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Analysis of Level of Stress among Doctors in Public and Private Hospitals of Pakistan

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Abstract
Stress is a universal and inevitable component of life, the occurrence of which cannot be avoided. The purpose of the present study was to determine the sources of stress among doctors of private and public hospitals in Bahawalpur District (Pakistan). The target population of the study was the doctors of private and public hospitals in Bahawalpur, Pakistan. Only 240 doctors (120 from public and 120 from private hospitals) were selected as sample of the study. Field study was conducted and primary data collection instrument was questionnaire. The questionnaire was based on seven dimensions i.e., workload, working conditions, role overload, sleep deprivation and unrealistic demands of the patients, relation with peers, night shifts. Statistical tools i.e. mean, standard deviation and t-test were used for the analysis of the data. For this purpose SPSS Version 16 was used. Findings of the study revealed that sleep deprivation was most important source of stress, second was workload, third factor was working conditions, fourth was role overload and last factor with respect to the importance was unrealistic demands of patients. Moreover workload, night shifts and relation with peers have a positive relationship with levels of stress.

Keywords: Analysis; Level of Stress; Doctors; Public & Private Hospitals; Workload; Sleep Deprivation; Night Shifts

Introduction

Present era, no doubt is the era of comfort and console, but at the same time creates surplus of rising demands that strain human beings physiologically and psychologically. This strain results in stress that has crossed the entire population despite of their social and economic backgrounds. The victims of stress are not only white-collars as managers, executives and administrators at key positions but also the blue collars as labors and other manual working staff. Owing to the increasing intricacies and complications of rising living standards, stress has become an inescapable and obvious element of life. Today's fast paced world has indulged everybody in stress. Thus in the current era, stress in general and job stress in particular has victimized everyone and so has achieved significant consideration. Stress is an element of every day living and so is barely avoided *(Nayak, 2008)*.

The present world despite of being the world of attainment and accomplishment is the world of stress *(Pestonjee, 1992).* Stress is defined as a dynamic condition in which the individual is confronted with an opportunity, constraint, or demand related to what he or she desires and for which the outcome is perceived to be both uncertain and important *(Robbins, 2001).* According to Caplan (1975), medical doctors are considered to be the members of high stress occupations as the responsibility of 'people' lie on them rather than 'objects'. The other reason that makes the doctor's profession more stressful is their intense impact on human life *(Rees, 1995; Antoniou, 2001).* The occupations that are subjected more to stress include school teachers, managers and health care practitioners according to the empirical research *(Aziz, 2004).*

Stress is a holistic concept and so is difficult to be specifically defined. From birth till death, individuals are subjected to the stressful circumstances *(Cardoso & Fernandes, 2011).* In 1936, Selye Hans was the first to introduce the notion of stress that was originated from the Latin word 'stringere' meaning starvation, sting, pain and physical hardship/suffering. Selye Hans identified stress in 1936 as "*the non-specific response of the body to any demand placed upon it" (Hans, 1936).* He further extended this definition in 1956 and defined it as "*any external event or internal drive which threatens to upset the equilibrium of the organism" (Hans, 1956).* Stress is defined as vibrant and dynamic state where the individual has to tackle with a chance, restraint or a demand linked to what he or she aspires for and the result of which is recognized as both significant and vague *(Robbins, 2001).* When the resources of the individuals are not adequate enough to deal with the emerging requirements and strains of the circumstances, physiological and psychological pressures are generated that results in stress *(Khuwaja et al., 2004).*

Stress is defined as a challenge, dare, warning or threat that interrupts with the normal functioning and pace of an individual's life *(Sanderson, 2004).* Stress is defined as a dynamic *and* vibrant condition with in an individual that results in response to the requirement of adaptation *(Wolf & Goodell, 1968).* Cox (1978) identified that stress does not only poses threat to the individual's quality of work life but also deteriorates his physical and mental well-being. Stress is a worldwide component of everyday life that is experienced by individuals specially employees universally. In developing nations the concept of stress is highly acknowledged by employees as the employers in these countries fail to realize the impact that stress has effects on the performance of its employees (Imtiaz & Ahmad, n.d.). Because of an increasing number of acquisitions, mergers, restructuring changes, development in technologies and high rate of economic interdependence as a result of globalization; extreme work pressure is experienced by employees to come up with the rising demands, swings in customer relationships and changing roles which causes stress *(Giga & Hoel, 2003).*

Considerable work has been done in the area of stress among doctors and health practitioners throughout the world, but most of the work has been done in European countries *(Aziz, 2004).* A large number of studies have been done in the area of stress analysis of doctors in different parts of the world but a very few studies contributed to analyze the stress level among doctors in public and private hospitals in Pakistan. Because of a lack of studies been conducted specifically in determining the causes and coping strategies in doctors in Pakistan, the purpose of the present study is to investigate the sources and causes of stress as well as coping strategies for stress among doctors of Govt. hospitals and private clinics in Bahawalpur, Pakistan. This study entirely focuses on the analysis of stress level in doctors of

Bahawalpur. This study can help health care professionals to understand some of the major causes of stress and its impact on performance, clinical practices and its impact on quality of health care. High level of stress that results from employee intra-organizational and extra-organizational interactions is a serious problem in health care sector and that can highly undermine doctor's performance so this study tries to explore all those extrinsic and intrinsic stressors.

Review of Related Literature

According to Nayak (2008), individual, organization and environment are the three important sources of stress. With individual perspectives, changes in personal life aspects as changes in career, personality types and several roles in life indulges an individual in a state of imbalance and generates stress. Characteristics of personality as masculinity, femininity, rigidity, extroversion, introversion etc are concerned with the stress in individuals. When individuals are ought to perform several roles in family and occupation, they need to fulfill several demands and requirements of the desired roles and due to this individuals are confronted with conflicting demands that causes stress. Within the organizations, stress is considered as an important issue *(Agrawal et al., 1979).* Pestonjee (1992) stressed that work itself; role types, personal development and organizational climate are important sources of stress within the organizations. External factors outside the organization are mostly concerned with the environmental sources of stress. These include social, economic, technological, political and financial conditions. Due to the dynamic changes in these conditions individuals are subjected to stress and strain.

Present medical workplace comprises of an intricate environment where medical professionals (doctors) respond differently; some are contented and happy and are more inspired to work while others due to extreme load of work feel burned out, strained and stressed *(McManus et al., 2004).* Government's special attention is required to enhance the quality of health care segments because it is a source of provision of relief and hope to the patients and their reliant. Health care sector is also very important contributor in the development of the country as it helps in sustaining the human capital *(Irfan & Ijaz, 2011).* One of the most severe professional health perils that resulted in increased turnover and absenteeism and decreased productivity, outcome and contentment is considered to be the work related stress *(Gianakos, 2000).* The concept of professional stress was first introduced by Freudenberger in 1974. According to him professional stress is a state of mental and emotional exhaustion among workers and this exhaustion leads to physical as well as behavioral outcomes. Professional stress and burnout are two terms which are often used in one in the same sense but literature suggests that they are two different constructs *(Cordes & Dougherty, 1993; Pines & Keinan, 2005; Smith et al., 2006).*

Occupational stress is defined by Akinboye et al (2002) as a rational, physical and emotional deterioration that is brought about by the dissimilarities between what is required of the job and which one is capable and competent of, the resources available and the employee's needs in order to manage and deal with the demands of the job. Several researches have been done on the area of occupational stress. Das and Singhal (2003) discovered the impact of job autonomy on occupational stress with a sample of 300 managers to conduct their study. Their findings revealed that job autonomy and occupational stress have an inverse relation which means that managers with higher job autonomy suffered from less occupational stress and managers with lower job autonomy suffered from high levels of occupational stress. Similarly, another study to investigate occupational stress and burnout was conducted by Bhatia and Kumar (2005). They took a sample of 100 employees

comprising of employees at supervisory and below supervisory level. The results revealed that employees at supervisory level experienced more occupational stress because of increased accountability than the employees at below supervisory level.

