CODEN [USA]: IAJPBB ISSN : 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES
SJIF Impact Factor: 7.187
https://doi.org/10.5281/zenodo.21283740

Available online at: http://www.iajps.com Research Article

ASSESS THE EFFECTIVENESS OF TIME MANAGEMENT ON THE PATIENT CARE QUALITY & JOB PERFORMANCE AMONG NURSES AT ALLAMA IQBAL MEMORIAL TEACHING HOSPITAL, SIALKOT

[1]Sofia Iqbal, [2]Areeba Azmat, [3]Amina Bibi

[1]Senior Nursing Instructor, College Of Nursing, Khawaja Muhammad Safdar Medical College, Sialkot

[2]Post RN 2nd year Student, College Of Nursing, Khawaja Muhammad Safdar Medical College, Sialkot

[3]Post RN 2nd year Student, College Of Nursing, Khawaja Muhammad Safdar Medical College, Sialkot

Abstract:

Background: *Time management is of utmost importance in healthcare facilities since time squandered by health professionals is time not invested in patients, and this affects the quality of care given to patients.*

Objective: *This study aims to assess the effectiveness of time management on the patient care quality and job performance among nurses at a private sector hospital, Sialkot.*

Methodology: *This is a descriptive, cross-sectional study in which total 46 nurses selected through convenience sampling technique. Structured questionnaire contained of close-ended questions adopted to collect data from eligible participants. Data were collected over a period of 4 months and analyzed in SPSS Version 29.*

Results: *In the sample of 46 nursing personnel, when respondents were asked that did they group activities that are same in the location, 43.48% said never; 17.39% replied infrequently; 13.04% said sometimes; 15.22% said frequently and remaining 10.87% said always. As well as when participants were asked that do they document nursing interventions as soon as activity is completed, 15.22% replied never; 60.87% replied infrequently; 8.70% said sometimes; 6.52% replied frequently and rest of 8.70% said always. As per scoring of Time management questionnaire (Q1-Q17), mean value of the questionnaire is 46.26; then scoring of SAPS questionnaire (Q1-Q7), mean value of the questionnaire indicated as 15.74 and lastly scoring of NPI questionnaire is determined as 26.80.*

Conclusion(s): *In conclusion, result findings showed low level of time management skills among study respondents that is affecting poor quality of care. Hence, study level of result indicated average level of performance determined by nursing personnel.*

Keywords: *Time management; nurses; skills; quality of care; nursing performance*

Corresponding author:

Sofia Iqbal,

Senior Nursing Instructor,

College Of Nursing, Khawaja Muhammad Safdar Medical College, Sialkot

QR CODE

Please cite this article in press ***Sofia Iqbal*** *et al.,* ***Assess The Effectiveness Of Time Management On The Patient Care Quality & Job Performance Among Nurses At Allama Iqbal Memorial Teaching Hospital, Sialkot****, Indo Am. J. P. Sci, 2026; 13(07).*

INTRODUCTION:

The importance of time management in nursing cannot be overstated as it directly impacts the quality of patient care, job performance, and overall efficiency within healthcare settings. Effective time management is crucial for nurses to prioritize tasks, delegate responsibilities, and manage their workload, especially when they are frequently interrupted or required to multitask (Shaukat et al., 2024). Time management is a critical component of nursing influencing individual performance and healthcare organizations' overall efficiency. Time is a vital element of work for nurses impacting every aspect of patient care and professional responsibilities (King et al., 2021).

Background of the study

Time, as a resource, is irreplaceable once lost, emphasizing the importance of effective management (Hashim et al., 2024). Over the years, many scholars have defined the construct of time management in different forms: "time management techniques", "a set of time-oriented behaviours when performing activities for a purpose". The continuous and daily management of numerous information and data, managing and meeting deadlines, checking and organizing services and activities and being efficient and productive are all tasks that a nurse must take charge of, and that involves an expenditure of time (Vizeshfar et al., 2022).

Therefore, proper time management allows nurses to allocate their time and resources effectively ensuring that they can meet the needs of all their patients without compromising the quality of care. It helps in prioritizing critical tasks, thereby reducing the likelihood of errors which can have serious implications for patient safety. Additionally, good time management can lead to improved job satisfaction as nurses are able to complete their duties more efficiently and with less stress (Filomeno et al., 2023).

Moreover, several strategies can enhance time management skills in nursing. One effective method is the use of clinical pathways and care plans, which provide a standardized approach to patient care. These tools help in streamlining processes and ensuring that all necessary steps are taken in a timely manner. Another strategy is the implementation of time audits. By regularly reviewing how time is spent during shifts, nurses can identify areas where they can improve efficiency and reduce time wastage. This reflective practice can lead to better time allocation and task management. Effective communication is also paramount. Clear and concise communication with colleagues, patients, and families can prevent misunderstandings and delays, thereby saving valuable time. Utilizing handoff reports and interdisciplinary team meetings can ensure that everyone is on the same page and tasks are clearly defined and understood (Filomeno et al., 2023).

