques to respond positively to any imbalance in their lifestyles, promote a lifetime of physical fitness and activity (by avoiding unhealthy habits), and to learn new

ways to cope with the burden of stress.

Studies have been conducted on medical students regarding awareness about wellness in the form of surveys and questionnaires. The main objective of this study was first to assess the knowledge and attitudes of medical students of Karachi in terms of awareness about wellness with respect to all of its dimensions and secondly to enquire about their practices of acquiring strategies to cope with various problems. It dealt with the three dimensions of existence coupled with three dimensions of cognition, practice and importance.

Subjects and Methods

The cross-sectional questionnaire-based survey was conducted after approval from the Research and Ethical Committee of Bahria University Medical and Dental College, and with permission from selected medical colleges of Karachi from January to December 2010. A total of 800 students from first year MBBS were randomly selected from three government and five private medical colleges. Male and female students aged 18-24 years, belonging to all ethnic groups were included. Students with acute or chronic illness were excluded. The close-ended questionnaire tailored from the Wellness wheel⁹ evaluated aspects of, emotional, physical and spiritual wellness; numbering 0-4 from the lowest to highest ranks ('never,' 'sometimes,' 'mostly,' 'always'). Students were asked about their lifestyles; type of food, intake of water/cold drinks, physical activity, mood swings, anxiety attacks together with strategies applied to overcome them like meditation, social interaction, taking help from mentors or from psychologists (Annexure).

Computation of frequency, proportion and percentages were executed for categorical variables with the help of Predictive Analysis Software (PASW) version 18. Mean and standard deviations were computed for continuous variables. For measuring consistency among the responses, the reliability of scores was measured using Cronbach's Alpha. For comparing overall scores of different wellness elements among males and females, Mann-Whitney U test was performed. For the comparison of categorical aspects of wellness, chi-square test was executed, and p value less than 0.05 was considered significant.

Results

A total of 800 questionnaires were distributed out of which 736 (92%) completed forms were included for analysis. Among them, 526 (71.5%) were females and the remaining were males. The reliability of the responses was 85.3%. The awareness of physical, mental and spiritual wellness in medical students (both genders) was found to be (n=803;

**Annexure:
Wellness Assessment Questionnaire**

DEMOGRAPHICS

S. No: _____ Research Code No: _____
Name: _____ Sex: M/F: _____

ASSESSING YOUR WELLNESS

**Answer all questions using following abbreviations:
1= No, 2= Sometimes 3=Mostly 4= Yes/Always**

Physical Wellness:

- 1 I am well and do not get sick often 1 2 3 4
- 2 I participate in sports/physical activities daily for at least 20 minutes 1 2 3 4
- 3 I attend yearly checkups by a physician 1 2 3 4
- 4 I keep a check and control on my weight 1 2 3 4
- 5 I prefer to eat fruits and vegetables 1 2 3 4
- 6 I take fast food 3 times a week 1 2 3 4
- 7 I drink 6-8 glasses of water daily 1 2 3 4
- 8 I drink fewer than five soft drinks per week 1 2 3 4
- 9 I avoid tobacco products 1 2 3 4
- 10 I get an adequate amount of sleep 1 2 3 4

Emotional Wellness:

- 1 I feel cheerful and hopeful 1 2 3 4
- 2 I value self-exploration and self-improvement 1 2 3 4
- 3 I feel that I am needed and valued by my family and friends 1 2 3 4
- 4 I can recognize and cope with stressors in my life 1 2 3 4
- 5 I suffer frequent mood swings and attacks of anxiety 1 2 3 4
- 6 The outbursts(Anxiety attacks) occur before a test/exam 1 2 3 4
- 7 I am capable to overcome them 1 2 3 4
- 8 I have to take help from my friends 1 2 3 4
- 9 I have to seek advice from my mentor 1 2 3 4
- 10 I have to consult and take help from parents/family members 1 2 3 4
- 11 I need my psychiatrist /psychologist to take me out of these spells 1 2 3 4
- 12 I am the one who helps people during emotional outbursts 1 2 3 4

Spiritual Wellness:

- 1 I have a meaning & purpose in life 1 2 3 4
- 2 I am honest ,respectful & trust worthy 1 2 3 4
- 3 I understand my own values, beliefs and can speak on them 1 2 3 4
- 4 I am tolerant to listen and try to learn about others beliefs & values 1 2 3 4
- 5 I take out time for prayers, fasting & religious activities 1 2 3 4
- 6 My spiritual beliefs and values give me direction; whenever I come across with problems 1 2 3 4

47%), (n=504; 47%) and (n=658; 89.35%) respectively. The total emotional wellness scores were 20.42±4.54 in males, and 21.03±4.27 in females (p <0.237). Physical wellness score was 5.05±1.69 and 4.95±1.51 in males and females respectively (p <0.305). The spiritual wellness score was 14.77±3.31 for males and 15.87±2.42 for females (p <0.0001).

