



PREVALENCE OF MUSCULOSKELETAL PAINS IN POSTGRADUATE RESIDENTS OF A GOVERNMENT MEDICAL COLLEGE IN INDIA – A QUESTIONNAIRE BASED OBSERVATIONAL CROSS SECTIONAL STUDY

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ABSTRACT **INTRODUCTION** - orthopaedic morbidity in in post graduate hasn't gathered enough attention. Just like psychiatric issues, orthopaedic morbidities like low backache, heel pain, leg pain and neck pain are quite common in postgraduate residents. The present study intends to shed some light upon the same. **AIMS AND OBJECTIVE** – this study was aimed at orthopaedics morbidity perceived by post graduate student during residency and copying factors of this group of doctors at different medical college of india . **METHODS AND MATERIALS** - This is a questionnaire based observational cross sectional study that was conducted in NSCBMCH JABALPUR involving postgraduate residents from different specialities. All the participants were asked to fill a specially designed semi-structured proforma containing personal identification data and questions regarding past/present illnesses and habits. **RESULTS** - The study consisted of 105 PG residents of NSCBMCH JABALPUR including 69 males (66%) and 36 females (34%) Most of the study participants were undergoing residency in department of Surgery (13), Paediatrics (13), Medicine (12), Obstetrics and Gynaecology (12), Orthopaedics (10), Anaesthesia (10), and Radiology (9) followed by Radiotherapy (6), PSM (4), Ophthalmology (4), Pharmacology (3), Pathology (3), Anatomy (3) and ENT (3). As many as 58% of female residents suffered from back pain, 42% from leg pain, 33% from heel pain and 17% from neck pain. On the contrary, 58% of male residents suffered from heel pain, 43% from leg pain, 42% from back pain and 25% from neck pain. **CONCLUSION** – this study found post graduate residency training is stressful and compounded by identifiable variable. Its desirable to design means of alleviating the orthopaedic morbidity like establishment of residency counseling , yoga, sports , employ more residents and orientation program to handle issue of orthopaedic morbidity

KEYWORDS : resident doctor, tertiary care hospital, musculoskeletal pain.

Introduction- Occupational health hazards are very common. [1, 2] With promotion of industrial life, the prevalence of musculoskeletal disorders have increased markedly during the past decades. [3] One reason for this increase is work-related activities. [4] The most complaints in workers are low back pain and neck pain. [5, 6] Hospital workers seem to have higher rates of low back pain compared to the general population due to physical and emotional factors involved in their occupation, such as stress. [7, 8]

Many factors at work could predispose people to develop musculoskeletal disorders. Lifting or carrying loads, whole-body vibration, having a static posture for a long time and frequent bending and twisting have been proved to be the physical load risk factors consistently associated with work-related back and neck disorders. There is evidence for a causal relationship between low back and/or neck injuries and disorders with workplace exposures to forceful exertions, awkward posture, and vibration taking into account all these, doctors who are exposed to such deleterious work-related factors, may be at a higher risk of developing low back pain and neck pain. [6,9] Many doctors believe that overstrained and awkward back postures, taking a static posture for a long time, and frequent bending during their work, expose them to develop several musculoskeletal disorders such as low back pain and neck pain.

Low back pain is associated with multiple risk factors, including gender, age, lifestyle, psychosocial profile, physical demands of the workplace, social support, and pain perception.[10] Low back pain cases associated with an initial episode could be resolved within 2-4 weeks. [11] It had been observed that individuals who suffered from low back pain problems might develop major physical, social and mental disruptions, which could affect their occupations. [12] Physical impact includes the loss of physical function and deteriorated general health. Social impact included decreased participation in social activities. Psychosocial impacts are manifested through insomnia, irritability, anxiety and depression. [13] Previous studies reported that

there were significant relationship between psychosocial variables and musculoskeletal disorders. [14-16]

Several studies have focused on the prevalence and risk factors of low back pain among nurses, [17-21] while other studies have highlighted the problem among physiotherapists. [22] As several other categories of workers in the hospital are subjected to muscular strains and stresses in the course of their work, they may also suffer from low back pain and will benefit from prevention program for low back pain in the workplace. In most studies, only a few of risk factors have been taken into consideration.

Present study has been conducted on the prevalence of musculoskeletal pain and its associated risk factors among post graduate residents.