Additionally, self-care and stress management are crucial for maintaining the stamina needed for effective time management. Nurses who are well rested and manage their stress levels are better equipped to handle the demands of their job efficiently (Aeon et al., 2021). Effective time management positively impacts both patient care and nurse well-being. By managing their time efficiently, nurses can ensure that they provide comprehensive and attentive care to each patient. This not only improves patient outcomes but also enhances patient satisfaction (Filomeno et al., 2024).

As analyzed a correct use of time management inevitably leads to better management of care e.g., nurses should aim at optimizing three main areas: (i) the greater involvement of RNs in building care relationships and the direct care of patients and relatives; (ii) better use of their skills in their autonomous nursing role, including making clinical nursing assessments and providing therapeutic education, and (iii) more systematically updating nurses' knowledge. Not all nursing coordinators and middle managers manage to acquire and put into practice in every situation all these attitudes and skills they should have (Michel et al., 2021).

For instance, in a study conducted in Pakistan, only 30% of nurses reported using time management techniques, highlighting a significant gap in this critical skill area (Farokhzadian et al., 2020). Time management refers to how nurses use and organize their time. Effective time management requires nurses to adopt specific behaviors that enable them to work smarter rather than harder. With the right habits in place, nurses can increase their efficiency, reduce workplace stress and improve patient outcomes (M. Qtait, 2024). Despite the importance of nurses' understanding of time management and the need for proper training in these skills, there is a lack of studies on the effectiveness of time management on the patient care quality and job performance among nurses in Pakistan. Thus, the present study aimed to assess the effectiveness of a time management on the patient care quality and job performance among nurses at Allama Iqbal Memorial Teaching Hospital, Sialkot.

Research objectives

- To assess the current level of time management skills among nurses at Allama Iqbal Memorial Teaching Hospital, Sialkot.

- To examine how particular time management practices affect the quality of nursing care for patients.
- To assess the impact of time management on nurses' job performance.

Research questions

- How proficient are the nurses in the hospital at managing their time?
- How particular time management practices affect the quality of nursing care for patients?
- How good time management skills have an effect on nurses' job performance?

Operational definitions

- **Assessment of time management skills:**
  - **Low Time Management Skills:** If respondents will get <55 score considered as low time management practices.
  - **Moderate Time Management Skills:** If respondents will get >55-65 score will be taken as moderate time management practices.
  - **High Time Management Skills:** If respondents will get >65-85 score will be considered as high time management practices.
- **Assessment of patient care quality:**
  - **Very dissatisfied:** 0-10 score, to obtain a score in this range, a person must have indicated that they are dissatisfied or very dissatisfied on four or more items.
  - **Dissatisfied:** 11-18 score, to obtain a score in this range, a person must have indicated that they are dissatisfied or very dissatisfied on at least two items.
  - **Satisfied:** 19-26 score, to obtain a score in this range, a person must have indicated that they are very satisfied or satisfied on over half SAPS items (4/7).
  - **Very satisfied:** 27-28 score, to obtain a score in this range, a person must have indicated they are very satisfied or satisfied on all seven SAPS items.
- **Assessment of Job performance:**
  - **Poor performance:** 1-18 score, to obtain a score in this range, a person must give positive statement on 3 items.
  - **Average performance:** 19-36 score, to obtain a score in this range, a person must have positive remarks on 6 items.
  - **Satisfied:** 37-54 score, to obtain a score in this range, a person must have positive statement on all 9 items.

MATERIALS & METHODS:

Study design: A descriptive, cross-sectional, quantitative study design used in this study because a population, circumstance, or phenomenon's traits, actions, and trends can be precisely and methodically described using a descriptive study design. Descriptive research design is a powerful tool used by scientists and researchers to gather information about a particular group or phenomenon.

Study setting: This research work carried out at Allama Iqbal Memorial Teaching Hospital, Sialkot.

Study duration: This study conducted over a period of 4 months (From Oct, 2025 to Jan, 2026).

Sample size: The sample size determined by considering the population size, level of confidence, and margin of error through a power analysis. Solvin's formulae used to draw sample for the study as under:

$$n = \frac{N}{1 + Ne^2}$$

N= Population = 52; n= Sample Size; E= Margin error = 0.05

$$n = \frac{N}{1 + N(E)^2}$$

$$n = \frac{52}{1 + 52(0.05)^2}$$

$$n = \frac{52}{1 + 52(0.0025)}$$

$$n = \frac{52}{1 + 0.13}$$

$$n = \frac{52}{1.13}$$

$$n = 46.02$$

In this study 46 nursing personnel and 46 patients recruited for collection of data.

Sampling technique: Non-probability, convenience sampling technique employed in the research work.

Sample selection criteria

a. **Inclusion criteria**

- Nurses working as clinical nurse on regular basis.
- Having at least one year working experience.
- Adult patients admitted in all the department of the hospital to assess patient quality care.

b. **Exclusion criteria**

- Nurses who on maternity or annual leave.
- Nurses who were seriously ill during the data collection period excluded from the study.
- Nurses less than one year professional experience.
- All healthcare professionals other than nurses excluded from final sample.

