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Work Related Stress: Its Sources and its Impact on the Productivity of Employees at Dubai Hospital

Dr. Mohamad Shehada, Dr. Sami kharabsheh, Rafeea Al Gufli

Al Isra University

*Corresponding Author Dr. Mohamad Shehada Email: <u>moeyaman@yahoo.com</u>

Abstract: The purpose of this research paper is to explore the sources of work related stress and its impacts on the productivity of Dubai hospital staff. This paper is an exploratory investigation using a questionnaire to identify the reasons behind stress and its impact on staff members. There are many sources of work related stress and it has negative as well as positive impacts. In the questionnaire, We covered the following sections: Section One: Demographic and functional information which included age, gender, educational level, job title, marital status and family size. Section Two: Employment information which is concerned with the extent to which the staff feels satisfied or dissatisfied about their job. Section Three: Sources of work related stress to determine the different sources of work related stress in Dubai Hospital. Section Four: Stress impact on the productivity of Dubai hospital staff. To do the statistical analysis We have used SPSS (Statistical Package for Social Sciences). Through the statistical analysis, We were able to study the various causes of work related stress in Dubai hospital and to highlight its impacts on the productivity of Dubai hospital staff which really needs close attention. After that we displayed the results and we ended up by presenting some possible solutions and recommendations to overcome the stress problem. In general, the results of this project will enhance the understanding of the concept of work related stress, its sources and impacts and it will also help the top management to make decisions regarding this issue.

Keywords: Stress, Productivity, Satisfaction, Sources, Impacts, Solutions, Business Process Management

INTRODUCTION

Irrespective of what we do, we have and will experience some degree of stress at some point in time in our life. World Health Organization in 1992 described stress as being "worldwide epidemic". It is further described as being "deadly", "silent killer" and "expensive". Let us look at some statistics:

Stress is recognized as the number one killer today. Stress "is the cause of 80% to 85% of all human illness and diseases" [1]. American businesses lose from \$250-\$350 billion per year to stress related factors. Northwestern National Life emphasized that: "25% of employees view workplace as number one stressor in their lives". Sources of stress might include: too much work to do, understaffing, long working hours, low payment rate, lack of communication, personal conflicts, harsh supervision, lack of training, and conflicts with superiors. Signs of work related stress include: high blood pressure, tension, headache, loss of appetite, gaining weight, fatigue, sleeping disorder, change in mode, and emotional instability. The behavioral side might include: arguments, shouting, aggressiveness, criticism of everything, and lack of interest in personal appearance. When it comes to work performance, the following might take place: wasting time at work, lack of motivation, increased absenteeism

rate, increased work related errors, and loss of commitment to work.

Organizations suffer from employees' stress too. Some of these sufferings include: reduction of productivity, loss of reputation, lower profit rate, increased customers' complaints, and defects in services/products.

Dubai is considered one of the most growing cities in the world. Various public and private organizations are undergoing a tremendous change because of technology, the outside labor, and competition. Healthcare is one of the areas that need much attention as Dubai is more and more interested in delivering the best healthcare quality in the region.

OBJECTIVES OF STUDY

The objectives of the study include:

- 1. Defining the work-related stress in Dubai Hospital.
- 2. Exploring the possible sources of work related stress in Dubai Hospital.
- 3. Explaining work related stress impacts on the productivity of Dubai Hospital Staff.
- 4. Identifying the possible solutions to reduce work related stress and even overcome it in Dubai Hospital.

- 5. Determining the most susceptible category for work related stress in Dubai Hospital.
- 6. Helping the top management in Dubai Hospital to conduct a stress audit based on the results of this project.

STUDY SIGNIFICANCE

Conducting such a project is very crucial and important. In my opinion, managing people and focusing on them is just as important to the success of any organization. One major cost to any business process today is work related stress which arises where work demands different types of efforts that exceed the person's capacity and capability to cope with.

