

Nature and Pressure of the Job Elevate Work-Related Stress in Hospital Employees

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Abstract: *Work related stress is increasing and causing a due concern at global perspective. Stress is not only a problem for an individual but also for the organization. Work-site stress occurs when there is an unbalance between the demands of the job and capabilities of the individual worker to meet those demands. Stress in working environment arises mainly due to pressure of work, where pressure can be defined as a subjective feeling of tension or arousal that is triggered by a potentially stressful situation. At least one third of the work force is estimated to be affected by work related stress. Most of such organizations incur huge amount of loss of productivity and hence lack of money.*

The current study was conducted at Mahavir Cancer Institute and Research Institute, patna, by asking 6 interpretative questions capable to evaluate their cause of stress, to 300 employees consisting Doctors, Technicians, Nurses, Lower Levels, Middle managers and Scientists.

Among 300 employees at the hospital, most of the nurses, followed by technicians and lower level employees faced more psychological stressful situation as compared to other employees enlisted. The reason may be attributed to the intimacy shared by nurses and technicians with the poor patients and dealing with their problems and pain. Moreover, their responsibility and nature of their job could also be major inducers of their stress.

In conclusion, most of the nurses and lower level employees were observed to be more stressful than any other groups of the employees. Hence, the organization must work in order to minimize their stress at work for healthy environment.

Keywords: *Hospital, Doctors, Nurses, Stress and technicians.*

I. Introduction

Work-site stress has now become a global concern as it is a major factor for decadence of global productivity observed in recent years. Mental stress does not affect only the organization but has great impact on the quality of life of the individuals who suffer from such condition. Nonetheless, several attempts are being made worldwide through research work to alleviate the overall stress on the employees. According to Hans Selye, father of stress, stress is an unavoidable consequence of life and henceforth an unavoidable consequence of organizations. A recent report by the National Association of Mental Health distinguishes between stress and pressure, where pressure can be defined as a subjective feeling of tension or arousal that is triggered by a potentially stressful situation. However, where pressure exceeds an individual's ability to cope, the result is stress. Mental health is created during the interactions with the world around us, and is determined by our sense of control in dealing with the circumstances and [1].

The evidence for stress-related ill health is all around us- within our organization. If an individual is typically part of UK businesses, it's likely that 10% of any workforce report very low levels of satisfaction with both their jobs and the organization. Twenty per cent of staff have reported that they have suffered some major life event in the past three months and approximately 3% will report levels of mental ill health that are worse than those of psychiatric outpatients receiving clinical treatment for anxiety and depression. Stress results from a mismatch between the demands and pressures on the person, on one hand, and their knowledge and abilities, on other [2]. It challenges the ability to cope with work. This includes not only situations where the pressures of work exceed the worker's ability to cope but also where the worker's knowledge and abilities are not sufficiently utilized and that is a problem for them [3].

Stress at work is a well known factor for low motivation and morale, decrease in performance, high turnover and sick-leave, accidents, low job satisfaction, low quality products and services, poor internal communication and conflicts etc. [4,5,6]. Moreover, Chusmir and Franks (1988) argued that all the aforementioned problems are related, directly or indirectly, to stress and they have an effect on overall organizational efficiency and effectiveness [7]. The British Industrial Society Survey (2001) indicated that 91 per cent of the 492 human resource and personnel professionals questioned believed stress to be a problem in their organization [8]. More specifically, 36 per cent believed that it was a significant problem and 5 per cent indicated that it was a serious problem. McHugh (1997) suggested that stress should be included in the change management agenda and people involved in the management of change need to acknowledge the fact that

increased pressure and stress are put on employees because of continuous organizational change and that it is necessary for organizations to think of incorporating a stress management program within the change management program [9].

II. Materials And Methods

The response for each question on the questionnaire form by Doctors, Technicians, Nurses, Lower levels, Middle Managers and Scientists were recorded and analysed. On the basis of statistical analysis (p-value and chi-square was calculated with help of SPSS 16.0 software) and graphical representations, each response is explained briefly.

Number of Doctors involved in the study=59

Number of Technicians in the study=64

Number of Nurses taken in the study=73

Number of Lower levels in the study=47

Number of Middle Managers = 34

Number of scientists involved the study=23

Questions asked to each employee at Mahavir Cancer Institute and Research Centre, Patna-

Q 1. Are you comfortable with your job responsibility?

a. Always b. Usually c. Seldom d. Never

Q2. How frequent you face stress during work hour?

a. Always b. frequently c. occasionally d. rarely e. Never

Q3. The stress are related to-

a. Job assigned b. Supervision c. Work group d. Time to complete the work assigned

Q4. Have you taken leave in past 12 months, due to work related stress?

a. Yes (1) once (2) Twice (3) Thrice (4) Several times

b. NO

Q 5. Do you face any problem with your job being emotionally dissertated of patients?

