



RESEARCH PAPER

Safety, Health and Wellness Practices in the Public Universities of Punjab, Pakistan

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ABSTRACT

The management of employees' safety, health and wellness is a major factor that contributes in the smooth functioning of any organizations. A safe, secure and healthy workforce is an important asset of any organization. Mixed method research was conducted by collecting both qualitative and quantitative data through questionnaire and interviews. The major objective was to analyze the system of safety, health and wellness of university teaching faculty in old and new universities. The study revealed that teachers and administration of universities were generally satisfied with the health facilities i.e. at campus medical facilities, referral facilities, and reimbursement of medical bills. However, CMOs of both types of universities further demanded extension of indoor lab facilities at campus, more doctors and medical staff, and increase in budget. The most common health problem was hypertension followed by diabetes. Other health problems of teachers include ischemic heart disease, seasonal ailments, psychological disorder and musculoskeletal problems

Introduction

People who work in a safe environment and enjoy good health are more likely to be productive and yield long term benefits to the organization. A safe, secure and healthy workforce is an important asset of any organization. Such working environment does not just happen; it has to be created. Safety means all the activities involved in protecting staff from injuries caused by work-related accidents. Health and wellness programs include all the activities involved in securing employees' freedom from illness and their general physical and mental well being. The organizations with best reputation develop deliberate, well planned and thorough safety, health and wellness programs. According to George and Cole (1992) safety begins at the top. The employer is ultimately responsible for the health safety and welfare of employees. Senior management, whether in

government or private organization, must understand the principles and philosophy of managing the organization with full regard to health, safety and welfare matters. The premises, equipment, operations, and processes carried out at the workplace must be safe for everyone. According to The Royal Society for the Prevention of Accidents. (2012, para. 1), A planned approach to managing risk is important, not just to prevent accidents and work related health problems to both staff and students.

Institutions of higher education must provide not only a safe working environment but also are required to make certain that working environment is, as far as possible, also a healthy one. This includes, for example, a working environment that is free from stresses resulting from lack of privacy or noise which disrupts concentration. Educational organizations should also be well lit and ventilated, and as attractive as practical. Daniels et.al (2017) reported that improvements in well-being and performance are associated with system-wide approaches that enhance job design

According to the University of Surrey's health and safety policy document (2019, pp:1-25), the vice-chancellor delegated the authority for health and safety (H&S) to Pro-Vice-Chancellor. He is an ex-officio member of sub-committees of H&S committees. These committees are responsible for safe operations of university, including control of hazardous substances to air, land, sewer, or surface water, and management and recycling of waste. The university involves students, staff and representatives on H&S issues. H&S performance is reviewed by head of H&S across the university and a report is submitted on risk exposure and objectives for the forth coming period to the health and safety. The University of Surrey requires all new staff to have a pre employment health assessment in order to identify any health conditions that may require work place adjustments; to ensure that the proposed work activities are not likely to cause ill health; and to identify the need for health surveillance. Proper medical care is provided by the occupational health advisor and proper remedial measures are suggested. All the staff members have to attend basic training in health and safety. An independent and confidential staff counseling service and insurance services are available on campus. The University of Surrey has its own security department supported by Close Circuit Tele-Visions (CCTV) across the campus, providing emergency response throughout the year. Georgia Southern University (2018) described in their standards of excellence that their health services measure excellence in three ways: through measuring program and service satisfaction; through meeting the highest performance standards; and through complying with national clinical standards of care. They administer a patient satisfaction survey on regular basis to evaluate users of health services (students and university community). Patients' feedback is taken on quality care, cost effectiveness, confidentiality, facility appearance, hours of operation, and overall conditions etc. The survey results have been constantly positive over the years. University health services are in strict compliance with regard to licensure and the credentials of the clinical staff and

federal regulations are met to comply with national clinical standards of care. Aiming for high standards of health and safety is the right thing to do and is not just about legal compliance. According to a handbook "Health and safety in the workplace, an introduction for employees" (2015), it is important for everyone to know health and safety rules and instructions so one should be aware of his/her actions and the impact they could have on his/her safety or the safety of others. Further, employees should report any health and safety hazards to their manager. The safety culture, can have great benefits to the organization, its viability and to the people working in it. (Ridley and Channing, 2003)

A safe, secure, and healthy working environment in universities is imperative and increase productivity. All the reputed and world class institutions of higher education continuously improve and develop a thorough safety, health, and wellness programs. According to AUN Healthy University Framework. AUN (2017) leadership commitment and support of senior decision-makers should enable the approval of university policies for the Healthy University Framework. Wellness-related programs should be designed and delivered according to the requirements and wellbeing of current employees (Brown et al., 2014, 2015).