When it comes to health care, human errors are not allowed to happen because we are dealing with people lives, and unfortunately medical errors in some countries, even advanced ones, are number one cause of death, and work related stress contributes much in these medical errors.

HYPOTHESES

 $H_{01:}$ Sources of work related stress in Dubai Hospital have no impact on the productivity of the staff.

 H_{02} : Stress has no impact on the productivity of Dubai Hospital Staff.

LITERATURE REVIEW

"People get sick from stress at work and the cost associated with stress is hence significant to the employer [2] probably the leading authority on the concept of stress, described stress as, "the role of all wear and tear caused by life. Stress is associated with constraints and demands. Constraints prevent the person from doing things what he or she desires. Demand refers to the loss of something desired. Stress is highest for the individuals who perceive they are uncertain as to whether they will win or lose and lowest for those who think that winning or losing is a certainty" [3].

Work related stress, as I stated in the introduction part of my research, has many causes, signs and impacts on both the employees and the organization. According to some studies, it is considered as the main reason for impaired productivity and inconsistent performance [3]. Additionally, "the

primary goal of every organization is to create surplus profit. Profit is a measure of the surplus of the amount incurred over income over expenses. To accomplish this goal effectively the management must establish an environment in which people can work productively.

Organizations use several kinds of inputs, such as manpower, materials and capital. Peter F. Drucker, [5] called the Management Guru quotes that 'The greatest opportunity for increasing productivity is surely to be found in knowledge work itself and especially in management'. In general, productivity improvement programs are mostly aimed at the worker level. Motivation and stress management play a vital role in productivity" [3].

Reasons for low productivity can include, but not limited to the following: poor training in company, machine breakdown, poor maintenance, not established performance standards, not established work, labor or assignments planning, lack of motivation, production interruptions as a result of change, poor layout of work area, improper equipment or tools, poor work atmosphere and environment -workplaces (safety, health, and hygiene), not proper work pacing or work flow - work organization, supervisor allowing each person to set his own pace, uncontrolled use of overtime, etc [6].

"While stress is typically discussed in a negative context, it also has positive value as it is illustrated in Figure 1. It offers potential gain, for example. the superior performance that an ophthalmologist gives during a complicated surgery. Such individuals often use stress positively to rise to the occasion and perform to their maximum. And hence the productivity rises. From the organization's stand point, management may not be concerned when employee experience low to moderate level of stress. Such levels may lead to higher employee performance. But high levels of stress or even low levels sustained over a long period of time, can lead to reduced employee performance and thus require action by management. From the individual's standpoint, even low levels of stress are likely to be perceived as undesirable. What management may consider as 'a positive stimulus that keeps the adrenaline running' is a very likely to be seen as 'excessive pressure' by the employee" [3].

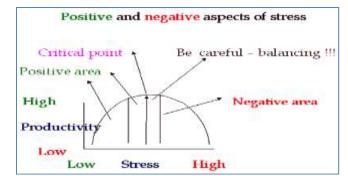


Fig-1: It shows the positive and negative aspects of stress (Yerkes Robert 1907)

"To Manage work related stress, individuals and organizations have attempted to deal with stress in various ways. Individuals, for example, may try to reduce stress through better management of their time, nutritious food, exercises, career planning, change in jobs, and promotion of psychological health, relaxation, meditation and prayer.

Organization may provide counseling or recreation facilities or may improve the job design by matching the person with the job. A proper fit between individual needs and the demands of the task will benefit both the individual and the organization" [3].

History of Dubai Hospital

Dubai Hospital was established in the Mid seventies and began admitting patients in the 1980. The hospital comprises numerous specialized departments and clinics, one of which is the cardiology center, which is a quality transformation in the services the authority offers in this field.

The hospital is constructed on 42 acres with an attractive landscape to provide a nice and relaxing ambience in the hospital compound. The building consists of 14 storey building superimposed on a large podium that housed most outpatient services. At the front façade of the building, murals are displayed and quoting verses from the holly Quran. In addition to that the highlights of the ancient Arabic medical practices in comparison with the modern practices of medicine are exposed. At the main entrance of the building a reception counter is placed in the middle of the main lobby.

