

Effectiveness of Learning Module on Time Management Ability and Delegation Skills for Head Nurses

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Abstract: Nursing is a demanding job and it can often feel as though there are not enough hours in the day to complete all of tasks required. Unlike other jobs, priorities can change rapidly when a patient is in urgent need for attention. This study was aimed to develop a learning module on time management ability and delegation skills, to assess the effectiveness of learning module on time management ability and delegation skills before and after implementation, to associate between pre and post test scores of time management ability and delegation skills with selected demographic variables and to find Correlation between time management ability and delegation skills among Head Nurses. The study was conducted at all units of Mansoura Emergency Hospital and Main Mansoura University Hospital. The study subjects included were all head nurses working in both hospital (34 from Mansoura Emergency Hospital - 43 from Mansoura University hospital) and a jury group of 15 Nursing academic staff and 15 Nursing leaders. Data collected through personal interview by using the demographic data sheet, time management issues questionnaire, delegation questionnaire for head nurses and an opinionnaire sheet for juries. Reliability was 0.91-0.93 for all tools. Results showed that there was a highly significant difference in knowledge score regarding time management ability ($t=34.75, p<0.05$) and delegation skills ($t=16.09, p<0.05$) also positive relationship were found after implementation of learning module ($r=0.348$) among Head Nurses. There is significant association was found in pre-test scores with regard to age and years of experience. The study recommends further research is needed in this area, with long-term follow-up of the effectiveness of the learning module.

Keywords: Time management abilities, delegation skills, Head nurses, Learning module.

I. Introduction

Management and leadership are vital phenomena in all domains of social activities (1). 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 (2). 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 (3).

Time management is often defined as a product of organizing skills, however the same processes may not be applicable to everyone in the same way (4). Therefore, what works for one particular person might not work for another (5). Culture and personality may also influence the temporal perception of each individual (6). In addition, the time available to each individual for attending to a range of requirements varies according to the abilities and capability limitations of each person (7).

Time management is the act or process of exercising conscious control over the amount of time spent on specific activities, especially to increase efficiency or productivity (8). Time management may be aided by a range of skills, tools, and techniques used to manage time when accomplishing specific tasks, projects and goals. This process encompasses a wide scope of activities, including: planning, setting goals, delegation, analysis of time spent, monitoring, organizing, scheduling, and prioritizing. Initially, time management referred to just business or work activities, but eventually the term broadened to include personal activities (9).

Time management has been recognized as an essential work element for all nurses. Consequences related to ineffective time management such as deterioration in the quality of care, job dissatisfaction, stress and burnout, role overload, and role ambiguity are potentially serious, not only for nurses and nurse managers, but also their clients, colleagues, families and the entire organizations where they are employed (10).

Time management can be viewed as a systematic approach in taking control of the issues that confront people on a day to day basis. As time is a valuable resource, the effective delegation also is necessary to help employees develop their skills and experience, and the delegation is considered the most important tool to save time (11). Head nurses can learn to control both personal and external time wasters to increase their productivity. However, even with minimal time wasted, there is frequently too much work to be accomplished by any one person. In those situations, the delegation, or sharing of the work and responsibility with other persons is indicated. If one wants to manage time effectively, have to assign tasks and responsibilities to others (12).

Delegation is defined as "The transfer of responsibility for the performance of an activity from individual to another while retaining accountability for the outcome" (13). Delegation of authority leads to the

promotion of trust throughout organization and it would be the best tool for head nurses to prove their trust to their personnel. Therefore, it is the nurse managers' responsibility to have adequate knowledge of delegation and to apply it (14).

The ANA Code of Ethics (15) notes that delegation is based on the RN's judgment concerning a patient's condition, the competence of all members of the nursing team, and the degree of supervision required. This statement coincides with the Five Rights of Delegation developed by the NCSBN (16). These Rights of Delegation include: (a) the right task, (b) the right circumstance, (c) the right person, (d) the right direction/communication, and (e) the right supervision. Effective delegation requires knowledge and skills in matching the task to be carried out and the delegate. For effective delegation, head nurses need to be aware of staff's legal job definitions and job descriptions, as well as their skills and willingness to accept the delegation of the task in question, and whether it is legitimate to delegate the task in question (17,18).