Study tools: Structured questionnaire contained of close-ended questions used to collect data from study respondents contained of following sections as under:

Section A: Socio-demographic variables included gender, age, years of experience, residence, and educational level.

Section B: Nursing Time Management Scale (NTMS) used to assess time management skills among nurses. The scale contains 17 items and measures various aspects of time management including goal setting, planning, scheduling, and organizing activities. Response categories were on a 5-point scale: *(1)* never *(2)* infrequently *(3)* Sometimes *(4)* frequ ently *(5)* always. Total sum score was calculated ranging between a minimum of 17 points representing poor time management skills and a maximum of 90 points representing the best time management skill.

Section C: The Short Assessment of Patient Satisfaction (SAPS) used to assess patient care quality that is a short, reliable and valid seven item scale that can be used to assess patient satisfaction with their treatment. In 2006 (Hawthorne 2006, Hawthorne et al., 2006) a study was undertaken to examine a number of the leading patient satisfaction measures with urinary incontinence patients. The items from all these patient satisfaction scales were pooled and the SAPS was developed by selecting the items with best measurement properties and the most comprehensive coverage of the domains of patient satisfaction. The SAPS consists seven items assessing the core domains of patient satisfaction which include treatment satisfaction, explanation of treatment results, clinician care, participation in medical decision making, respect by the clinician, time with the clinician, and satisfaction with hospital/clinic care. Responses scales are 5-point scales.

Section D: Nursing performance instrument used to assess job performance of nurses. The NPI consists of nine items on a 6-point Likert scale (1 = strongly disagree to 6 = strongly agree). These items address physical (1, 4, 8), mental (5, 7), and general (2, 3, 6, 9) tasks of performance during a work shift. Items 1, 2, 5, 7, and 9 are reverse coded, with higher item mean scores indicating higher nursing performance.

Method of data collection: Data were gathered using the quantitative approach. The researchers contacted and met the nursing directors of hospital and explained the objectives and importance of the study and agreed upon assigning a focal person in each facility to follow-up distributing, checking, and gathering all questionnaires. Then the researchers personally collected the completed questionnaires from the nursing directors. To ensure the data quality and accuracy during data collection, the researchers attached with each questionnaire an explanatory letter clarifying the study purpose and objectives. The researchers kept her mobile number on the explanatory letter for responding to any possible inquiries or unclear question.

Ethical consideration: The present study approved by the Ethics Committee of College of Nursing, Khawaja Muhammad Safdar Medical College, Sialkot. All necessary permissions for conducting the research was obtained from the relevant administrators and all methods was performed in accordance with the relevant guidelines and regulations. Furthermore, a session was held after the selection of the participants for explaining the study objectives and procedures. Written informed consent forms was also taken from all the participants.

Data analysis: The collected data organized, tabulated and statistically analyzed using the statistical package for social sciences (SPSS), version 29. Descriptive analysis performed and data were presented in frequencies and percentages. Furthermore, date were also presented in the form of bar/pie charts.

RESULTS:

A total of 46 participants recruited for the study out of which 6 (13.04%) respondents having age less than 25; 4 (8.70%) respondents were between age group (25-35) years; 12 (26.09%) had age group (36-45) years; 5 (10.87%) having age group (46-55) years and remaining 19 (41.30%) having age above than 56 years. As per job experience of study respondents, 6.52% got one to five years; 52.17% six to ten years whereas 41.30% attained above than eleven years as mentioned in table 1 and figure 1-2.

Moreover, regarding management experience of nursing personnel, 26.09% having experience from (1-5) years; 34.78% from (6-10) years and rest of 39.13% more than 11 years. In the sample of 46 study respondents, 52.17% attended time management course while 47.83% didn't as depicted in table 2 and figure 3-4.

Table 1: Socio-Demographic characteristics of study respondents (n=46)

Variables	Frequency (f)	Percentage (%)
Age (Years)		
Less than 25	6	13.04
25-35	4	8.70
36-45	12	26.09
46-55	5	10.87
56+	19	41.30
Total	**46**	**58.70**
Sex		
Male	0	0.00
Female	46	100.00
Total	**46**	**100.00**
Qualification		
Diploma in nursing	1	2.17
Post RN (BSN)	44	95.65
Postgraduate	1	2.17
Total	**46**	**100.00**
Organization type		
Government	28	60.87
Private	18	39.13
Total	**46**	**100.00**
Job experience (Years)		
1-5	3	6.52
6-10	24	52.17
>11	19	41.30

Total	**46**	**100.00**
Management experience (Years)		
1-5	12	26.09
6-10	16	34.78
More than 11	18	39.13
Total	**46**	**100.00**
Attended a time management course		
Yes	24	52.17
No	22	47.83
Total	**46**	**100.00**