Abualrejal (2016) highlighted the significance of improving the knowledge about the Safety and Health Practices to the workers and employees to reduce the accidents in the workplace. Wellness programs on the workplace including nutrition, fitness and education on health lifestyles improve workplace conditions.

Alford, Lynch, Rosenblum, and Kullmann(2014) reported that injuries and illness can create conflict and hard feelings among workers, slow down production, and increase costs. A well organized safety, health and wellness program can have a dramatic effect on the overall effectiveness of departments of organization. Therefore, universities in Pakistan should also have a good system of safety, health and wellness for teachers and other relevant staff so that they could feel them as worthwhile contributors in the university and perform better. University administrators should assess the unique and specific needs of their employees as opposed to students in order to serve, accommodate, and build successful programs that can have a lasting effect on their employees' wellness. (Tyler et.al. 2016)

Material and Methods

A mixed method research was conducted by collecting both qualitative and quantitative data through questionnaire and interviews. Questionnaires and Interview protocols were developed and data were collected after checking the validity and reliability of the instruments. Questionnaire data were analyzed quantitatively by using SPSS software. The interviews were analyzed by describing and narrating the data to get an in-depth understanding of the system of safety, health and wellness in the universities.

The universities were divided into two groups for comparison i.e. old and new: For the purpose of this research, the universities having more than 40 years of

their establishment were classified as “old universities”. The universities completed at least fifteen years of their existence were considered as new universities. Five new universities were included in this research. Consequently, total ten (10) universities (five old and five new) were taken for the research study.

The underlying speculation to get information on old and new universities’ systems of safety, health and wellness was that the old universities may be having well established systems as compared to new universities. Therefore, the system of safety, health and wellness of universities were measured and compared on the same underlying supposition.

The sample of the study included teachers, vice-chancellors, and Chief Medical officer (CMO) of the universities. Following table shows the detail of sample and tools administered. Following table shows the detail of sample and tools administered.

Table 1
Type of sample personnel, and research tool

Serial No.	Type of personnel to whom tools of research administered	Tool of research
1	Teaching faculty i.e. Professors, Associate Professors, Assistant Professors and Lecturers	Questionnaire
2	Vice-Chancellors	Interview protocol
3	Chief Medical officer (CMO)	Interview protocol

Practices regarding safety, health and wellness were analyzed on the outline given below:

1. Teachers opinions
2. Vice-Chancellors’ reflections
3. Opinions and information taken from Chief Medical officer (CMO)

Teachers’ Opinions

Teachers’ opinions regarding safety, health and wellness were solicited on a five point scale. Chi-square test was applied to check the association in response pattern of teachers from old and new universities on nine indicators of Safety, health, and wellness. Mean response values were also computed. Summary of results is given in table 2

Table: 2
Old and new universities teachers' opinions on safety, health and wellness

Safety, health and wellness	Type of University	Number of teachers	Degree of response level						Mean value	χ^2	Sig. level
			S.D %	D %	UD %	A %	SA %				
1. Natural environment of university is clean and healthy.	Old	406	1.2	3.7	3.0	56.2	36.0	4.22	9.527	.049	
	New	189	1.6	5.8	7.9	49.7	34.9	4.11			
2. Psychological climate is very conducive in university for teachers to acquire new knowledge and skills.	Old	404	2.2	9.7	16.1	52.5	19.6	3.77	6.287	.179	
	New	184	5.4	8.2	19.6	46.2	20.7	3.68			
3. Health facilities provided at the university are satisfactory.	Old	403	8.4	21.8	14.6	39.7	15.4	3.32	12.363	.015	
	New	187	7.5	11.2	21.9	43.3	16.0	3.49			
4. University administration provides appropriate facilities to the teachers facing physical diseases.	Old	405	5.9	16.8	27.2	34.8	15.3	3.37	2.982	.561	
	New	187	7.0	11.8	27.3	39.0	15.0	3.43			
5. University administration provides appropriate facilities to the teachers facing psychological diseases.	Old	403	9.7	21.8	31.3	25.8	11.4	3.07	3.458	.484	
	New	186	9.7	16.7	29.6	29.6	14.5	3.23			
6. Stress plays major role in creating health problems in teachers.	Old	405	19.8	44.9	20.5	10.9	4.0	2.34	10.074	.039	
	New	186	25.8	35.5	16.7	15.1	7.0	2.42			
7. The university ensures teachers' safety, health and wellness to such an extent that the teachers can save a lot of their mental energy for their work.	Old	403	7.2	17.9	27.5	32.3	15.1	3.30	3.103	.541	
	New	187	9.6	17.1	26.7	34.8	11.8	3.22			
8. Teachers' work place is free of harassment and threat.	Old	404	3.0	8.2	12.6	53.7	22.5	3.85	3.103	.541	
	New	186	5.4	8.1	9.7	52.7	24.2	3.82			
9. Teachers never went through work place violence.	Old	397	1.5	7.8	9.1	50.4	31.2	4.02	13.489	.009	
	New	186	7.0	5.9	6.5	48.4	32.3	3.93			