Job stress among health care workers and doctors has gained considerable importance today because their occupations are at more risk for stress and its related problems. Prevailing stress can have drastic impact that results in several problems as headaches, stomach aches; sleep deprivation etc *(Ahmed et al., 2010).* Work related stress is very common among doctors. Working Condition Survey conducted in Europe (2005) proved that 22% health care workers are affected by it. Stress related conditions like anxiety, depressions are the most common reason for health care workers sickness leaves *(National Social Insurance Board, 2007)* and the main reason behind such psychiatric disorders are the working environment *(National Social Insurance Board, 2003 ; Theorell, 2006).* Thus it can be said that work related stress is caused due to main variables psychiatric disorders and working environment *(Tennant, 2001; Paterniti et al., 2002; Borritzz et al., 2005; Wang, 2005; Ylipaavalniemi et al., 2005).* Thus job stress for employees in many organizations is a widespread problem which poses a drastic impact on their physical and mental well being which in turn affects the long-term performance of the company *(Salleh et al, 2008).* Stress upsets the body equilibrium by disturbing an individual physically and psychologically. Individuals device coping or dealing strategies whenever they are faced with stress because of inability to remain in the same state of tension *(Nayak, 2008).* These dealing strategies are coping strategies that basically comprise of two goals- changing ourselves or changing our environment. Coping refers to "*a person's active efforts to resolve stress and create new ways of handling new situations at each life stage" (Erikson, 1959).* The present study also highlights the strategies that doctors use to cope up with stress.

Globally, health sector has gained considerable importance and rapid growth among all the other service organizations *(Emin & Glenn, 1992).* Public/government and private hospitals are a common element of this sector. According to Admin (2008), public or government hospitals are totally funded by government and private hospitals are managed by a single or a group of people where there is no intrusion of government funding and administration. He further elaborated that public hospitals are cheaper than private hospitals with later one providing more facilities and better treatment for health care. In contrast public/government hospitals are affordable for every class with profusion of doctors. In line with Admin, Andrew (2011) elaborated more on the difference between public and private hospitals with a more focus on financing and funding. According to him private hospitals charge more because of the fact of provision of more care and facilities. By keeping in view the difference in government and private hospitals, this study is conducted to identify the causes of stress in doctors working in private as well as public hospitals.

In Pakistan medical profession is considered to be one of the leading professions of the nation as approximately 10000 students are graduated each year from all 5 provinces but in recent few years some negative trends are being seen like quitting profession, serving in some other country (brain drain) that is the reason behind selecting this sector. As it is a known fact that stress can't be eliminated from work place but if its sources are exposed it can be better managed and reduced to some extent *(Imtiaz & Ahmad, n.d.).* Medical Profession is considered as high stress profession and all others like air force, teaching, mining, social work are considered secondary to it *(Cooper et al., 1988).* The primary reason behind high stress in this field is sense of responsibility as people and their lives are involved in it *(Caplan et al., 1975; Rees, 1995; Antoniou, 2001).* Moreover doctors are under continual

evaluation as their work produces immediate results and their mistakes are visible than any other profession which is also a reason of stress (Payne & Firth Cozens, 1987). Medical profession is considered as one of the most challenging profession as it demands physical and mental involvement of doctors and this situation is even more critical in Asian context especially in South Asian Countries (like India, Pakistan, Sri Lanka and Bangladesh) which are highly populated and lack of resources exist. In such context there are number of factors exists which enhances stress of these professional personnel. Most contributing factors in this context are long working hours, night shifts, barriers in enhancing medical skills and lack of opportunities to fulfill personal development plans. Due to these prevailing reasons doctors in Pakistan are not as much satisfied as they should be and these reasons force them to migrate in western countries as they seek for better working conditions.

According to Antoniou (2002), two most common sources of stress are face to face interaction with patients and peers and second is high degree of risk associated with exposure to diseases and another factor which can also be considered in enhancing stress is to appear calm in all situations *(Sutherland & Cooper, 1990; Kash et al., 2000; Botseas, 2001).* The need of this hour is to develop a national level policy in Pakistan for doctors in order to protect their rights and provide them with better working conditions but unfortunately no such policy exists and higher authorities are not paying attention at this issue. This issue has been ignored all over the health sector irrespective of public or private sector. In western countries medical association exist which fight for doctor's right but unfortunately here in Pakistan very few such organizations exist and those which exist do not play a very significant role *(Shiwani, n.d).*

In a cross-section and longitudinal study conducted by Cozens (2003), doctors having stress above the threshold level were 28 % as compared to the general working population that was 18 %. Severe stress from work puts an adverse impact on healthcare. Stress is considered to reduce the satisfaction and productivity of doctors. In both developed and specially developing countries like Pakistan, public expectations are not by the health care services (hospitals, clinics) despite of the fact that health is an essential Human right *(Park, 2002).* Studies have revealed that stress resulted in putting adverse impact on the physical and psychological well-being of the doctors that resulted in serious outcomes as burnout (Burke & Deszca, 1986) and suicide *(Sonneck & Wagner, 1996).* Doctors who work in hospitals experience higher levels of stress than those working in other areas as private clinics etc.

Stress is a component of life that cannot be avoided. Stress is a term that is a result of the physical, mental and emotional strains that a person is exposed to because of the interactions with the people and the environment and that exceeds their capacities to adapt and pose a threat to their well-being (Ghaleb, 2008). Smith et al (2011) identifies various symptoms of stress and categorized them under four headings i.e., 1) Cognitive symptoms: problems of memory and inability to concentrate; 2) Emotional Symptoms- Moodiness and short temperedness; 3) Physical Symptoms: Pains and aches, diarrhea and constipation, nausea, quick heartbeat and frequent colds; 4) Behavioral Symptoms: Eating disorder, sleep deprivation or enhancement, isolation, neglecting responsibilities, drugs usage and nervous habits (pacing etc). They further identified the warning signs of stress such as poor judgment, depression, agitation, overwhelmed feelings, racing thoughts, pessimistic feelings etc. according to them the external causes of stress include difficulties with relationships, children and family problems, financial problems and major life changes and internal causes include unrealistic expectations, perfectionism, lack of assertiveness and negative self-talk.

Some of the doctors are discontented with their work that can be marked as stress or burnout. Burnout is also defined as "an experience of physical, emotional, and mental exhaustion caused by long-term involvement in situations that are emotionally demanding" *(Mateen & Dorj, 2009).* It is composed of three elements as emotional exhaustion, depersonalization and reduced personal accomplishment. Burnout is related with reduced job performance, decreased commitment towards job, health related problems and low satisfaction from career *(Shanafelt et al, 2002).* Doctor's stress and burnout is related to negative affectivity *(Dreary et al, 1996).* Some of the reasons of burnout are highlighted as long hours and enormous workloads, disparity between family and career, feeling of isolation/having not enough time to join colleagues, delayed gratification, financial pressures (salary, insurance issues etc), discontented outcomes, unsatisfactory work environment, unrealistic goals and delayed gratification *(Anon., 2009).* Lazarus & Folkman in 1984 proposed a transactional model of stress, according to which the imbalance between demands and resources causes stress or when the pressure on an individual surpasses his professed ability to manage *(Lazarus & Folkman, 1984).* A large amount of stress is faced by health sector professionals. Doctors are facing an increased pressure of stress that directly impacts their performance *(Caplan R. P., 1994).* A number of obstacles are faced by medical doctors of whom one of the most important factors is stress. Lower satisfaction with job associated with the consideration of abandoning work owing to stress was highly complained by physicians and surgeons *(Anthony, 2001).*

Andrew (2008) differentiated public and private hospitals. The later one are purely owned and governed by the individuals and not the government who purely finance it themselves. Not only the finances but the entire management, administration, staff, doctors are all controlled by the private individuals. People prefer private hospitals because of enhanced and better services provided to the patients as compared to the private hospitals. But the undeniable fact is that they are expensive and costly as compared to the public/government hospitals and can not be afforded by everyone. Public hospitals on the other side are purely governed and funded by government. From the construction of building to the salary of doctors and hospital staff, everything is under the control of local government. Public hospitals are afforded by people of all classes. People who are not so rich prefer public hospitals on private ones.