Item analysis on physical wellness awareness showed significant differences; males were more prone to participating in physical activities (p <0.001), whereas females had more control on weight (p <0.0001). The

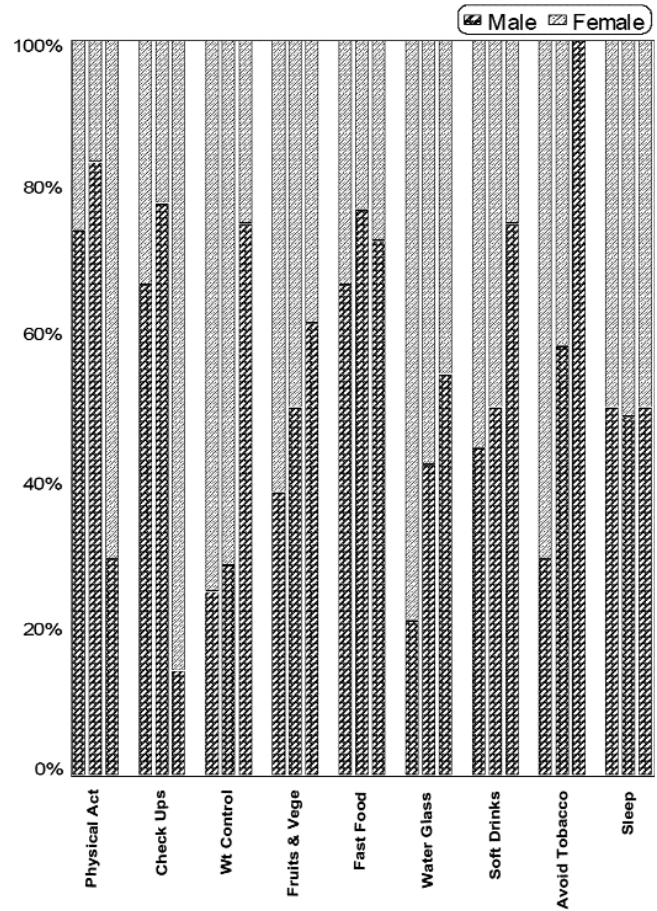


Figure-1: Comparison of awareness of Physical wellness in male and female medical students ('always,' 'mostly,' 'sometimes' from left to right).

preferences of fruits and vegetables were observed slightly more in females (p <0.037), while males were more fast food consumers (p <0.03). Proportion of taking 6-8 glasses of water in a day was found more in males (p <0.001), while soft drink intake was found more in female students. Males were interested in tobacco products (p <0.001). As many as 552 (75%) participants did not care to go for yearly checkup. Besides, 221 (30%) students took adequate sleep (Figure-1).

In terms of awareness regarding emotional wellness, 237 (45%) of girls always felt cheerful as compared to 85 (41%) boys; 362 (69%) girls felt the need for self improvement compared to 127 (60%) boys; 126 (24%) girls and 59 (28%) boys never had mood swings; females considered themselves more anxious in exam than boys (p <0.001). Males were used to seeking advice from mentors and psychiatrists/psychologists more than females (p <0.034, p <0.0001), who took help from family members, friends, and helped others during emotional outbursts more than the boys (p <0.062) and helped in solving their problems

