Effect of Time Management Program on Job Satisfaction for Physicians, A Cross-Sectional Study

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Abstract

Background and objective: we conducted this study to find out the important relationship between time-management skills and physician career satisfaction and explore the importance of utilizing strategies that promote efficient time management. Methods: In this cross-section study, used a self-designed and validated questionnaire. The current study was conducted during a series of workshops, in CMH Lahore Medical College & IOD from August-October 2021. Participants were, no prerequisite knowledge, skills, or resources were required for the workshop. Results: A total of 157 participants were enrolled for a workshop and 155 participants fill the questionnaire completely so the response rate was 98.72%. Questionnaire, Cronbach’s Alpha value was 0.78 male participants were 60 (38%) and females 96 (61.4%). The age average was 25-39 years. Most participants are demonstrators/lecturers/registrars. About 77 (49%) of the physician’s sleep duration was normal hours and 78 (51%) complain to insomnia. Only 67 (43.9%) physicians give family time properly but 88 (56.4%) spend less than 4 hours with their families. Doctors spend less time on their smart devices 16 (10.3%) spend more than 2 hours/day. Very few physicians do their favorite hobby or any physical activity daily. Conclusion: Physicians are not good time managers, its means their patients are kept waiting, they get stressed, their work becomes less enjoyable, stress can build, they lose their sense of humor and they lose valuable time for family, exercise, and sleep, insignificantly different across gender, age, experience and entering qualification. Keywords: Time management, physicians, Family time, Sleep time.

INTRODUCTION

Healthcare is one of the most important career fields that exist in the world and effective time management has the potential to increase productivity, limit burnout and improve both professional and personal satisfaction. Time management is a constant personal and professional challenge for physicians [1]. The medical profession has been hazardous to physicians’ health and creates an environment of psychological toxicity. Medical students present higher levels of stress when compared with other people of the same age in other professions. They also have higher scores for daytime sleepiness. Studies with physicians have found that students had a deficit in hours of sleep, physical activity, and social interactions which is starts from the first year of medical school. Many studies found, that it is difficult for doctors, to regulate studies, duties and their external lives, leading to time mismanagement, poor sleep patterns, and increased levels of stress [2-4]. As rates of physician burnout rise, teaching effective time-management skills may become a priority [5]. Time management can be defined as clusters of behavioral skills that are important in the organization of the study and course load or the way that you organize and plan how long you spend on specific activities [6].

Examining time use efficiency involves three primary assumptions: an awareness of time, an awareness of the elements that fill time, and positive working habits. Typically, such awareness is developed through self-regulation and the development of goals...
and action plans before the action, and it has been found that such time management techniques can cause fewer feelings of anxiety [3]. As a health care provider, time management is essential to successfully performing and progressing along the continuum [7].

Barriers to time management include ineffective planning or problem-creating situations, and commitments. Unnecessary activities and disruptions also impede the organization of time. Failure to delegate, imagining, procrastination, and perfectionism are other factors that can create poor time management [2]. Multitasking is also an ineffective strategy, and can mostly cause more harm than good it actually slows a person down, decreases creativity, increases stress, and burnout and it consecutively impacts memory and raises the chances of mistakes [8].

This interactive workshop is submitted as part of the faculty development program series designed for all the medical professionals from general practitioners to professors, demonstrators to heads of departments. The core professional sustainability skills that promote work-life integration.

**Significance of the study:** The management of time has got to be handled so important because if 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 effectively. So, a sound understanding of the time in management helps in managerial skill development in all physicians.

**Aim of the study:** To highlight the important relationship between time-management skills and physician career satisfaction and explores the importance of utilizing strategies that promote efficient time management.

**Null hypothesis:** There is no effect of a time management program on job satisfaction for physicians.

**SUBJECTS AND METHODS**

**Design:** This is a quantitative, descriptive cross-sectional study.

**Setting:** This study was conducted to recognize faculty needs for faculty development programs in private medical colleges in Lahore Pakistan.

**Duration:** This study was carried out from August to October 2021.

**Population:** A total of 160 participants were enrolled through a non-random convenience sampling technique, with a 95% confidence level and 5% confidence interval.

**Subjects:** Convenient sample included all head participants of the workshop who are available at the time of the study.

**Tools of data collection:** Self-design questionnaire used after validation. The questionnaire form has two parts. The first part is demographic and the second part has specific survey questions about the Time management behavior scale that was a structured questionnaire. The validity of the questionnaire was assessed through experts' views. The validated questionnaire was then piloted to ten volunteer physicians that were not part of the sample and asked to complete the questionnaire. The reliability of the tool is computed by using Cronbach’s Alpha which was 0.78.