Methodology- Study design & participants

Using a universal sampling, this prospective observational study was carried out among all post graduate students (n = 106) in a government medical college in Jabalpur, India during the period of 1.5 year (1st March 2017 to 31st August 2018). All the residents were included who are ready to give written consent.

Study instruments

This study used an online self-administered questionnaire in English language. The questionnaire was composed of questions on socio-demographic data. included questions on the risk factors such as exercise and caffeine consumption, history of physical trauma and family history of musculoskeletal disorders and questions on the occurrence of pain in the neck, shoulders and low back. The questionnaire was pre-tested on 10 students before distributing to the subjects to ensure that the questionnaire was easily understood.

Result-

Surgery, paediatrics, orthopaedics, medicine, and radiology had the

most male study participants. The gender distribution of participants was statistically significant ($p < 0.0001$), with most women in the obstetrics and gynaecology and anesthesia departments. 65% of men were not vegetarians, while 72% of women were ($p 0.0001$). Most participants—male and female—say their vision hasn't changed since joining. At joining, males had 42% alcohol dependence, while females had 0%, which was statistically significant ($p 0.0001$). At joining, 67.8% of males and 3% of females were alcohol dependent, a statistically significant difference ($p 0.0001$). 21% of men and 0% of women reported smoking addiction. 80% of men and none of women reported smoking addiction. 22% of women and 59% of men reported sexual activity. This difference was significant ($p 0.0001$). Past versus Present Male: 3.26 ($P=1.68$) Chi Square Female: 1.68 ($P=0.195$).

Table 1 Socio-demographic characteristic of study Participants

		Male		Female	
		Frequency	Percentage	Frequency	Percentage
Department	Anesthesia	6	8.70%	4	11.10%
	Anatomy	1	1.40%	2	5.60%
	ENT	3	4.30%	0	0.00%
	Medicine	9	13.00%	3	8.30%
	Obstetrics and Gynecology	2	2.90%	10	27.80%
	Ophthalmology	2	2.90%	2	5.60%
	Orthopedics	10	14.50%	0	0.00%
	Pathology	1	1.40%	2	5.60%
	Pediatrics	10	14.50%	3	8.30%
	Pharmacology	1	1.40%	2	5.60%
	PSM	3	4.30%	1	2.80%
	Radiology	7	10.10%	2	5.60%
	Radiotherapy	3	4.30%	3	8.30%
	Surgery	11	15.90%	2	5.60%
Dietary Habit	Veg	24	34.80%	26	72.20%
	Non veg	45	65.20%	10	27.80%
Vision at the time of Joining	1.75/1.50	1	1.40%	0	0.00%
	2.25/2.25	1	1.40%	0	0.00%
	6/6	67	97.10%	36	100.00%
Vision Present	6/6	69	100.00%	36	100.00%
ALCOHOL ADDICTION At the Time of Joining	Yes	29	42.0	0	0.0
	No	40	58.0	36	100.0
ALCOHOL ADDICTION AT PRESENT	Yes	40	67.8	1	2.8
	No	19	32.2	35	97.2
SMOKING ADDICTION At the time of Joining	Yes	14	20.3	0	0.0
	No	55	79.7	36	100.00
SMOKING ADDICTION At Present	Yes	55	79.7	0	0.00%
	No	14	20.3	36	100.00%
Sexually Active at preset	Yes	41	59.40%	8	22.20%
	No	28	40.60%	28	77.80%
Sexually Active at preset	Yes	51	73.91	13	36
	No	18	26.08	23	63.88

Men reported back pain most often after posture changes (35%), morning (30%), sitting for more than 30 minutes (25%), work loss (10%), and radicular pain (9%). Women had the highest frequency in the morning (28%), then after sitting for more than 30 minutes (25%), work loss due to pain (14%), and poster changes (11%).