a. Always b. Sometimes c. Seldom d. Never

Q 6: Do you have conflict with demand with patients care / management?

a. Always b. Sometimes c. Seldom d. Never

III. Results

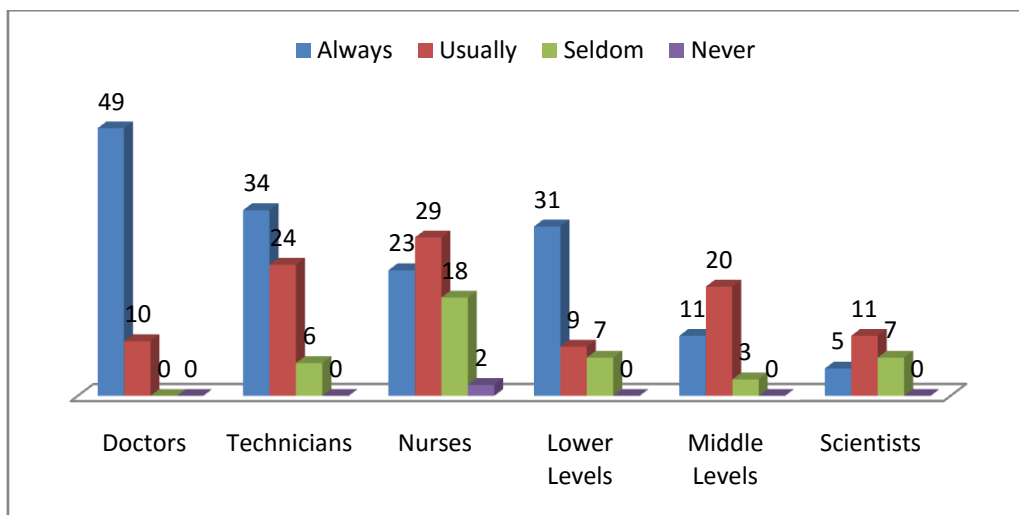
As per response to the questions asked to every employee at Mahavir Cancer Institute and Research Centre, Patna, data were generated as follows:-

Q 1. Are you comfortable with your job responsibility?

Maximum number of doctors (n=49) were found to be most comfortable with the job responsibility assigned to them, followed by technicians (n=34) and lower level (n=31). Among all, 29 Nurses and 24 Technician were usually comfortable with responsibility assigned to them, followed by middle managers (n=20), scientists (n=11), Doctors (n=10) and Lower levels (n=9). Most intriguingly, maximum number of nurses (n=18) were very seldom comfortable with the responsibility followed by Lower levels and Scientists (n=7) and least number of Technician (n=6) and no Doctor were seldom or ever uncomfortable with their responsibility (Table 01).

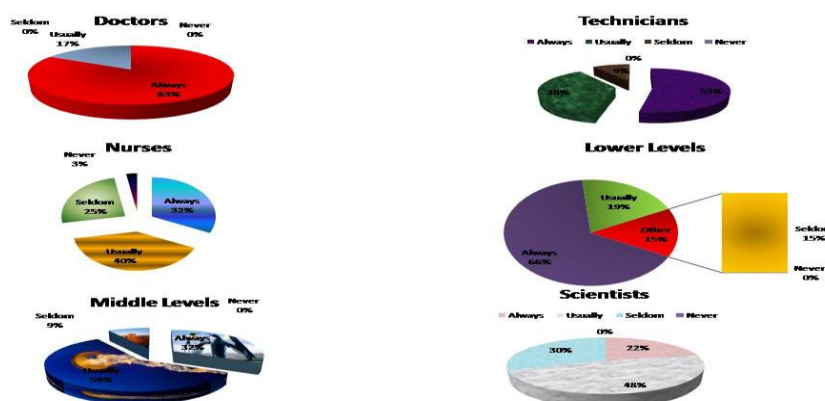
	Always	Usually	Seldom	Never
Doctors	49	10	0	0
Technicians	34	24	6	0
Nurses	23	29	18	2
Lower levels	31	9	7	0
Middle managers	11	20	3	0
Scientists	5	11	7	0

Table 01- Showing number of Doctors, Technicians, Nurses, Lower level, Middle Managers, and Scientists chose the options given in the question.



Text Figure 01- Number of doctors, technicians, nurses, lower levels, middle levels, scientists selected different options (Chi square = 68.90 and p-value < 0.0001).

From the question whether Hospital employees are comfortable with their job responsibility, significant data were generated (text fig 01 and table 01). 83% of doctors were found to be always comfortable with the job responsibility, 17% were usually and no one was seldom or ever uncomfortable with their job responsibility given (Text fig 02).



Text Figure 02- Illustrating the percentage of Doctors, Technicians, Nurses, Lower levels, Middle Managers chosen different options.

