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Research Article

**THE RATE OF SHOULDER & NECK PAIN AMONG COMUTER  
USERS**<sup>1</sup>Dr. Syeda Madiha Zaheer, <sup>1</sup>Dr. Muhammad Nabeel, <sup>2</sup>Dr Ayesha Saddiqa Tarar<sup>1</sup>Jinnah Hospital Lahore.<sup>2</sup>WMO, Maternity Hospital Phalia**Article Received:** January 2019**Accepted:** February 2019**Published:** March 2019**Abstract:**

**Objective:** The pain in shoulder and neck are very common problems among the users of computers. The adaptable danger aspects for jobs linked with the musculoskeletal complications contains the environment of the office & factors related to the psychosocial work. The main objective of this research work was to determine the rate of the pains in shoulder and neck & the utilization of the computer workstation which are adjustable among bankers of Multan, Islamabad & Rawalpindi.

**Methods:** This was a transverse research work conducted on one hundred and twenty participants. This research work used the purposive sampling method for the selection of the samples. Remodeling of MUEQ (Maastricht upper extremity questionnaire) carried out & separation of vital questions performed from its elaborated description. The validation of the tool carried out with the help of opinions of expert. The calculation of percentages & frequencies carried out to find out the categorical variables.

**Results:** About 71.670% participants faced the neck pain at the time of work hours & 48.330% respondents experienced the pain in shoulder during the work hours. About 16.670% participants were using the adjustable keyboards. Forty percent bankers were using the materials of back care. About 95.83 bankers were using the adjustable chairs. Three percent bankers had chairs with no adjustable height. About 25.0% bankers were using the chairs with changeable armrests.

**Conclusion:** The most common incidences among bankers are the pains of shoulder and neck. Most of the equipment used by banker are adjustable but there is still a need of proper attention to tackle this problem.

**Key Words:** Station, Computers, categorical, objective, MUEQ, methodology, tackle, adjustable, shoulder, respondents.

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**INTRODUCTION:**

The most important part of the offices are the computers. But there is an enhancement I the occurrence of the symptoms of upper quadrant with the utilization of the computers. The most common areas for the development of the musculoskeletal symptoms are the shoulder & neck in among the users of the computers. The changeable danger aspects for these musculoskeletal complications contains the environment of the office and other associated factors related to the psychosocial work. The layout of the computer workstation is the most vital physical element of the environment of work which have an impact on the symptoms of the upper quadrant [1]. Ergonomics is the compulsory part of the various enterprises but it is a recent idea in our country Pakistan [2]. The ergonomics nature plays an important part in the protection of the health of humans and prevention of the risks related to the health [3]. The most important part in the implementation of the ergonomics is the introduction of workstations which are adjustable. An emphasis on the following the principles of the ergonomic can be the reason of the decrease in the musculoskeletal complications and it can increase the output of the workers [4].

A good design of ergonomics increases the efficiency of the workers and the satisfaction of the job but it also decreases the cost spent on the health and increases the output of the company. The banking system in recent times is facing many innovations because of the modernity, liberalization & globalizations. Many reforms are also available in the banking sector of our country Pakistan. The policies of modernity, globalization & privatization are the main reason to lead the banking sector of our country to give the motivation for reform & to get the competitive benefit in the international companies [5]. The internet banking and ATMS increases the use of the computers. Computers are the main integral part for data processing in every field of the human activities [2]. There is a close association of the pain in shoulder and neck pain with the long hours of working & irregular posture during sitting [4]. The main purpose of this research work was to determine the rate of the pain in shoulder and neck & the utilization of the computer workstations which are adjustable among the computer users as well as bankers working in Multan, Islamabad & Rawalpindi.