Opinions of the teachers were found dependent on type of university on four of the nine indicators of safety, health and wellness. On five of the nine indicators, opinions of the teachers were not dependent on type of university i.e. opinions were similar.

As far as the average degree of response level is concerned, comparison of mean response values indicated that old university teachers considered their environment cleaner as compared to new university teachers. Their response was statistically significant in favour of old universities. The psychological environment was also more conducive in old universities for teachers to acquire

new knowledge and skills. However, χ^2 value was not significant. Mean values were 3.77 and 3.68 in old and new universities, respectively.

A further comparison of mean values on item 3, 4, and 5 showed that level of satisfaction regarding health facilities is not high. It is closer to neutral value. New university teachers seem to be relatively more satisfied not only with respect to general health facilities but also facilities provided for treatment of physical and psychological diseases. However, the relationship between type of university and teachers' opinion was only significant on item 3.

The teachers of both types of universities negated on item 6, and said stress was not identified as major cause for creating health problems but old universities' teachers more strongly negated on the statement than teachers in new universities. As far as the safety and security of the teachers was concerned, teachers of both type of universities opined that their workplace is free of harassment and threat. Teachers' opinion was significantly associated with the type of university on item 9, where teachers from old universities more strongly opined, that they never went through workplace violence as compared to new universities' teachers. Teachers of both type of universities further confirmed this stance on item 7 that their universities ensure teachers' safety, health and wellness to such an extent that the teachers can save a lot of their mental energy for their work.

Vice-Chancellors' Reflections

Vice-Chancellors were asked about their satisfaction over health facilities available at campus. Six of the eight VCs expressed their satisfaction on health facilities provided by the universities. The remaining two expressed their dissatisfaction. Some of the reflections are given below:

"Yes I am satisfied because we have contracts with good hospitals. If any of employees need help, they can be referred to big hospitals. In the past, we gave only emergency treatment to students but now on special instruction of Governor, we are also considering hepatitis cases. We are trying to provide remedies, for such cases. They only pay for tuition fee if they have problem while staying here we treat them. We are creating test facilities and have already purchased laboratory equipment and hiring technicians now. We are trying to make as many facilities as are possible but we are not making hospital.....It is some kind of dispensary here. We are trying to make certain types of tests for hepatitis, sugar etc. available here." (a new university)

"It is not satisfactory but it is deficient and university needs ambulance, doctors' panel and outdoor facilities etc. We are taking Measures for further improvements. These should be extended from time to time." (an old university)

Furthermore, Opinions and information were solicited through three open ended and eight closed ended questions from the CMOs.

Opinions and information provided by CMOs

Chief Medical Officers' opinions were solicited through a five point likert type scale. Mean response values were computed on eight close ended statements indicating average degree of agreement or disagreement with each statement. Following table presents the summary of mean values for each statement:

Table 3
Old and New University CMOs' opinions on safety, health and wellness practices

Safety, health and wellness practices	Old University N=05 Mean value	New University N=05 Mean value
1. Physical diseases are found more in the university teachers as compared with general people.	4.20	4.20
2. Psychological diseases are found more in the university teachers as compared with general people.	3.00	3.20
3. Medical facilities provided at campus are sufficient.	3.40	3.60
4. Mostly teachers complain that they are facing health problem because of stress and tension at workplace.	2.60	3.40
5. Medical facilities fulfill the needs of university teachers	3.00	3.40
6. University provides health coverage to the family of teachers.	4.80	3.80
7. University provides appropriate facilities to the teachers who are facing physical diseases.	4.80	3.40
8. University provides appropriate facilities to the teachers who are facing psychological diseases.	3.00	3.40

Chief Medical Officers (CMO) of old and new universities opined on eight indicators of safety, health, and wellness. They opined similarly that physical diseases are found more in university teachers as compared with general people. Mean values on item 7 indicated highly positive response on provision of appropriate facilities against diseases in old universities ($\bar{x}=4.80$) as compared to slightly positive response in new universities ($\bar{x}=3.40$).