As high as 53% of technicians felt totally comfortable with the job responsibility, 38% usually, 9% seldom and no one were uncomfortable with their job responsibility. From group of Nurses, only 32% were comfortable, 40% usually, 25% seldom and 3% were never comfortable with their job responsibility. As much as 66% of the middle managers were fully comfortable, 19% usually, 15% seldom and no one felt uncomfortable with their job responsibility. Only 32% of scientists were comfortable, 59% usually, 9% seldom and no one were uncomfortable with their job responsibility (text fig. 02).

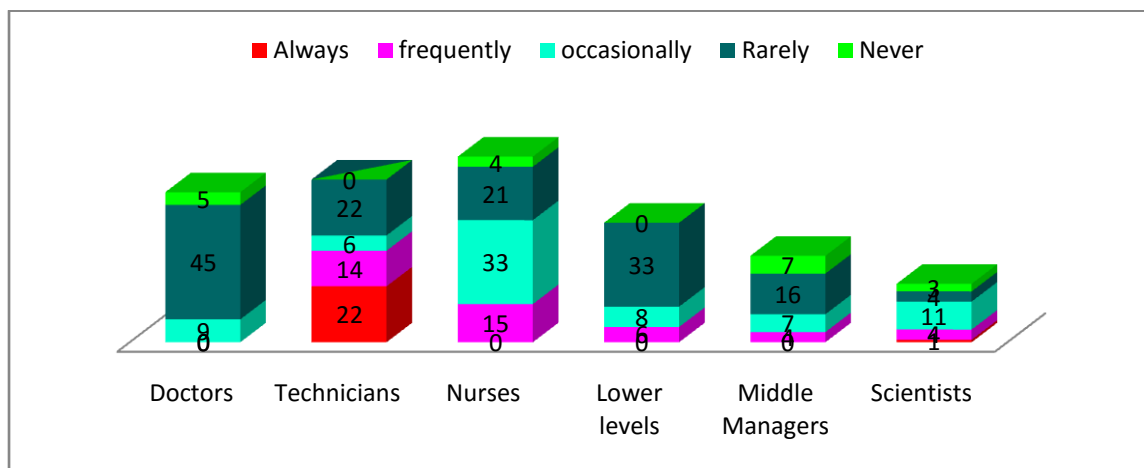
Q2. How frequent you face stress during work hour?

Based upon the frequency of stress of employees, maximum number of Technicians (n=22) had had stress always while working whereas no other employee had faced stress always. However, maximum number of nurses (n=15) had been facing stress very frequently followed by technicians (n=14), lower levels (n=5), middle managers and scientists (n=4) and no doctor faced stress frequently. Nurses (n=33) were facing stress occasionally whereas scientists (n=11), Doctors (n=9), lower levels (n=8), middle managers (n=7) and technicians (n=6). Highest number of doctors (n=45) felt stress during working hours rarely followed by lower level (n=33), 22 technicians, 21 nurses, 16 middle managers and 4 scientists (Table 02).

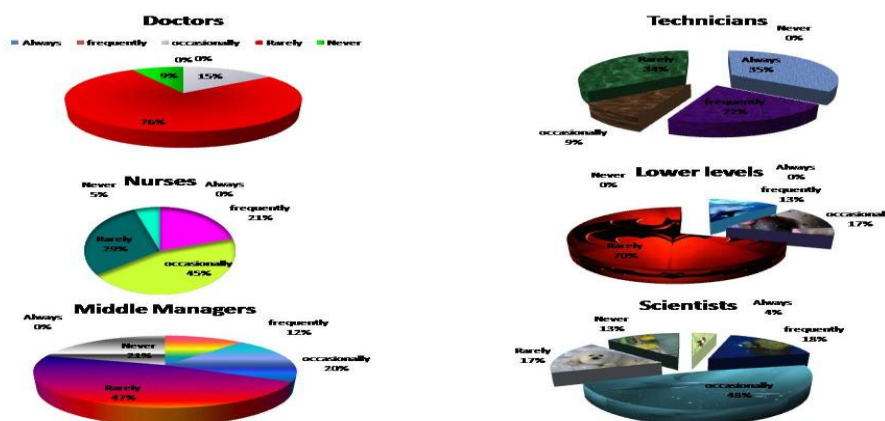
	Always	Frequently	Occasionally	Rarely	Never
Doctors	0	0	9	45	5
Technicians	22	14	6	22	0
Nurses	0	15	33	21	4
Lower level	0	5	8	33	0
Middle Managers	0	4	7	16	7
Scientists	1	4	11	4	3

Table 02- Showing number of Doctors, Technicians, Nurses, Lower level, Middle Managers, and Scientists chose the options given in the question.

Upon asking how frequent you feel stressed during working hour, Doctors, Technicians, Nurses, Lower levels, Middle Managers and Scientists produced a random graph (text fig. 03 and table 02).



