



**Daffodil**  
*International*  
**University**

**PROJECT REPORT**

A Survey on

**“Work-Related Stress and Its Effects on  
Personal Life of Pharmaceutical Sales  
Representatives: Bangladesh Aspect”**

**Submitted to:**

Department of Pharmacy  
Faculty of Allied Health Science  
Daffodil International University

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## **APPROVAL**

This project, “Work-Related Stress and Its Effects on Personal Life of Pharmaceutical Sales Representatives: Bangladesh Aspect”, submitted to the Department of Pharmacy, Faculty of Allied Health Science, Daffodil International University, and has been approved as satisfactory for partial fulfillment of the criteria for the Bachelor of Pharmacy degree, and its style and content have been approved.

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## **CERTIFICATE**

This is to certify that the outcomes of the study reflected in this project are unique and have not before been presented in material for any degree at this University. The full study, presented as a project research for the partial fulfillment of the Bachelor of Pharmacy degree, is based on the author's (ID: 183-29-137) individual study.

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## **DECLARATION**

I formally declare that this entire project report was completed by me under the guidance of MD. MIZANUR RAHMAN, Assistant professor, Department of Pharmacy, Faculty of Allied Health Science, Daffodil International University, as an unbiased fulfillment of the Bachelor of Pharmacy degree requirement. This project and project report are my own study, I declare. I further declare that neither this project report nor any portion of it has been submitted anywhere for the granting of a Bachelor's degree or any other degree.



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Author

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## **ABSTRACT**

**Introduction:** Pharmaceutical Sales Representatives (PSRs) are becoming more and more necessary as the pharmaceutical business expands daily. Target-related pressure is changing the character of work, which finally causes Job Induced Stress (JIS) within PSRs.

**Objective:** This research attempts to evaluate JIS and the different contributing elements, while also taking into account some of the health effects.

**Method:** The data was collected utilizing a self-administered questionnaire sent to the PSRs (n=100). Data was imported into MS Excel (version 2016) and descriptive statistics were used to examine it.

**Result:** One hundred Pharmaceutical Sales Representatives completed the questionnaire. 88% percent respondents are male and 12% are female. 45% start their daily work at 7 am, 37% start at 8 am, and the rest 18% start at 9 am. 32% of Respondents close their work at 6 pm, 20% close at 7 pm, 22% close at 8 pm, 13% close at 9 pm, and the rest 13% close at 10 pm. Among all respondents, 84% of respondents enjoy their job, and 82% can meet their Target sales quantity. On the other hand, 54% of PSRs feel stress in their personal life, and 70% Feel distance from family. As a result of stress, 62% of respondents' PSRs experienced Headache, 20% experienced Fatigue, 33% experienced Irritability, 29% experienced Loss of Appetite, 27% experienced Over Sensitivity, 21% Suffering Insomnia, 29% experienced Anxiety and 29% are in depression.

**Conclusion:** Any improvement in the way a work is performed professionally must be viewed in light of how it will effect and be implemented by PSRs. If JIS for the PSRs is not acknowledged and lessened, they will continue to be at high risk of experiencing several negative health effects.

**Keywords:** Job Induced Stress (JIS), Pharmaceutical Sales Representatives (PSRs), Stress.



## **CHAPTER 1**

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# **INTRODUCTION**

## **1. Introduction**

Pharma companies are a conventional marketing sector that primarily deals with clinical personnel. To sell various pharmaceutical items, these businesses need an increasing number of qualified, knowledgeable salespeople that can establish strong relationships with their primary customers (doctors). Furthermore, Pharmaceutical Sales Representatives must be knowledgeable about their drugs and understand their Unique Selling Proposition (USP) to persuade doctors and PULL demand for their goods. Doctors are the essential customers in this system, and the emphasis is on creating and maintaining these customers since they drive product demand; hence, corporations place a premium on building and maintaining these customers. In many businesses across several industries, the work environment for medical representatives has evolved into one that is high-stress. Due to a variety of circumstances, including a heavy workload, strict deadlines, lofty goals, the type of the work, a lack of job satisfaction, performance-related pressure, and long working hours, employees are under a lot of stress. Stress caused exhaustion, irritation, poor communication, and quality issues/errors as a result of which they may experience frustration or feel "burned out" when they encounter difficulties with peers or clients. The organization's members are expressing stress about a variety of issues, including heavy workloads, interpersonal issues, role conflicts with staff clients, and the client's lack of development or advancement (Shinn et al, 1984). These types of workplace pressures harm performance. Therefore, it was deemed necessary to study the impact of stress on Medical Representatives in the city of Dhaka [1].

### **1.1. Role of PSRs in Pharmaceutical Industry:**

The development of new drugs involves significant research and contributions from the pharmaceutical industry. The pharmaceutical industry's function changes from that of a scientist to that of a business promoter after a new drug product has received approval and marketing has started. Concerns regarding the possibility of commercial influence in the connection between the pharmaceutical business and active physicians have increased as a result of this role transition. [2-4].