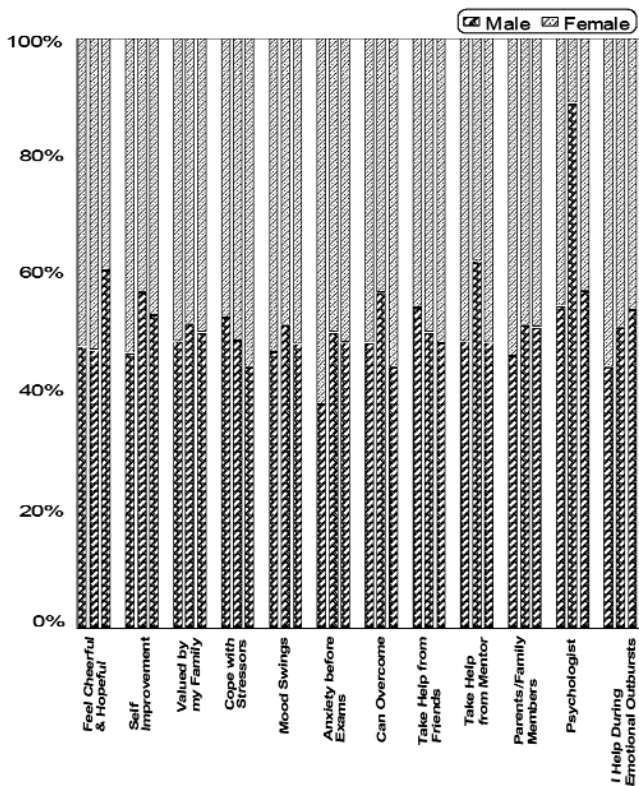


Figure-2: Comparison of awareness of Emotional wellness in male and female medical students ('always,' 'mostly,' 'sometimes' from left to right).

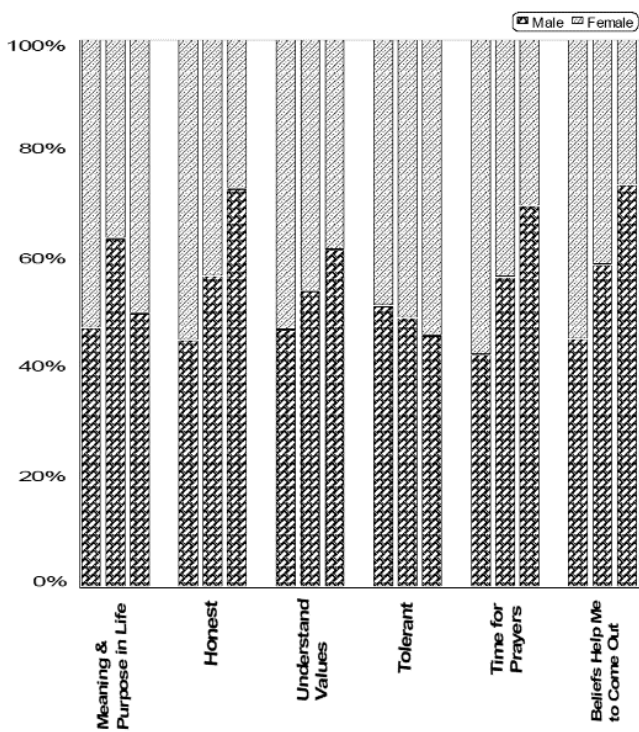


Figure-3: Comparison of awareness of Spiritual wellness in male and female medical students ('always,' 'mostly,' 'sometimes' from left to right).

($p < 0.018$) (Figure-2).

The spiritual context of both the genders differed significantly ($p < 0.0001$). Females had defined meaning and purpose of life ($p < 0.01$). Boys were less honest, respectful and trustworthy compared to females ($p < 0.0001$). Besides, ($n=549$; 75%) of the participants understood their own values, beliefs and could speak about them. Again females stood higher than males in this dimension ($p < 0.004$). Only 39% ($n=287$) of the participants considered to be tolerant to listen and try to learn about others' beliefs and values. Females took out time for prayers, fasting and other religious activities ($p < 0.0001$). Less number of males reported that their spiritual beliefs and values gave them direction whenever they came across any problem ($p < 0.0005$) (Figure-3).

Discussion

Optimal wellness derived from the wellness wheel is a degree of balance based on needs, experiences and adjustments with respect to circumstances. It reflects positive and empowering approach that makes compatible existence of an individual with his surroundings. Eating nutritiously and exercising are necessary for a healthy lifestyle, but they make up just a part of total wellness which has a much broader concept. The concept of total wellness recognises that our every thought, word, and behaviour affects our greater health and wellbeing in terms of physical, emotional and spiritual wellbeing. Studies conducted on medical students regarding awareness about wellness in the form of surveys and questionnaires revealed that medical students acknowledge importance of a physician having a sound mind and body. However, they were unable to realise their own wellbeing is a priority.¹⁰