Significance of the Study

Effective time management is considered important for managers for achieving the goals in an organization. Head nurses can improve their efficiency and performance with effective use of time. Effective delegation may enhance job satisfaction, responsibility and productivity, as well as personal and professional growth of staff. Ninety-seven percent of middle level managers feel they face work overload. The source of this problem may lie in a failure to delegate tasks effectively. If a manager does not effectively delegate, he/she is more likely to report fatigue, stress and depression. Conversely, effectively delegating tasks will improve overall job quality, professional growth in subordinates and cooperation within the team. While it is necessary for managers to delegate tasks effectively, few can be considered to be good natural 'delegators'. Learning and training is necessary for managers to develop the necessary confidence and maturity.

So time management abilities and delegation skills are the most useful skills need to be learnt by head nurses to help them to excel in their jobs and keep up good balance, to improve performance and increase productivity.

Statement Of The Problem:

Effectiveness of learning Module on Time Management Ability and Delegation Skills for Head Nurses at selected Hospitals, Egypt

Hypothesis

H₁: There is a significant difference between pre and post-test knowledge scores on time management ability and delegation skills among head nurses after application of learning module.

II. Methodology

Research Design: Quasi experimental one group pre and post test design was used in this study.

Setting: The study conducted at Mansoura Emergency Hospital and Main Mansoura University Hospital. The Main Mansoura University Hospital is affiliated to teaching University Hospital, with total bed capacity of 1860. The Mansoura Emergency Hospital with total bed capacity of 180 affiliated to Mansoura University Hospitals, Mansoura City, Egypt. This hospital receives emergency cases and injuries 3 days/week from Mansoura City and other near areas, giving care for about 5 million peoples, according to the hospital most recent statistical data 2013.

Subjects: The study subjects consisted of two categories, namely Head nurses group for the intervention and a jury group for validation of the proposed learning module and related assessment tools. The head nurses group included in this study was 77 (34 from Emergency Hospital- 43 from Mansoura University hospital) and the jury group included 15 nursing academic staff included professors, assistant professors and lecturers from Mansoura Universities, Zagazig, Benha and, Fayoumand 15 nursing leaders from Mansoura Emergency Hospital and Main Mansoura University hospital.

Data Collection Tools. Four different tools were used to collect study data which includes the following:

(1) Demographic Characteristics of study subjects: Included are age, educational level and years of experience in nursing.

(2) Time management issues Questionnaire

This tool is modified by the researcher based on the time management questionnaire used by (19) and modified version of the one (20) to investigate the time management abilities among top-level hospital administrators in Turkey. This instrument is a self-administered questionnaire that consists of four dimensions, namely: priorities,

workload, schedule, and technique. The scoring system for the instrument is a 3-point Likert scale (not at all = 3, sometimes = 2, and Always = 1).

(3) The delegation Questionnaire:

This questionnaire adapted from(21) . This tool was used to assess the degree of delegation of the head nurses and consisted of 18 statements. The scoring system is 5 point likert scale which includes strongly agree(5),agree(4),neutral(3),disagree(2)and strongly disagree(1).The score interpretation will be varying according to the 18 statements.

(4) An opinionnaire sheet: developed by the researcher guided by relevant literature (22,23) to validate the developed time management and delegation skills learning module. The tool consists of 17 items; one item for face validity form, three items to define data for participant as targets, language, and duration; seven items to determine the general content of the module; two items to identify its goals and objectives, and methods of teaching evaluation; three items to assess the materials of teaching ,comprehensive ,sequence of the module and audiovisual aids to be used; and, one item for the appropriate and help to learn from that module. Each item was to be checked as “agree” or “disagree” with comments and/or suggestion

Administrative Design: - An official approval to carry out the study was obtained from responsible persons in the selected hospitals (hospital directors, nursing directors, and heads of departments). Each study subjects were met by the researcher and explained the purpose of the study. Informed consent was obtained and subjects were told that they have the right to withdraw from the research at any time.

