

# Grievances of Post Graduate Residents in their training

## Abstract:

Purpose: to evaluate the problems of residents during their residency

Materials and methods: To locate and assess all relevant literature, we employed systematic review as a search approach, utilizing punctilious and unambiguous methodologies. We initiated by stipulating key terms and selecting appropriate databases for your literature search. To find replicable and reportable publications from high-quality peer reviewed journals, we used Google Scholar, PubMed, and Research Gate. A manual literature search, snowballing, and obtaining expert advice were some of the other search tactics employed to find items of relevance.

Conclusion: While working in residency, the residents experience a lot of problems like work place harassment, gender discrimination, insults , grueling working hours , poor infrastructure of training programs, struggling parenthood and lack of time to relax.

These and many other personal issues affect the professional performance of the residents and in turn affect the treatment outcomes of the patients

As a conclusion, there must be healthy working relationships between the residents and their supervisors. There should be meetings at intervals which should focus on sharing the problems going on in the personal and professional lives of the residents and the issues that are affecting their work. The supervisors must consider the genuine issues and try to rectify them if possible.

Key words: residents, harassment , residency , supervisor

## Introduction

Medical and surgical trainees have poor financial health during training they have a moderate to high-risk debt to asset ratio, signifying that residents are dangerously financially leveraged.[1] In addition to student loan debt, it has been shown that residents are unable to manage the monthly cost of living expenses . Studies showed increasing rates of emotional exhaustion, depersonalization, cynicism, depressive symptoms, and burnout [2][3]

Workplace bullying, understood as harassment, intimidating behavior, abuse or discrimination that is practiced persistently against an individual, can generate a hostile work environment and consequently lead to exhaustion, with poor psychological outcomes among residents of medical or surgical specialties, and the onset of symptoms such as loss of confidence, fatigue, depressive thoughts and desertion, and even suicidal ideation. [4][5]

Residency training is a demanding period in a resident career and can overlap with desired childbearing time. resident parents experience challenges in a variety of domains, including breastfeeding support, childcare, schedule flexibility, finances, and wellness.[6][7][8][9][10][11][12][13][14][15][16][17]

Finally, resident parents experience negative stigma and perceived career impact as a result of parenthood. [2][3][7][11][14][16][18][19][20][21]

Periods of sleep deprivation are common to all residents in their training. Prolonged sleep loss can result in a variety of psychologic and physical impairments. These include behavioral changes, such as increased anxiety, hostility, tension, and confusion; loss of short-term memory; decreased ability to concentrate; and disorganization [22] [23] [24] [25] [26] [27] [28].

## MATERIALS AND METHODS

To locate and assess all relevant literature, we employed systematic review as a search approach, utilizing punctilious and unambiguous methodologies. We initiated by stipulating key terms and selecting appropriate databases for your literature search. To find replicable and reportable publications from high-quality peer reviewed journals, we used Google Scholar, PubMed, and Research Gate. A manual literature search, snowballing, and obtaining expert advice were some of the other search tactics employed to find items of relevance.

## STUDY DESIGN

We performed an observational, descriptive, cross-sectional study, through an anonymous survey

All residents were invited to participate, and they could either accept or reject the invitation. The researchers respected the fundamental ethical principles through verbal consent. Those interested in participating completed a short demographic survey to enable purposive sampling.

A proforma based survey was administered to all ophthalmology residents from different hospitals. We purposively sampled with the goal of representing diverse perspectives by including different genders, races, levels of training, size of residency program, whether participants became parents during or before residency, person responsible for household finances, their perception of harassment and long duty hours with little sleep and how it affect their performance during residency.

## RESULTS

80 residents expressed interest in the study, among them 48 were males and 32 were females, residents from postgraduate residency year 1 to year 4 were represented. The majority of residents have one or two family members in their family. 30(37.5%) of the residents reported that they possess a student loan. Over 25(31.25%) residents did not have enough savings for an emergency fund, 15 (18.75%) of trainees had credit card debt, and 10 trainees (12.5%) received financial help from their parents. [fig 1]

Regarding workplace harassment, 42 (52.5%) of the residents reported that they have felt some behavior of aggression/harassment at work during their residency. Considering non-exclusive responses, 36(45%) reported that this type of harassment impacted their hospital work. Regarding gender discrimination, 29(36%) reported it; 16 (20%) of them referred that these behaviors affected their work as residents. In regards to verbal harassment, 30(37.5%) referred to have been the object of destructive criticism and insults, and 26(32.5%) of them referred that their work as a resident was affected because of the criticism. Sexual harassment has been perceived by 8(10%) women; all of those who answered

affirmatively to this question said that this type of harassment affected their work and their development as residents

