

Effect of Time Management Program on Job Satisfaction for Head Nurses

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Abstract

Background:- Time management and job satisfaction all related to each other and greatly affect success of organization. **Subjects and Methods:-** The study aimed to evaluate the efficacy of a designed program of time management on job satisfaction for head nurses. A Quasi-experimental design was used for a total number of head nurses participated. Two tools of data collection used, namely, time management knowledge Questionnaire and job satisfaction Questionnaire. **Results:** There was a significant response related to head nurse's time waster post program implemented and three quarter of head nurses reported that job satisfaction was moderate levels post program. There is highly statistically significant relationship between time management and job satisfaction. **Recommendation:** the study recommended that time management training should be held for all hospitals and hospital personnel, especially nurses who tolerate more problems.

Keywords: Head nurses, Time management, Job satisfaction, Training program

1. Introduction

A head nurse is the one who assumes responsibility for managing the human and material resources of a nursing unit and takes lead in developing the staff to provide quality of patient care and a good conducive environment to help staff growth and satisfaction (*Ebrahimi et al, 2014*). Control of time and prevent it from wasting can managing the intelligent, which leads to retaining human resources, decreasing stress and increasing job satisfaction among nurses. Lack of time management in nursing profession may have effect on quality of care and declining work efficiency and productivity which may lead to burnout and job dissatisfaction for head nurses (*Nasri et al, 2013*).

Managing the time effectively requires a distinction between what is *important* and what is *urgent* (*MacKenzie, 1990*). Experts agree that the most important tasks usually aren't the most urgent tasks. However, we tend to let the urgent dominate our lives. *Covey et al., (1994)* categorize our activities into four quadrants in their *Time Management Matrix*: urgent, not urgent, important and not important.

Effective time management has become increasingly important for managers as they seek to accomplish objectives in today's organizations, which have been restructured for efficiency while employing fewer people. Managers can improve their ability to manage time effectively by examining their attitudes toward time, analyzing time-wasting behaviors, and developing better time management skills. Managers can improve their performance and promotion potential with more effective time utilization, through time management program to learning Strategies for improving the time management skills (*Courier, 2014*).

"The aim of good time management is to achieve the lifestyle balance you want and increase job satisfaction for head nurses. Nowadays, one of the most important challenges facing by any organizations is to satisfy and retain their employees who are known as one of the most important differentiating success factors. Managing head nurses time is an important issue in achieving competitive advantages for organizations. (*Holley, 2013*).

According to *Spector (1997)*, job satisfaction can be described as the degree to which employees like their jobs. And the job satisfaction is a pleasurable or positive emotional state resulting from head nurses perceptions about important facets of their jobs. Thus, it is an emotional response to various dimensions of job (*Pool et al., 2007; Rastgar et al., 2012*).

Job satisfaction is an important concept need to be understood by managers. This contributes to efficient services and high performance, and will increase organizational productivity. Further, low levels of job satisfaction leads to turnover intentions and absenteeism (*Gunlu et al., 2010*). Thus, job satisfaction is a key factor to retain and satisfy employees. Also, time management has been shown to be affected by job satisfaction, group performance (*Janicik & Bartel, 2003*) and consequently will contribute to the profitability of organizations. On the other hand, poor time management has been related to stress and job dissatisfaction and emotional exhaustion (*Peeters and Rutte, 2005*).

Significance of the study: The management of time has got to be handled so importantly, because-time lost is lost forever; it cannot be retrieved. Therefore, the effectiveness of time management helps develop task-oriented coping behavior in the face of demands on a person and equips him to mobilize and utilize resources in an effective manner. So, sound understanding of the time in management helps in managerial skill development to all sectors. However, Poor time management affects every part of your life. (*Dudovski, 2012*). Finally, Effect of time management is a panacea to organizational effectiveness and not a placebo. Effective time

management will improve staff productivity, make scheduling of jobs easier, make staff to perform tasks at their highest skill level, helping staff to prioritize and accomplish important task, recording and guiding the organization towards achieving its set goals. This entire things can increased the job satisfaction for head nurses (**Health wise Staff, 2013**).