Mission

Dubai Hospital is committed to providing cost effective quality and tertiary healthcare services guided by international standards. It serves all eligible UAE residents, through dedicated, highly qualified healthcare professionals using the latest medical technologies and providing a proactive system for training and medical education. It strives to provide a safe, reliable, compassionate and community responsive work and service provision environment.

Vision

Dubai Hospital is committed to becoming a renowned secondary and tertiary healthcare services centre of excellence in the Middle East.

Nature

The hospital shares its ambitions with everyone in the health system including patients, residents, consumers, clinicians, health care professionals, health care administrators and the community.

Study limitations

Like any other project, I faced some limitations and difficulties while conducting my research. Some of these include:

- I was surprised by the lack of cooperation by Dubai hospital staff in filling the questionnaire that I have distributed. I have distributed 80 questionnaires to different departments and units in the hospital and only 60 were returned. After revising the filled questionnaires only 36 were fully completed.
- The difficulty of having more than one version of the questionnaire. I have a questionnaire in Arabic (for Arabs), one in Hindu (for Indians) and one in English
- The difficulty of finding similar studies done in similar manner in UAE, so that I can compare my findings with others' findings.

RESEARCH METHODOLOGY

Population and sampling of the Study

The population of the study is the staff of Dubai Hospital. They are from many different nationalities. They are mainly Indians, Arabs, Europeans, Asians, and Africans. Besides Arabic the questionnaire was translated into Hindu and English. The total number of questionnaires distributed was 80 but the valid ones for analysis were 36.

Sources of Information

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The information gathered in this paper is categorized mainly as secondary sources and primary ones. The secondary information was gathered from journals, pamphlets, brochures, books, and search engines. Primary sources were gathered from distributing a questionnaire that was designed and articulated by a group of specialists in the field of health care to answer the paragraphs of the questionnaire.

Validity of Tools Measurements

In the context of this subject Cronbach's Alpha is used as an index of reliability. Cronbach's alpha determines the internal consistency or average correlation of items in the questionnaire to gauge its reliability, as it considered very important to know whether the same set of items would elicit the same responses if the same questions are recast and readministered to the same respondents. Measures derived from questionnaire are declared to be reliable only when they provide stable and reliable responses over a repeated administration of the questionnaire (Cronbach's Alpha factor was> 70% and it is valid and reliable result). Likert Scale had been used to analyze answers. Scale includes the following ranks:

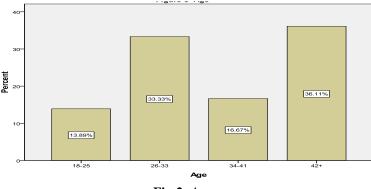
1= Strongly Disagree 2= Disagree 3=Neutral 4=Agree 5=Strongly Agree

Data Analysis

The questionnaire was distributed randomly to 80 employees in different departments at Dubai hospital. 60 questionnaires were collected and the valid ones for analysis were 36. In the questionnaire, there were 26 statements for the sources of stress and 11 for the impact of stress on the staff of Dubai Hospital. To analyze the data collected, Likert scale was used to figure out the responses of the sample. Dubai Hospital is one of the main busiest hospitals in Dubai Health Authority with a large number of staff working there.

The demographic variables in section one of the questionnaires is as follows:

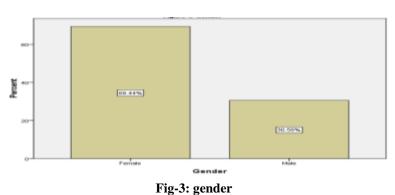
Regarding age





- The percentage of respondents who are 42 years old and above is 36.11%
- The percentage of respondents who are 34-41 years old is 16.67%
- The percentage of respondents who are 26-33 years old is 33.33%
- The percentage of respondents who are 18-25 years old is 13.89%

Regarding gender



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The majority of the respondents were female 69.44% and the male respondents were only 30.56%.

