Pilot Comparison of Wellness-Related Beliefs in Two Medical Student Cohorts

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Introduction

Medical students develop beliefs about mental and physical health during their training. These beliefs influence how they view coping with stress, recovery from exhaustion, burnout in medicine, and the role of psychological factors in patient care (Dyrbye et al., 2008; Shanafelt et al., 2012).

Medical schools may differ in how they approach and discuss wellness, which can shape how students understand these issues (Association of American Medical Colleges [AAMC], 2020; West et al., 2016). Exploring these perspectives can help identify similarities and differences in how students think about well-being and professional health (Dyrbye et al., 2014).

Oakland University William Beaumont School of Medicine (OUWB) incorporates structured wellness programming through its PRISM curriculum. A comparable cohort of Chinese medical students participated in a structured wellness-focused course modeled in part after PRISM. This provided an opportunity to explore how students in two educational contexts conceptualize mental and physical well-being within medicine.

Objectives

To descriptively compare medical students' beliefs regarding coping during training, recovery from mental versus physical exhaustion, the role of psychological factors in patient recovery, burnout among medical personnel, constructive approaches to professional distress, and definitions of a healthy and fulfilling life across two cohorts.

Methods

This exploratory cross-sectional study used a custom-designed survey consisting of structured multiple-choice response options administered to OUWB medical students (n = 26). The comparison cohort consisted of de-identified survey data (n = 26) collected in 2023 from Chinese medical students of similar age range (M1–M4 equivalent). These students were enrolled in 5- or 8-year medical programs at a pediatric-focused medical school and participated in a structured wellness course modeled after OUWB's PRISM curriculum.

Survey items were presented in multiple-choice format and required participants to select the option that best reflected their perspective. Items assessed perceptions of personal coping during medical training, beliefs about recovery from physical versus mental exhaustion, perceived psychological influence on patient recovery, recognition of burnout as a widespread professional issue, suggested responses to medical personnel distress, and definitions of a healthy and fulfilling life. Given the pilot design and small sample size, analysis was descriptive, focusing on response distributions across groups without inferential statistical testing.

Figure 1. Exploratory Cross-Cultural Study Design

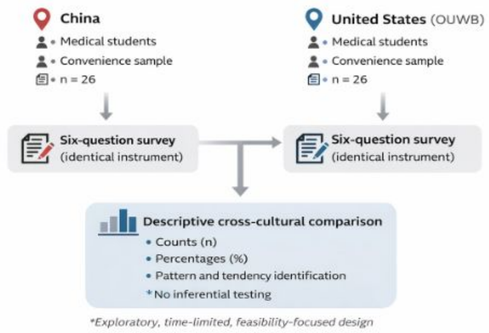

Figure 1. Overview of an exploratory, descriptive study design comparing responses from medical students in China and the United States who completed an identical six-question survey. Data were summarized using counts and percentages to identify patterns and tendencies across cohorts.

Results

Survey Question	Key Response Option Reported	China % (n=26)	U.S. % (n=26)
As a medical student, which of the following situations best represents your experience during the learning process?	Mostly able to cope; anxiety has both positive and negative effects	65.2% (15)	53.8% (14)
Based on your own experience and observations, which is more likely to recover to a healthy state: pure physical exhaustion or pure mental exhaustion?	Pure physical exhaustion more likely to recover	69.6% (16)	61.5% (16)
Based on your own experience and observations, how do a patient's psychology, emotions, mental state, and beliefs affect their physical recovery?	Critically important impact	39.1% (9)	69.2% (18)
Do you know which of the following emotional or psychological abnormalities among medical personnel has reached the level of a global epidemic?	Burnout	56.5% (13)	80.8% (21)
Considering the frequent warnings about the mental and physical health of medical personnel, and given that reducing their workload is impossible and seeing a psychologist is stigmatized, what constructive suggestions do you have?	Both personal responsibility and institutional education	78.3% (18)	61.5% (16)
What kind of life do you think is healthy and fulfilling?	All listed dimensions combined	52.2% (12)	46.2% (12)

Table 1: Results from pilot study survey questions.