2.Study aim: To evaluate the efficacy of a designed program of time management on job satisfaction for head nurses.

3.Study hypothesis: There is an effect of time management program on job satisfaction for head nurses.

4.Subjects and Methods:

4.1Design: A–Quasi-experimental design was used in the study.

4.2Setting: The study was conducted at Mansoura university Hospital that provides a wide spectrum of health services at Delta Region.

4.3Subjects:- Convenient sample included all head nurses available at the time of the study. Their total numbers were 50 head nurses with 95% confidence level and 5% confidence interval.

4.4Tools of data collection:- Were including two tools:

4.4.1Tool (1): Time management knowledge questionnaire included three parts:

Part 1: included Personal characteristics of the head nurses as: age, department, educational qualification, experience, and marital status.

Part 2: Time waster Questionnaire: It was a structured questionnaire format, developed by **Baillie et al, (1989)**. It aimed to determine what extent the head nurses can manage the time wasters and it consists of forty one items. The possible response for each item is yes, sometimes, and no. **the Scoring system** was allocated as follow: (1) Yes, (2) Sometime and (3) No. the maximum scores were (123). The scoring levels were arranged as follow for each head nurse separately. - 41- 80 (indicated that head nurse have presence of time wasters) and - 81- 123 (no time wasters) **Baillie et al., (1989)**.

Part 3: Time management behavior scale: It was a structured questionnaire format developed by **Macan, (1994)** the time management behavior scale will be used to assess the frequency at which head nurses practice in time management behaviors at their work situations, including: setting goals, prioritizing, organizing and scheduling. Responses will be measured on 5-point Likert-Scale ranging from “1” (seldom true) to “5” (very often true). Higher mean score indicates more frequent use of time management.

4.4.2Tool (2): Job Satisfaction Questionnaire It was a structured questionnaire format developed by **Ahmed (2007)** used to assess head nurses job satisfaction. which includes 62 items and composed of eight main categories as following; Policy of hospital contains (5 items), Work system contains (6 items), Work relations contains (10 items), Work environment contains (10 items), Salary and incentives contains (5 items), Psychological status contains (4 items), Safety at work contains (4 items), Achievement and work advancement contains (18 items). **The scoring system:** According to **Kelly (2007); Ghoneim (2008); and Noqbill (2009)**. (For all tools). Responses of the participants were measured on three-point Likert scale ranged 1, 2, and 3 for the responses never, sometimes, and always respectively. Low = < 50 %, Moderate = 50 -75 % and High = > 75 %.

4.5 Methods of data collection:-

4.5.1 Ethical consideration:-Before commencing the study, ethical approval was granted from the research ethics' committee in which the study took place. The researchers ensured that the correct procedures were undertaken concerning informed consent, autonomy, anonymity and maintenance of the subjects of confidentiality.

4.5.2 Official permission to conduct the study was obtained from the manager of hospital and administrator of training department at Mansoura University Hospital.

4.5.3 Tools were translated by the researchers into Arabic, and tested for its content validity and relevance by five experts in nursing administration from faculties of nursing, and accordingly the necessary modification was done.

4.5.4 Double translation English- Arabic was done separately to ensure validity of tools.

4.5.5 Internal consistency reliability of the two tools items was assessed using coefficient alpha. It was 0.96 for (time management) items while it was 0.97 for (job satisfaction) items.

4.5.6 A pilot study was conducted on 10% of study sample (n=5) to examine its clarity and feasibility before using it. Accordingly, minor changes were done. All head nurses involved in the pilot study were excluded from the study sample later on.

4.5.7 Informed consent for participation in the study was secured from the entire study sample. Participation in the research is voluntary. Each participant may decide to stop completing the study and withdraw at any time without consequence.