The old university CMOs provided neutral response on item 2, and 8 as compared to slightly positive response given by the new university CMOs. In other words, new university CMOs said that psychological diseases are found more in the university teachers as compared to the general people and appropriate

facilities are provided to teachers, who are facing psychological diseases. While old university CMOs were undecided on both the statements.

Further, CMOs of new universities opined more favorably on item 3, medical facilities provided at campus are sufficient, than in old universities. Greater mean value of old universities on item 6 shows that old universities are more enthusiastic in providing health coverage to the family of teachers than new universities. Furthermore, old university CMOs' were neutral on the issue that medical facilities were fulfilling the needs of old university teachers ($x=3.00$) as compared to slightly positive opinions of new university CMOs ($x=3.40$).

New university CMOs opined that teachers of new universities mostly complain that they are facing health problems because of stress and tension at workplace, while CMOs of old universities negated on this statement.

A comparison of teachers and CMOs' opinions showed that Teachers' level of satisfaction regarding health facilities was not quite high. New university teachers seem to be relatively more satisfied not only with respect to general health facilities but also facilities provided for treatment of physical and psychological diseases. However, a considerable percentage of teachers were neutral on these statements. Generally CMOs of both types of universities were also somewhat satisfied over the provision of sufficient medical facilities. CMOs opined more favorably on the provision of appropriate facilities to teachers who are facing physical diseases as compared to psychological diseases.

Medical Facilities and Health Problems of Teachers

CMOs were asked three open ended questions to provide response in narration. Following table summarizes the provided information:

Table 4
Medical facilities and health problems of teachers

Question	Responses	N
What Medical facilities are provided to employees of the university?	• Not enough facilities	1
	• At campus medical facility	9
	• Referral facilities	9
	• Reimbursement of medical bills	9
What are the most common health problems of teachers?	• Hypertension	9
	• Diabetes	5
	• Ischemic heart disease (IBS)	4
	• Seasonal ailments	4
	• Psychological disorder	3
	• Musculoskeletal problems	2
What health facilities are needed to improve medical services at campus?	• Extension of indoor lab facilities at campus	9
	• More doctors and medical staff is needed	4

- Budget increase

When CMOs were asked about the medical facilities provided to university teachers and employees, nine out of ten Medical officers said the university is giving at campus medical facilities, referral facilities and reimbursement facility to not only teachers but all the other employees. Only one medical officer of a university said that there are not enough facilities provided by the university.

The medical officers identified six health problems most commonly faced by the university teachers. Among the most common health problems, Hypertension was at the top, and Diabetes came to second, and ischemic heart disease and seasonal ailments were at third number. While psychological disorder and musculoskeletal problems were at number four and five, respectively. Percentage of responses is given in the pie chart:

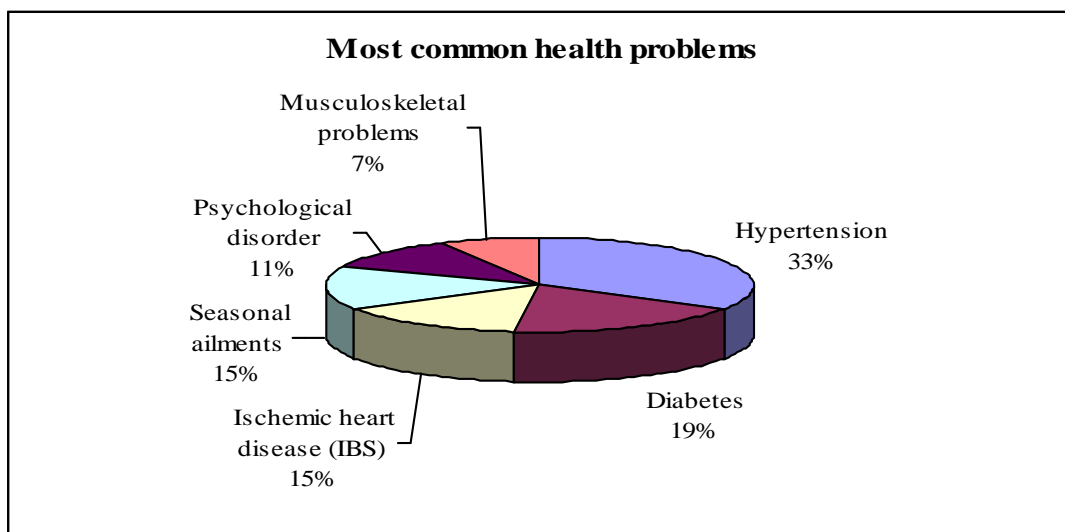


Figure 4.26: Common health problems among teaching faculty

Finally, CMOs were questioned about the required health facilities for the improvement of medical services at campus. Most of the medical officers demanded extension of indoor lab facilities at campus. In four universities they need doctors and other medical staff. Budget increase was another demand from two medical officers.