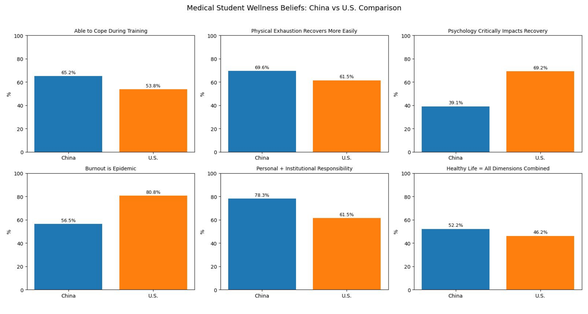

Figure 2. Comparison of wellness-related beliefs among medical students in China and the U.S.
Side-by-side clustered bar graphs illustrate differences in perceptions of coping during training, recovery from mental versus physical exhaustion, psychological influence on patient recovery, burnout recognition, responsibility for wellness, and definitions of a healthy life. Percentages are shown for each response option across cohorts (n=26 per group). Blue bars represent China data and orange bars represent U.S data.

Students in both cohorts reported generally being able to cope with the demands of medical training (China 65.2%; U.S. 53.8%). A majority in both groups perceived physical exhaustion as easier to recover from than mental exhaustion (China 69.6%; U.S. 61.5%).

Differences emerged in beliefs regarding psychological influence and burnout. A greater proportion of U.S. students endorsed the view that psychological factors play a critically important role in patients' physical recovery (69.2% vs. 39.1%). U.S. students were also more likely to characterize burnout among medical personnel as having reached epidemic levels (80.8% vs. 56.5%).

Perceptions of constructive approaches to supporting medical personnel and definitions of a healthy and fulfilling life were broadly similar across cohorts.

Conclusions

Study	Country / Region	Population	Key Findings	Relevance to Current Study
Goebert et al., 2009	U.S. (multi-school)	Medical students & residents	High prevalence of depressive symptoms across institutions	Supports high distress prevalence in training environments
Abdulghani et al., 2011	Saudi Arabia	Medical students	High stress levels; academic pressure major contributor	Demonstrates stress burden in non-Western training systems
Quek et al., 2019 (Meta-analysis)	12 countries (global)	Medical students	High global prevalence of anxiety; regional variation in stigma & help-seeking	Supports cross-cultural differences in perception of psychological distress
Aboalshamat et al., 2015	Saudi Arabia & UK (comparative)	Medical students	Differences in coping styles across cultural contexts	Aligns with cohort differences in coping and burnout framing
Al-Dubai et al., 2011	Malaysia	Medical students	Cultural norms influence coping strategies	Supports role of sociocultural context in wellness beliefs
Noonan et al., 2018	Ireland	Medical students	Students define health holistically, integrating psychological factors	Relevant to differing views on psychological impact in recovery
Engel, 1977 (Biopsychosocial Model)	Theoretical framework	Medical model	Health influenced by biological, psychological, and social factors	Explains stronger psychological emphasis in U.S. cohort

Table 2. International literature on medical student and physician wellness.
This table summarizes global studies demonstrating high levels of stress, anxiety, and burnout among medical trainees, while highlighting cultural and institutional differences in coping styles, stigma, and perceptions of psychological well-being. Together, these findings provide context for the present cross-cohort comparison and support the influence of educational and cultural environments on wellness beliefs.

This pilot comparison suggests substantial overlap in how medical students in two educational contexts conceptualize coping, recovery, and wellness in medicine. Observed differences in emphasis on psychological influences in patient recovery and framing of burnout may reflect variations in cultural context or curricular emphasis. Given the exploratory design and small sample size, findings should be interpreted as descriptive and hypothesis-generating, informing future larger-scale studies examining how medical training environments shape beliefs about wellness and professional well-being.

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