4.5.8 Designed an educational program which include objectives of the training, concept of time, definition of time and time management, importance of time management, barrier for managing time, common myths of time management and time management strategies including three main strategies: **(1)** Planning: (setting goals, action plan, prioritizing, scheduling activities, establishing "To-Do" list). **(2)** Organizing: (the stacked desk syndrome, no detourism, the art of waste basketry, memo mania). **(3)** Implementing activities for control: (attacking the priorities, finding extra time, handling paperwork, filing system, delegating, control interruptions, communications, open door policy, learning to say "No", meeting, procrastination, and management by crisis, decision making, improve memory, rewarding the self).

4.5.9 Implementation of the training program. The data was collected by the researchers and the questionnaire sheets of time management and job satisfaction were distributed to head nurses as (pre test) before starting the program at morning shifts by the researchers then post immediately and 3 month after the program. The time needed by each staff nurse to complete each sheet ranged from 25-30 minutes.

4.5.10 The program was implemented three times for three groups of head nurses according to the working place of each group. The total allocated time for achieving the whole program to each group was 12 hours (6 session's \times 2hours). Divided into six sessions in two week, 3 times per week and duration of every session was two hours.

4.5.11 Different teaching and learning methods were used during the sessions which included; interactive lecture, group discussion, demonstration, brain storming, work in small groups.

4.5.12 Actual field work started at the beginning of Jun 2015 and finished at the middle of February 2015. Follow up phase started from middle of February till the middle of May 2015.

4.5.13 Statistical Design: - Data entry and statistical analysis were done using Statistical Package for Social Science (SPSS), version 16.0. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations for quantitative variables. Chi- Square (χ^2) test was used to test association between variables. Correlation coefficient(r) test was used to test the closeness of association between two variables. Statistical significance was considered at p -value <0.05 while, p -value of <0.001 indicates a highly significant result.

5. Results:- Table (1): shows personal characteristics of head nurses. It was observed that the mean age of the studied head nurses was 39.3 ± 4.5 years, their ages ranged between 32- 47 years and 44 % of them were in age from 35 to 40 years. In addition, 48% of them were working in Main Mansoura university hospital. Concerning Year of experience, 40 % of them were less than 15 years of experience. While, 24% of head nurses were between 15 to 20 years of experience and most of them 98 % were married.

Figure (1): portrays the total score of time waster knowledge among the studied head nurses. It was observed that the mean score are 119.18 and 104.36 of them had high knowledge score level regarding time waster in the post immediate test and post after 3 month compared to the pre-test .

Table (2)& Figure (2): shows the distribution of studied head nurses according to their practice of time management behavior pre, and post the intervention. This table shown that, there is a highly statistical significant difference in the all domains of time management behavior (planning, organizing, scheduling and controlling) (**P-value ≤ 0.001**). This table also, clarifies that the behavior of head nurses regarding time management was changed to improve in immediate and 3 month after the program (the mean score 120.84 ± 3.36 and 94.96 ± 15.94) compare to pretest (the mean score 60.46 ± 1.97). The difference observed was highly statistical significant (**P-value ≤ 0.001**).

Figure (3): Showed the total score of studied head nurses regarding total time management. This figure portrayed that the improvement of head nurses in total time management, it increased after the program intervention and still improved 3 month after the program but slightly decreased. Also, the difference observed was highly statistical significant, where (**P-value ≤ 0.001**).

Table (3) & Figure (4): shows the Head nurses total actual job satisfaction domains pre, immediate and 3 month post the program. There is highly statistical significant differences were seen with regard to work relation, work environment, achievement, and psychological status pre and post the program (**P-value ≤ 0.001**). This table also clarifies that the head nurses job satisfaction increased after the program implemented.

Table(4) : Represent the Correlation between time management and job satisfaction. This table revealed that, there is statistically significant relation between time management and job satisfaction. As the time management practice used the job satisfaction increased.