Male Heal pain was highest after long periods of standing (44%), followed by morning pain (29%), pain while walking normally (26%),

pain after walking (23%), and tingling and numbness (19%). The study also examined special sandals, cushions, and shoes. Females scored highest after walking (28%), followed by walking normally (22%). 22% of people stand for long periods. To alleviate this issue, 17% use specialized sandals, cushions, or shoes. Morning pain (11%), tingling, and numbness (8%). After standing, 44% of men reported heel pain. Morning pain (29%), normal walking (26%), after-walking (23%), and tingling and numbness (19%) followed. The study also examined whether people used heel-pain-relieving sandals, cushions, or shoes. After walking, 28% of women were most active, followed by 22% who walked normally. According to the survey, 22% of people reported long-term discomfort, and 17% used sandals, cushions, or shoes. Morning pain (11%), tingling, and numbness (8%). The study found that male knee pain was highest during long standing (20.30%), squatting (18.80%), using the toilet (14.50%), morning stiffness (13.00%), changing positions (4.30%), and at night (5.80%). In women, knee pain was most common during long standing (19.40%), morning stiffness (16.70%), squatting (5.60%), using the toilet (5.60%), changing positions (5.60%), and at night (2.80%). Male leg pain was highest during night cramps (37.70%), followed by walking (27.50%) and exercise (26.10%). 25.00% of women had nocturnal leg cramps. Walking and exercise caused 11.10% and 22.20% leg cramps, respectively. Reading and watching TV caused 20.30% of male neck pain, according to the study. Morning neck pain was 7.20%, and neck pain radiating to the arm was 13.00%. Vertigo and headache occurred 5.80% and paresthesia 4.30%. Vertigo and Headache were 11.10% and Radiating Pain to the Arm 8.30% in women. 8.30% of women had morning neck pain. Paresthesia affected 2.80% of women. 5.60% of women reported discomfort while reading and watching TV.

Table 2 SEX WISE DISTRIBUTION OF THE PAIN IN THE PARTICIPANTS WORKING IN VARIOUS DEPARTMENTS

			Male		Female		x ²	p value	
			N	%	N	%			
Back Pain	Morning Back Pain	Yes	21	30.40%	10	27.80%	0.08	0.777	
		No	48	69.60%	26	72.20%			
	Pain after sitting for >30 min	Yes	17	24.60%	9	25.00%	0.00	0.972	
		No	52	75.40%	27	75.00%			
	Pain after poster change while standing / sitting / lying	Yes	24	34.80%	4	11.10%	6.78	0.009	
		No	45	65.20%	32	88.90%			
	Any leave / work loss due to back pain Any leave / work loss due to back pain	Yes	7	10.10%	5	13.90%	0.33	0.57	
		No	62	89.90%	31	86.10%			
	Radicular Pain	Yes	6	8.70%	0	0.00%	0.32	0.07	
		No	63	91.30%	36	100.00%			
	Heal Pain	Morning Pain	Yes	20	29.00%	4	11.10%	4.29	0.04
			No	49	71.00%	32	88.90%		
After long Standing		Yes	30	43.50%	8	22.20%	4.63	0.03	
		No	39	56.50%	28	77.80%			
After walking	Yes	16	23.20%	10	27.80%	0.27	0.61		
	No	53	76.80%	26	72.20%				
Do you use special	Yes	13	18.80%	6	16.70%	0.07	0.78		

	Walk Normally	No	56	81.20%	30	83.30%		
		Yes	18	26.10%	8	22.20%	0.19	0.66
	Tingling and	No	51	73.90%	28	77.80%		
		Yes	13	18.80%	3	8.30%	2.02	0.16
Knee Pain	After long standing	Yes	14	20.30%	7	19.40%	0.01	0.92
		No	55	79.70%	29	80.60%		
	Morning Stiffness	Yes	9	13.00%	6	16.70%	0.25	0.62
		No	60	87.00%	30	83.30%		
	At night	Yes	4	5.80%	1	2.80%	0.48	0.49
		No	65	94.20%	35	97.20%		
	Change in position	Yes	3	4.30%	2	5.60%	0.08	0.78
		No	66	95.70%	34	94.40%		
	Squatting	Yes	13	18.80%	2	5.60%	3.41	0.06
		No	56	81.20%	34	94.40%		
	Toilet	Yes	10	14.50%	2	5.60%	1.87	0.17
		No	59	85.50%	34	94.40%		
Leg Pain	During Exercise	Yes	18	26.10%	8	22.20%	0.19	0.66
		No	51	73.90%	28	77.80%		
	During Walking	Yes	19	27.50%	4	11.10%	3.73	0.05
		No	50	72.50%	32	88.90%		
	Night Cramp	Yes	26	37.70%	9	25.00%	1.71	0.19
		No	43	62.30%	27	75.00%		
Neck Pain	Morning Neck Pain	Yes	5	7.20%	3	8.30%	0.04	0.84
		No	64	92.80%	33	91.70%		
	At Reading & Watching TV	Yes	14	20.30%	2	5.60%	3.98	0.05
		No	55	79.70%	34	94.40%		
	Radiate down to arm	Yes	9	13.00%	3	8.30%	0.52	0.47
		No	60	87.00%	33	91.70%		
	Paraesthesia	Yes	3	4.30%	1	2.80%	0.16	0.69
		No	66	95.70%	35	97.20%		
Vertigo and Headache	Yes	4	5.80%	4	11.10%	0.95	0.33	
	No	65	94.20%	32	88.90%			