[fig 2] [fig 3]

Regarding residency and struggles of parenthood, they felt that the long hours and erratic schedule of residency exacerbated many of the typical struggles of parenthood. Out of 80 residents 29(36.25%) complained about sleep deprivation, 40(50%) complaints of missing time with their children, breastfeeding, and pumping, the financial burden, and 11(13.75%) complaints of finding childcare. Many described waking up multiple times each night with an infant while working long days. Participants described feeling that they were missing large parts of their children's lives and trying to create more time with them by sacrificing sleep and its affecting their parenting as well as training. [fig 4]

sleep deprivation negatively affects a surgical resident's performance in the domains of factual recall, concentration ability, and manual dexterity in 60(75%) out of 80 residents. Neurophysiologic, behavioral, and psychological changes were seen as a result of sleep deprivation in 10(12.5%) residents. 10(12.5%) of the residents who are repeatedly sleep deprived are adapted to it.

Conclusion:

While working in residency, the residents experience a lot of problems like work place harassment, gender discrimination, insults , grueling working hours , poor infrastructure of training programs, struggling parenthood and lack of time to relax.

These and many other personal issues affect the professional performance of the residents and in turn affect the treatment outcomes of the patients

As a conclusion, there must be healthy working relationships between the residents and their supervisors. There should be meetings at intervals which should focus on sharing the problems going on in the personal and professional lives of the residents and the issues that are affecting their work. The supervisors must consider the genuine issues and try to rectify them if possible.