Operational Design:

A) Preparatory Phase. After reviewing the available literatures concerning to the topic of the study, the study tools were modified, translated into Arabic. Content validity was obtained from a jury consisted of 5 experts; from Mansoura faculty of nursing and 5 nurse managers in the Hospital. Internal consistency reliability of the 19 items of was assessed using coefficient alpha. It was 0.91 and 0.93 respectively. The delegation and the time management issue questionnaires were administered to study nurses by the researcher and it took about 30-35 minutes to complete. A learning module on time management and delegation skills for head nurses was developed based on the analysis of the head nurses' response related to degree of delegation and time management issues as perceived by them. A module to improve delegation skills and time management for head nurses was reviewed by 30 experts include 15 Nursing academic staff from Mansoura Universities, Zagazig , Benha and, Fayoum and 15 Nursing leaders included leaders from Mansoura Emergency Hospital and Main Mansoura University hospital.

B) Pilot Study: A pilot study was done to test feasibility, understandability, and reliability of the study tools. It was carried out on (10) head nurses selected from units who were not included in the Main study. Data collected from the pilot study were analyzed, reviewed and used in making necessary modifications prior to the final application of the study tools. The duration of this phase took about one month .

C) Field Work: The data was collected from Head nurses by personal interview which took about 30-35 minutes. The learning module was implemented and post test was conducted with the same questionnaires. The data collection took about four months from June 2014.

Description and development of Learning module on Delegation skills and time management ability:

Objective of the module: The main objective of the module is to improve knowledge and skills of head nurses about time management ability and delegation skills.

Target Participants:77 head nurses (34 from Mansoura Emergency Hospital- 43 from Mansoura University hospital) were selected by Non- probability convenient sampling technique **Language:** English

Duration of learning module : 4 hours/day for 6 day(10am to 2 pm) with total of 24 hours .

Selection and Organization of content :The content was selected after careful study analysis of data collected from head nurses about their knowledge on time ability and delegation skills . The use of simple scientific and professional language was considered to ensure that the head nurses knowledge will be improved.

Contents of the module: include topics ofBasic concepts of time management ability (definitions, benefits),Time management strategies (time analysis, setting goal, priorities, planning, scheduling, delegation, avoid procrastination and manage time wasters), Common time management mistake and How nurses spend their time . Delegation skills contains items on definitions, benefits, what should and should not be delegated, five right of delegation, common delegation errors.

Methods of teaching: Selection of teaching methods was governed by consideration for characteristics of the subject themselves and contents of the module. The methods used in teaching the module included lecture, situation from real life and group discussion.

Teaching aids :The teaching aids used in the module were learning module and power point.

Settings: The module was conducted in the classroom at Main Mansoura University Hospital

Statistical Analysis:

After data were collected and coded, they were transferred into a specially designed format to suit for computer feeding. Frequency analysis, cross-tabulation, and manual revision were all used to detect and manage errors. Descriptive measures included frequency,percentage, arithmetic mean and standard deviation. Inferential statistical tests utilized included: Paired t-test, Chi-square (X2), Spearman Correlation Coefficient (r) for analysis of qualitative variables. The level of significance used was $P \leq 0.05$.

Table No: 1–Distribution of head nurses according to their demographic variables (N=77)

Demographic Variables	Main Mansoura University Hospital (n= 43)		Mansoura Emergency Hospital (n=34)	
	No	%	No	%
Age in Years				
24 - 30	16	37	7	21
30-40	23	53	21	62
40 - 50	2	5	6	17
> 50	2	5	0	-
Years of Experience				
< 5	7	16	2	6
5- 10	24	56	11	32
10 - 20	9	21	21	62
> 20	3	7	0	-

Table (1) Distribution of head nurses according to their age shows that, inboth Main Mansoura University Hospital and Mansoura Emergency Hospitalthe highest percentage (53% & 62%) of staffs were in the age group of between 30 – 40 years respectively. Only 17 percentage of staffs were in the age group between 40-50 years in Mansoura Emergency Hospital. Where as in Main Mansoura University Hospital the staffs had same percentage (5%) in the age groups of 40-50 and above 50 years respectively.