Text Figure 03- Number of doctors, technicians, nurses, lower levels, middle levels, scientists selected different options (Chi square = 164.4 and p-value < 0.0001).



Text Figure 04- Illustrating the percentage of Doctors, Technicians, Nurses, Lower levels, Middle Managers and Scientists chosen different options.

76% of Doctors felt stressed rarely, 15% occasionally, 9% never felt stressed and no one felt stressed either always or frequently during work hour (text fig. 04). 35% technicians felt stressed always, 22% frequently, 9% occasionally, 34% rarely and no one felt unstressed during working hour. No nurse felt stressed all the time, 21% felt frequently, 45% occasionally, 29% rarely, and 5% never felt stressed during working hour. No lower level employee was found to be stressed always, only 13% frequently, 17% occasionally, 70% rarely, and no one ever felt stressed during work. No middle manager felt stressed always, 12% frequently, 20% occasionally, 47% rarely, and 21% never felt stressed during work (text fig. 04). Surprisingly, 4% of scientists were witnessed responding to be stressed all the time, 18% frequently, 48% occasionally, 17% rarely, 13% were never stressed during work (text fig 04).

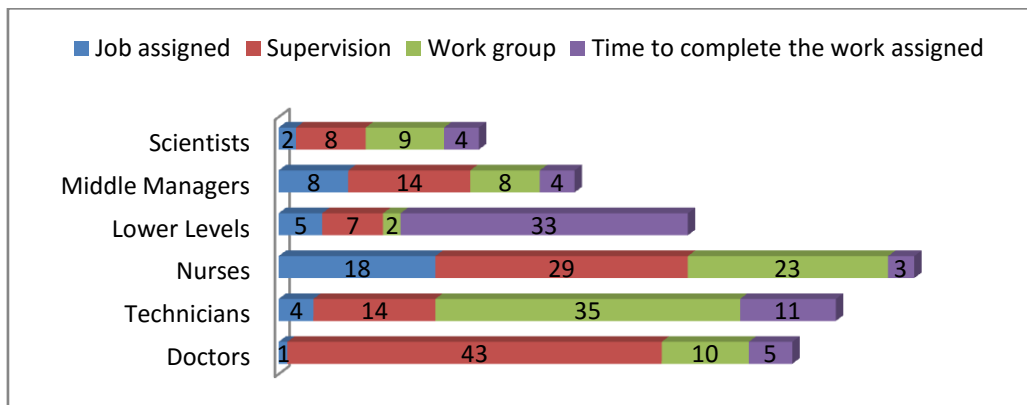
Q3. The stress are related to-

Highest number of nurses (n=18) had stress due to job assigned, followed by middle managers (n=8), lower levels (n=5), scientists (n=2) and doctors (n=1). On the other hand, doctors (n=43) were more stresses due to supervision, nurses (n=29), technicians and middle managers (n=14), scientists (n=8) and lower levels (n=7) (Table 03).

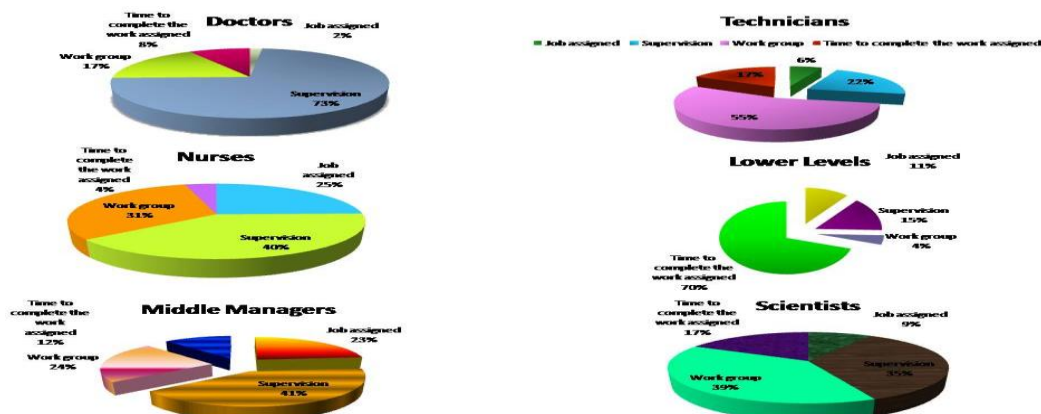
	Job Assigned	Supervision	Work Group	Time to Complete the Work Assigned
Doctors	1	43	10	5
Technicians	4	14	35	11
Nurses	18	29	23	3
Lower levels	5	7	2	33
Middle Managers	8	14	8	4
Scientists	2	8	9	4

Table 03- Showing number of Doctors, Technicians, Nurses, Lower level, Middle Managers, and Scientists chose the options given in the question.

