#### Short Communication

## STRESS PROFILE OF POST GRADUATE MEDICAL RESIDENTS IN WESTERN INDIA

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#### INTRODUCTION

The last few decades are witnessing an era of increased specialization among doctors along with an increased demand for specialized medical care globally. The post graduate residents play a crucial role in the medical care delivery of the multispecialty hospitals attached to the teaching medical colleges. These residents are often invariably assigned duties exceeding 24 hours at a time. In the initial first year of residency, residents sometimes are on call for more than a week at a stretch and are under great stress due to sleep deprivation. Combined with other factors such as less stipend, abuses faced at the workplace often affects their mental health and also has a profound impact while dealing with patients. This study aims to explore the stress levels among post-graduate resident doctors and important variables affecting the same in this contextual background

#### METHODOLOGY

The study reports of interviews of 50 Post Graduate (P.G.) residents each from medical colleges of three cities of Gujarat, namely, SMIMER (municipal medical college) and GMC, Surat (government medical college); GMC, Baroda (government medical college); PSMC, Karamsad (self financed medical college) with their informed consent from 6<sup>th</sup> August 2008 to 16<sup>th</sup> September 2008. The interview schedule was developed with the active involvement of the stake holders so as to cover the study objectives and was suitably pre-tested.

### **OBSERVATION & DISCUSSION**

44%, 32% and 24% respondents belonged to the  $1^{st}$ . 2<sup>nd</sup> and 3<sup>rd</sup> year of residency. Highest self reported feeling was stress was by the first year of residents (77.3%), followed by 3<sup>rd</sup> year residents (58.3%) and lastly 2<sup>nd</sup> year residents (52.1%). It was observed that maximum stress feeling was reported by the 1<sup>st</sup> year residents (77.3%) followed by 52.1% among the 2nd year and 58.31% among the 3rd year students. These levels are higher than that reported in Spain<sup>1</sup> wherein 42% residents had reported of high stress levels and 21% had reported that stress interfered with family relationships. Genderwise, significantly higher stress levels were reported among females (72.9%) as compared to males (59.3%) in line with the Canadian study<sup>2</sup> findings wherein 40% females had reported of stress as compared to than 27% males. Specialty wise, differential stress levels were observable with the

maximum number (86.7%) of pediatrics P.G residents reported of stress and the least stress (28.6%) was reported among the anesthesia P.G residents. Differential stress levels have been reported in other studies as well. According to Tulane University, USA study<sup>3</sup> at Department of Orthopedic Surgery, residents reported considerable burnout, showing a high level of emotional exhaustion and depersonalization and an average level of personal achievement. Hill JD et al had found levels of burnout among academic otolaryngology residency training program using Maslach Burnout Inventory-Human Services Survey (MBI-HSS).<sup>4</sup>

When asked as to specific reasons that might be contributing to their high stress levels, the majority (66.7%) had perceived that was due to work overload, inadequate sleep and rest time; 32% to misbehavior and unpleasant interactions with their seniors, colleagues and other working staff; 25.3% to their absence of a social life, political pressures, less stipend and improper management; 14.7% due to the need to study continuously despite their heavy workload; and, lastly 12% to inadequate staff and less number of residents and other manpower as compared to the actual need.

The residents had reported that taking of adequate sleep and rest was the main way to relieve their stress (68%); followed by listening to music or watching a movie or playing some game (53.3%); consuming of tobacco products or smoking or taking sleeping pills, shouting at patients and doing of yoga and meditation (36%); and lastly talking or chatting with family members, sharing their thoughts with colleagues or friends

Fixed working hours and leave, proper division of work and giving of appropriate work was listed as the foremost way (73.3%); followed by recruitment of adequate medical and paramedical staff, increasing of P.G residents (49.3%); and, lastly other facilities such as increasing of their stipend/ fellowship, improved management and promotion of better relations (46.7%).

The vast majority (89.3%) had opined that their high stress levels affect their quality of work in line with findings of other studies describing multiple adverse effects of sleep loss and fatigue on learning and cognition; job performance, including professionalism and task performance; and personal life, including personal well-being and relationships with spouse or significant other and family. Only 2. 16% of the sample scored within the "normal" range on the ESS; 84% scored in the range for which clinical intervention is indicated.

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