Physical wellness is built on awareness; "give your body what it needs to start living well" by eating well, exercise, and selection of healthy lifestyle choices to improve quality of life. Included in physical wellness is an awareness of the body's true identity, depth of feelings, tension patterns, reactions, balance and harmony. Although 68% students had knowledge and practised steps to take care of physical wellness, yet males participated in physical activities whereas females were conscious about weight control, preferred to take fruits and vegetables and avoided fast food. It has been found that girls tend to spend time in smaller groups and engage in verbal games, conversation and socializing, while boys play in larger groups and physically active games, especially football. It is said that participation in daily physical activity is associated with superior academic performance, better short-term memory, creativity and a positive attitude towards school, whereas lack of physical activity can contribute to obesity,

illnesses and abstinence from school.^{11,12} It has also been associated with improved psychological health by reducing levels of stress, anxiety and depression. The awareness of physical fitness in females can thus contribute to building self-esteem and confidence required for social integration, equality with men and getting rid of depression; incidence of which is twice that of men in both developed and developing countries. Lack of physical activity detected in our study can be rationalised by orientation of students through public health programmes for selection of healthy lifestyle choices for better existence. This will be the first achievement which will help them survive in a crisis by feeling of happiness with strength and control on one's body.

Emotional wellness is all about taking care of the 'mind'; accepting exploring and enhancing one's inner resources to reduce stress, relax and create a positive outlook in life. The need of awareness of emotional wellness and recognition of coping strategies is extremely important for medical students who face an enormously stressful environment that can affect their health as well as academic performance.¹³ The possible negative effects of emotional distress in medical students of Thailand, India, Malaysia and even Pakistan have reported high levels of stress leading to the development of vicious circle starting from the inability to cope with studies, poor class performance, lack of confidence, leading to further deterioration in learning capabilities and mental distress.^{13,14} In this study, 322 students were found to be always cheerful and hopeful. Both genders revealed that they were valued and fully supported by their parents, had optimistic approach towards life, but they realised the need of stress-coping strategies to overcome off and on mood swings for self improvement.

Self exploration, which is the basis of emotional wellness, was found to be significantly higher in females. Though girls considered themselves more anxious during exam than boys, they could manage these stresses on their own, helped others during emotional outbursts by interaction, volunteered and shared skills and knowledge better than the males. Boys, on the contrary, were not able to manage stress on their own and consulted psychiatrist/psychologist and mentors who guided, counselled and supervised them in managing time for professional success, academic achievements, and enabled them to withstand stressful environment.¹⁵

The spiritual dimension of wellness involves seeking meaning and purpose in human existence. It includes the development of a deep appreciation for the depth and expanse of life and natural forces that exist in the universe. In our study, females not only understood their

own values, ethics and beliefs, but respected values, ethics and beliefs of other people also which helped in managing stress, anxiety required for firm foundation of a healthy existence. They exhibited more fairness and justice in dealing with people than the males. To be spiritually well, it is important to explore 'meaning and purpose in life.' A higher proportion of females had a meaning and purpose in life compared to the boys. At the same time, less proportion of boys mentioned to be honest, respectful and trustworthy. Tolerance to listen to others was found to be low in both genders; 39% of the participants considered themselves to be tolerant enough to listen and try to learn about others beliefs and values. This dimension of wellness is acquired by prayers, meditation, affirmations, or specific spiritual practices that support connection with a higher power or belief system. Larger number of females in our study took out time for prayers, fasting and other religious activities.

Wellness issues reported in medical colleges are attributed to increase in stress levels because medical education is different, demanding, stressful,⁷ and students face additional problems due to lack of facilities in hostel, home sickness, high parental expectations and fear of failure due to the vastness of syllabus. A comprehensive wellness approach is thus required to measure student wellness components in the college environment so that programmes, lecture, and services would be initiated to educate students on preventive health aspects, lifestyle modifications, risky behaviours such as smoking, drinking and drug use, in the core curriculum of first year medical students. Emotional wellness can be enhanced by giving a message to students to recognise their values, beliefs, positive qualities and accomplishments. At the same time, awareness about coping strategies, like positive re-framing, proper planning, acceptance, time management, self-responsibility, social interaction and emotional support from peers, teachers and mentors,¹⁶ is required to be conveyed to the medical students. Women tend to put more emphasis on the importance of social connections, time management to balance social demands with social needs;¹⁷ discussion of these strategies in the form of lectures or interactive sessions can be helpful in reducing stress level of male and female medical students¹⁸ in order to bring a positive behavioural change. Throughout this journey of wellness, awareness is the first step which can then be translated into holistic wellness programmes for students in order to keep their soul, mind and body intact to produce a physically fit, better learner who believes in his own values, but is considerate towards his fellows, and will prove to be a good future empathetic doctor.

Conclusion

Awareness of the concept wellness was found to be dissimilar in both genders.

Positive health practices, like outdoor games, should be supported both for boys and girls; public health awareness messages about risky behaviours should be propagated; mentoring should be encouraged; and stress and time management strategies should be taught as part of core curriculum to medical students.

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