**Methods of data collection:**

No prerequisite knowledge, skills, or resources were required to attend the workshop. Instructors leading these sessions were physicians who possessed both an understanding of the time-management strategies described in this workshop and first-hand experience of the challenges that arise in managing the time of a practicing physician.

**Inclusion criteria:** All workshop participants who fill the questionnaire.

**Exclusion criteria:** Undergraduate medical students and who fill out an incomplete questionnaire.

**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 confidentiality of the subject.

**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, percentages, and means and standard deviations for quantitative variables. Statistical significance was considered at a p-value <0.05 while, a p-value of <0.001 indicates a highly significant result.

**RESULTS**

A total of 157 participants out of these 2 participants fill the survey form incomplete so the total response rate was 98.72%. It was observed in Figure 1, that the mean age of the studied head nurses was 43.9 ± 11.5 years, their ages ranged between 25-39 years are 39.4 %, ages ranged between 40-49 years are 24.8 %, ages ranged between 50-59 years are 21.6%, and ages ranged between 60 to onwards years are 14%. Figure 2 shows, that out of 157 males 60= 38% and females are 96 (61.4%). Figure 3 shows the number of kids, the participants have, 24 (15.4%) participants have no kids.
12 (7.7%) have 1 kid, 53 (34%) have 2 kids, 48 (30.8%) have 3 kids, and 19 (12.2%) have 4 or more kids.

Scientific research makes clear that specific hours of sleep is essential at any age. Sleep powers the mind restores the body and fortifies virtually every system in the body. National sleep foundation guidelines advise that healthy adults need between 7 and 9 hours of sleep per night. Table 1 results show that 77 (49%) participants (n=155) take 7 hours or more sleep at night and other participants take 6 or fewer hours of sleep in 24hours. About 63 (40.1%) physicians can extract their time with friends but 104 (66.2%) don’t have enough time for friends’ meetups or gossip. It is observed that only 67 (43.9%) physicians give family time properly but 88 (56.4%) spend less than 4 hours/day with their families. Doctors spend less time on their smart devices 16 (10.3%) spend more than 4 hours per day and 23 (14.8%) less than 4 hours per day but 116 (74.9%) never use smartphones for other than call purposes. And very few physicians 11 (7.1%) do their favorite hobby or any physical activity daily otherwise 144 (92.3%) do not have enough time to do their favorite activities daily.

![Figure 1: Average age distribution of participants](image1)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>60</td>
<td>38.0</td>
</tr>
<tr>
<td>Female</td>
<td>96</td>
<td>61.4</td>
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<tr>
<td>Total</td>
<td>156</td>
<td>99.4</td>
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![Figure 2: Gender Distribution](image2)

![Figure 3: Number of kids participants](image3)
Figure 4: Distribution of experience in work with their designations

Table 1: Distribution of 24 hours in different essential and non-essential activities

<table>
<thead>
<tr>
<th>S/no</th>
<th>Question</th>
<th>Never</th>
<th>Rarely</th>
<th>Usually</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How much you can sleep daily</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8 hours or more</td>
<td>38 (24.2%)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>7 hours</td>
<td>39 (24.8%)</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>6 hours</td>
<td>58 (36.9%)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Less than 6 hours</td>
<td>22 (14%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Can you extract time to meet or gossip with your friends?</td>
<td>11 (7%)</td>
<td>93 (59.2%)</td>
<td>43 (27.4%)</td>
<td>20 (12.7%)</td>
</tr>
<tr>
<td>3</td>
<td>How much time do you spend with your family daily while being awake after routine work</td>
<td>44 (28.2%)</td>
<td>44 (28.2%)</td>
<td>43 (27.6%)</td>
<td>24 (16.3%)</td>
</tr>
<tr>
<td>4</td>
<td>How much time you can extract daily on your favorite hobby daily</td>
<td>142 (91%)</td>
<td>2 (1.3%)</td>
<td>4 (2.6%)</td>
<td>7 (4.5%)</td>
</tr>
<tr>
<td>5</td>
<td>How much time do you spend daily with your smartphones</td>
<td>112 (72.3%)</td>
<td>23 (14.8%)</td>
<td>16 (10.3%)</td>
<td>4 (2.6%)</td>
</tr>
</tbody>
</table>

DISCUSSION

"While time management cannot extend the day or lower your workload, it can make you feel more in control and minimize stress" [10]. It can also assist you in achieving your personal and professional objectives by ensuring you have adequate time to speak effectively with patients and colleagues as well as complete administrative responsibilities [3]. Time Management is the method to organize our time, so each decision we make regarding that is useful, constructive, and the most beneficial to our life's structures [11]. The workshop topic of time management among physicians is becoming increasingly more important as more individuals try to manage demands on their time from work, personal, family, and other societal obligations. Many people struggle to find different ways to maintain the balance between demands and seek out methods to manage their time wisely [12].