Table (1): personal characteristic of studied head nurses (n=50)

| Personal characteristics | No. n= 50 | % |
|--------------------------------------|--------------|-----|
| Age in years | | |
| ▪ < 35 | 7 | 14% |
| ▪ 35- | 22 | 44% |
| ▪ ≥ 40 | 21 | 42% |
| M (SD) (39.3 ± 4.5) | | |
| Range (32-47) | | |
| Working departments | | |
| ▪ Main Mansoura university hospital | 24 | 48% |
| ▪ Medical specialized building | 19 | 38% |
| ▪ Out - patient clinics | 7 | 14% |
| Year of experience in nursing | | |
| ▪ < 15 | 20 | 40% |
| ▪ 15 – | 12 | 24% |
| ▪ ≥ 20 | 18 | 36% |
| Marital status | | |
| ▪ Married | 49 | 98% |
| ▪ Divorced | 1 | 2% |

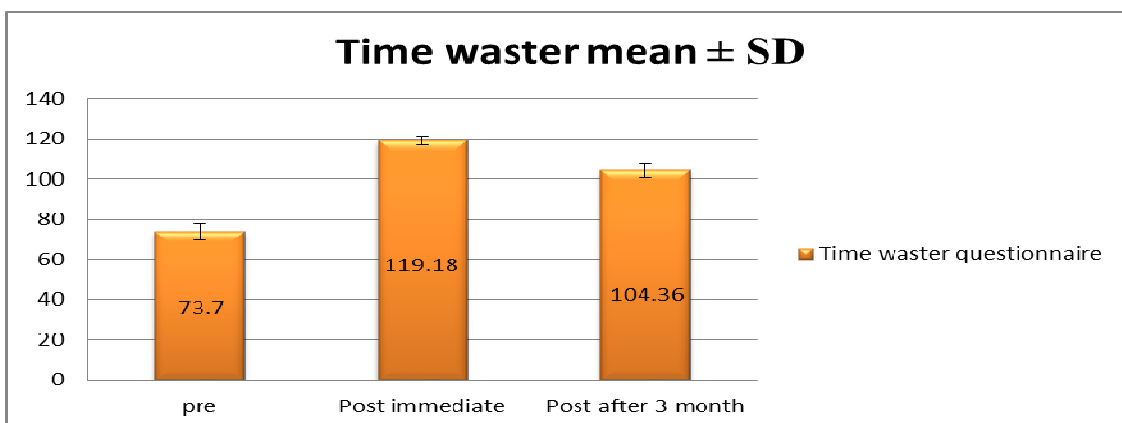


Figure (1): Distribution of Studied head nurses according to their Total Knowledge Score Levels regarding time waster Pre, immediate and Post (after 3 month) Program Implementation Phases (N=50).

Table (2): Distribution of studied head nurses according to their practice of time management behavior pre, and post the intervention .

| Items | Study group | | | Paired-t test | | |
|---------------------------|-------------|----------------|--------------------|-----------------------|----------------------|----------------------|
| | pre | Post immediate | Post after 3 month | P1 | P2 | P3 |
| Planning | 17.06±3.57 | 28.3±0.839 | 24.06±7.23 | t=20.89 p ≤0.001* | t=6.255 p ≤0.001* | t=4.03 p ≤0.001* |
| a)setting goals | 5.44 ±1.92 | 12 ± 0 | 9.08±2.08 | t=24.04 p ≤0.001* | t=9.64 p ≤0.001* | t=9.93 p ≤0.001* |
| b)setting priority | 11.6±2.66 | 16.3±0.84 | 14.98±6.18 | t=11.032 p =0.001* | t=3.72 p =0.001* | t=1.47 p =0.147 |
| Organizing | 27.18±9.7 | 57.1±1.28 | 45.32±6.93 | t=21.26 P≤0.001* | t=15.22 P≤0.001* | t=12.3 P≤0.001* |
| Scheduling | 8.72±6.52 | 23.56±1.91 | 15.6±5.76 | t=15.61 P≤0.001* | t=5.54 P≤0.001* | t=8.94 P≤0.001* |
| Controlling | 7.5±2.58 | 11.88±0.85 | 10.78±0.99 | t=10.79 P≤0.001* | t=10.11 P≤0.001* | t=5.49 P≤0.001* |
| Total time behavior score | 60.46±1.97 | 120.84±3.36 | 94.96±15.94 | t=10.99 p ≤0.001* | t=20.73 p ≤0.001* | t=15.32 p ≤0.001* |