Distributionof head nurses according to their years of experience shows that, in Main Mansoura University Hospital the highest percentage (56%) of staffs had 5 – 10 years of experience. More or less similar percentage of staff had 10-20 (21%) and <5 (16%) years of experience. And very less percentage (7%) of staffs had >20 years of experience. Where asinMansoura Emergency Hospital the highest percentage (62%) of staffs had 10-20 years of experience and only less percentage (6%) of staffs had <5 years of experience.

Table No: 2 Pre&Post Knowledge scores regarding implementation of Delegation skills Learning module among head nurses (n=77)

S. N	Items	Pre test		Post test		Paired value	t'	P value
		Mean	SD	Mean	SD			
1	I need more delegation but I find the task that I delegate not that expected	2.30	1.209	4.65	0.871	14.92		< 0.05*
2	I feel that I do not have enough time to delegate	1.22	0.955	4.86	0.996	16.08		< 0.05*
3	I Always observe subordinates work without their knowledge, then I correct it	2.34	1.108	4.44	0.854	13.19		< 0.05*
4	I delegate all tasks, to subordinates to do without my intervention	2.06	1.219	4.71	1.021	14.56		< 0.05*
5	The task ofdelegation is given with clear order, the lack of focus induces more stress	2.29	1.157	4.68	1.178	13.97		< 0.05*
6	I feel that subordinates lack commitment ,therefore any tasks I delegate is not perfect	2.05	1.307	4.53	0.773	15.35		< 0.05*
7	I want to delegate more, but effect will be more good when i do it by myself	1.09	1.149	4.73	1.902	17.79		< 0.05*
8	I want to delegation buti will strongly criticism subordinate errors	1.74	0.894	4.06	1.075	17.24		< 0.05*
9	I do not feel the same satisfaction and happiness of the work when I delegate the part to others	1.84	0.974	4.74	0.674	17.86		< 0.05*
10	I usually find myself compelled to return to work	2.04	1.186	4.48	0.873	16.91		< 0.05*
11	I don't found that delegation save time	1.57	1.069	4.89	0.972	18.04		< 0.05*
12	Delegate work correctly, and expect exactly what to do	2.27	1.096	4.94	1.571	17.37		< 0.05*
13	I am not able to delegate the task as I need to subordinates because they have no experience	1.83	1.005	4.64	0.863	14.62		< 0.05*
14	I feel when I delegate there is loss of sincerity	1.49	0.868	4.71	0.807	15.54		< 0.05*
15	I need to delegate more but with a high degree of accuracy	2.94	1.151	4.98	1.026	17.02		< 0.05*
16	I work longer hours than I needed	1.91	1.138	4.88	1.305	18.67		< 0.05*
17	Give routine task to subordinates and kept non-routine tasks to myself	1.95	1.134	4.09	1.084	14.18		< 0.05*
18	Chairman of the work expected from me give details of the work	2.93	1.135	4.78	1.202	16.32		< 0.05*

(*) statistically significant at $p < 0.05$

Table (2) Pre-Post Knowledge scores regarding implementation of Delegation skills learning module among head nurses shows that in post-test the highest mean (4.98±1.026) was obtained in the aspect of I need to delegate more but with a high degree of accuracy and more or less similar mean was obtained in the aspects of I work longer hours than I needed (4.88±1.305), I don't found that delegation save time (4.89±0.972) and I feel that I do not have enough time to delegate(4.86±0.996) respectively. Lowest mean was obtained in the aspect of I want to delegation but I will strongly criticism subordinate errors (4.06±1.075). Where as in pre-test the highest mean was obtained in the aspects I need to delegate more but with a high degree of accuracy (2.94±1.151) and Chairman of the work expected from me give details of the work (2.93±1.135) respectively. More or less similar mean was obtained in the aspects of delegate work correctly, and expect exactly what to do (2.27±1.096), the task of delegation is given with clear order, the lack of focus induces more stress (2.29±1.157), I need more delegation but I find the task that I delegate not that expected (2.30±1.209) and I Always observe subordinates work without their knowledge, then I correct it (2.34±1.108). Very less mean was obtained in the aspect of I want to delegate more, but effect will be more good when i do it by myself (1.09±1.149).