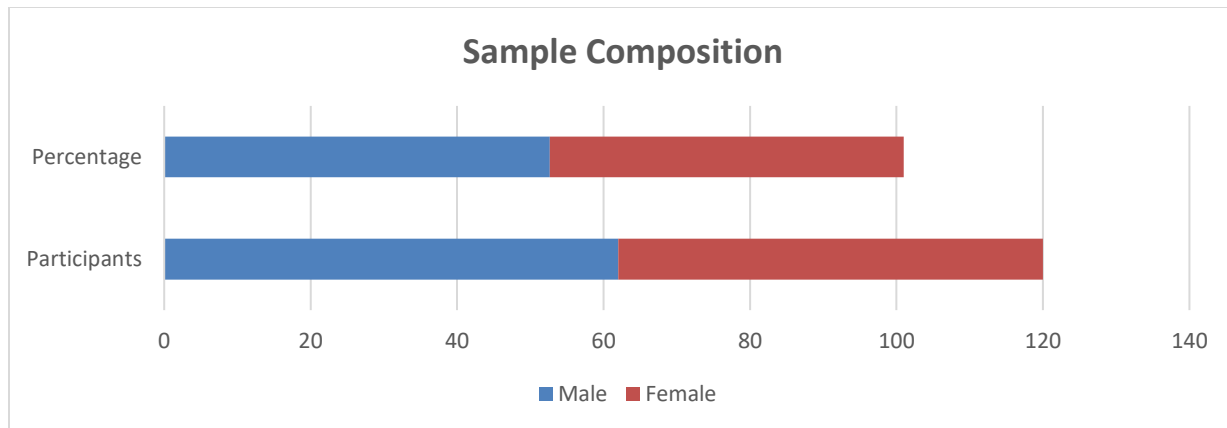
**METHODS:**

This transverse research work conducted on the basis of the observations. One hundred and twenty bankers were the part of this research work from three big cities of Pakistan. The research work covered a duration of complete six months. The ethical committee of the concerning sector gave the approval for the conduction of the research work. Purposive method of sampling was in use for the selection of sampling. Participants were from different banks of those cities. The remodeling of MUEQ (Maastricht upper extremity questionnaire) carried out & extraction of most important questions carried out from its elaborated version [6]. Expert opinion was in use for the validation of the selected questionnaire. The validity of the content of Cronbach's alpha was just 0.730. The administration of the Questionnaires carried out in English and we gave those papers to the supervisors of the bankers. The supervisors got the consent of the main branches in written form as well as got the verbal willing from the bankers. All the bankers were working on 17th scale or above and they were working at least six hours a day. Workers of internship and persons who did not give their consent were not the part of this research work. SPSS .17 was in utilization for the analysis of the collected data.

**RESULTS:**

About 48.330% participants of the research work were females. Average  $\pm$  SD of the participant's age for the bankers of public & private sector were  $30.79 \pm 5.055$  &  $32.82 \pm 6.240$  correspondingly. Fifty seven bankers were from banks of public sector & sixty three bankers were from banks of private sector. Master degree was the greatest level of education with 45.830% bankers. About 55% bankers were performing over time work. About 6.670% bankers were using the adjustable keyboards & 40% bankers were using the materials of back care. About 95.830% bankers were using the adjustable chairs. The chairs with the facility of the adjustable heights was not available to only three percent bankers.

Chairs with the facility of adjustable armrests were in use 25% participants. About 72.20% bankers were using the monitors having the facility of adjustable levels. The rate of the bankers who can move their knees, wrists & elbows was 73.330%, 68.330% & 65.80% correspondingly. About 71.670% bankers were experiencing the neck pain & 48.330% bankers had faced the pain of the shoulder at the time of working. In relax time, 78.340% bankers reported a reduction in the amount of pain.



### DISCUSSION:

The requirements for the presentation of design of ergonomic of the workstations in the work place is to assess & determine the recent status & present utilization of equipment designed ergonomically & the awareness of the ergonomics in the workers. The research work carried out to find out the knowledge level & to know that equipment designed ergonomically is in utilizations by the workers or not. The findings displayed that public sector banks & private sector banks have the less knowledge about the design of ergonomic. The environment of the office is the vital factor in the increase the outcome of the workers of offices [7]. A research work carried out in Nigeria displayed that only 3.40% members found with the awareness about ergonomics. Case studies state that a very less knowledge of ergonomics was due the fact that there was a lack of awareness among Nigerians about the designs of ergonomics [8].

A research work carried out in banks of Nairobi located in Kenya showed that most of the bankers did not have the knowledge about the ergonomics application in the institutions of the banking. Female members had the more knowledge about the application of the exercise of ergonomic in comparison with the male member [9]. The workstation's designs always affect the worker's health. Many efforts are in progress for the production of a better environment for working that could increase the workers capabilities & would decrease the risk aspects linked with the environment which can increase the different musculoskeletal complications.

Ergonomic application enhances the association among the worker & his working environment. So, we can say that ergonomics has an association with the level of competence of the workers [10]. Our

results are very much similar to the finding of the past studies. A very high amount of pain was present in the patients who were using computers more than 5 hours a day [11]. Pain in the neck was also present among bankers working in the banks of Dhaka & this pain was depending upon the design of the workstation, job type and demand of the job [12]. In Nairobi, another research work showed that the bankers working on the computers in the banks were mostly the victims of the musculoskeletal complications [13]. There were pure associations among the musculoskeletal complications related to work & unsuitable design of the workstation in another research work carried out on bankers of public & private sector bankers [14].

### CONCLUSION:

This research work finds that the pain of shoulder & neck are very frequent incidences among the bankers working on computers. Neck pain was dominant as compare to the pain in shoulder. Most of the bankers were using the adjustable components of computers but this areas still needs more attention.

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