Stress and its types depend on the medical practice that the practitioners execute. For example public hospital doctors may face different type of stress as compared to the private hospital doctors. The sources of stress are associated to the (1) job itself- including the load of work, time pressure, sleep deprivation, administrative duties, irregular meals and threat of malpractice suits; (2) the organization- this includes the structure of the career, uncertainties related to the career, resource and staff inadequacy, lack of support from seniors, organizational climate and culture; (3) The doctor himself- This source includes the type of doctor's personality, high demand on self and others, handling death and dying and confronting physical and emotional suffering; (4) Relationship with others- This stress source includes conflicts with staff, bullying, professional isolation, expectations and demands of patients, support from family and friends; (5) Work-Life balance- This includes demands from home, disturbance to social life, lack of free time and lack of leisure activities and exercises *(Wong, 2008).*

There is no suspicion in the fact that physically or mentally stressed and burned out doctors are unable to execute secure medical practices. This may conclude into professional misbehavior and insufficient care for the patients *(Houston DM, 1997).* Number of hours

worked is an important source of stress *(Dreary et al, 1996; Fielden and Peckar, 1999).* According to Myerson (1991) 90 percent of the general practitioners responded that the most important problem that caused them stressed out was inadequate time. Other causes of stress were identified as being on-call, challenging situations, stress related to uncertain situations, night shifts, treatment for the critical patients, conflicts within team, insecurity, lack of freedom, overload of work, enhanced expectations, demands and disapproval from public *(Sonneck & Wagner, Suicide and burnout of physicians, 1996).* Young physicians perceived stress as a result of variables like relationship with patients, financial issues, time constraints and pressure and concerns for competence *(Simpson & Grant, 1991)*

The results of the study conducted by Firth-Cozens and Morrison (1989) concluded that doctors reported stress to be caused by the critical condition of students or who died. The same study concluded that work overload was also the important stressor and the second important source was poor relationship with the senior doctors. According to (Cox, Randall, & Griffiths, 2002) in any working situation stress occurs when demands exceeds the resources. In health care sector one of the causes of stress is ever exceeding demands especially in South Asian context where healthcare services are limited and number of patients is more.

In recent times a lot of attention has been given to performance of public hospitals and working conditions within them and its affect on health personnel (doctors, nurses, complementary health personnel). Several problems regarding their performance has been highlighted such as inadequate resources, work load, long waiting hours, patient dissatisfaction and all these factors contribute in creating stress among doctors (Agdelen, Ersoz, & Sarp, 2010). High level of job stress among doctors effect their physical and mental health, quality of life, goal achievement and personal development (Kaur *et al*., 2009). Such working conditions can lead to increased turnover from one hospital to other, conflict among colleagues, absenteeism, low quality work with errors (Khawaja *et al*., 2004).

Doctors stress and their dissatisfaction has been given considerable importance in recent times as they directly affect quality of service and level of patient satisfaction (Hass *et al*., 2000). The most common work stressor for doctors in public hospitals are emergency calls during surgery hours, continuous night shifts and night calls, time pressure from patients as well as management, working after a sleepless night, dealing with problematic patients, irritating patient complaints, interruption of family life, 24 hour responsibility for patients' lives and unrealistically high expectations (French, Mackinley, & Hastings, 2001). Work related stress can be divided into various taxonomies a brief summary was given by (Cox, Randall, & Griffiths, 2002).

Category	
Content of Work	**Hazardous Conditions**
Job content	*Lack of variety or short work cycles, fragmented or meaningless work, under use of skills, high uncertainty, continuous exposure to people through work.*
Workload/work pace	*Work overload or under-load, machine pacing, high levels of time pressure, continually subject to deadlines.*
Work schedule	*Shift working, night shifts, inflexible work schedules, unpredictable hours, long or unsociable hours.*
Control	*Low participation in decision making, lack of control over workload, pacing, shift working, etc. Lack of control (particularly in the form of*

	lack of participation) is also a context and wider organizational issue.
Environment & Equipment	*Inadequate equipment availability, suitability or maintenance; poor environmental conditions such as lack of space, poor lighting, excessive noise.*
Social & Organizational Context to Work	
Organizational culture and function	*Poor communication, low levels of support for problem solving and personal development, lack of definition of, or agreement on, organizational objectives.*
Interpersonal relationships at work	*Social or physical isolation, poor relationships with superiors, interpersonal conflict, lack of social support*
Role in organization	*Role ambiguity, role conflict, and responsibility for People.*
Career development	*Career stagnation and uncertainty, under promotion or over promotion, poor pay, job insecurity, low social value of work.*
Home-work interface	*Conflicting demands of work and home, low support at home, dual career problems.*

Adopted By: Interventions to control stress at work in hospital staff (Cox, Randall, & Griffiths, 2002)

Figure 1 highlights the theoretical model for the present study. The stressors for the proposed study are detailed below.

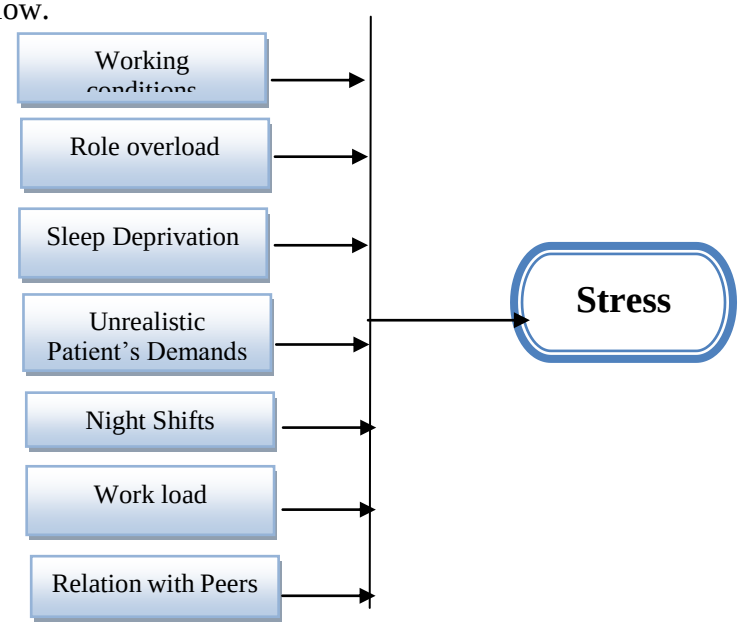

Figure 1. Analysis of stress level among doctors

Working Conditions

Low level of satisfaction on job and higher level of stress at the job are injurious physically and mentally to the health. Similarly it also has a detrimental effect on the achievement of goals, personal development and quality of life *(Kaur et al, 2009).* The results of these conditions are conflict, turnover, enhanced absenteeism, lower quality and quantity of life *(Khwaja et al 2004).* Good quality of services for health can only be provided by the team contribution of doctors, nurses and other health personnel. Among this team doctors play a very vital role for the proper functioning and patient's treatment. Satisfaction of patients depends on the appropriate services of healthcare provided to them and the

satisfaction of health practitioners from the working conditions is highly related to the patient's satisfaction *(Jovic-Vranes et al, 2008; Stanowski, 2009).*