Age Group at PG	up to 25 yrs	14	20.30%	14	38.90%
	26-35 yrs	50	72.50%	20	55.60%
	>35 yrs	5	7.20%	2	5.60%
	Mean + SD	28.55+3.73	27.42+4.16		
	t-test = 1.42	p=0.16			
Sleeping Hours Group	Less than 6 hrs	23	33.30%	16	44.40%
	6-6.9 hrs	31	44.90%	10	27.80%
	>=7 hrs	15	21.70%	10	27.80%
Addiction	No any addiction	29	42.00%	35	97.20%
	Either alcohol or smoking	20	29.00%	1	2.80%
	Alcohol smoking both	20	29.00%	0	0.00%

All participants in the undergraduate cohort were under the age of 25 and were of both genders. The study found that the average age of males was 19.51+1.27 years, while the average age of females was 19.00+1.26 years. The majority of postgraduate participants fell within the age range of 26-35 years, with 72.5% being male and 55.6% being female. A smaller proportion of male (20.3%) and female (38.9%) participants were under the age of 25. Conversely, a minority of male (7.2%) and female (5.6%) participants were over the age of 35. The study found that the average age of males was 28.5 years with a standard deviation of 3.73, while the average age of females was 27.42 years with a standard deviation of 4.16. In general, 45% of the participants who took part in the study were male and reported sleeping for a duration of 6-6.9 hours. On a daily basis, there is a reduction of 33% in the duration of less than 6 hours, while there is an increase of 22% in the duration of 7 or more hours. The study reported that a significant proportion of female participants (44%) reported sleeping for less than 6 hours per day, while 28% reported sleeping for 6 to more than 7 hours daily. The average duration of daily sleep was determined. According to the reported data, the estimated mean height for males was 5.89+1.07, while the estimated mean height for females was 5.84+1.26.

Discussion-

A large-city teaching hospital with tertiary care has a huge workload. Resident physicians underpin this overburdened system. Clinicians must be available 24/7. These doctors treat patients of all severity and clinical presentation. They risk nosocomial infections. Residents have emotionally draining jobs. Burnout is a major career risk for them. Burnout causes cardiovascular disease, depression, suicidal thoughts, and insomnia. Medical school is hard, and many students struggle mentally and physically. Academic, ethical, and financial stress has increased psychological morbidity like burnout and depression. Psychological distress can cause neck, back, leg, heel, knee, and wrist pain. Even among young people, postgraduate medical seats are scarcer than undergraduate seats in the nation. OT, ICU/CCU/NICU/PICU, seminar, thesis, and OPD management are typical workdays. Duty days involve CPR calls, posting accidents and emergencies, and overtime. Orthopaedic Morbidity Study Among Medical Personal Doctors: BACK PAIN, LOW BACK, AND SEXUALITY Males reported the most back pain (1,2,3,4,5) after poster changes (35%), morning back (30%), sitting for more than 30 minutes (25%), work loss (10%), and radicular pain (9%). Morning (28%) is the highest subheading for back pain in women, followed by after sitting for more than 30 minutes (25%), work loss due to pain (14%), and posture changes (11%). The post-graduate residency departments with the most morning back pain are Anaesthesia (70%), Paediatrics (69%), Pathology (67%), Pharmacology (66%), Radiotherapy (50%), Radiology (22%), Medicine (9%), and Surgery (8%). In our study, Paediatrics Residents (77%), ENT (67%), Radiotherapy (50%), Radiology (33%), Anatomy (33%), Anaesthesia (30%), PSM (25%), Ophthalmology (25%), and Orthopaedics (10%) had the highest prevalence of back pain after sitting > 30 minutes. Obstetrics and gynaecology (8%) had the highest admission rate among paediatric residents due to long shifts in the ward, NICU, and call. Postgraduate medicine (58%), surgery (54%), and PSM residents had the most back pain during poster changes. Radiology (22%), anaesthesia (40%), 25% ophthalmology Pharmacology (33%),