Whereas, highest number of technicians (n=35) had stress due to work group, then nurses (n=23), Doctors (n=10), scientists (n=9), middle managers (n=8) and lower levels (n=2). Lower levels (n=33) had stress due to time given to complete the task, technicians (n=11), doctors (n=5) and Middle managers and scientists (n=4) (Text fig 05).



Text Figure 05- Number of doctors, technicians, nurses, lower levels, middle levels, scientists selected different options (Chi square = 152.0 and p-value < 0.0001).



Text Figure 06- Illustrating the percentage of Doctors, Technicians, Nurses, Lower levels, Middle Managers and Scientists chosen different options.

As per question “Stress are related to?”, individual’s response was recorded and generated graphs which shows significant correlation (Text fig. 05). Only 2% of the doctors were stressed because of Job assigned, 73% were stressed because of supervision, 17% pointed to work group and 8% said they were stressed because of time given to complete the work (text fig 06). 6% technicians were observed to be stressed due to job assigned, 22% supervision, 55% work group, 17% were recorded for responding to time to complete the job assigned. 25% of nurses were stressed due to job assigned, 40% supervision, 31% work group and 4% struggled to complete the assigned job in time. 11% Lower level employees were stressed due to job assigned, 15%

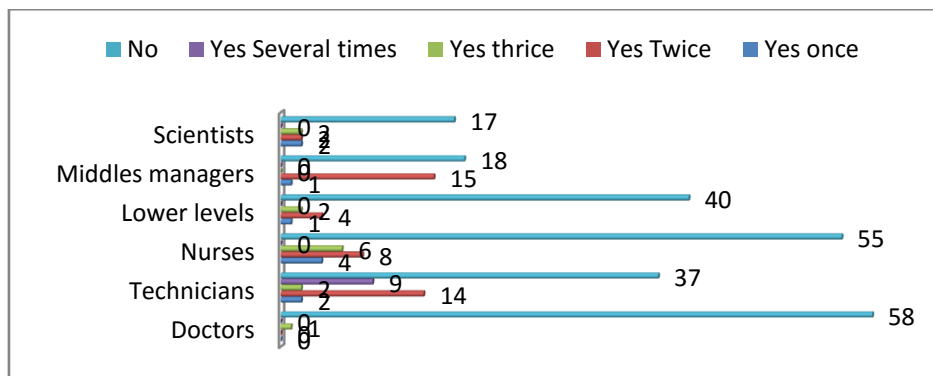
supervision, 4% work group, and 70% were stressed due to time to complete the job assigned. 23% of Middle Managers were stressed due to job assigned, 41% supervision, 24% work group, and 12% were observed to be stressed due to time to complete a job. 9% of scientists were feeling unrelieved due to job assigned, 35% supervision, 39% workgroup, and 17% time to complete the work (text fig 06).

Q4. Have you taken leave in past 12 months, due to work related stress?

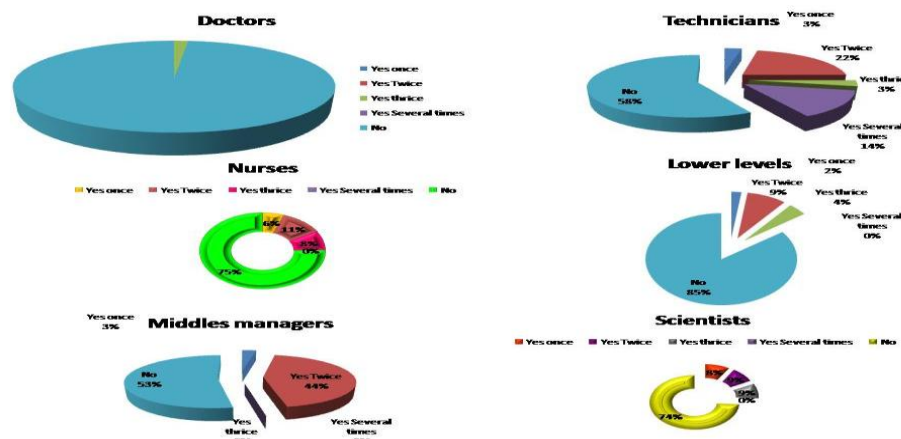
Highest number of technicians and nurses (n=18) took leave due to stress, then middle managers (n=16), 7 lower levels, 6 scientists and only one doctor. Rest of them never took leave due to stress (Table 04 and Text fig. 7).

	Yes				No
	Once	Twice	Thrice	Several times	
Doctors	0	0	1	0	58
Technicians	2	14	2	9	37
Nurses	4	8	6	0	55
Lower levels	1	4	2	0	40
Middle Managers	1	15	0	0	18
Scientists	2	2	2	0	17

Table 04- Showing number of Doctors, Technicians, Nurses, Lower level, Middle Managers, and Scientists chose the options given in the question.