Role of Overload

Braithwaite and Ross (1988) proposed a study relating to the common stressors of doctors at work. They concluded that work insecurity, depressed relationships with other doctors, isolation and unpredictable changing demands at work contributed to be the important stressors at work for doctors. Another study founded four vital job stressors for doctors i.e. expectations of patients, interference of work and home life, job demands and practice administration *(Cooper et al, 1989).* Other factors identified by Maoz et al (1992) contributing to role overload are demands of patients to care for them and overload of information. Work-home imbalance, doctor-boss, doctor-colleague and doctor-patient relationship are also vital stressors *(Maslach, 1997).*

Sleep Deprivation

Sleep deprivation is one of the important sources of stress *(Admin., 2011).* According to the Canadian Medical Association Journal sleep deprivation is an emerging issue that affects medical people and the practicing practitioners. A current study signified that sleep deprivation can result in elevated pace of complications related to surgery, if a surgeon had a sleep of less than six hours the previous night *(MacDonald et al, 2011).* According to an article published in physweekly archives in 2008, doctors are not getting adequate sleep that they need for their optimal functioning. Least attention is paid to the sleep deprivation issue of physicians. Studies have revealed the impact that sleep has on physicians call hours and working hours but the data discloses that sleep is considered an optional and unnecessary issue *(Goldberg, 2008).* American College for Chest Physicians Sleep Institute in 2008 revealed the results from a survey assessing the sleeping habits of physicians that a large percentage of doctors reported they are not having adequate sleep for their proper functioning. The results also revealed that doctors had a tight schedule which did not allow them to practice at their best. Dr. Goldberg also emphasized that there is a gap between the doctor's perceived need for sleep and the reality of what is achieved by physicians.

Several industrial studies have revealed that stress in the form of sleep deprivation and fatigue has a harmful effect on the work performance of doctors. A study using a population of 225 hospital doctors was conducted by Firth-Cozens and Greenhalgh in 1997 which revealed that 82 doctors reported that their performance for patient's care was negatively affected by stress. Spurgeon and Harrington (1989) also emphasized the relation between health and sleep loss and concluded that loss of sleep and sleep disruption are a major source of stress to doctors.

Unrealistic Patient's Demands

Patients wear expectations of perfection and complete disease killing from doctors that makes the doctors feel stressed and strained from the unrealistic demands of the patients *(Kushnir et al, 1997).* Bonn D. and Bonn J. (2000) emphasized that patient's unrealistic and unimaginable demands from patients, over expectations of patients from doctors, lack of freedom over work and work-family conflict contribute to the work stressors. The most important stressors in general practitioners identified by a medical audit group in 1993 in descending order of occurrence were during the hours of surgery emergency calls, night calls, pressure of time/time constraint, working after a sleepless previous night, treating

troublesome patients, agonizing about the complaints of patients, disturbance of family life, 24 hours accountability for the lives of patients and finally the high unrealistic patient's expectations *(French et al, 2001).* In line with French *et al*, Hayter *et al* (1996) reported the results of the survey and concluded that improper demands of patients together with enhanced expectations from what doctors could originally offer impose great stress on doctors. Similarly Edwards et al in 2002 concluded that patients are persuaded to expect form doctors to provide them with improved services together with elongated hours while offering less admiration and reverence to doctors.

Workload in Public Hospitals

Work load stress is very common among doctors of public hospitals. In peak season of the year some public hospitals are so much crowded by the patients that they have to divert patients in other units. Hospitals are too much overloaded that patients have to wait in emergency departments for longer hours and that causes a lot of pressure for doctors and other staff and act as a source of stress (Weissman et al, 2007). According to a study conducted by Cooper, Rout and Farragher in late 1980s, there are four predictors of job stress among doctors: work-home time conflict, demands of the job, patients' expectations and practice administration.

Workload in hospitals basically refers to volume, case intensity and throughput of the patient. Volume refers to number of patients admitted in the hospital. Throughput refers to the time period with which patient moves in the system and intensity refers as severity of illness of the patient being admitted (Weissman et al, 2007). In recent few years workload among doctors have increased considerably because of patient turnover rate and that directly affects amount of time given to each patient in delivering services and for this reason they have to work in extra shifts and that contributes in creating stress among patients (Duffield, et al., 2009). A study was conducted in Brazil in 2007 to uncover different types of stress associated with psychic workload findings are as follows:

Psychic Workloads	**Specific strain for each Psychic Workload**	
Psychic aggression	Stress	High blood pressure
	Irritation	Lack of motivation
	Physical and mental strain	Anguish
	Anxiety	Felling of impotence
	Panic Syndrome	Mental strain
	Depression	
Monotonous and repetitive work	Stress	Sleep
	Irritation	Disregard
	Physical and mental strain	
Constant attention	Stress	High blood pressure
	Irritation	Stomachache
	Physical and mental strain	Anxiety
	Visual discomfort	Insecurity
	Headache	Depression
	Insomnia	Somatic diseases
Female work	Stress	Depression;
	Tiredness	High blood pressure
	Strain of interpersonal relations	Insomnia
	Existential crisis	Increase of sensibility

	Overload	Lack of attention Guilty
Lack of collective defenses	Headache Discomfort among the work team Lack of motivation Arguments	Intrigue Strain of interpersonal relations Lack of union
Abuse of alcohol and drugs Accelerated work rhythm	Anesthetic drugs Irritation Tiredness Fatigue Physical and mental strain High blood pressure Insomnia Stomachache	Sleep Lack of attention Anxiety Insecurity Headache Lack of motivation
Lack of communication	Felling of uselessness Professional belittling Depression; Lack of communication among the hospital departments	Emotional strain Irritation Overload
Strict supervision of nursing head and other professionals	Strict supervision of nursing head and other professionals	Stomachache Depression Dissatisfaction
Lack of creativity and autonomy	Stress	Lack of motivation.

Adopted by: Psychic Workloads and Strain Processes in Nursing Workers of Brazilian University Hospitals (Mininel, Baptista, & Felli, 2011).

According to the fact sheet provided by Better Health channel about work-related stress, work-related stress is a rising dilemma of the modern world. It can be caused by a number of incidents like when work demand (responsibilities, hours etc) exceeds an individual's capacity to manage, conflicts with colleagues/boss, risk to security of job and continuous change. This report further identified the causes of work-related stress as heavy workload, working long hours, organizations undergoing change, stiff deadlines, changing duties, lack of freedom, job insecurity, tedious work, uncomfortable working environment, lack of appropriate resources, lack or little opportunities for promotion, harassment, unfairness, improper relationships with colleagues and supervisor.