It seems that implementation of Delegation skills learning module among head nurses was highly effective and improved the knowledge level.

Table No: 3: Pre &Post Knowledge scores regarding implementation of Time Management ability learning module among head nurses (n=77)

S. No	Delegation Items	Pre test		Post test		Paired t-test	p-value
		Mean	SD	Mean	SD		
Workload							
1	Feel stress or anxious about performing tasks on time	1	0.517	3	0.704	32.92	<0.05*
2	Feel have more tasks than you can do	1.05	0.875	2.94	1.158	30.87	<0.05*
3	Sacrifice your social activities for your job	1.23	0.923	2.97	1.196	34.54	<0.05*
4	Say yes for extra tasks when you are busy	1.17	0.841	2.88	1.024	31.07	<0.05*
Schedule							
1	Awareness of having time for extra tasks	1.09	1.021	2.85	0.729	28.43	<0.05*
2	Feel unable to finish daily schedule tasks in one day.	1.14	1.164	2.92	0.878	29.9	<0.05*
3	Arrive late for your appointments	1.26	1.293	2.98	0.915	37.61	<0.05*
4	Bring work home or stay late after work.	1.07	0.905	2.91	1.912	35.58	<0.05*
Technique							
1	A lot of documents waiting to be read.	1.19	0.827	2.78	1.812	26.19	<0.05*
2	Meetings are a waste of time	1.32	0.614	2.81	1.657	33.88	<0.05*
3	Difficult to finish work-related conversations	1.29	0.708	2.89	0.946	36.08	<0.05*
4	Your telephone conversations stop your work.	1.12	1.173	2.9	1.304	36.4	<0.05*
5	Leave your tasks uncompleted	1.01	1.027	2.97	1.498	40.13	<0.05*
Priorities							
1	Priorities main tasks and responsibilities	1	1.104	3	1.354	42.5	<0.05*
2	Priorities time needed for each activity each day.	1.26	1.192	2.95	0.788	39.31	<0.05*
3	Priorities most important activity in your job.	1.49	0.918	2.98	1.522	34.32	<0.05*
4	Have enough time to consider most important tasks	1.42	0.648	2.97	1.864	35.79	<0.05*
5	Spend more time on routine than unusual tasks	1.37	1.272	2.93	1.701	38.2	<0.05*
6	Priorities activities for next year for 3 to 5 years	1.18	1.209	2.86	1.727	36.65	<0.05*

(*) statistically significant at p<0.05

Table (3) Pre &Post Knowledge scores regarding implementation of Time Management ability learning module among head nurses shows that in post-test all of them managed their time effectively in the aspects of Feel stress or anxious about performing tasks on time(3±0.704)and Main tasks and responsibilities(3±1.354) respectively. More or less similar mean was obtained in the aspects of Sacrifice your social activities for your job (2.97±1.196), Leave your tasks uncompleted (2.97±1.498), Arrive late for your appointments(2.98±0.915) and Most important activity in your job(2.98±1.522) respectively. Lowest mean was obtained in the aspect of A lot of documents waiting to be read(2.78±1.812). Where as in pre-test the highest mean was obtained in the aspect of most important activity in your job(1.49±0.918). More or less similar mean was obtained in the aspects of have enough time to consider most important tasks (1.42±0.648), Spend more time on routine than unusual tasks(1.37±1.272), Meetings are a waste of time(1.32±0.614) and Difficult to finish work-related conversations(1.29±0.708). Very less mean was obtained in the aspects of Feel stress or anxious about performing tasks on time(1±0.517) and Main tasks and responsibilities (1±1.104). It seems that implementation of Time Management ability skills learning module among head nurses was highly effective and improved the knowledge level.