The pharmaceutical sector employs a variety of strategies to advertise new products, spending up to 40percent of its revenue on advertising [5]. For the distribution of medication information, professional magazine advertising and direct mail to physicians are frequently

utilized. The pharmaceutical industry's costliest and popular approach for promoting medicinal items at the moment is marketing via Pharmaceutical Sales Representatives.

One sales representative is assigned by the pharmaceutical business to a large group of medical doctors in several countries. Concerns have been raised related to the effect of these aggressive marketing strategies on doctors' judgment and, ultimately, the price of prescriptions. The information supplied by pharmaceutical sales representatives is viewed with skepticism by many practitioners and policymakers since the implied purpose of the pharmaceutical business is to encourage sales of new and usually more expensive drugs. Despite this popular belief, research has demonstrated that physicians routinely use this knowledge in their day-to-day practices [6-7].

## **1.2. Patient Safety & Pharmaceutical Sales Representatives:**

The primary source of funding for pharmaceutical advertising is pharmaceutical sales representatives (PSRs) & the free physician samples they offer [8]. PSRs have been demonstrated to affect prescription, contrary to what many doctors believe [9]. Lower prescription quality and higher prescribing expenses and volume are linked to greater exposure to promotion [10]. According to a 2009 survey conducted in the US (United States), PSRs are the primary source of information for most newly prescribed medications for 85% of doctors [11]. The primary motivation for consulting PSRs, according to a survey of Canadian doctors, was informational [12].

If PSRs fail to alert doctors to a medicine's unfavorable side effects, patient health may suffer. For instance, a Merck document cautioned PSRs from mentioning the cardiac risks associated with rofecoxib [13]. Although there is little study on the PSR message's content, it frequently contains errors and omissions [14]. PSRs omitted side effects around 70 percent of the time, and/or nearly one-third of advertisements highlighted prohibited indications or dosages, according to a long-term French study (2000–2005) [15].

Different countries have different laws that regulate promotions. PSRs are subject to FDA regulation in the US, where "fair balance" requirements mandate that all aspects of marketing include information on both benefits and risks. PSRs cannot advocate for unauthorized applications, although they may give copies of these uses upon a doctor's request. Samples,

food, gifts, and offers to participate in research are all prohibited by the 8 Sales Visit Charter that was implemented in France in 2004. PSRs are required to give doctors information about authorized products. The industry association Rx & D is mostly in charge of regulating PSRs in Canada. Consistency with authorized product information and contemporary medical thought is required under the Rx & D ethical code. It is possible for the federal regulatory body, Health Canada, to use its legislative power [16], although this seldom happens in reality.

### **1.3. Stress**

Stress is a consistent factor in both professional and daily life. The great Canadian-Hungarian medical scientist Hans Selye pioneered the notion of stress (1907-1983). It's an ambiguous term; for some, it represents challenge (good stress or eustress) and excitement, but for many others, it represents an unfavorable condition of persistent exhaustion, concern, irritation, and inability to cope (bad stress or distress) [17]. He regarded it as a "nonspecific" organismic reaction to any urge for change [18].

Stress may be defined further as the physical and psychological condition that occurs when an individual's resources are insufficient to meet the pressures & demands of the circumstance. People's conduct can reveal signs of stress, particularly when there are changes in their attitude [19]. Acute stress reactions have been seen in a variety of domains, including feelings (e.g. anxiety, sadness, irritability, weariness), behavior (e.g. being uninspired, emotional, withdrawn, violent), thinking (e.g. difficulty with problem solving and focus), and physiological responses (e.g. palpitation, headache, & nausea). Long-term stress can cause alterations in neuroendocrine, autonomic nervous system, cardiovascular system, and immunological functioning, resulting physical & mental illness (e.g., heart disease, depression, anxiety) [20].

According to several additional studies, occupational stress can be a major driver of CHD in working-age populations, with an indirect influence on health behaviors and a direct effect on the neuroendocrine stress pathway [21]. Another study conducted in Japan found a link between occupational stress and an increased risk of stroke [22]. One of the most damaging factors in the workplace is stress. The study of workplace stress may be traced back to studies

on role conflict and role ambiguity. Many ideas have been evolved since that time on the relationship between job pressures and the subsequent strains or sickness [23].

Job stress can be defined as detrimental physical and emotional reactions that arise when a job's requirements do not meet the worker's needs, talents, or resources, and can result in poor health and even damage [24]. The nature of the employment or the substance of the job have been associated to stress & health hazards. Moreover, Long hours, job overload, not enough time, tough tasks or complicated tasks, lack of variation, a lack of breaks, and poor physical working conditions are some intrinsic work content issues. Stress can be caused by unidentified work or contradictory responsibilities & limits, as well as an absence of promotion, insufficient training, insufficient rewards, and job instability [19].