Richard Smith in 2001 for his study "Why doctors are so unhappy?" revealed that the most important reason for doctor's unhappiness is excessive workload and under support. Another study concluded that high workload and workplace climate are the cause of doctor's stress because they are not supportive and receptive. The article reported in BMJ Careers "Doctor's Wellbeing" found that poor working conditions are the cause of lack of support and overload of work on doctors *(Chambers, 2003).* The findings of the study conducted by Gray-Toft and Anderson in 2002 revealed three important sources of stress among doctors and nurses as excessive workload, feeling a sense of inadequacy to come up with the emotional demands of patients and their families and issues related to the death *(Gray-Tofta & Anderson, 2002).* A study conducted on American doctors revealed that workload was the

most important source of stress. Doctors for being 'on-call' identified work overload *(Aziz, 2004).*

Anesthetists in countries world-wide face excessive pressures because of 'on-call' and night shift duties. This causes stress because of the intrusion of interlinked factors as deprivation of sleep, requisite to perform quickly and uncertain work nature. Persistent sleep deprivation and working over nights cause chronic health problem *(Dinges et al, 2005; Cauter, 2005).* Some of the sources of occupational stress in general practitioners identified by Makin et al in 1988 were emergency calls during the surgery hours, night calls, night shifts, problematic patients, demands of job on family life, demands of job on social life, time division between family and career, 24 hour patients responsibility, work environment, lack of recognition from superiors, dealing with critically ill patients and their families, visits for home and emergency calls *(Makin et al, 1988).*

Night Shifts in Public Hospitals

Working in night shift is an integral part of doctor's duty in order to provide 24 hour health services to patients and in order to serve community well. However this job requirement can also be source of doctor's stress and this issue is even more critical for junior doctors from whom it is expected to awake whole night. Long working hours especially working at night usually causes a state of stress among doctors and that can have adverse consequences. This can lead to poor decision making or even mistakes. Main reason behind stress and this state of anxiety while working at night is sleep deprivation and fatigue (Royal College of Physicians of London, 2006). Fatigue among doctors often results in impaired memory, higher level anxiety and compromises on quality as well as problem solving approach that definitely undermines the credibility and reputation of not only the associated doctor but the health care sector itself (Stucky et., al, 2011). The human body clock is used to, to work at day and sleep at night but when body clock routine is changed anxiety, fatigue, stress and feeling of depression are inevitable (Royal College of Physicians of London, 2006).

Work schedule of doctors and night shifts are contributing factors in work place stress and this issue is even more critical for trainee doctors (House Officer). Rosa (1993), conducted a retrospective study and measured impact of night shifts and too tight work schedule on performance of doctors. According to this study, performance of doctors decreases relatively when number of working hours increased from 8 to 12 hours. Bell (2001), stated in his study that mortality rate increased among patients who were admitted on weekends. Gold (1992), stated in his work that long shifts of doctors resulted in medication errors. They were not as vigilant and active as they were supposed to be on performing duties. Moreover errors were found while treating patients. Rosa (1993), study indicated that 12-hour shifts had poorer performance especially at night. Booker (1995), Medication errors greatest 1-2 months after darkest month, after controlling for medication error increase with increased temporary worker shifts and patient days per month, and decrease with increased overtime per month. The impact of duty hours and night shifts is yet not clear. Strucky et., al (2011) stated, in an investigation duty hours of doctors were reduced moreover relaxation was given to them in night shifts but that in turn reduced their time to coordinate with patients and to understand their problems and that resulted in increased frequency of patients hand-off which in turn resulted in increased stress.

Relation with Peers and Family

Long working hours and too much of work overload results in spending more time at work place (hospital) that leads to work-family interference which also act as a source of

stress. Studies have proven that women are more exposed to such stress (J, 1997). The main reason behind this fact can be that women are held responsible for all domestic activities and so work life balance is a greater issue for them (Berntsson, Lundberg, & Krantz, 2006). But on the other hand receives more support than men (Dumelow, Littlejohns, & Griffiths, 2000). Not only have the gender but personality traits also important in this regarded (Grzywacz & Marks, 2000). Doctor's marriages are often characterized as unsatisfactory (Vaillant, Sobowale, & McArthur, 1972). More time spent at workplace (hospital) which results in less time spending with family and children that act as a major source of conflict between the partners (Gabbard, Menninger, & Coyne, 1987). According to Sakinofsky (1980), the rate of suicide of general practitioners wives was four times more than other women. Moreover studies have proven that level of emotional stress is more among doctor's wives (Nelson, 1978). The major stressors include: Detachment, communication problem, concerns regarding husband's workload, telephonic interruptions when at home (Rout, 1996).

Statement of the Problem

The paper was specially designed to analysis the level of stress among doctors working in public and private hospitals of Bahawalpur (Pakistan). Therefore the statement of the problem was entitled as ***"Analysis of Level of Stress among Doctors in Public and Private Hospitals of Bahawalpur District, Pakistan".***

Objectives of the Study

The objectives of the study were:

1. to identify the factors contributing to cause stress in doctors of public and private hospitals in Bahawalpur District;
2. to analyze the level of stress among doctors in both public and private hospitals Bahawalpur District; and
3. to determine coping strategies adopted by doctors to deal with stress.

Research Methodology

Population

All the doctors serving in all the public and private hospitals of Bahawalpur District (Pakistan) constituted the population of the study.

Delimitations of the Study

The study was delimited to only medical officer serving in public and private hospitals. The study was further delimited to only male doctors due to cultural barriers.

Sample and Sampling Technique

In order to ensure adequate representation of the population, a total 240 doctors 120 from public hospitals and 120 from private hospitals were selected as sample through simple random sampling technique.

Research Instrumentation

The study was descriptive in nature and a self-developed structured questionnaire was used for data collection. The questionnaire was composed of 15 closed ended items designed on five point likert scales i.e. SA (Strongly Agree), A (Agree), UN (Undecided), SDA (Strongly Disagree) and DA (Disagree). These five point likert scales were coded as:

SA (Strongly Agree) = 1 A (Agree) = 2 UN (Undecided) = 3
SDA (Strongly Disagree) = 4 DA (Disagree) = 5

Pilot Testing

Validation and authentication of research tool is an important stage of research study for the achievement of exact and precise results. For this purpose, pilot testing was conducted in six hospitals to eliminate the weaknesses, misconceptions and ambiguities of the questions in the questionnaire. The questionnaire was administered on 20 doctors in four hospitals and data was collected. In the light of statistical analysis of the data, some poor items were investigated and were deleted. Then it was revised and final version was prepared in the light of suggestions given by the experts.

Validity and Reliability

Validity was checked by five experts having doctorate degrees and their suggestions were incorporated. Originally, the questionnaire was composed of 20 items and in which five items were found poor and were deleted. The data acquired through pilot testing was analyzed to find out the reliability coefficient Cronbach's alpha. The reliability coefficient was found to be 0.89. SPSS (Version 16) was used to calculate the reliability.

Data Collection

The researchers personally visited to the sample hospitals in Bahawalpur and distributed the questionnaires among the participants. Difficult terms were first explained and then the participants were told to give appropriate and exact response without any hesitation and free of bias. A total of 240 questionnaires were distributed and 240 i.e., 100% responses were received. In this way data was collected.

Data Analysis

After collection of data, it was organized, tabulated, analyzed and interpreted. The statistical tools i.e., mean, standard deviation and t-test were used for the statistical analysis of the data. SPSS (Version 16) was used to calculate mean, standard deviation and t-value.

Analysis, Results and Discussions

The purpose of the study was to analyze the level of stress among Doctors in Public and Private Hospitals in Bahawalpur District (Pakistan). The study was descriptive in nature and a self-developed structured questionnaire was used for data collection. Statistical tools, i.e. mean, standard deviation and t-test were used for the statistical analysis of the data. The whole process is explained as below:

Table 01: Showing Work Load

	Types of Hospitals					
	Private Hospital		**Public Hospital**			
Workload	**Mean**	**SD**	**Mean**	**SD**	**t-value**	**p-value**
Complex nature of work does not confuse me.	2.866	1.308	3.844	1.822	-4.777*	.000
Fed up of monotonous routine.	2.436	1.234	1.237	0.608	9.548*	.000
Emergency calls causes stress.	2.268	1.132	1.796	0.745	3.815*	.000
***Significant (p<0.05)**	**df = 238**			**t at 0.05 level = 1.970**		

Statistical Description

There were total three items in the questionnaire that define the workload variable .The mean value of 1st item of private hospital is 2.866 and SD is 1.308 where as the mean value of 2nd item of private hospital is 2.436 and SD is 1.234 and the 3rd item is 2.268 and SD is 1.132

where as mean value of 1st item of public hospital is 3.844 SD is 1.822, 2nd item 1.237 and SD is 0.608, and 3rd item mean value is 1.796 and SD is 0.745.