Table No: 4: Association between Pre-Post Knowledge scores regarding implementation of Delegation skills and Time Management ability learning module with the demographic variables of head nurses (n=77)

S.No	Demographic Variables	Max. No	Pre Test X ² Value		Post Test X ² Value	
			Delegation Skills	Time Management Ability	Delegation Skills	Time Management Ability
1.	Age: 24-30 30-40 40-50 50>	22 44 8 3	9.276*	8.512*	5.841	3.239
2	Years of Experience >5 5-10 10-20 >20	9 35 29 4	11.031*	12.274*	4.702	2.725

P < 0.05 – Significant* P > 0.05 – Not Significant

Table (4) Association between Pre-Post Knowledge scores regarding implementation of Delegation skills and Time Management ability learning module with the demographic variables of head nurses shows Significant association was found in pre -test scores when compared to age and years of experience at P < 0.05 level of significant. Hence, it can be interpreted that the difference in mean score related to these demographic variables were not by chance and true difference. Hence the research hypothesis was accepted.

Where as in post-test knowledge scores regarding implementation of Delegation skills and Time Management ability learning module with the demographic variables shows no significant association was found between post-test scores when compared to age and years of experience at P > 0.05 level of significant. Hence, it can be interpreted that the difference in mean score related to these demographic variables were by chance and not true difference. Hence the research hypothesis was rejected.

Table No: 5: Correlation between Pre-Post Knowledge scores of Delegation skills and Time Management ability training module among Head nurses (n=77)

S.No	Variables	Pre Test r-Value	Post Test r-Value
1.	Delegation Skills	0.348	0.879
2	Time Management Ability		

P < 0.05 - significant

Table (5) Karl Pearson’s Correlation coefficient (r) was calculated to find the relation between Pre-Post Knowledge scores of Delegation skills and Time Management ability learning module among head nurses shows that, in pre-test there was significant positive relationship between delegation skills and time management ability (r=0.348). Where as in post-test it shows highly significant positive relationship between delegation skills and time management ability (r=0.879). It reveals the research hypothesis was accepted.

Table 6: Agreement of jury nursing groups upon developed delegation skills and time management ability learning module form and components (N=30)

Components	Jury nursing groups				ChiSquare Test	p-value
	Leader (no =15)		Academic (no =15)			
	No	%	No	%		
Time management and delegation skills face validity - (form).	14	93.33	11	73.33	2.94	0.086
- Determine target participants	14	93.33	12	80.0	0.268	0.605
Identify language of module	14	93.33	12	80.0	0.268	0.605
Suitable duration of module	13	86.66	11	73.33	0.839	0.36
A method of trainees' evaluation was measurable	14	93.33	10	66.66	0.288	0.591
Material of teaching was suitable and applicable	12	80	10	66.66	0.000	1.000
Audio visual aids were suitable and applicable.	13	86.66	10	66.66	4.615	0.032
- Module goal and Objectives were clear, scientific and comprehensive.	12	80	10	66.66	0.000	1.000
Areas covered under this module were in logical sequence, scientific and comprehensive	13	86.66	12	80.0	1.298	0.255
Delegation concepts and overview was in logical sequence, clear, scientific and comprehensive.	14	93.33	11	73.33	2.946	0.086
Five Rights” of Delegation Self-Leadership characteristics were clear, scientific and comprehensive	14	93.33	12	80.0	4.286	0.038

Barriers to delegation was clear, applicable, scientific and comprehensive.	14	93.33	12	80.0	4.286	0.038
time management concepts and overview was in logical sequence, clear, scientific and comprehensive	14	93.33	11	73.33	0.390	0.533
Time management abilities were suitable and clear.	13	86.66	9	60.0	0.096	0.756
Time Management Skills was clear, applicable, scientific and comprehensive.	13	86.66	10	66.66	0.288	0.591
Time management Pitfalls was clear, applicable, scientific and comprehensive.	14	93.33	9	60.0	2.500	0.114
The content of the proposed module can be applied in other hospitals.	12	80.0	10	66.66	0.000	1.000

The validation of the developed delegation skills and time management ability teaching module was done through experts' opinions. Table 6 illustrates the agreement of the jury groups of nursing leaders and nursing academic staff. The percentages of agreement ranged between 80% and 93.33% for the nursing leaders group, and 60.0% and 80.0% for the academic group.