*Significance at level ≤ 0.001

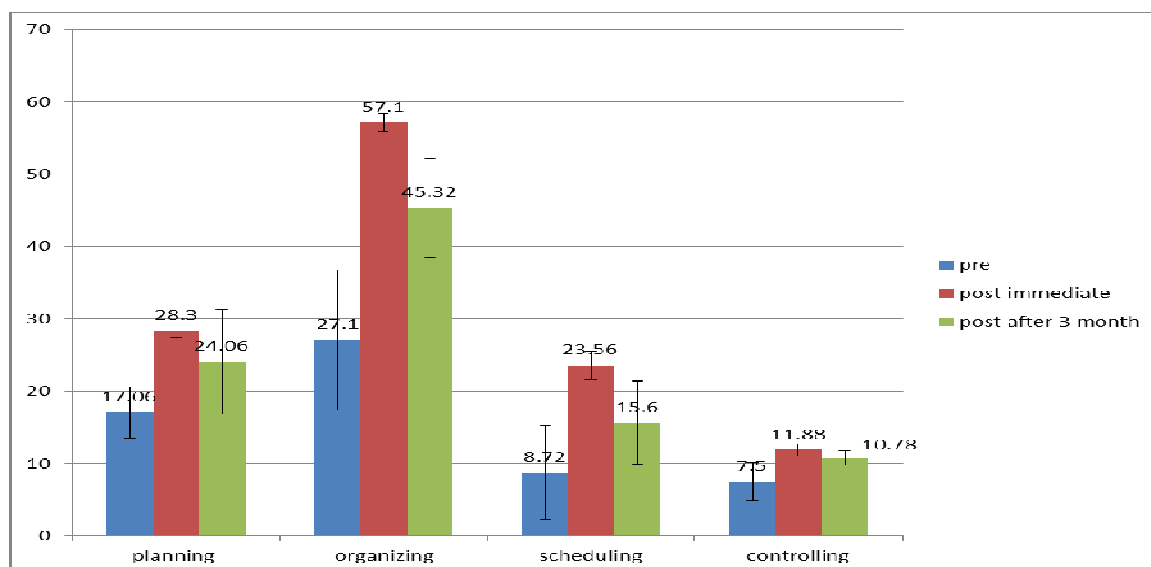


Figure 2: Total score of studied head nurses regarding practice of time management behavior.