As we know that mean value indicates the average value and standard deviation indicates dispersion of individual data values around their mean. As first item mean value in private sector is 2.436 which indicates that doctor are somewhat neutral in their judgment towards this item on the other hand doctors of public hospitals shown a unfavorable tendency towards this item that yes the complex nature of their task does not confuse them. Similarly, the second item of this variable was monotonous routine the mean value of both private and public sector showed a favorable tendency toward it that doctors are fed up of their monotonous routine while the proportion of public doctors are higher than that of private hospitals doctors. As the mean values were 2.268 and 1.796 of private and public hospitals respectively which explains a favorable trend towards this item that it contributes in causing stress among doctors both in private and public sector though the level of stress as well as emergency calls are more in public hospitals rather than private hospitals.

Public Sector Reason Elaboration

Workload was more in public hospitals and there are several reasons behind it. Firstly, patients turnover rate is drastic in government hospitals such as BVH as it is the largest government hospital in southern Punjab and people from nearby smaller cities and villages came here for the treatment so patient turnover traffic is really high over here. Moreover sometimes this workload increases the complexity of the task. As they have to deliver their services in presence of those limited resources which they have so that increases the complexity of the task. For example in nephrology and dialysis unit there are limited machines for dialysis so that makes their really complex that to which patient they should offer their services and to whom they should not. Sometimes more than two patients of equally critical situation are there and then to chose among them is really a tough task and involve risk. Moreover carrying same task over and over again made routine of public hospital doctors very monotonous. As patients turnover traffic is really high in public hospital such has BVH so emergency calls anytime is not a new thing for them but too much of them and even not sparing them on special occasions such as religious festivals and family causes stress among doctors.

Private Sector Reason Elaboration

In private sector hospitals workload do exist but vary from one hospital to another depending upon the credibility of the owner and doctors who are working over there and services being delivered to patients. The workload is not the same in all private hospitals. In private hospitals complexity of work is relatively less because of less patients' traffic but performing similar task again and again made their life quite similar. Emergency call for attending patients is also a source of considerable stress.

Comparative Analysis

Workload differs between public and private hospitals. The load is more in public hospitals (BVH) than in private hospitals and this difference is due to difference in patients' turnover traffic among two of that which is considerably high in public sector because of several reasons: free medical assistance given to patients, round the clock availability of specialized doctors, free medicines given to needy patients etc. and because of this complexity of performing task is more in public sector. Though monotonous routine and emergency calls anytime a day causing stress is a common element among the two sectors. Though this is also a fact that ratio of emergency calls in public hospital is far larger than ratio in private hospitals and one of the major reasons behind this is again patients' high turnover traffic.

Patients from nearby smaller cities such as Lodhran, Yazman, Malsi, Khan Bella, Khairpur Tambey Wala, Liaqatpur, Haroonabad, Khangha Sharif etc and many other smaller villages rush towards this hospital for the treatment.

Table 02: Showing the Working Conditions

	Types of Hospitals					
	Private Hospital		Public Hospital			
Working Conditions	**Mean**	**SD**	**Mean**	**SD**	**t-value**	**p-value**
Working conditions are satisfactory in my hospitals.	1.368	0.534	3.742	1.738	-14.303*	.000
***Significant (p<0.05)**	**df = 238**			**t at 0.05 level = 1.970**		

Statistical Description

The mean value in private sector is 1.368 with S.D of 0.534 and in public sector it is 3.742 with S.D of 1.738. As we know that mean value indicates the average value and standard deviation indicates dispersion of individual data values around their mean. So according to our results doctors are quite satisfied with working conditions in private sector as the mean value is 1.368 which can be considered as good value depicting doctor's satisfaction towards working condition in private hospitals on the other hand doctors' responses from government hospitals indicate unfavorable results as the mean value is 3.742 which indicates doctors are somewhat unsatisfied with the working conditions of the hospitals.

Public Sector Reason Elaboration

Doctors of BVH showed somewhat unfavorable response towards the working conditions of the hospital though many of them were satisfied also but the ratio was less as compared to unsatisfied one. Most of the young female doctors showed their serious concerns over lack of security. They feel threatened performing their night duties. Very less security is there. Moreover element of harassment do exist. There is no visible policy or governing authority exists for this concern. As BVH is one of the biggest hospital in Southern Punjab so patients' turnover traffic is very high and available resources are less as compared to the needs and demands for example the quota oral medicines and inject able are often very less and because of this doctors often have to face undesirable circumstances when patients become very aggressive when their needs are not being fulfilled.

Private Sector Reason Elaboration

Doctors of private Hospitals were contended with the working conditions of the hospitals. High level of security is there. No more than two attendants are allowed to stay with the patient. Moreover day and night shifts of doctors are usually adjusted according to their will. Patients are being charged for the service being delivered to them thus no shortage of resources usually exists. One of the major reason behind these results were that most of the doctors which are working in those hospitals are the owners or from their peers.

Comparative Analysis

Working Conditions of private sector is far better than that of public hospitals because of availability of resources and flexibility of working hours. In government hospitals scarce resources exist as compared to the patients' load so that it makes working conditions bit tougher for the doctors especially when patients got bit aggressive.

Table 03: Showing Role Overload

	Types of Hospitals					
	Private Hospital		Public Hospital			
Overload	**Mean**	**SD**	**Mean**	**SD**	**t-value**	**p-value**
Ask to do often non clinical task	4.301	2.118	2.956	1.735	5.381*	0.000
***Significant (p<0.05)**	**df = 238**			**t at 0.05 level = 1.970**		

Statistical Description

The mean value private sector is 4.301 with standard deviation of 2.118 and that of public hospitals is 2.956 and 1.735. As we know that mean value indicates the average value and standard deviation indicates dispersion of individual data values around their mean so according to our results doctors of private hospitals are of view point that they do not have to do other than clinical task. On the other hand hospital doctors response in this regard was bit neutral. Depending upon the job status they are often ask to do non clinical task.

Public Sector Reason Elaboration

In public hospitals depending upon the job status doctors often have to do some non-clinical task like maintaining duty chart, running tea club for doctors and many other such small task which are not hectic in their nature and do not affect their job routine. That is the reason why most of the doctors have given neutral responses in this regard because these task are of such mild nature that they often do not consider it as a task.

Private Sector Reason Elaboration

In private hospitals most of the doctors strongly disagreed that they have to perform any kind of task other than clinical one. One of the major reasons behind this is no matter how big a private hospital is? Its workload magnitude cannot be compared with that of public hospital. Most of the private hospitals are specialist hospitals rather than general one so task is easily defined. Another main reason behind such responses are almost all private hospitals have hired a kind of administrative staff who are there to perform all other non clinical task so this issue do not really exists in private sector hospitals.

Comparative Analysis

There is significant difference between the two mean scores. The trend of performing non clinical task do exist in public hospital (BVH) by doctors but these tasks are not of such a magnitude that they act as a source of stress for them they are really easy to perform in terms of their nature like maintaining duty chart or running tea club that is the reason most of the doctors of BVH have given neutral responses in this regard. On the other hand in most of the private hospital no such norm exists of performing other than clinical tasks mostly administrative staff is there to perform such duties.