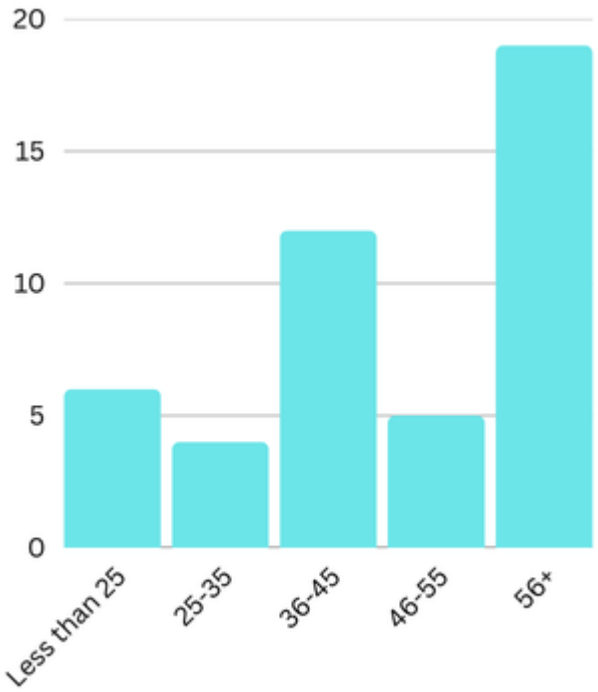

Figure 1: Age of study respondents (Years)

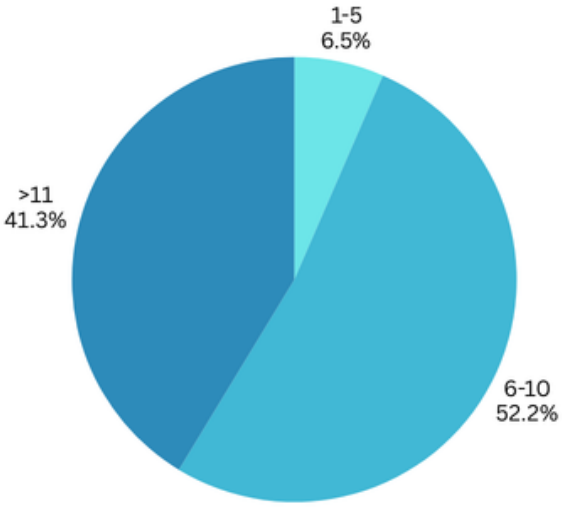

Figure 2: Job experience of study respondents (Years)

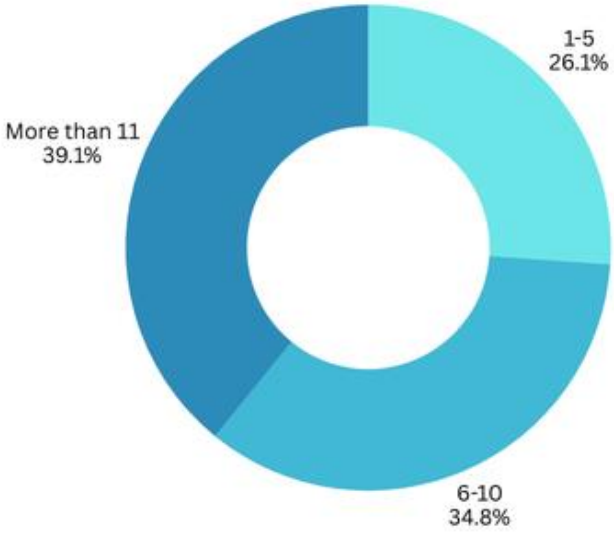

Figure 3: Management experience of study respondents (Years)

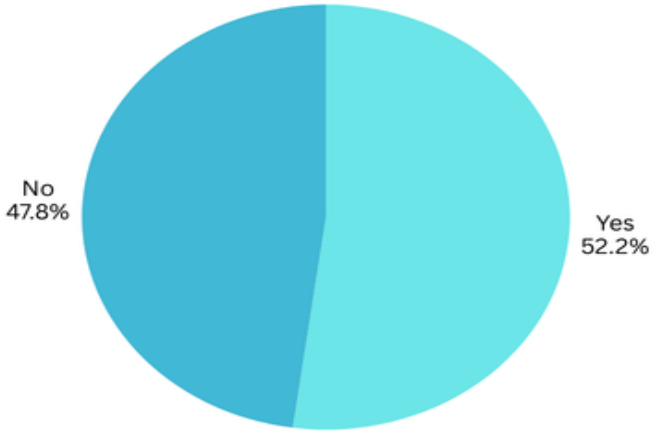

Figure 4: Status of attended time management course among study respondents

Table 2: Assessment of effectiveness of time management among nursing personnel (n=46)