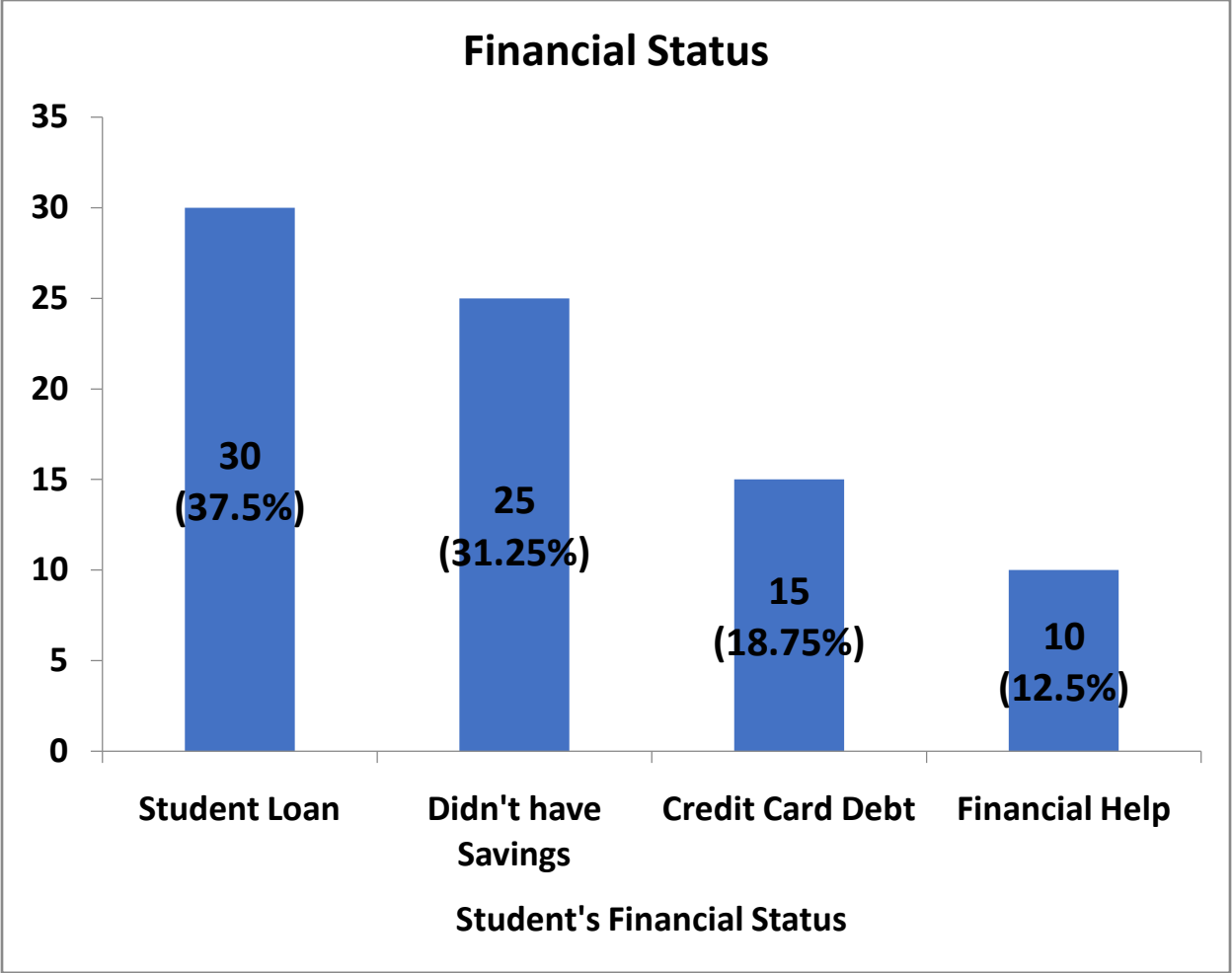


Fig 1. Bar graph showing Students' Financial Status.

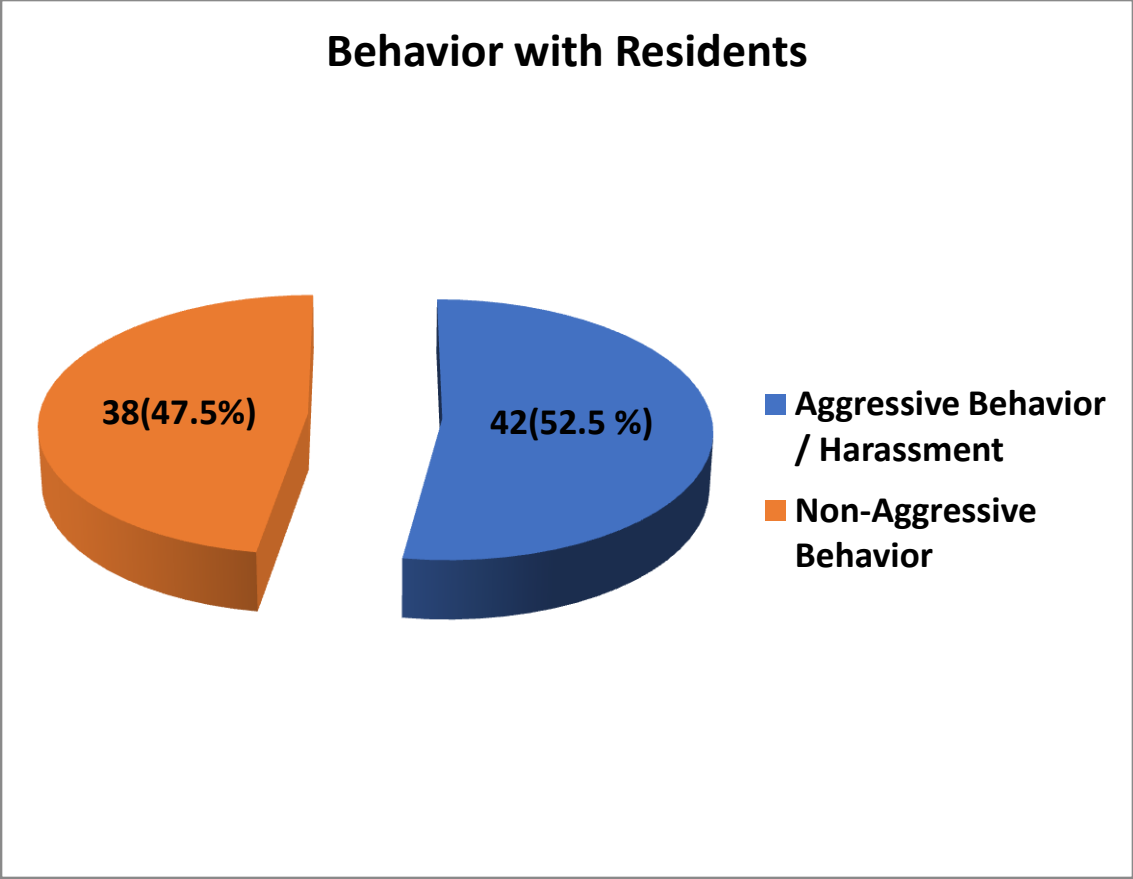


Fig 2. Graphical representation with frequency and percentage of behavior with Residents