Table 04: Showing Sleep Deprivation

	Types of Hospitals					
	Private Hospital		Public Hospital			
Sleep Deprivation	**Mean**	**SD**	**Mean**	**SD**	**t-value**	**p-value**
I am not deprived of sleep taking my work schedule in consideration.	3.097	1.880	3.824	1.645	-3.188*	.002
***Significant (p<0.05)**	**df = 238**			**t at 0.05 level = 1.970**		

Statistical Description

The mean value of private hospital is 3.097 with standard deviation of 1.880 and mean of public hospitals is 3.824 with standard deviation of 1.645. As we know that mean value indicates the average value and standard deviation indicates dispersion of individual data values around their mean so according to our findings the problem of sleep deprivation exist both in public and private sector. Though the problem is more prevalent in public hospital (BVH) as our mean value indicates.

Public Sector Reason Elaboration

As the mean score is higher in public hospital (BVH) but still this ratio varies in different job titles. The house officer responses were more towards sleep deprivation. They have to perform duties of 48 hours every fortnight. Moreover 36 hours duty was very common in Emergency Operation Theater (E.O.T) and that drastically resulted in sleep deprivation of young doctors and that directly contributes in causing stress and anxiety among on them. On the other hand at level of Post Graduate Residency (PGR) they are required to perform day and night duties. In E.O.T they often have to perform duties of 36 and 48 hours so that to results in sleep deprivation and causes a lot of stress as they are post graduate trainee's they have to study also in order to prepare themselves for FCPS exams, so such a hectic routine with sleep deprivation results in a lot of stress.

Private Sector Reason Elaboration

In private sector hospitals the responses were somewhat neutral towards sleep deprivation. Most of the doctors maintain their schedule according to their own will but still in emergency situations or when workload is more they have to work round the clock and the results in sleep deprivation.

Comparative Analysis

There is significant difference between the two mean scores. The problem of sleep deprivation prevails more in public hospital (BVH) rather than in private hospital according to our statistical results and even this problem is a major issue at house officer (H.O) and Post Graduate Resident (P.G.R) level where they have to perform connective day and night duties of 36 hours and 48 hours that do results in severe sleep deprivation and causes a lot of stress, depression anxiety among the young doctors. On the other hand flexible working hours are there in private sector and major reason behind this that most of the doctors are owners of the hospital or belongs to network of peers so flexible shifts are their comparative to public hospital but still exceptions are there in case of emergency or higher patient traffic hectic day and night duties are being performed and that do result in sleep deprivation but still to a lesser extent as compared to public hospital.

Table 05: Unrealistic Demands & Hopes

	Types of Hospitals					
	Private Hospital		Public Hospital			
Unrealistic Demands & Hopes	**Mean**	**SD**	**Mean**	**SD**	**t-value**	**p-value**
Giving unrealistic hopes to patients	4.368	2.434	4.742	2.438	-1.189	0.236
Non-Significant (p>0.05)	**df = 238**		**t at 0.05 level = 1.970**			

Statistical Description

The mean values of private hospital doctors' responses is 4.368 with standard deviation of 2.434 and that of public hospital doctors' is 4.742 with standard deviation of 2.438. The two values are quite close to each other. As we know that mean value indicates the average value

and standard deviation indicates dispersion of individual data values around their mean so according to our results doctors of both public and private avoid giving unrealistic hopes to their patient. There is no significant difference between the two mean scores.

Public Sector Reason Elaboration

In public hospital (BVH) doctors avoid to give unrealistic hopes to patients because this often results in adverse situation. If a doctor gave good hopes to patient's relatives in and afterwards if the patient does not survive they often file case against that particular doctor because of such reasons today doctors avoid to give unrealistic hopes to patients and their relatives. Even in serious cases they do not proceed in treatment unless patient's close relatives do not signed the Consent Form.

Private Sector Reason Elaboration

In private sector unrealistic hopes to patients are given by doctors is not encouraged. Unless consent form is filled by patient's attendants, doctors do not start treating the patient no matter how serious patient condition is.

Table 06: Night Shifts

	Types of Hospitals					
	Private Hospital		Public Hospital			
Night Shifts	**Mean**	**SD**	**Mean**	**SD**	**t-value**	**p-value**
Unpleasant aspect of work is night shift.	1.368	0.434	1.442	0.438	-1.315	.190
Non-Significant (p>0.05)	**df = 238**				**t at 0.05 level = 1.970**	

Statistical Description

The mean value of responses of private hospital is 1.368 with standard deviation of 0.434 and that of public hospital (BVH) is 1.442 with standard deviation of 0.438. . As we know that mean value indicates the average value and standard deviation it indicates dispersion of individual data values around their mean so according value to our findings both public and private hospital doctors dislike to work at night shifts as the mean value of both sectors indicate that they agree that working at night is one of the unpleasant aspect of their work.

Public Sector Reason Elaboration

In public hospitals house officers (H.O), Post Graduate Residents (P.G.R) and Medical Officers (M.O) have to perform day and night duties but working at night shifts is a real cause of stress. Most of the doctors admit that this is one of the most unpleasant aspects of their work. It affects their health and moreover disturbs their family life as well.

Private Sector Reason Elaboration

Doctors of the private hospitals are also of the same point of view. They dislike performing night shifts but as in private hospitals working hours are flexible to some extent so they often adjust their schedule according to their will but exception are there in emergency cases.

Comparative Analysis

There is no significant difference between the two mean scores. Working at night shifts is considered as unpleasant aspect of work both in public and private sector hospitals.

Table 07: Relation with Peers

	Types of Hospitals

	Private Hospital		Public Hospital			
Relation with peers	**Mean**	**SD**	**Mean**	**SD**	**t-value**	**p-value**
Employment responsibilities interfering with family roles.	2.735	1.066	1.546	0.661	10.384*	0.000

***Significant (p<0.05)** **df = 238** **t at 0.05 level = 1.970**

Statistical Description

The mean value of workload for private hospitals is 2.735 with standard deviation of 1.066 and for public hospitals is 1.546 and standard deviation is 0.661. As we know that mean value indicates the average value and standard deviation it indicates dispersion of individual data values around their mean so according value to our result the role overload is significantly high in public hospital (BVH) as compared to private hospitals. The doctors of public hospital strongly agreed that role over load exists. On the other hand doctors of private hospitals showed neutral responses in this regard with mean of 2.735.

Public Hospital Reason Elaboration

Working day and night in hospital and performing duties do effect and create lot of interference in their family roles. They have to miss their family occasions, get together and events in order to perform their duties diligently and this issue is even more severe for female doctors. In culture like Pakistan especially in Bahawalpur females are supposed to perform all domestic chores and should be always there for the family such kind of organizational responsibilities creates a lot of problems for them.

Private Hospital Reason Elaboration

This is the fact that doctors no matter working in public or private sector have to perform hectic job but in private sector they have flexibility to some extent that they can fix the days or timings. That is the reason the responses of doctors were less unfavorable and were more towards neutral that their responsibilities interfere with their family and social life.

Comparative Analysis

There is significant difference between the two mean scores. The mean value of public hospital is more than that of private hospitals which indicates that family and social life are affected more by organizational responsibilities of doctors working in public hospitals than that of private hospital doctors.