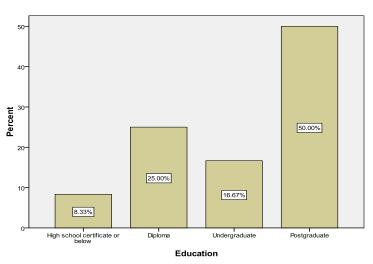
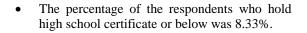
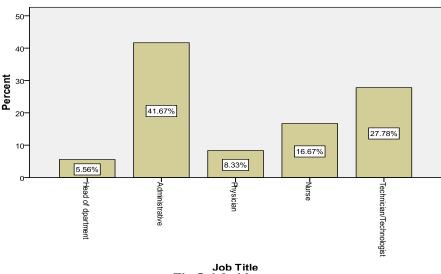


Fig-4: educational level

- The percentage of the respondents who were postgraduates was half of the sample 50%.
- The percentage of the respondents who were undergraduates was 16.67%.
- The percentage of the respondents who hold diploma certificate was 25.00%.



That reflects that most of the respondents are highly educated.



Regarding the job titles

Regarding the educational level

Job Title Fig-5: job titles

Most of the respondents are working in the administration department (41.67%), and the others are Technician/Technologist (27.78%), Nurses (16.67%), Physicians (8.33%) and Head of departments (5.56%) respectively.

Regarding the marital status

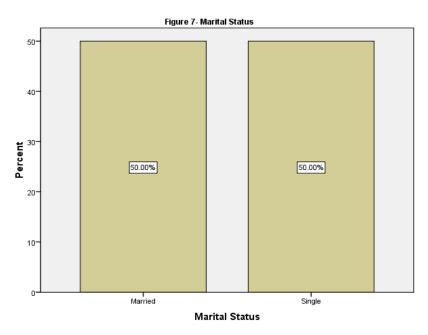
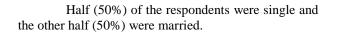


Fig-6: marital status



Regarding family size

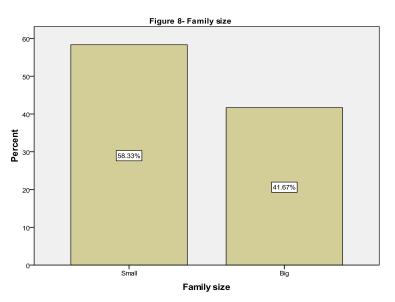


Fig-7: family size

Most of the respondents have small family size (58.33%) and 41.67% have big family size. This section is concerned with the extent to which staff in Dubai

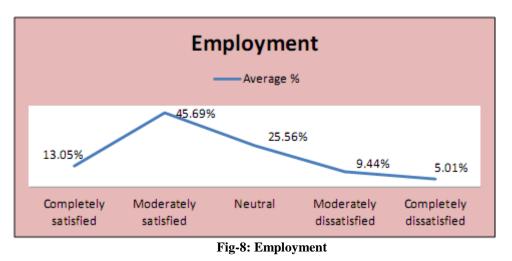
Hospital feels satisfied or dissatisfied with their jobs and the results came as it is displayed in the following table:

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	Table 1:				
Statement	Completely dissatisfied	Moderately dissatisfied	Neutral	Moderately satisfied	Completely satisfied
1. Communication and the way information flows around my organization	2.8%	22.2%	13.9%	<mark>50.0%</mark>	11.1%
2. The relationship I have with other people at work	0%	0%	11.1%	<mark>55.6%</mark>	33.3%
3. The actual job itself	2.8%	2.8%	16.7%	<mark>58.3.%</mark>	19.4%
4. The degree to which I feel motivated at work by my job	11.1%	2.8%	19.4%	<mark>52.8%</mark>	13.9%
5. The way in which conflicts are generally resolved in my company	8.3%	8.3%	<mark>47.2%</mark>	30.6%	5.6%
6. The kind of tasks and work I'm required to perform	2.8%	8.3%	22.2%	<mark>58.3%</mark>	8.3%
7. The amount of work I'm given (whether too much or too little)	0%	8.3%	30.6%	<mark>55.6%</mark>	5.6%
8. The design of my organization's structure	2.8%	13.9%	27.8%	<mark>47.2%</mark>	8.3%
9. The level of salary relative to my experience, training and education	13.9%	22.2%	<mark>30.6%</mark>	22.2%	11.1%
10. The amount of flexibility I have in my job	5.6%	5.6%	36.1%	<mark>38.9%</mark>	13.9%

As it is clearly shown in the above table, most of respondents responded that they are moderately and completely satisfied with their jobs in many aspects ranking from high percentage to the lowest one as follows:

- 1. "The relationship I have with other people at work "statement had the highest degree of satisfaction (88.9%).
- 2. "The actual job itself "statement had the second degree of satisfaction (77.7%).
- 3. "The degree to which I feel motivated at work by my job" statement had the third degree of satisfaction (66.7%).
- 4. "The kind of tasks and work I'm required to perform" statement had the fourth degree of satisfaction (66.6%).
- 5. "The amount of work I'm given (whether too much or too little) got the fifth degree of satisfaction (62.2%).



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Sources of work related stress

The main sources of work related stress in Dubai Hospital are presented in the table below:

Table 2:					
Statements	Strongly	Disagree	Neutral	Agree	Strongly
	disagree				agree
1. Too much work to do	0%	8.3%	<mark>41.7%</mark>	33.3%	16.7%
2. Under appreciated	2.8%	22.2%	33.3%	<mark>36.1%</mark>	5.6%
3. Low promotion	5.6%	2.8%	<mark>38.9%</mark>	36.1%	16.7%
4. I do not have enough work to do	33.3%	<mark>52.8%</mark>	13.9%	0%	0%
5. Beside my work I manage the work of other people	2.8%	5.6%	38.9%	<mark>44.4%</mark>	8.3%
6. Beside my work I supervise the work of other people	5.6%	19.4%	<mark>38.1%</mark>	27.8%	11.1%
7. Coping with office politics	0%	5.6%	<mark>69.4%</mark>	22.2%	8.3%
8. Taking my work home	13.9%	<mark>30.6%</mark>	22.2%	19.4%	13.9%
9. Rate of pay	13.9%	16.7%	<mark>50.0%</mark>	16.7%	2.8%
10. Personal beliefs conflicting with those of the organization	2.8%	13.9%	<mark>61.1%</mark>	11.1%	11.1%
11. Inadequate guidance form superiors	8.3%	19.4%	<mark>55.6%</mark>	13.9%	2.8%
12. Inadequate back up from superiors	8.3%	25.0%	<mark>38.9%</mark>	25.0%	2.8%
13. Inadequate encouragement from superiors	8.3%	19.4%	<mark>41.7%</mark>	22.2%	8.3%
14. Lack of consultation	11.1%	13.9%	<mark>38.9%</mark>	27.8%	8.3%
15. Lack of communication	8.3	19.4%	<mark>33.3%</mark>	<mark>33.3%</mark>	5.6%
16. Keeping up with technology advances	8.3%	11.1%	27.8%	<mark>41.7%</mark>	11.1%
17. Ambiguity in the nature of job role	0%	13.9%	<mark>50.0%</mark>	27.8%	8.3%
18. Inadequate training	5.6%	27.8%	<mark>33.3%</mark>	25.0%	8.3%
19. Mundane administrative tasks	0%	2.8%	<mark>72.2%</mark>	16.7%	8.3%
20. Having to take risks	0%	16.7%	33.3%	<mark>44.4%</mark>	5.6%
21. Working with those of the opposite sex	8.3%	16.7%	<mark>41.7%</mark>	22.2%	11.1%
22. Making important decisions	2.8%	5.6 %	<mark>50.0%</mark>	36.1%	5.6%
23. Personality clashes with others	2.8%	25.0%	<mark>36.1%</mark>	19.4%	16.7%
24. Pursuing a career at the expense of home life	5.6%	25%	<mark>38.9%</mark>	25.0%	5.6%
25. Lack of social support by people at work	5.6%	22.2%	<mark>41.7%</mark>	19.4%	11.1%
26. Having to work very long hours	2.8%	25.0%	<mark>36.1%</mark>	19.4%	16.7%