Table 3 distribution of age and addiction in study participants

		Male		Female	
		Frequency	Percentage	Frequency	Percentage
Age Group at UG	upto 25 yrs	69	100.00%	36	100.00%
	26-35 yrs	0	0.00%	0	0.00%
	>35 yrs	0	0.00%	0	0.00%
	Mean + SD	19.51+1.27	19.00+1.26		
	t-test = 1.35, p = 0.05				

paediatrics (23%), anaesthesia (20%), radiotherapy (17%), surgery (15%), radiology (11%), orthopaedics (10%), and obstetrics and gynaecology (8%). Radicular Back Pain: Postgraduate residents in pharmacology (33%), PSM (25%), radiology (11%), orthopaedics (10%), anaesthesia (10%), and surgery (8%). Anaesthesia staff had the most morning back pain due to their duties in surgery, gynaecology, orthopaedics, medicine, and casualty. They work in the ICU because spine surgery, total hip replacement, and neurosurgery kept them moving and standing. Due to long shifts and frequent ICU and ward admissions, paediatric residents have busy schedules and cardiac unit have many serious patients, so residents have mental stress and musculoskeletal disorders like neck, back, knee, leg, and heel pain from file work and record keeping. The orthopaedic surgeon and doctor may have bent their neck and back. Musculoskeletal disorders affected surgeons most in the lower back, hips, knees, ankle, and neck. Operation-related standing and bending may cause this. Psychological issues cause neck and back pain. Stress, exhaustion, emotional distress or anxiety, sleep disturbances, poor quality of life, and pain behaviour are all major contributors to MSD. The neck and lower back were the most common sites of musculoskeletal disorder in physicians (40% and 50%, respectively), while hips, elbows, and knees were least affected by smoking-related low back pain in resident doctors. In a 2016 study by Seydeh Somayeh Kazemi, Mohammad Rafiqi MSc, and others, 93 cases had low back pain (30.4%), 76 had knee pain (24.8%), 50 had shoulder (16.3%), 21 had heel pain (9.6%), 65 had neck (21.3%), 10 had wrist (16.3%), and 6 had elbow pain. Yoga, sports, and gym inactivity are also linked to neck, knee, low back, and heel pain (12,13,6,7,8). Resident doctors use computers and the internet for seminars, paper presentations, and thesis work, which can cause back, neck, and knee pain (9). The 2017 study on Neck and Low Back Pain in 506 Medical Students Enrolled by Jerry Y. Du, Alexander Aichmair et al. (10) had a mean age of 24.7 4.3 years (between 20 and 53 years). NP was 35% (74/210) and LBP 47% (99/210). 66 medical students (31%) had NP and LBP. Reza Nasiri, Hossein Firouzi, et al. studied medical student neck pain in 2011 (13). 65% of 107 medical students participated. Both studies are unrelated. This study examines sex-based differences in heel pain across departments. The study found that the most men experienced heel pain after prolonged standing (44%), morning pain (29%), pain while walking (26%), pain after walking (23%), and tingling and numbness (19%). The study also examined whether participants used special sandals, cushions, or shoes. Females reported pain after walking (28%), walking normally (22%), and standing for a long time (22%). (17%), morning pain (11%), and tingling and numbness (8%). The table compares heel pain in different postures and activities. A study found that many medical residents had morning heel pain. 70% of paediatrics, 67% of ENT, 33% of Pharmacology, 30% of Orthopaedics, 30% of Anaesthesia, 22% of Radiology, 16% of Radiotherapy, 16% of Obs&Gyn, and 8% of Surgery residents reported morning heel pain. Medical specialties assessed heel pain after prolonged standing. Heel pain was reported by 62% of paediatrics, 50% of PSM, 33% of Pharmacology, 40% of Orthopaedics, 30% of Anaesthesia, 62% of Surgery, 67% of Radiotherapy, 8% of obs&Gyn, and 58% of Medicine residents. Medical specialties assessed heel pain after walking. Paediatrics residents had the highest heel pain rate (69%), followed by Radiotherapy (83%), Anaesthesia (20%), Surgery (21%), Medicine (16%), Pharmacology (30%), Pathology (30%), and Orthopaedics (10%). 23% of paediatric residents used specialised footwear and cushions for heel pain. Radiotherapy (67%), ophthalmology (50%), pharmacology (33%), anatomy (33%), and ENT (33%). Surgery (15%), medicine (25%), anaesthesia (10%), and obstetrics and gynaecology (8%). Those without pain should walk normally. 23% of paediatric residents had heel pain while walking. User-studied medical specialties are: Pharmacology (33%), Obstetrics and Gynaecology (8%), Pathology (100%), Anaesthesia (10%), Radiology (45%), Ear, Nose, Throat (33%), Surgery (31%), and Radiotherapy. 17% preferred traditional medicine, while 50% preferred alternative treatment. This study examined heel pain with tingling and numbness across medical specialties. Radiotherapy (50%), Surgery (31%), Anaesthesia (30%), Obs&Gyn (9%), and Paediatrics (8%). The topic is 25% medicine. Especially in Orthopaedics (10%), residents suffer from heel pain. Standing in wards, operation theatres, casualty, and ICU, walking on hard surfaces, and wearing leather shoes can cause this. Poor rest and standing posture may also contribute to this condition. In our current study of 105 resident medical doctors at the Netaji Subhash Chandra Bosh Medical College in Jabalpur, we found that 29% of male