Sr. No.	Statements	Responses				
		Never f (%)	Infrequently f (%)	Sometimes f (%)	Frequently f (%)	Always f (%)
1	I write a set of goals for myself for each day.	12 (26.09%)	14 (30.43%)	4 (8.70%)	9 (19.57%)	7 (15.22%)
2	I have a set of goals for the entire week.	5 (10.87%)	21 (45.65%)	3 (6.52%)	11 (23.91%)	6 (13.04%)
3	I force myself to make time for planning.	16 (34.78%)	8 (17.39%)	15 (32.61%)	3 (6.52%)	4 (8.70%)
4	I spend enough time planning.	10 (21.74%)	22 (47.83%)	2 (4.35%)	1 (2.17%)	11 (23.91%)
5	I have a time to think about how plans will be translated into action.	23 (50%)	8 (17.39%)	6 (13.04%)	4 (8.70%)	5 (10.87%)
6	I have a clear idea of what I want to accomplish during day and make list of activities.	14 (30.43%)	12 (26.09%)	3 (6.52%)	8 (17.39%)	9 (19.57%)
7	I Coordinate Medication Administration.	9 (19.57%)	13 (28.26%)	5 (10.87%)	11 (23.91%)	8 (17.39%)
8	I coordinate the administration of Treatments.	5 (10.87%)	9 (19.57%)	8 (17.39%)	13 (28.26%)	11 (23.91%)
9	I Coordinate the nursing Procedures.	7 (15.22%)	12 (26.09%)	5 (10.87%)	12 (26.09%)	10 (21.74%)
10	I Determine how reports will be given and received between shifts.	2 (4.35%)	12 (26.09%)	8 (17.39%)	9 (19.57%)	15 (32.61%)
11	I maintain a clean work area, and keep my desk organized.	14 (30.43%)	15 (32.61%)	4 (8.70%)	4 (8.70%)	9 (19.57%)
12	I group activities that are in the same location.	20 (43.48%)	8 (17.39%)	6 (13.04%)	7 (15.22%)	5 (10.87%)
13	I gather all equipment that will be needed before starting an activity.	11 (23.91%)	18 (39.13%)	8 (17.39%)	5 (10.87%)	4 (8.70%)
14	I estimate the time needed to complete the task.	9 (19.57%)	16 (34.78%)	6 (13.04%)	4 (8.70%)	11 (23.91%)

15	I document the nursing intervention as soon as possible after the activity is completed.	7 (15.22%)	28 (60.87%)	4 (8.70%)	3 (6.52%)	4 (8.70%)
16	I handle paper work efficiently.	12 (26.09%)	17 (36.96%)	5 (10.87%)	4 (8.70%)	8 (17.39%)
17	I utilize appropriate technology to facilitate communication and coordination.	11 (23.91%)	14 (30.43%)	3 (6.52%)	7 (15.22%)	11 (23.91%)

To assess effectiveness of time management, Likert's type scale used carrying 5-point. When respondents were asked either they write goals for themselves each day, in the sample of 26.09% said never; 30.43% replied infrequently; 8.70% responded sometimes; 19.57% said frequently while only 15.22% said always. While asking about exchanging reports between shifts 4.35% respondents said never; 26.09% said infrequently; 17.39% replied sometimes; 19.57% replied frequently whereas only 32.61% said always as shown in table 2.

Similarly, when respondents were asked that did they group activities that are same in the location, 43.48% said never; 17.39% replied infrequently; 13.04% said sometimes; 15.22% said frequently and remaining 10.87% said always. As well as when participants were asked that do they document nursing interventions as soon as activity is completed, 15.22% replied never; 60.87% replied infrequently; 8.70% said sometimes; 6.52% replied frequently and rest of 8.70% said always. On the other hand, when respondents were asked either they utilize appropriate technology to facilitate communication and coordination, 23.91% said never; 30.43% replied infrequently; 6.52% replied sometimes; 15.22% replied frequently and remaining 23.91% said always as depicted in table 2.

Regarding patient quality care, SAPS tool was used to collect data from study respondents. There were total 46 adult patients admitted in the different department of the hospital selected for the study. When respondents were asked that how well they were satisfied with the effect of treatment given to them in the hospital, 8.70% said very satisfied; 17.39% replied satisfied; 6.52% replied neutral; 47.83% respondents were dissatisfied whereas 19.57% participants were very dissatisfied.

Whereas, when the respondents were asked that healthcare professional was careful to check everything while examination, 23.91% participants were very satisfied; 17.39% satisfied; 10.87% replied neutral; 19.57% respondents were dissatisfied while remaining 28.26% very dissatisfied as shown in table 3. On the contrary, when respondents were asked that they were satisfied with the time healthcare professional given to them, 23.91% respondents were very satisfied; 8.07% satisfied; 13.04% replied neutral; 26.09% respondents were dissatisfied while remaining 28.26% participants were very dissatisfied as indicated in table 3.

Table 3: Assessment of patient care quality in relation to time management skills of nursing personnel (n=46)

Sr. No.	Statements	Responses				
		Very satisfied f (%)	Satisfied f (%)	Neither satisfied nor dissatisfied f (%)	Dissatisfied f (%)	Very dissatisfied f (%)
1	How satisfied are you with the effect of your {treatment/care}?	4 (8.70%)	8 (17.39%)	3 (6.52%)	22 (47.83%)	9 (19.57%)