III. Discussion

Delegation is one of the most important management skills. Good delegation saves time, develops people's growth to be the successor and motivates. Poor delegation will cause frustration, demotivation and confusion to the other person and fails to achieve the task or purpose itself (24). Hence the aim of the study are to develop a learning module on time management ability and delegation skills, to assess the effectiveness of learning module on time management ability and delegation skills before and after implementation, to associate between pre and post test scores of time management ability and delegation skills with selected demographic variables and to find Correlation between time management ability and delegation skills among Head Nurses.

In relation to implementation of Delegation skills learning module among head nurses the study results showed that in pre-test the highest mean was obtained in the aspects I need to delegate more but with a high degree of accuracy (2.94 ± 1.151) and Chairman of the work expected from me give details of the work (2.93 ± 1.135) respectively and the lowest mean was obtained in the aspect of I want to delegate more, but effect will be more good when i do it by myself (1.09 ± 1.149). The possible explanation is may due to head nurses get confused about delegation to the most appropriate person and not carefully considering the Patient activity to be performed, the support person's job description and competencies of the individual who will complete the task. This results come in contrast with Dimond (25) has described the legal responsibility of the nurse undertaking delegation by noting, "it is the personal and professional responsibility of each practitioner who delegates activities to ensure that the person to carry out that activity is trained, competent, and has the necessary experience to undertake the activity safely". Also Royal college of nursing (26) state that the person who delegates the task is accountable for the appropriateness of the delegation. If the delegation of a task to another person is appropriate, the support worker is accountable for the standard of performance. The level of supervision provided must be appropriate to the situation and take into account the complexity of the task, the competence of the support worker, the needs of the patient and the setting in which the care is being given.

Results of this study in post-test indicated that the highest mean (4.98 ± 1.026) was obtained in the aspect of I need to delegate more but with a high degree of accuracy and the lowest mean was obtained in the aspect of I want to delegation but subordinate errors I will strongly rescue (4.06 ± 1.075). The possible explanation is may due to head nurses try to reduce the risk by select the tasks to be delegated carefully, select the right people to do them, and be very careful when delegating tasks that have already been delegated – to subordinate. The head nurses delegating the task have already reduced their direct control and may be very reluctant to reduce it further. This results come in contrast with Stone (27) who stated that delegation involves giving an employee the responsibility for part of job and the authority to carry it out, while retaining control and accountability.

In relation to implementation of time management ability learning module among head nurses the study results showed that in pre-test the highest mean was obtained in the aspects of priorities most important activity in your job (1.49 ± 0.918) while the Very less mean was obtained in the aspects of Feel stress or anxious about performing tasks on time (1 ± 0.517) and Main tasks and responsibilities (1 ± 1.104). Where as in post-test all of them managed their time effectively in the aspects of Feel stress or anxious about performing tasks on time (3 ± 0.704) and Main tasks and responsibilities (3 ± 1.354) respectively. The possible explanation is may due to poor time management has been related to stress and job dissatisfaction and emotional exhaustion among head nurses. This result is supported with (28) Who state that Managing your personal work environment can accomplished by practice effective time management especially by avoiding overload. Also Croydon and Chatercan (29) state that Anecdotal evidence of managed time issues include deterioration in the quality of care provided, job dissatisfaction, stress and burnout, role overload and role stress. However, some researchers have shown that there is a meaningful relationship between time management, behavior, and stress (30). They indicate

that, instead of actually using time management behaviors, perceptions about the structure and purposes of time use might be useful in reducing worry (31). Additionally, many organizations now offer programs to teach employees time-management skills in order to reduce stress and improve overall well-being, and to assist them in managing their non-work lives (32). In addition