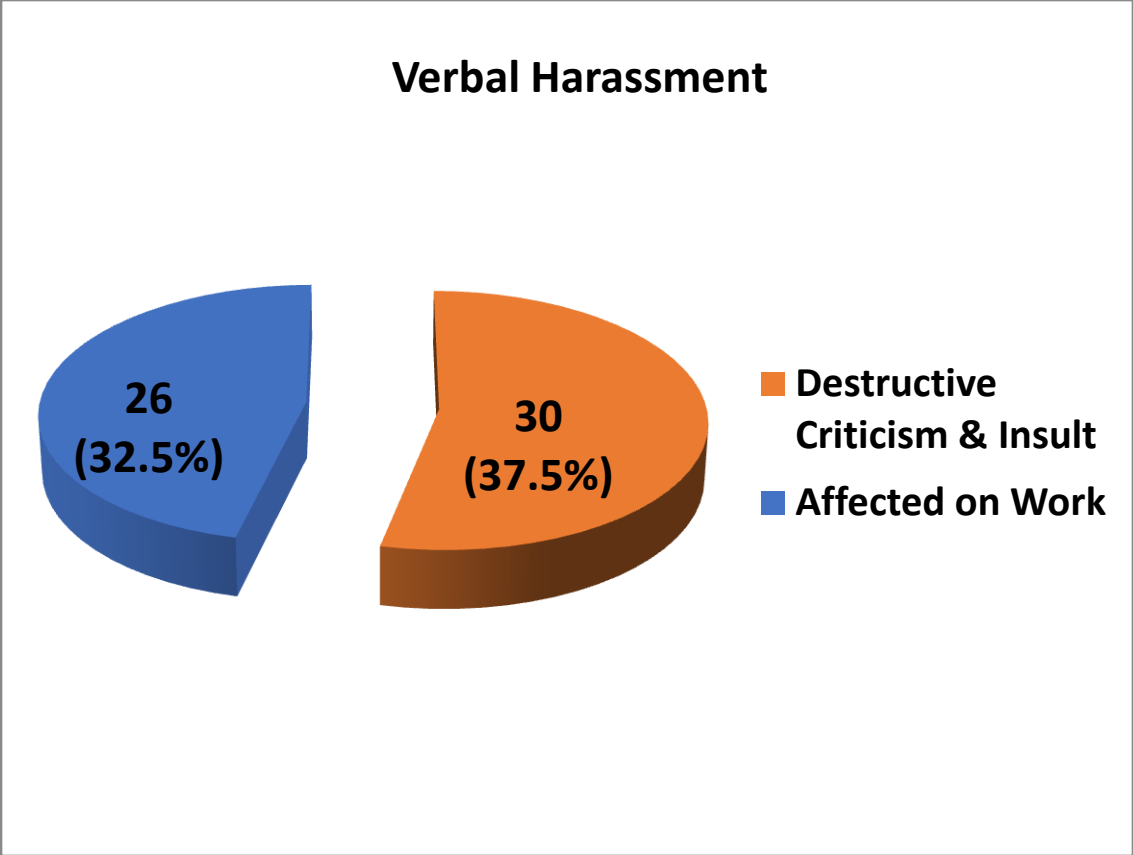


Fig 3. Graphical representation with frequency and percentage of verbal harassment