2	How satisfied are you with the explanations the {doctor/other health professional} has given you about the results of your {treatment/care}?	12 (26.09%)	10 (21.74%)	4 (8.70%)	6 (13.04%)	14 (30.43%)
3	The {doctor/other health professional} was very careful to check everything when examining you.	11 (23.91%)	8 (17.39%)	5 (10.87%)	9 (19.57%)	13 (28.26%)
4	How satisfied were you with the choices you had in decisions affecting your health care?	9 (19.57%)	12 (26.09%)	3 (6.52%)	12 (26.09%)	10 (21.74%)
5	How much of the time did you feel respected by the {doctor/other health professional}?	16 (34.78%)	12 (26.09%)	5 (10.87%)	8 (17.39%)	5 (10.87%)
6	Are you satisfied with the care you received in the hospital?	21 (45.65%)	12 (26.09%)	4 (8.70%)	4 (8.70%)	5 (10.87%)
7	The time you had with the {doctor/other health professional} was too short.	11 (23.91%)	4 (8.70%)	6 (13.04%)	12 (26.09%)	13 (28.26%)

Now the next step is how nursing time management skills affecting nursing performance, Nursing Performance Inventory Scale was adopted. It is a 6-Point Likert Scale consisted of 9 items. When participants were asked that either they take shortcuts during patient care, 8.70% respondents strongly disagreed with it; 10.87% disagreed; 6.52% participants somewhat disagree; 19.57% participants somewhat agree; 17.39% agree whereas 36.96% strongly agreed with it as shown in table 4.

In the sample of 46 respondents, when participants asked that they apply 5 rights principle when administering medications to the patients, 23.91% respondents strongly disagreed; 32.61% disagreed; 13.04% somewhat disagreed; 6.52% somewhat agree; 10.87% agreed and only 13.04% respondents were strongly agreed as indicated in table 4.

Finally, when they were asked if they sometimes forced to modify work standards to get work done, 6.52% respondents strongly disagreed; 6.52% respondents disagreed; 8.70% somewhat disagree; 6.52% somewhat agree; 21.74% agreed and 50% strongly agreed with the statement as recorded in table 4. As per scoring of Time management questionnaire (Q1-Q17), mean value of the questionnaire is 46.26; then scoring of SAPs questionnaire (Q1-Q7), mean value of the questionnaire indicated as 15.74 and lastly scoring of NPI questionnaire is determined as 26.80 as shown in table 5.

Table 4: Assessment of nursing performance in relation to effectiveness of time management (n=46)

Statements	Responses					
	Strongly disagree f (%)	Disagree f (%)	Somewhat disagree f (%)	Somewhat agree f (%)	Agree f (%)	Strongly agree f (%)
During a work shift, changes in my muscle strength, endurance, or physical energy affect my ability to perform physical tasks associated with my job (e.g., carry items, perform patient handling tasks, walk/drive from patient to patient, etc.).	3 (6.52%)	4 (8.70%)	5 (10.87%)	8 (17.39%)	15 (32.61 %)	11 (23.91%)
I sometimes find it necessary to take shortcuts in patient care.	4 (8.70%)	5 (10.87%)	3 (6.52%)	9 (19.57%)	8 (17.39 %)	17 (36.96%)
I always apply the 5 rights principle when administering medications to the patients.	11 (23.91 %)	15 (32.61%)	6 (13.04%)	3 (6.52%)	5 (10.87 %)	6 (13.04%)
Throughout a work shift, I am able to perform fine motor tasks (e.g., inserting an IV, catheter insertion, medication preparation, etc.) with no difficulty.	14 (30.43 %)	9 (19.57%)	5 (10.87%)	7 (15.22%)	6 (13.04 %)	5 (10.87%)
During a work shift, changes in my concentration or alertness affect my ability to perform patient monitoring, medication administration, and documentation tasks.	6 (13.04 %)	5 (10.87%)	3 (6.52%)	5 (10.87%)	14 (30.43 %)	13 (28.26%)
I am always able to carry out safe nursing practice.	12 (26.09 %)	14 (30.43%)	4 (8.70%)	6 (13.04%)	5 (10.87 %)	5 (10.87%)
During a work shift, changes in my mood, mental energy, or attentiveness affect my ability to communicate clearly and effectively (e.g., express my opinions, understand what others are saying, etc.) with other nurses, physicians, clinicians, patients, or family members.	21 (45.65 %)	9 (19.57%)	2 (4.35%)	8 (17.39%)	3 (6.52%)	3 (6.52%)
I always follow existing facility guidelines for safe patient handling (e.g., use of lift devices, two-person lifts, etc.).	7 (15.22 %)	23 (50%)	4 (8.70%)	4 (8.70%)	2 (4.35%)	6 (13.04%)
I am sometimes forced to modify my standards to get the work done.	3 (6.52%)	3 (6.52%)	4 (8.70%)	3 (6.52%)	10 (21.74 %)	23 (50%)

Table 5: Total scoring of time management, SAPS and NPI questionnaire (n=46)