From the above table it is very clear that most of the statements got answer as "Neutral", but still it is clear that the top five main sources for work related stress which is arranged from the highest to the lowest percentage according to Dubai hospital staff:

- 1. Both "Low Promotion" and "Keeping up with technology advances" statements had the same percentage of agreement (52.8 Agree & Strongly Agree) as the top main source of such a stress in Dubai hospital.
- 2. "Besides my work I manage the work of others" statement had nearly (52.7 Agree and Strongly

Agree) from Dubai hospital staff to be the third main source of stress.

- 3. 36.1% agree and 16.7 strongly agree that being "Too much work to do" is the fourth main source of work related stress in Dubai hospital.
- 4. Although, "Having to take risk" statement had percentage (50%) of both answers "Agree" and "Strongly Agree", and still can be considered as the fifth main source.

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In general, the degree of agreement about the possible sources of work related stress in Dubai hospital

is shown clearly in the following figure:



Fig-9: Sources of work related stress

It is very obvious that most of the staff participated in the questionnaire gave "Neutral" as an answer (41.92%) to most of the statements in this section, following that the answers "Agree" (27.01%), "Disagree" (17.44%), "Strongly agree" (9.85%) and finally "Strongly disagree" (3.80%).

DISCUSSION

To resolve any problem, it is very important to first address the main causes of the problem and then

trying to find the best solutions through problem solving techniques.

Stress impacts on the productivity

The impact of work related stress on the productivity of staff in Dubai hospital whether it is negative impact or positive one and the results are shown in the following table:

Table 3:					
Statements	Strongly	Disagree	Neutral	Agree	Strongly
	disagree				agree
I can't control my time under stress	5.6%	25.0%	33.3%	27.8%	8.3%
Stress to me is "A positive stimulus"	8.3%	30.6%	22.2%	33.3%	5.6%
Having to work for very long hours can	0%	13.9%	25.0%	47.2%	13.9%
impair my performance					
Taking important decisions can increase	0%	0%	19.4%	58.3%	22.2%
my productivity					
Under stress I lose my motivation	2.8%	22.2%	22.2%	41.7%	11.1%
Under stress I lose my commitment to	2.8%	27.8%	25.0%	36.1%	8.3%
work					
High level of stress can raise the rate of	0%	8.3%	16.7%	50.0%	25.0%
work related errors					
Low payment rate can result in	2.8%	19.4%	25.0%	44.4%	8.3%
declining my performance					
Having too much to do at work can	0%	8.3%	33.3%	50.0%	8.3%
decrease my control over the work					
Lack of communication can lead to an					
inconsistent performance	0%	5.6%	19.4%	52.8%	22.2%
Work related stress has no impact on my	8.3%	44.4%	30.6%	13.9%	2.8%
productivity					

From the above table, it is clear that 44.4% disagreed that work-related stress has an impact on their productivity which approves my H_a which states that: There are many sources for work related stress in Dubai Hospital which has impacts on the productivity of the staff.