Text Figure 07- Number of doctors, technicians, nurses, lower levels, middle levels, scientists selected different options (Chi square = 88.45 and p-value < 0.0001).



Text Figure 08- Illustrating the percentage of Doctors, Technicians, Nurses, Lower levels, Middle Managers and Scientists chosen different options.

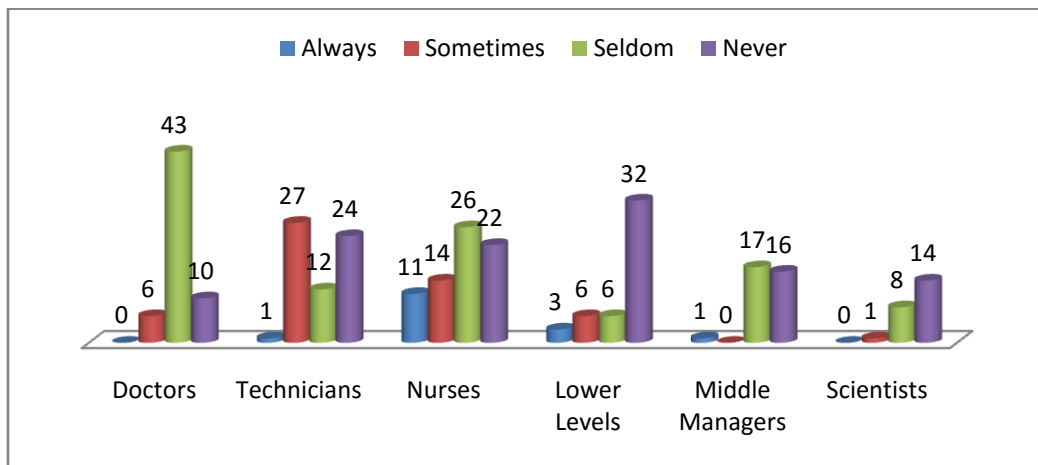
To make sure how much the employees are stressed, they were asked how many times they have taken leave due to stress, and that provided us a significant results (table 04, text fig 07). 98% of doctors never took leave in past 6-12 months due to stress, 2% took leave thrice (text fig 08). 58% of technicians never took leave, 3% took leave once, 22% twice, 3% thrice, 14% many times. 75% never stayed home on working days, 6% once, 11% twice, 8% thrice. 85% nurses never took leave, 2%once, 9% twice, 4% thrice. 53% middle managers never rested at home on working days, 3% once, 44% twice and no one twice or several times. 74% scientists never took leave, 8% once, 9% twice, 9% thrice and no one several times (text fig 08).

Q 5. Do you face any problem with your job being emotionally dissertated of patients?

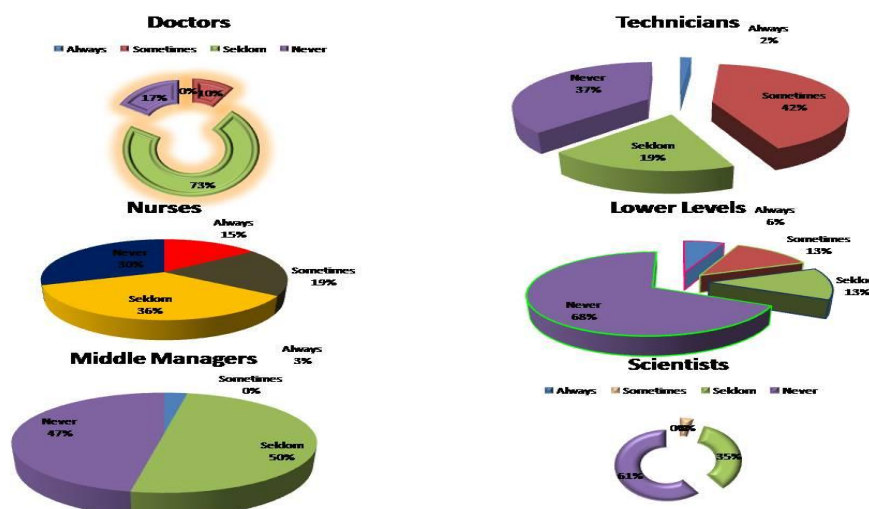
On the basis of question number 5, nurses (n=11) were highest in number among all other employees to respond that they always feel emotionally dissertated to patients, followed by lower levels (n=3), middle managers and technicians (n=1) and no doctor or scientists felt emotionally dissertated to patients. On the other hand, technicians (n=27), nurses (n=14), lower levels and doctors (n=6), scientists (n=1) and no doctors felt emotionally dissertated of patients sometimes. Doctors (n=43), nurses (n=26), middle managers (n=17), lower levels (n=12), technicians (n=6) and scientists (n=8) felt emotionally dissertated to patients seldom (Table 05 and Text fig 09).