UNDER REVIEW

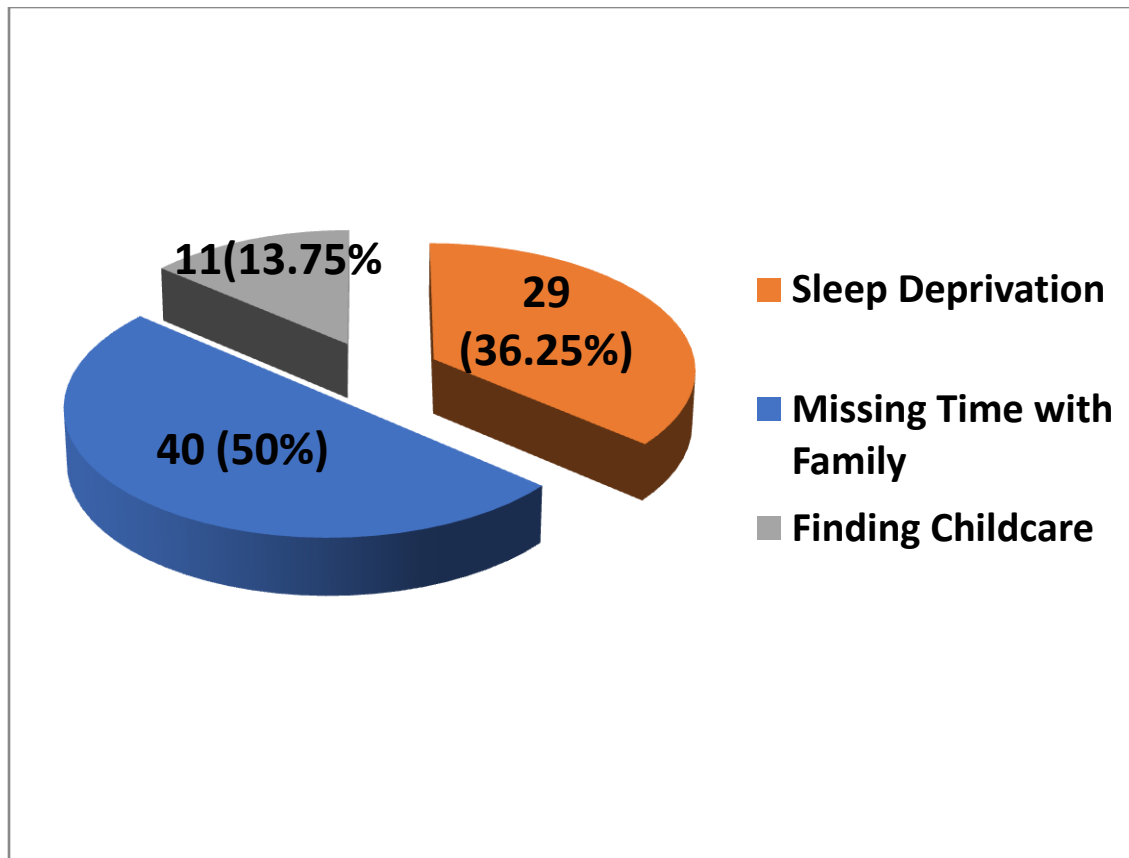


Fig 4. Graphical representation with frequency and percentage of sleep deprivation, missing time with family and finding childcare.

#### References:

- [1] S. E. Tevis, A. P. Rogers, E. H. Carchman, E. F. Foley, and B. A. Harms, "Clinically competent and fiscally at risk: impact of debt and financial parameters on the surgical resident," *Journal of the American College of Surgeons*, vol. 227, no. 2, pp. 163-171. e7, 2018.
- [2] C. P. West, T. D. Shanafelt, and J. C. Kolars, "Quality of life, burnout, educational debt, and medical knowledge among internal medicine residents," *Jama*, vol. 306, no. 9, pp. 952-960, 2011.
- [3] V. U. Collier, J. D. McCue, A. Markus, and L. Smith, "Stress in medical residency: status quo after a decade of reform?," vol. 136, ed: American College of Physicians, 2002, pp. 384-390.
- [4] S. Nagata-Kobayashi, T. Maeno, M. Yoshizu, and T. Shimbo, "Universal problems during residency: abuse and harassment," *Medical education*, vol. 43, no. 7, pp. 628-636, 2009.
- [5] M. R. Socarrás, J. L. Vasquez, P. Uvin, P. Skjold-Kingo, and J. G. Rivas, "'Síndrome de agotamiento': Estrés, Burnout y depresión en Urología," *Archivos españoles de urología*, vol. 71, no. 1, pp. 46-54, 2018.