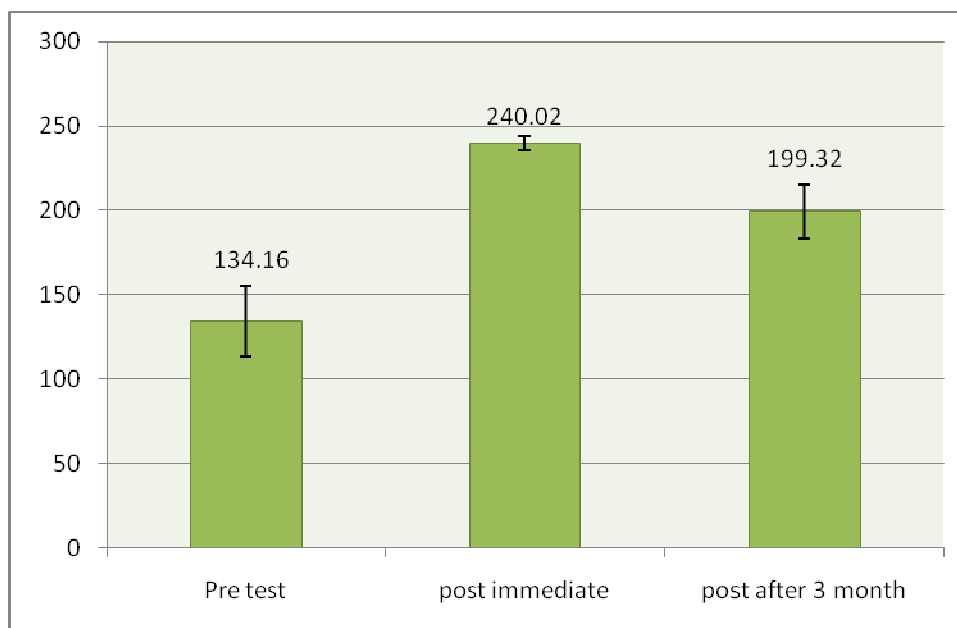


Figure 3: Total score of studied head nurses regarding total time management.

Table (3) : Head nurses total actual job satisfaction domains pre, immediate and 3 month post the program

| Job satisfaction domains | Pre | Post immediate | 3 months Post the program | P1 | P2 | P3 |
|--------------------------|--------------|----------------|---------------------------|-----------------------|-----------------------|-----------------------|
| Policy of the hospital | 6.64 ± 2.57 | 6.70 ± 2.54 | 6.68 ± 2.56 | t= 0.59 P = 0.5 | t= 0.38 P = 0.6 | t= 0.57 P = 0.5 |
| Work Relation | 16.7 ± 2.58 | 17.9 ± 1.63 | 17.3 ± 2.02 | t= 5.5 P ≤ 0.001* | t= 4.2 P ≤ 0.001* | t= 3.6 P ≤ 0.001* |
| Work environment | 11.3 ± 2.85 | 12.2 ± 2.90 | 11.5 ± 2.75 | t= 7.0 P ≤ 0.001* | t= 1.8 P ≤ 0.07 | t= 5.0 P ≤ 0.001* |
| Work sy stem | 6.86 ± 2.49 | 6.86 ± 2.49 | 6.86 ± 2.49 | t= 0 p=1 | t= 0 p=1 | t= 0 p=1 |
| Salaries and incentives | 2.04 ± 2.25 | 2.04 ± 2.23 | 2.1 ± 2.29 | t= 0 P=1 | t= 1.35 P=0.18 | t= 1.35 P=0.18 |
| Achievement | 21.08 ± 5.83 | 24.1 ± 3.8 | 23.7 ± 4.25 | t= 6.21 P ≤ 0.001* | t= 7.11 P ≤ 0.001* | t= 1.47 P=0.1 |
| Psychological status | 6.34 ± 1.71 | 7.6 ± 0.48 | 7.6 ± 0.48 | t= 6.61 P ≤ 0.001* | t= 12.1 P ≤ 0.001* | t= 11.4 P ≤ 0.001* |
| Safety at work | 3.64 ± 1.75 | 3.64 ± 1.75 | 3.66 ± 1.74 | t= 1 P=0.3 | t= 1 P=0.3 | t= 1 P=0.3 |