	Always	Sometimes	Seldom	Never
Doctors	0	6	43	10
Technicians	1	27	12	24
Nurses	11	14	26	22
Lower level	3	6	6	32
Middle Managers	1	0	17	16
Scientist	0	1	8	14

Table 05- Showing number of Doctors, Technicians, Nurses, Lower level, Middle Managers, and Scientists chose the options given in the question.



Text Figure 09- Number of doctors, technicians, nurses, lower levels, middle levels, scientists selected different options (Chi square = 108.9.0 and p-value < 0.0001).



Text Figure 10- Illustrating the percentage of Doctors, Technicians, Nurses, Lower levels, Middle Managers and Scientists chosen different options.

Text figure 09 and Table 05 illustrate the diversified response to the question no 14 by the hospital employees. 73% doctors said they seldom felt dissertated of the patients, 10% sometimes, 17% never and no one felt that way always. 2% technicians felt dissertated always, 42% sometimes, 19% seldom and 37% never. 15%

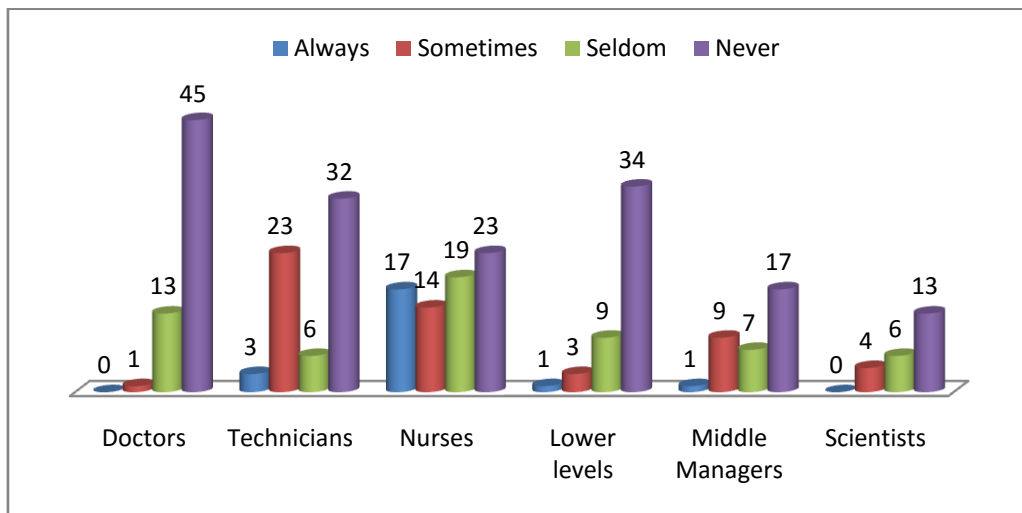
of nurses felt emotionally dissertated always, 19% sometimes, 36% seldom, and 30% never. On the other hand, 6% of lower level felt emotionally deserted always, 13% sometimes, 13% seldom, and 68% never. Similarly, 3% middle managers were emotionally dissertated always, 50% seldom, 47% never and no one felt that way sometimes. No scientist felt emotionally dissertated always, 4% felt that way sometimes, 35% seldom, and 61% never (Text fig. 10).

Q 6: Do you have conflict with demand with patients care / management?

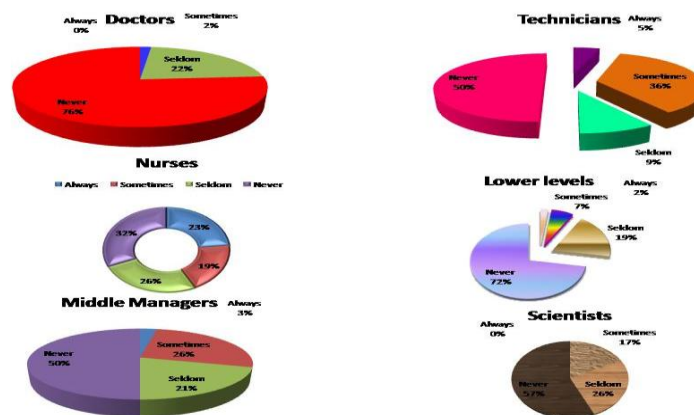
Maximum number of nurses (n=17) had had conflict with meeting demands with patients care or management always, followed by technicians (n=3), lower levels and middle managers (n=1) and no doctor or scientists had ever had conflict with demands of the patients care. Technicians (n=23), nurses (n=14), middle managers (n=9), scientists (n=4), lower levels (n=3) and doctors (n=1) had conflict with demands of patients care sometimes. Nurses (n=19), doctors (n=13), lower levels (n=9), middle managers (n=7), and technicians and scientists (n=6) had seldom conflict with the demands of patients care. Rest of them never had conflict with meeting demands of patients care or management (Table 06 and Text fig. 11).