doctors abused alcohol and cigarettes, compared to 42% of female doctors. Compared to the 97% of female doctors who did not have any addictions, 2.8% of male doctors who had completed their one-year residency programme reported abusing alcohol, a statistically significant difference ($p < 0.0001$). In prior research, a 2005 German study by Judith Rosta et al. (17) found that from heavy drinking and hazardous drinking 12%-16% to misuse and dependence 6-8% in doctors, increased risk was positively correlated with male doctors aged 40 to 45 years and older as well as some work life style and health factors. In a 1996-1998 study by John R. Knight, M.D., et al. of 115 paediatric residents, 12 had scores suggesting and 6 indicating alcoholism, 28 reported blackouts, 13, felt guilty about their drinking, 6, argued while drinking, and 2% had marital issues related to alcohol. According to Monica-Lamberti, Paola Napolitano (18) studied 641 medical students, 359 degree students, and 500 resident doctors in 2017. 76% drank alcohol, 85% were medical students, 77% were residents, and 63% worked in healthcare. According to Avi Singh, Prathiba Gupta et al. (19) found that 61.29% of male and 0.24% of female first-year MBBS students at Era's Lucknow Medical College abused alcohol and tobacco in 2016. Ashiara Shidmir, Mahesh, and colleagues examined 379 medical students' drug use in 2016. 25.9% of students abused drugs. In 2015, Nidhi Goel, Vivek Khandelwal, and colleagues (20) examined alcohol and tobacco use among Indian medical students. UG students had 16.6% and 8.0% prevalence, while PG students had 31.5% and 14.5%. Males used both substances more than females in both groups ($p < 0.001$).

Smoking addiction among male participants has increased from 21% at joining to 80% at present ($\chi^2=2.41; p=0.121$), while none of the female participants had a smoking addiction at that time ($\chi^2=8.43; p=0.004$). According to Dr. Smits, PA Leggat et al. studied medical student smoking habits worldwide in 2007. Smoking among medical students seems to vary by region. Australia had 3% female doctors, China 3%, India 7%, Thailand 7%, the US 7%, and Malaysia 9%. Pakistan. Greece 49%, Australia 3%, UK 3%, USA 2%, and Japanese physicians 43% 38% of Kuwaiti, 36% of UAE, and 48% of all male Indian physicians. In 2008, 18.3% of 946 medical students surveyed by Ehsan Taheri Ahmat Ghorbani (54) reported smoking. 9.8%, 17.6%, and 4.2% of men and women did so. 24.9% of smokers cited personal life stress. 17.6% Women started smoking at 18.9+2 and men at 19.6+2.5. 4. 9.8%, 17.6%, and 4.2% respected cigarette smoking. Women started smoking at 18.9+2.4 and men at 19.6+2.5. 22% of women and 59% of men reported having sex. This difference was significant ($p < 0.0001$). 36% of women and 74% of men report sexual activity.

Conclusion- According to the findings of this study, postgraduate residency training is a stressful experience that is made worse by identifiable variables. In order to address the problem of orthopaedic morbidity, it is recommended to devise strategies for reducing orthopaedic morbidity, such as the establishment of residency counselling, yoga, and sports, as well as the employment of more residents and the implementation of an orientation programme.

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