*Significance at level ≤ 0.05

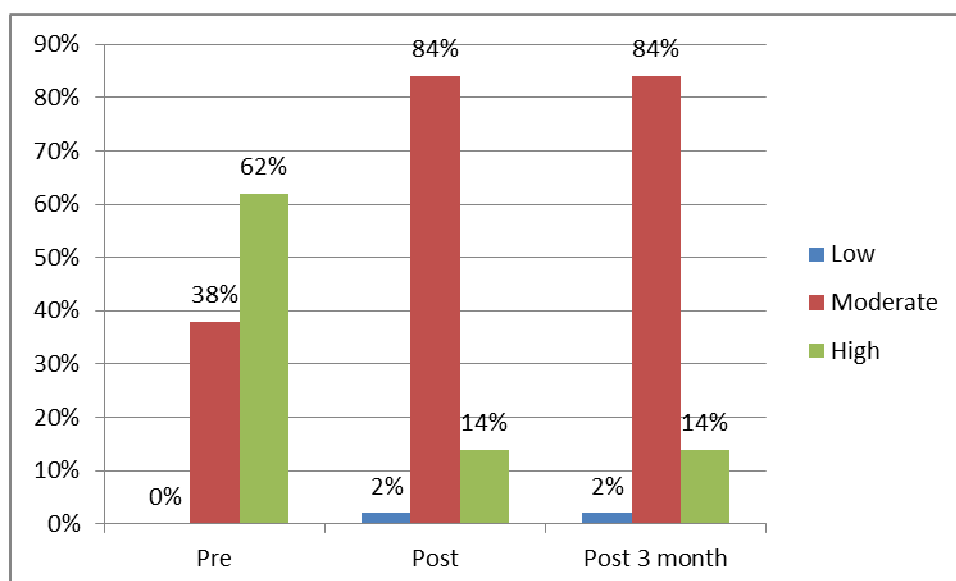


Figure 4: Frequency Distribution of Studied head nurses according to levels of job satisfaction (N=50).

Table (4): Correlation between time management and job satisfaction

| Items | Time management | | | | | |
|------------------|-----------------|--------|----------------|-------|---------------|-------|
| | pre | | Post immediate | | Post 3 months | |
| | r | p | r | p | r | p |
| Job Satisfaction | 0.323 | 0.022* | 0.106 | 0.463 | 0.071 | 0.622 |

6. Discussion

Management and leadership are vital phenomena in all domains of social activities (Leonidas et al., 2010). Human and material resources will be destroyed in the absence of qualified management and leadership. However, time management in the realm of health and for nurse managers is of paramount importance (Mirzaei et al., 2012) because it is directly related to the people's health, and waste of time and lack of time management in the domain of nurse managers cause a reduction in efficiency (Soleimani et al., 2011). So, Control of time and prevention it from wasting can improve the ability of managing, retaining human resources, decreasing stress and increasing job satisfaction among head nurses (Nasri, 2010).

In relation to time management knowledge our present study recorded that all head nurses reported that their response to time management is high (*100% response*) This result comes in accordance with the result of Ritz et al, (2010) who reported that *There was a 100% response*.

Also, the study found that the total behavior of time management as well as all elements of the time management behavior "planning (setting objectives, setting priorities), organizing, scheduling, and controlling" among head nurses were improved immediately after program implementation and still improved 3 months later but slightly decreased. The head nurses misbehavior of time management before the program might be due to that the head nurses were performing their daily work activities without planning, scheduling, or deciding what the priorities, are this is leads to unsatisfied with time management behavior. Meanwhile, an improvement which occurs for most of head nurses in time management behavior after the program could be related to that the most of head nurses applied several time management strategies including (setting objectives, setting priorities, designing work plan and to do list).

The present study supported with Ebrahimi, et al (2014) who stated that the head nurses time management behaviors improved after training the program and applying the ways to improve the quality of these programs can be useful. Going beyond these results of (Claessens et al., 2007) who Suggests that better time management skills—which include the ability to set achievable goals, identify priorities, monitor one's own progress, and remain organized—can lead to more effective time use and ultimately more positive outcomes, including reduced job stress and increased job satisfaction, in some settings.

Furthermore, our research revealed that there was a high significant statistics in time management behavior $p \leq 0.001$ before and after implementing the program. This results supported with the result of Ebrahimi, (2014) who found that there was a significant difference in staff nurses' and head nurses' perception of nursing time management behaviors ($P < 0.05$) and also-clarified that Effective time management is considered important for managers for achieving the goals in an organization. In addition, the head nurses can improve their efficiency and performance with effective use of time. The same thing was explained at the hands of Ghorbanshiroudi et al, (2011) who showed that, time management training had a significant effect $p < 0.003$, and that the time management training has been effective in increased job satisfaction.