Also in general the degree of agreement in this section was the highest as it is illustrated in the following chart:

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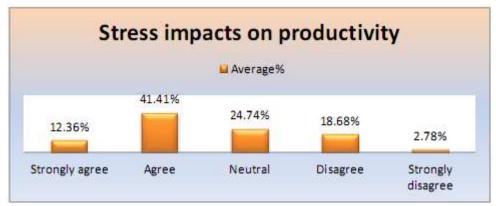


Fig-10: Stress impacts on productivity

It is obviously that 41.41% agreed that stress can impacts their productivity either positively or negatively as follows:

- 1. "Taking important decisions can increase my productivity" (80.5% agreed and strongly agreed).
- 2. "Lack of communication can lead to an inconsistent performance" (75.0% agreed and strongly agreed)
- 3. "High level of stress can raise the rate of work related errors" (75.0% agreed and strongly agreed)
- 4. "Having to work for very long hours can impair my performance" (61.1% agreed and strongly agreed)
- 5. "Having too much to do at work can decrease my control over the work" (58.3% agreed and strongly agreed)

In this section I was able to approve and support my H_a which states that: There are many sources for work related stress in Dubai Hospital which has impacts on the productivity of the staff.

The impacts varied between being negative or positive as it is shown in the following table:

Table 4:					
Statement	Type of impact	Percentage			
Taking important decisions can increase my	Positive	58.3%			
productivity					
Lack of communication can lead to an inconsistent	Negative	52.8%			
performance					
High level of stress can raise the rate of work related	Negative	50.0%			
errors					
Having too much to do at work can decrease my	Negative	50.0%			
control over the work					
Having to work for very long hours can impair my	Negative	47.2%			
performance					
Low payment rate can result in declining my	Negative	44.4%			
performance					
Under stress I lose my motivation	Negative	41.7%			
Under stress I lose my commitment to work	Negative	36.1%			
Stress to me is "A positive stimulus	Positive	33.3%			
Average Percentage for negative impact	46.03%				
Average Percentage for positive impact	45.80%				

From the above information and results in this section I can surely say that work-related stress has negative impact percentage (46.03%) more than its positive impact (45.80%) on the productivity of Dubai hospital staff.

CONCLUSIONS

Indeed, in every organization there is a percentage of employees (it can be small or large) who suffer from work related stress. The management should be aware of its sources, otherwise they will suffer from its negative impacts on both the individuals and the organization. They also should find ways to make a balance between the organization's needs and the employees' capabilities. In addition to that, the

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organization should handle the stress positively to increase the productivity of the staff. Sources of work related stress at Dubai hospital according to their seriousness to the staff are:

- 1. Low promotion
- 2. Keeping up with technology advances
- 3. Beside my work, I manage the work of other people
- 4. Too much work to do
- 5. Having to take risks

The impact of work related stress on the productivity of staff in Dubai hospital according to their importance includes:

- 1. High level of stress can raise the rate of work related errors
- 2. Lack of communication can lead to an inconsistent performance
- 3. Having to work for very long hours can impair my performance
- 4. Having too much to do at work can decrease my control over the work
- 5. Under stress I lose my commitment to work
- 6. Low payment rate can result in declining my performance

RECOMMENDATIONS AND FUTURE RESEARCH

Recommendations can be summarized as follows:

- ✓ Establishing stress audit process which will help the management to identify such stress, its sources, who is affected (individuals or specific departments or units), how they are affected and at the end how to reduce, manage and control it.
- ✓ Establishing tools and techniques to measure the productivity and performance of staff under work related stress like surveys and performance standards monitoring and checking.
- ✓ Educating staff and management about this issue and how to reduce it or even overcome it.
- ✓ Providing more training programmes on the advanced technology, so that staff will be able to cope with it.
- ✓ Showing the staff how much they are valuable to the organization and to what extent they are supported and appreciated.
- ✓ Providing adequate staffing.
- ✓ Conducting regular meetings or consultations from time to time to discuss this issue intensively.
- ✓ Conducting similar study, but with the involvement of more staff to get good resemblance of the real issue.
- ✓ Conducting more studies to show why staff in some jobs has more stress than others in different jobs.

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