Table 08: Working Environment

	Types of Hospitals					
	Private Hospital		Public Hospital			
Working Environment	**Mean**	**SD**	**Mean**	**SD**	**t-value**	**p-value**
Mutual cooperation exists between employees.	1.854	0.943	1.670	0.494	01.89	.060 (ns)
Relation with superior is a source of anxiety.	4.815	2.926	2.886	1.840	06.11*	.000
No questioning approach allowed.	4.708	2.749	1.958	0.748	10.57*	.000
Superiors understand problems with empathy.	1.623	0.812	2.999	1.392	-9.36*	.000
It is convenient to work in place of doctors who are absent.	4.239	2.125	1.865	0.832	11.40*	.000

***Significant (p<0.05)** **df = 238** **t at 0.05 level = 1.970**

Statistical Description

There are three items in the questionnaire that addressed the variable working environment. The mean value of 1st item in private sector is 1.854 with standard deviation of 0.943 and that in public sector it is 1.670 with standard deviation of 0.494. As we know that mean value indicates the average value and standard deviation it indicates dispersion of individual data values around their mean so according to our findings more mutual cooperation exist in private sector hospitals than in public sector. The mean value of second item in private sector is 4.815 with standard deviation of 2.926 and that of public sector is 2.886 with standard deviation of 1.840 so according to our findings relation with superior is a source of stress in public hospital (BVH) but not a source of stress in private hospitals.

The third item of the variable is right of questioning approach for the doctors the mean value of private sector hospital is 4.708 with standard deviation of 2.749 and that of public sector it is 1.958 with standard deviation of 0.748. According to our findings suffocating environment do not exist in private sector and they have right of questioning but this suffocating environment is a real source of stress in public hospital. The fourth item of the variable working environment is superiors' empathy with junior doctors. The mean value in public sector hospital is 1.623 with standard deviation of 0.8115 and that of public hospital is 2.999 with standard deviation of 1.392. So according to our findings more empathetic relation exist between senior and junior doctors in private sector than in public hospitals.

The last item of the variable working environment was replacement convenience in each other absence. The mean value of private hospital doctors is 4.239 with standard deviation of 2.125 and that of public hospital doctor is 1.865 with standard deviation of 0.832. So according to our findings replacements convince exist in public hospitals but no such trend is seen in private hospitals.

Public Sector Reason Elaboration

In public hospital (BVH) generally sufficient mutual cooperation exist between doctors of same job status but a sense of superiority do exist among higher ranks and level of support also declines. In BVH politics, grouping, elements of flattering, biasness exist and such kind of environment and seniors' attitude creates difficulties for junior doctors and creates a lot of stress for them at workplace. Moreover this kind of superiors' attitude creates an environment where there is no room for questioning and only dictatorship exists. In BVH replacement convince exist at house officer and post graduate trainee level. In case of any problem doctors replace each others' duty or even sometimes work in each others' duty hours so sufficient mutual cooperation exist between them.

Private Sector Reason Elaboration

In private sector cooperation exist among members in most of the private hospitals doctors are owners of the hospital or belongs to their peers so cooperation is not an issue. Moreover there is also no such issue of senior junior relationship. Doctors' work at equality basis so no such stress exist but the trend of replacing each other on work is seen lesser in private sector hospitals.

Conclusions

The present study showed that workload was the most important stressor for the doctors with a mean score value of 3.844. These results are consistent with the results of Gray-Tofta and Anderson in 2002 where excessive workload was the important source of stress in doctors. Overall finding of this paper is that stress levels do exist among public hospital and private hospital doctors. Doctors at Bahawalpur Victoria Hospital agreed that

they do experience stress though the level varies among different variables. Some variables cause more stress and some less. These findings are quite consistent with the findings of the level of stress found in Saudi MOH (Al-Omar, 2003). Research also supports this fact that public health sector employees are among those work groups that are exposed to highest level stress (Weinberg & Creed, 2000).

Result of this study indicated workload in public hospitals is a big source of stress for the doctors. Many factors contribute in public hospital doctors work load like emergency calls, dealing with aggressive patients in peak hours, monotonous routine, sleep deprivation and unable to have regular meals at time and these all factors results in high level of doctors stress. The analysis of the present study related to the working conditions of the private hospitals depicted that similar to the public hospital doctors, private hospital doctors also consider working conditions as important but their satisfaction with the working conditions in private hospitals and clinics is a bit more than public hospitals. These results are supported by the results of the study conducted by Agdelen et al. (2010).

Moreover consecutive night shift is also a source of stress for public as well as private hospital doctors. Sleep deprivation results in anxiety and depression and that automatically undermines doctors performance. Giving unrealistic hopes in good will has also been resulted in disastrous situation as reported by many doctors of BVH, patients attendants afterwards accuse doctor for everything keeping deaf ear to what reality is which also results in doctors stress and affect their performance. These findings are supported by the results of the study by Edwards et al. (2002).

Work family interference is also often a source of stress for few doctors working in public hospitals especially when long working hours in hospitals interrupt them in performing family roles. Although the current study provides an improved understanding of the stress sources among the doctors of public and private hospitals and clinics in Bahawalpur, Pakistan; yet there is a room for more in depth study of the sources of stress among doctors of public and private hospitals across the entire country. Further research can also be done for exploring the coping strategies for stress among doctors.

Recommendations

Problem: There is too much of work load on Doctors

Solution

This is a fact that doctors have to perform a hectic duty and there is no substitute of that, one thing which can be done is proper scheduling. One other thing which can be done is to create a comfortable environment for them. Weekly or fortnightly get together at lunch time or dinner time can be arranged in hospital so that they can enjoy at workplace and can have some break from their monotonous routine.

Benefits of Solution

Doctors will remain energetic. There will be some attraction at workplace. A soft corner for hospital administration will also be created in their minds that they think for employees' personal welfare rather than just thinking about their own financial interest.

Implementation Plan

Tea clubs or small social groups can be created within the hospital and members and organizers of those clubs and societies should also be the doctors so that they can also engage themselves in such activities and arrange recreational stuff for themselves.

Problem: Poor working condition of the hospital:

Solution

A peaceful and comfortable atmosphere must be given to doctors, that is necessary to improve their performance. Teachers must feel free to work there. They must have autonomy to work at their own. Security should be provided to doctors for their personal safety especially to female doctors performing night duties. Moreover doctors should be provided with adequate resources such as oral and inject able medicines so that they full fill the patients requirements according to their needs.

Benefits to Solution

Providing security will give them mental relaxation and because of that they will work more diligently at workplace. Moreover providing with adequate resources will ensure to some extent that doctors will not face undesirable cit treatment circumstances facing aggressive patients and their attendants when their needs are not fulfilled.

Implementation Plan

Trained security guards should be there who are armed with weapons and must have enough potential to face every kind of situation. Moreover hospital administration should work on effective resource allocation programs.

Problem: Unrealistic hopes and adverse situations.

Solution

Doctors should not give unrealistic hopes to patients but should be extra realistic while diagnosis.

Benefits to Solution

This will prevent doctors from afterwards undesirable circumstances which doctors have to face when patients' attendants accuse doctors for everything and sometimes doctors have to face physical violence from them which is really unethical.

Implementation Plan

Doctors should not start treating any patient if there is any risk associated in it unless patient or its attendants' fill a "CONSENT FORM" that doctor will not be accused afterwards.

Problem: Night Shifts

Solution

Night shift in hospitals is a must and there can be no escape for this. Patients cannot be left all alone in hospitals doctors presence is a must and for this reason doctors have to perform day and night duties. To stay awake whole night is really tough job. The thing which can be done is to schedule night shifts in such a way that there must be at least 2 doctors at a time in a single night shift, so that they can divide duty among them at night. A sleep or few hours also act as relieve in such a hectic routine.

Benefits to Solution

Performing such night duties of consecutive 36 hour and 48 hours results in lots of errors such night divisions will prevent such errors and safe many precious lives.

Implementation Plan

While making monthly rostrum SR should divide night duties in such a way that at least two doctors should be in one ward so that they can divide midnight duties among them and can give each other relieve.

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