The finding of this study revealed that the head nurses perception concerning their satisfaction increased immediately after implementing the program which appeared in their enthusiasm, enjoyment and pleasure. The result could be related to that the head nurses generally when perceiving the time management principles such as make list to do, set deadlines.....etc, it effects directly their feeling to be satisfied. But the degree of their job satisfaction decreased 3 months after the program when their enthusiasm and interest regarding job lowered. They become unsatisfied once more. This result agree with the results of Edwin, (2004) who reported that Time management is the best method of using the time to achieve the personal and occupational objectives, that creates a direct relationship between performing daily activities, on the one hand, and ensuring job satisfaction and progress, on the other hand. Also, This result was in harmony with Brigitte & Christel, (2007) who stated that time as a pressure factors everywhere and argues that time management is an efficient tool to cope with this problem which increased in job satisfaction.

Moreover, the findings of the present study revealed that the highest percentage of the head nurses in the Mansoura university hospital representing high mean score were highly satisfied with work achievement and work relations of head nurses. Regarding achievement and work advancement, the high mean score of head nurses are satisfied about rewarding by tangible and incorporeal incentives for extra activities and presence of rewarding for good performance. This could be due to presence of some motivation system and evaluation system in some units. This result agrees with the result of (Kaliski, 2007) that showed the Job satisfaction is a worker's sense of achievement and success on the job. It is generally perceived to be directly linked to productivity as well as to personal well-being that lead to a feeling of fulfillment

Adding to the above mentioned result of job satisfaction, the present study indicates that there was highly statistically significant difference pre and after implementation the program. This result in contrast with the result of Ritz et al, (2010) who revealed that there were not any statistically significant differences between groups job satisfaction levels.

Finding of the present study revealed that there was highly statistically significant relation between time management and job satisfaction. As the head nurses apply the principle of time management technique that enhances job satisfaction levels for head nurses. Generally, it could be concluded that the level of head nurses knowledge showed marked increase in the score which related to attending the time management training program and a significant improvement was occurred in head nurses time management behaviors and control of time waster. Also, a significant improvement occurred in head nurse's job satisfaction levels.

This result agree with the results of Claessens et al., (2004) who explained that the time positively related to job satisfaction and negatively to job-induced. This suggests that autonomy only has an indirect effect on the outcomes, which means that people with high autonomy experience perceived control of time and therefore feel less strained, more productive, and more satisfied in their work and planning behavior leads to

more control and therefore less strain, more satisfaction, and feeling more productive than others. Moreover, Improvement in time management skills is associated with a reduction in job stress ($p < 0.01$).

This findings are agreement with a studies conducted by Roe, (2005) who reveals that job satisfaction was positively related to time management and mediated by perceived control of time. Perceived control of time was not significantly related to job performance. These results imply that by implementing time management techniques, one is able to experience control over what can be done within workday time. This feeling in turn has a positive effect on job satisfaction, and somatic tensions.

On the other hand, the study conducted by Nasri, (2010) was contrast to the present study and reported that there was no any correlation between time management of head nurses (from their view) with nurses' job satisfaction ($r = .$, $p > .$). Also-the results of Macan, (2010) who examined the effects of a time-management training program on employees' self-reports of time-management behavior, control over their time, job satisfaction, and stress responses, and on supervisors' ratings of these employees' job performance. Contrary to expectations, respondents did not report more frequent use of time-management, more job satisfaction, or less job-induced tension after training. Job performance did not significantly change after training. Thus, in general, the assertions made about time management were not supported.

7. Conclusion: There was effect of time management training program knowledge and practice of time behavior on job satisfaction of head nurses at Mansoura University Hospital.

8. Recommendations:- From findings, it was obvious that effective time management is a tool for organization performance. Thus, it is recommended that organization should adhere strictly to effective time management in order to provide quality services to their customers. The following time management tips are also recommended: List the main time wasting situations and explain why these situations arise. Avoid attempting too much task; make sure you delegate the right task to the right person. Make use of technology time savers and use the most appropriate form of technology for your purpose. In addition to, Every person must treat time very carefully, because nothing affects the bottom-line of an organization more than time effectiveness of its people (some executive do nothing serious about it). The benefits an organization will reap in future depend on what the hospital does with their time now. The basic element of time is event. And key to effective time management is event control. This is to say that an organization cannot time, but the organization can control what they do with time.

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