- [6] S. A. Fisher-Owens *et al.*, "Influences on children's oral health: a conceptual model," *Pediatrics*, vol. 120, no. 3, pp. e510-e520, 2007.
- [7] A. M. Hutchinson, N. S. Anderson III, G. L. Gochnour, and C. Stewart, "Pregnancy and childbirth during family medicine residency training," *pregnancy and childbirth*, vol. 1, p. 2, 2011.
- [8] S. W. Stack, C. M. McKinney, C. Spiekerman, and J. A. Best, "Childbearing and maternity leave in residency: determinants and well-being outcomes," *Postgraduate medical journal*, vol. 94, no. 1118, pp. 694-699, 2018.
- [9] E. L. Rangel *et al.*, "Pregnancy and motherhood during surgical training," *JAMA surgery*, vol. 153, no. 7, pp. 644-652, 2018.
- [10] S. W. Stack *et al.*, "Maternity leave in residency: a multicenter study of determinants and wellness outcomes," *Academic Medicine*, vol. 94, no. 11, pp. 1738-1745, 2019.
- [11] E. L. Rangel, M. Castillo-Angeles, M. Changala, A. H. Haider, G. M. Doherty, and D. S. Smink, "Perspectives of pregnancy and motherhood among general surgery residents: a qualitative analysis," *The American Journal of Surgery*, vol. 216, no. 4, pp. 754-759, 2018.
- [12] M. K. Mulcahey, C. Nemeth, J. D. Trojan, and M. I. O'Connor, "The perception of pregnancy and parenthood among female orthopaedic surgery residents," *JAAOS-Journal of the American Academy of Orthopaedic Surgeons*, vol. 27, no. 14, pp. 527-532, 2019.
- [13] Y. B. Osband, R. L. Altman, P. A. Patrick, and K. S. Edwards, "Breastfeeding education and support services offered to pediatric residents in the US," *Academic pediatrics*, vol. 11, no. 1, pp. 75-79, 2011.
- [14] B. J. Sandler, J. J. Tackett, W. E. Longo, and P. S. Yoo, "Pregnancy and parenthood among surgery residents: results of the first nationwide survey of general surgery residency program directors," *Journal of the American College of Surgeons*, vol. 222, no. 6, pp. 1090-1096, 2016.
- [15] A. Dixit, L. Feldman-Winter, and K. A. Szucs, "'Frustrated,' 'depressed,' and 'devastated' pediatric trainees: US academic medical centers fail to provide adequate workplace breastfeeding support," *Journal of Human Lactation*, vol. 31, no. 2, pp. 240-248, 2015.
- [16] S. J. Finch, "Pregnancy during residency: a literature review," *Academic Medicine*, vol. 78, no. 4, pp. 418-428, 2003.
- [17] K. Magudia *et al.*, "Parenting while in training: a comprehensive needs assessment of residents and fellows," *Journal of graduate medical education*, vol. 12, no. 2, pp. 162-167, 2020.
- [18] C. Kin, R. Yang, P. Desai, C. Mueller, and S. Girod, "Female trainees believe that having children will negatively impact their careers: results of a quantitative survey of trainees at an academic medical center," *BMC medical education*, vol. 18, no. 1, pp. 1-8, 2018.
- [19] L. L. Willett *et al.*, "Do women residents delay childbearing due to perceived career threats?," *Academic Medicine*, vol. 85, no. 4, pp. 640-646, 2010.
- [20] E. L. Rangel, H. Lyu, A. H. Haider, M. Castillo-Angeles, G. M. Doherty, and D. S. Smink, "Factors associated with residency and career dissatisfaction in childbearing surgical residents," *JAMA surgery*, vol. 153, no. 11, pp. 1004-1011, 2018.
- [21] M.-B. Mundschenk *et al.*, "Resident perceptions on pregnancy during training: 2008 to 2015," *The American Journal of Surgery*, vol. 212, no. 4, pp. 649-659, 2016.
- [22] Kollar EJ, Slater GS, Palmer JO, Dotter RF, Mandell AJ. Stress in subjects undergoing sleep deprivation. *Psychosom Med* 1988; 28: 101-13.
- [23] Kranes A. Sleepy interns. *N Engl J Med* 197 1; 285: 231.
- [24] Luby ED, Grisell JL, Frohman CE, Lees H, Cohen BD, Gottlieb JS. Biochemical, psychological, and behavioral responses to sleep deprivation. *Ann NY Acad Sci* 1982; 98: 7 1.
- [25] Sassin JF. Neurologic findings following short term sleep deprivation. *Arch Neurol* 1970; 22: 54-8.

- [26] Asken MJ, Rahaam D. Resident performance and sleep deprivation: a review. J Med Educ 1983; 58: 382-8.
- [27] Reuben DB. Psychologic effects of residency. South Med J 1983; 78: 380-3.
- [28] Bliss EL, Clark LB, West CG. Studies of sleep deprivation: relationship to schizophrenia. AMA Arch Neural Psychiatry 1959; 81: 348-59.

UNDER PEER REVIEW