Following are some major findings of the study:

1. Majority of the VCs expressed their satisfaction on health facilities provided by their universities.
2. A comparison of mean response values indicated that old universities' teachers considered their environment cleaner as compared to new

- universities' teachers. Their response was statistically significant in favor of old universities.
3. Teachers' level of satisfaction regarding health facilities was not quite high in both types of universities. However, mean values showed that new university teachers seem to be relatively more satisfied not only with respect to general health facilities but also facilities provided for treatment of physical and psychological diseases.
 4. The psychological environment was also more conducive in old universities for teachers to acquire new knowledge and skills than in new universities. However, χ^2 value was not significant.
 5. In spite of the similar response pattern, teachers' opinion was significantly associated with the type of university on workplace violence. The teachers from old universities more strongly opined, that they never went through workplace violence as compared to new universities' teachers.
 6. It was found that the teachers of both type of universities opined that their workplace is free of harassment and threat.
 7. The teachers of both types of universities did not identify stress as to the extent of creating health problems.
 8. Teachers of both types of universities opined that their universities ensure teachers' safety, health and wellness to such an extent that the teachers can save a lot of their mental energy for their work.
 9. A comparison of teachers and CMOs' opinions showed that teachers' level of satisfaction regarding health facilities was not quite high. Similarly, CMOs of both types of universities were also somewhat satisfied over the provision of sufficient medical facilities.
 10. New universities' CMOs said that psychological diseases were found more in the university teachers as compared to the general people and appropriate facilities were provided to teachers, who were facing psychological diseases, while old universities' CMOs opinion, on the average was neutral on this issue.
 11. According to the old and new universities' CMOs, the old universities were more liberal in providing health coverage to the family of teachers than the new universities.

12. Old universities' CMOs' were, on the average, neutral on the issue that medical facilities were fulfilling the needs of old universities' teachers as compared to slightly positive opinions of new universities' CMOs .
13. New universities' CMOs opined that teachers of new universities mostly complain that they were facing health problems because of stress and tension at workplace, while CMOs of old universities negated for having such complaints.
14. Chief Medical Officers of both the old and new universities had similar opinion that physical diseases were more common in university teachers as compared with general people.
15. CMOs opined more favorably on the provision of appropriate facilities to teachers who were facing physical diseases as compared to psychological diseases.
16. Medical officers said that the universities are giving on campus medical facilities, referral facilities and reimbursement facility to not only the teachers but all other employees, as well.
17. The medical officers identified six health problems most commonly faced by the university teachers. Hypertension was at the top, and Diabetes came to second, and ischemic heart disease and seasonal ailments were at the third number. While psychological disorder and musculoskeletal problems ranked as fourth and fifth, respectively.
18. Most of the CMOs wanted extension of indoor lab facilities at campus. In four universities they need doctors and other medical staff. Budget increase was another demand from two medical officers.

Conclusion

Many researchers have found that improved work conditions for workers can be of assistance to create an environment for worker to prosper, where safety practices are made possible and supported by a culture of health (Sorensen et.al, 2016, 2019). A comparison of teachers and CMOs opinions showed that teachers' level of satisfaction regarding health facilities was not quite high. Similarly CMOs of both types of universities were also not fully satisfied over the provision of sufficient medical facilities. CMOs further opined more favorably that universities were providing appropriate health facilities against physical diseases as compared to psychological diseases. Interestingly, unlike teachers' and CMOs' VCs were more satisfied with the safety and health and wellness facilities provided by the universities. However VCs expressed their plans to extend these health facilities and they told that these facilities have been extended from time to time in the past. Extension of these facilities was also demanded by CMOs of the universities.

Recommendations

1. Policies regarding safety, health and wellness should be continuously evaluated and appropriate facilities should be extended from time.
2. Universities' authorities should fully facilitate researchers in obtaining information about universities and should also instruct their staff to provide necessary information to the researchers.

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