The Pareto's Principle, also known as the 80/20 rule, says that 20 percent of the input of the activities is responsible for 80 percent of the outcomes or results [13]. For example, twenty percent of the products will have eighty percent flaws. This Rule tells us how we can use it to more effectively manage our time and many different aspects of our life.

1. Planning and organizing activities:

   Finding time for important activities after goals are selected and activities categorized by their relative importance and urgency, the next step is to determine how to most effectively complete key tasks, as our results show our physicians are not good time managers. They spend lots of time in unplanned activities and due to no proper sleep, stress, and anxiety, they are unable to use the lag time for minor activities [14]. Sweller’s cognitive load theory also claims both against multitasking and for proper time allocation [15]. We discussed in our workshop that, good time managers take a few moments at the start of their day to prioritize tasks and consider how much time is needed to perform them. It can help to make a list and set priorities according to urgency [15]. As our study result shows women participants are more than men and women will report higher levels of stress than men [17]. A large portion of the workforce is increasingly
represented in higher status roles, such as head of the department, and professors. The social cognitive theory also lends support to this idea of older adults performing more time management behaviors than younger adults. The premise of the theory is self-regulation [15]. Many studies show that older and experienced physicians have had the opportunity to experience more life events and circumstances than younger adults by a mere function of time [7, 11].

2. How to plan and organize activities:
Many authors suggest that this requires advanced planning beyond a daily routine, which does not allow adequate preparation and organization for achieving short or long-term goals. One day only planning readily becomes reactionary, involuntarily, moving the attention towards “most urgent” activities. Developing a weekly or monthly calendar is a more effective strategy for achieving long-term goals [2]. Because we already find the free time slot to manage our routine activities and planning. The advantage of this pro-active approach is that it identifies the available time in advance that can be devoted to ‘important’ but ‘less urgent activities [6, 18, 19]. If one day is filled with a busy clinical emergency, multiple meetings, or other regularly scheduled teaching commitments, then a different day is a far superior choice for manuscript writing or developing new quality improvement initiatives [1]. Organizing the calendar by grouping similar activities such as meetings, clinical work or teaching, and assessment activities in a manner that reserves other larger blocks of time for activities that require more concentration promotes effective time management [20]. Ideally, effective time management includes blocks of reserve time at least once each week for quadrant activities. Awareness of the next day’s schedule is an effective time management technique [4]. The concept of activation energy to begin a task also applies to each day. This is important before each working week begins to identify the available periods to advance quadrant activities. Preparation facilitates progress on daily tasks by immediately attending to them upon arrival at work is a key to fulfilling the task on time [8].

3. Utilization of Hidden time:
Regardless of their specific commitments, all physicians have covered up time’ lost while waiting for meetings, traveling, or patients. Covered time can be regained by bringing printed information, a computerized right hand, a day organizer, or other assignments through smart devices that can be accomplished while waiting, traveling [21] like reading an article, replying the mails, communicating with friends and family or even play video games to refresh your mind. Another important source of reclaimable time is commuting. Time can be gained mostly by changing modes of transportation. On the go, doctors can examine restorative diaries, make changes to original copies, or survey slides for upcoming presentations. Commuting drivers can listen to previous restorative instruction recordings, and podcasts, learn a new dialect to improve their grasp of care skills or consider their long-term professional goals. Focusing on non-career interaction or mental unwinding is incomprehensible [2].

RECOMMENDATIONS
Effective time management is clearly a tool for organizational performance, according to our findings and in order to give quality services to their patients as well as students, need closely adhere to good time management. The following time management suggestions are also useful: List the most common time-wasting situations and explain why they occur. Avoid taking on too many tasks; make sure the proper assignment is assigned to the right person. Make use of time-saving technologies and the most suited technology for your needs. The future benefits of an organization are determined by how the hospital spends its time now. An event is the most fundamental component of time. And event control is the key to good time management. This means that while an organization cannot control time, it can manage how it is spent.

LIMITATION
Some important limitations should be considered when interpreting the results from this study. The most important limitation is that this is not longitudinal, but a cross-sectional study so we are unable to assess the effect of time management workshops on individuals, consider revising items of the time management scales to make them more applicable to current times.

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Conflict of Interest: The authors declare no conflict of interest.

REFERENCES