No. of participants	Total scoring of Time management questionnaire (Q1-Q17)	Total scoring of SAPs questionnaire (Q1-Q7)	Total scoring of NPI questionnaire (Q1- Q9)
1	41.00	18	31
2	51.00	17	24
3	50.00	9	27
4	52.00	16	25
5	34.00	18	31
6	41.00	17	24
7	51.00	9	27
8	50.00	16	25
9	41.00	21	31
10	51.00	12	31
11	50.00	18	24
12	52.00	17	27
13	41.00	9	25
14	51.00	16	31
15	50.00	18	24
16	52.00	17	27
17	34.00	9	25
18	41.00	18	31
19	51.00	17	24
20	41.00	9	27
21	51.00	16	25
22	50.00	18	31
23	41.00	17	24
24	51.00	9	27
25	50.00	16	25
26	52.00	21	31
27	34.00	12	24
28	41.00	18	27
29	51.00	17	25
30	41.00	9	31
31	51.00	16	24
32	50.00	18	27
33	41.00	17	25
34	51.00	9	31

35	50.00	9	24
36	52.00	16	27
37	34.00	9	25
38	41.00	16	31
39	51.00	18	24
40	41.00	17	27
41	51.00	9	25
42	50.00	28	25
43	41.00	21	31
44	51.00	17	24
45	52.00	22	27
46	34.00	28	25
	2128.00	**724.00**	**1233.00**
	46	**46**	**46**
	46.26	**15.74**	**26.80**

DISCUSSION:

The results demonstrated a marked enhancement in participants' knowledge related to key domains of time management, including its concept, identification and control of time wasters, and application of strategic approaches. This aligns with findings from prior studies emphasizing that educational interventions can substantially improve cognitive understanding of time use among nursing personnel (Qtait, 2025). The practice of time management was shown to be significantly associated with compensation and benefits packages in the hospital. Health workers who were satisfied with the hospital compensation and incentives have good time management practices than unsatisfied workers (Chanie et al., 2020).

Our study result findings are inconsistent with the findings of Perveen et al. who reported that most nurses possess average level of time management skills while our result showed low level of time management skills found among nursing personnel affecting patient care quality and nursing performance. It is recommended that hospitals should provide training and resources to enhance these skills and that further research should be conducted to explore other factors that may affect time management in this setting.

Moreover, a study by (Shaukat et al., 2024) is also dissimilar to our study findings that majority of nurses demonstrated moderate time management skills. These results underscore the necessity for targeted interventions, including structured training programs, to enhance time management abilities among nurses, thereby improving both job performance and patient care outcomes.

Likewise, (Khalifa et al., 2021) demonstrated that majority of nursing staff practicing good time management skills that is comparable to this research findings. In addition, our study findings are opposite to the findings of Mohammad et al. in Hebron Hospital, majority of nurses exhibited high time management skills, it is evident that the nurses in the current study struggle significantly more with managing their time effectively. In view of above literature findings it is imperative to identify prime obstacles contributing to low level of management skills and take proactive actions to obsolete time wasting activities among nursing personnel.

CONCLUSION:

In conclusion, result findings showed low level of time management skills among study respondents that is affecting poor quality of care. Hence, study result indicated average level of performance determined by nursing personnel. While some demographic characteristics are directly proportional to time management skills of nursing personnel included age, education and management experience as respondents with advanced age, higher qualification and greater management experience showed more effective time management skills as compared to others emphasizing to conduct periodic workshops/seminars on the importance of time management skills to improve patient quality care and nursing performance to attain best clinical outcomes.

RECOMMENDATIONS

- Hospitals and clinics should conduct regular time management courses for their employees, with an emphasis on providing practical instructions and exercises on how to avoid and eliminate time-wasting activities such as interruptions, distractions, and procrastinations. In addition, organizations should design policies that minimize time-wasting activities, such as requiring excessive reporting, vague communications, and unnecessary meetings. Such policies should be clearly communicated to all employees.
- In addition to time management courses, organizations should also provide their employees with the necessary tools and resources to manage their time e6ectively, such as time tracking software or prioritization frameworks. By following these recommendations, hospitals and clinics can create a more productive work environment and improve the quality of care they provide to their patients.
- Training programs focused on time management can equip nurses with the skills necessary to handle their demanding workloads. Incorporating time management training into nursing education can prepare future nurses to manage their responsibilities efficiently.
- Healthcare institutions have a duty to prioritize healthy work settings and to encourage team member health in addition to providing safe and hazard-free work environments. Therefore, a healthy workplace incorporates health promotion to enhance employees' well-being. Well-being at the work level influences all the various aspects of the workers involved. Surely further studies that could relate the two issues would give a broader view of the phenomenon.

LIMITATIONS

Several limitations must be acknowledged:

- **Self-report bias:** Self-administered questionnaires introduces potential for social desirability bias and subjective overestimation of time management skills.
- **Cross-sectional design:** The study's cross-sectional nature prevents evaluation of changes in time management behaviors over time or causal inferences.
- **Single-country context:** Data were collected exclusively from nurses in Pakistan limiting generalizability. Cultural factors may influence perceptions of time management, highlighting the need for cross-cultural validation.
- **Potential item redundancy:** Unusually high variance explained may indicate overlapping items necessitating item resentment to stream line the scale.
-

REFERENCES:

1. Aeon, B.; Faber, A.; Panaccio, A. (2021). Does time management work? A meta-analysis. *PLoS* ONE, 16, e0245066.
2. Al-Nusair, Hussam, Rafi Alnjadat, Doreen Macherera Mukona, Mariezl Fonbuena, and Saleem Perinchery. (2023). The Effect of Intentional Nurse Rounding and Nurse Prompt Response Time to Call System on Patient Satisfaction, Patient Complaints, and Patient Clinical Outcome: An Audit Trial. *Nursing and Midwifery Studies*, *12*(3), 142–150. doi: 10.48307/NMS.2023.406538.1225.
3. Chanie, M. G., Amsalu, E. T., & Ewunetie, G. E. (2020). Assessment of time management practice and associated factors among primary hospitals employees in north Gondar, northwest Ethiopia. *PLoS ONE*, *15*(1), e0227989. https://doi.org/10.1371/journal.pone.0227989
4. Farokhzadian J, Miri S, Doostkami M, Rezahosseini Z, Shahrbabaki PM. (2020). We are promoting the psychosocial and communication aspects of nursing care quality using time management skills training. *Journal of education and health promotion*, *9*(1), 361.
5. Filomeno, L.; Di Muzio, M.; Tartaglini, D.; Gigliello, M.; Di Mario, S.; Forte, D.; Ivziku, D. (2023). A rapid review of time management strategies among nurses managers. *Clin. Ter.*, , *174*, 75–79.
6. Haggstrom, M.; Andersson, I.; Kihlgren, A. (2012). Experiences of interruptions in healthcare: A qualitative study. *Int. J. Nurs. Stud.*, *49*, 1101–1112.
7. Hashim R, Hashim S, Waseem H, tul Naval A, Ali M, Tariq N. (2024). Stressors and Strategies for Time Management among Public and Private Medical Colleges Healthcare Workers. *Environment*, *4*, 5.
8. Intan, Nur, Hayati Husnul, Raden Siti Jundiah, and Rizky Muliani. (2022). Efek Fatigue Terhadap Respon Time Penanganan Penderita Gawat Darurat Kategori Australasian Triage Scale 1-5 Versi Indonesia Fatigue Effects on the Response Time of Handling Emergency Patients Indonesian

Version 1-5. *Australasian Triage Scale Category*., *9*(2), 209–19.
9. Khalifa, M., Abdelrahman, S., Fahmy, A., & Gabra, S. (2021). Relation between Emotional Stability and Time Management Levels among Nurses at one Day Surgeries Hospital. *Minia Scientific Nursing Journal*, *010*(1), 19–26. https://doi.org/10.21608/msnj.2021.91423.1001
10. King R, Taylor B, Talpur A, Jackson C, Manley K, Ashby N, et al. (2021). Factors that optimize the impact of continuing professional development in nursing: A rapid evidence review. *Nurse education today*., *98*, 104652.
11. M. Qtait (2024). Effectiveness of Time Management Training Program on Patient Quality of Care Performed by Nurses Working in Intensive Care Units in the West Bank Government Hospitals (Arab American University, 2024), https://repository.aaup.edu/jspui/handle/123456789/.
12. Michel, O.; Garcia Manjon, A.; Pasquier, J.; Ortoleva Bucher, C. (2021). How do nurses spend their time? A time and motion analysis of nursing activities in an internal medicine unit. *J. Adv. Nurs*., *77*, 4459–4470
13. Perveen, R., Ashiq, A., Farooq, Z., Parveen, I., Munir, S., Sehar, S., & Naeem, M. (2023). ASSESSMENT OF TIME MANAGEMENT SKILLS AMONG NURSES WORKING IN THE EMERGENCY DEPARTMENT. *Biological and Clinical Sciences Research Journal*, *2023*(1), 500. https://doi.org/10.54112/bcsrj.v2023i1.500
14. Qtait, M. (2025). Time wasters facing nurses during work in hospital departments. *SAGE Open Nursing*, *11*, 23779608251328278. https://doi.org/10.1177/23779608251328278
15. Qtait, Mohammed (2025). Assessing the Psychometric Properties of a Time Management Scale for Nurses in Hospitals, *Journal of Nursing Management*, 8, 5248695. https://doi.org/10.1155/jonm/5248695
16. Rabia Arpacı, Zehra Can Karabörklü, Derya Tanriverdi (2025). Impacts of 21st century Time Traps, Time Management and Mental Well-Being on Job Performance in Nurses. *Scand J Caring Sci.*, *39*(3). https://doi.org/10.1111/scs.70068
17. Shaukat, S., Saddique, H., & Tasneem, S. (2024). ASSESSMENT OF TIME MANAGEMENT SKILLS AMONG STAFF NURSES. *Biological and Clinical Sciences Research Journal*, *2024*(1). https://doi.org/10.54112/bcsrj.v2024i1.1034
18. Vizeshfar, F.; Rakhshan, M.; Shirazi, F.; Dokoohaki, R. (2022). The effect of time management education on critical care nurses' prioritization: A randomized clinical trial. *Acute Crit. Care*, *37*, 202–208.
19. Zyoud RN. (2023). Factors influencing time management skills among nurses in North West Bank, Palestine. *BMC Nurs*, *22*(1), 386. doi: 10.1186/s12912-023-01560-x. PMID: 37848893; PMCID: PMC10580556