Abdel-Hafz and Woogara(12, 33) State that one of the fundamental challenges in effective time management is remembering the difference between "urgent" and "important." Urgency alone cannot make a task important. It is the connection to our personal principles and business priorities that determines the importance of a task. There will be times when we simply can not get everything done. Sometimes we have to say "no" or "not now" to other's requests. But, by scheduling what's important first and then trying to get to the less important tasks in our remaining time, we increase the odds that we will accomplish what's really important. In addition head nurses and supervisors organize their own job tasks and daily activities to meet the demands of the unit or facility. They must coordinate multiple duties, such as meeting attendance, operational policy development, interacting with nurses and residents, monitoring work schedules and overseeing budgets. Work schedules and duties are assigned to nurses, practical nurses and nurses' aides (34).

With regard to Association, the results of the present study indicates that there were Significant association was found in pre -test scores when compared to age and years of experience at $P < 0.05$ level of significant. Hence, it can be interpreted that the difference in mean score related to these demographic variables were not by chance and true difference. Hence the research hypothesis was accepted. The possible explanation may be due to head nurses confidence seems to increase with age and focused on building up trust and confidence between them and their subordinate for better team work which lead to delegating and time management . In this respect Morsy (11) found relation between age, years of experience in the current position of the professional head nurse and their satisfactory skills in time management and delegation. In addition (35,36,37) state that age and experience play an important part in nurses' effective delegation. Younger nurses and recent graduates often feel uncomfortable having to delegate tasks to older or more experienced staff members. In their study, participants 50 years and older had greater confidence when it came to delegation and gave clearer instructions than those in other age groups. Also, they were less concerned about delegation giving the impression that they were lazy. Nurses have a tendency to move into a less stressful working environment when they get older. Older nurses who are still working in the acute care setting may be leaders and role models for younger nurses with less experience. These results suggest that delegation skills are learned by trial and error in the workplace, rather than through systematic educational opportunities. This is in accord with results of other studies where lack of delegation skills is acknowledged among young RNs. Novice RNs may well be knowledgeable about the principles of successful delegation and what can be delegated, but lack the skills to delegate effectively.

Finally, the result of the present study indicates in pre-test there was significant positive relationship between delegation skills and time management ability ($r=0.348$). Where as in post-test it shows highly significant positive relationship between delegation skills and time management ability ($r=0.879$). It reveals the research hypothesis was accepted. Time management is the ability of person to use the time function to accomplish the tasks in the exact timing. When we are successful at time management, we are able to maximize use of every hour of the day. This means using each hour of our day to do the right things to accomplish all of the tasks that we need to in the most efficient manner. More time management more achievement and less stress. Nursing is a demanding and stressful occupation, thus the nurses should be organized to manage time effectively, knowing when to delegate and thinking critically are essential(38). This is consistent with Marquis (39) who said that to be an effective management of time you can use delegation skill at home, at work, and in group activities. Also study that was carried out at Zagazig University hospitals on 100 head nurses concluded that the designed training program had a positive effect on head nurses' knowledge and time management abilities, and a modest effect on delegation skills(40).

IV. Conclusion

The present study concluded that there was a highly significant difference in knowledge scores related to delegation skills and time management ability and positive relationship were found after implementation of learning module among head nurses.

V. Recommendations

1. Training programs for nurses are recommended in order to improve time management and delegation skills changing habits and behaviors that lead to obstacles of time.
2. Job description should be developed and must be available for the different categories of all nursing personnel to facilitate application of the process of delegation
3. Nursing leaders should be aware of and understand the key regulatory, organizational and individual factors that create opportunities for safe and effective delegation and supervision

4. Hospitals should ensure there is a clear and consistent policy and procedure in place that outlines requirements for safe and effective delegation and supervision of nursing tasks and activities. This should be inclusive of roles and responsibilities for delegators/supervisors and delegates/supervisees
5. Further research is needed in this area, with long-term follow-up of the effectiveness of the learning module

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