	Always	Sometimes	Seldom	Never
Doctors	0	1	13	45
Technicians	3	23	6	32
Nurses	17	14	19	23
Lower level	1	3	9	34
Middle managers	1	9	7	17
Scientists	0	4	6	13

Table 06- Showing number of Doctors, Technicians, Nurses, Lower level, Middle Managers, and Scientists chose the options given in the question.



Text Figure 11- Number of doctors, technicians, nurses, lower levels, middle levels, scientists selected different options (Chi square = 80.49 and p-value < 0.0001).



Text Figure 12- Illustrating the percentage of Doctors, Technicians, Nurses, Lower levels, Middle Managers and Scientists chosen different options.

Hospital employees are bound to meet the patients demand or care, sometimes they face problem during their work while meeting such challenges (text fig 11 and table 06). No doctor always faces conflicts, 2% sometimes, 22% seldom, and 76% never have conflict with meeting demands of the patients (text fig 12). 5% technicians always, 36% sometimes, 9% seldom, 50% never have conflict with the patient's demand or care. 23% nurses, 19% nurses always, 26% seldom, and 32% never find conflict with the patients demand/care. 2% lower level employees always, 7% sometimes, 19% seldom, and 72% never incur conflict with the patient's demands or care. 3% middle managers always, 26% sometimes, 21% seldom, and 50% never had problem while meeting demands of patients. No scientist always, 17% sometimes, 26% seldom and 57% never incurred conflict with the patient's demand or care (text fig 12).

IV. Discussion

Stress is a contributing factor to organizational inefficiency, high staff turnover, absenteeism because of sickness, decreased quality and quantity of care, increased costs of health care, and decreased job satisfaction [10]. Today, employees in organizations undergo various stages of stresses and they yield different responses to the stress of different extent. These responses highly influence their daily performance. The study analyzes how the modern enterprise ought to carry out the stress management rationally and also how an employee, as an individual, should take relative actions against the here-mentioned stresses.

In health care settings, work stress increases as staff face growing numbers of acutely ill patients and endure pressure to conform to rigorous standards of cost-containment and quality assurance programs [11]. Work stress can be considered as a useful criterion of organizational performance for hospitals [12], because one of its deleterious effects is reduced job satisfaction, found to be an indirect cause of absenteeism among nursing staff [13]. Organizational research on the determinants of employees' job-related outcomes illustrates that supervisors may have a significant bearing on subordinates' personal and professional outcomes [14]. In the field of nursing, Duxbury et al. [15] and Bakker et al. [16] asserted that a head nurse can buffer the effects of a demanding work environment on staff nurses by thoughtfully maintaining a leadership style that is supportive of the needs of staff nurses. Presumably, this is a main way by which head nurses can reduce work stress among their staff.

As per 6 questions asked to the hospital employees certainly leaves us with tremendous useful outputs. Most of the employees are either always or usually comfortable with their job responsibility. That means they feel that whatever the responsibilities are given to them, there is no problem in handling them (text fig 01 & 02 and table 01). Even though some technicians and nurses thought they have job responsibility that is somewhat matched to their profile. Most of the doctors, nurses, lower levels and scientists frequently, occasionally and rarely face stress during working hours, but most of technicians always and frequently face stress during work hours (text fig 03 & 04 and table 02). Most of the doctors, technicians, nurses, middle managers, and scientists have stress majorly because of supervision and work group whereas lower level employees have stress related mainly to deadline given to them to complete an assigned duty (text fig 05 & 06 and table 03). Most of the employees have not taken leave in last 12 months but few of the technicians, nurses and middle managers had had leave once or twice in last one year (text fig 07 & 08 and table 04). Most of the nurses responded that they are either always, sometimes or seldom emotionally affected by the dissatisfaction of patients (text fig 09 & 10 and table 05), this could be due to the time and feelings that patients share with the nurses. Most of the nurses and technicians feel difficulty in meeting the demands of patients care or management care (text fig 11 & 12 and table 06) because nurses and technicians have to work closely with the patients and report to senior with their results.

Nowadays, there is a global shortage of nurses that threatens the quality of nursing care [17, 18, 19, 20, 21]. Many nurses continue to leave their workplaces before they reach their age of retirement [17]. Workplace turnover is costly as well as destructive to nurse and patient outcomes [20]. One way to handle this shortfall is to construct management interventions that enhance retention and reduce workplace stress. However, development of such strategies demands a clear understanding of workplace variables that either motivates nurses to remain employed or lead them to leave their jobs.

More pressure and burden on nurses, technicians and lower level along with the interfacing with patients put these employees in a very stressful situation. Nurses, especially spend more time on communicating with patient's problem and their pain which make them emotionally weak and encumber their performance. Not to mention that organization and the higher level managers ought to take steps to prevent their employee from such stress and burnouts.

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