The World Health Organization defines health as "a condition of well-being in which individual is capable of working efficiently and fruitfully [25]." A good workplace environment is one where there isn't only an absence of dangerous conditions but also an excess of health-promoting ones [26], and getting a healthy workplace is the right of anybody involved in any type of profession, including pharmaceutical sales agents (PSRs). PSRs are those cadres of individuals who are primarily involved in the sales promotion of medications or pharmaceuticals, which is why they are subjected to several stressful conditions. A study found that PSRs are at an elevated risk of illness owing to the nature of their employment [27].

Previous studies have also found that PSRs are subjected to extended working hours, extensive driving, and physical handling of promotional items [28]. All of the reasons mentioned may contribute to occupational stress among PSRs. One study shows the occurrence of occupational stress among PSRs, with unsupportive coworkers, work overload, and continual pressure for greater performance as notable contributing variables [29].

## 1.4. Occupational Stress

Occupational stress is may be described as the deleterious emotional and physical reactions that happen when the requirements of job do not meet the worker's talents, demands, or resources. Working stress can result in illness & even damage of the health. Although the 2 are not synonymous, occupational stress is sometimes mistaken with difficulty. Challenge energizes us both physiologically & mentally, motivating us to learn new talents and perfect our occupations. When we Complete a task, then we feel relieved and gratified (U.S NIOSH,1999) [1].

**Okebukola and Jedgede (1989)** defined occupational stress as "a state of mental and physical exhaustion caused by harassing incidents or dissatisfying aspects or general qualities of the working environment."

## 1.5. Causes of Occupational Stress

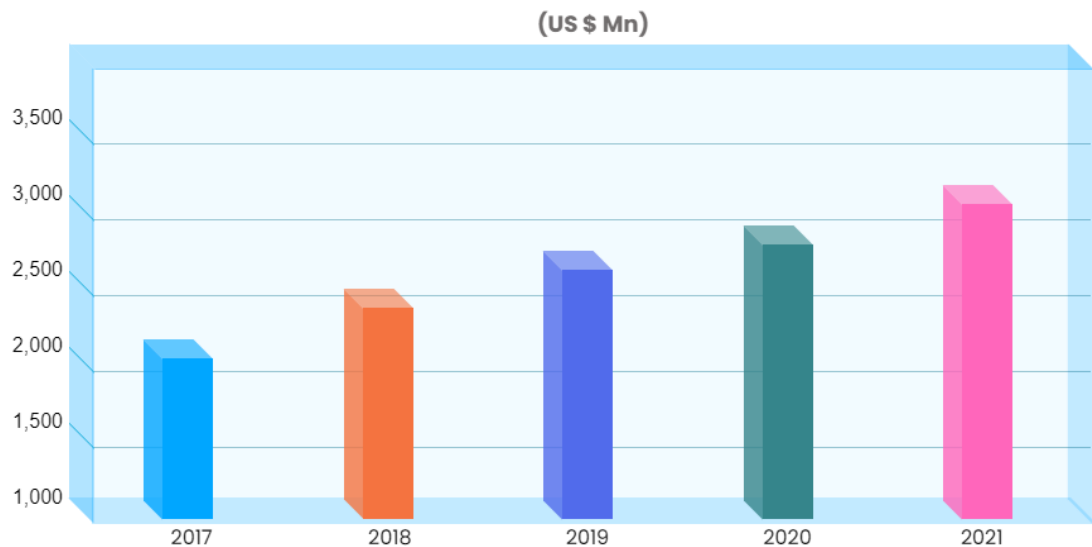
Almost everyone believes that occupational stress is caused by the interplay between the worker and the working conditions. However, opinions disagree on whether worker qualities or the working environment are the major sources of occupational stress. These opposing opinions are significant because they propose distinct approaches to reducing workplace stress.

## 2.4. Pharmaceutical Industry in Bangladesh

According to BAPI (Bangladesh Association of Pharmaceutical Industries), the pharmaceutical sector in Bangladesh consists of around 286 big and minor enterprises. The pharmaceutical business is one of Bangladesh's most advanced technological industries. Manufacturers make practically every sort of medication, including high-tech items such as insulin, hormones, and anti-cancer drugs. This industry meets 98% of the local market's entire medical needs. The sector also sells medications to over 150 nations, including the United Kingdom, Australia, the United States, Canada, Germany, and the European Union. Pharmaceutical businesses are extending their operations to increase their export market share [30].

Since the early 1980s, Bangladesh's pharmaceutical business has been altering and evolving. Over the previous five decades, the industry has developed from strength to strength. Because this is a technology and knowledge-based business, the road was not simple for an LDC

facing severe economic problems. Bangladesh is now proudly the only LDC with a well-developed pharmaceutical sector [30].

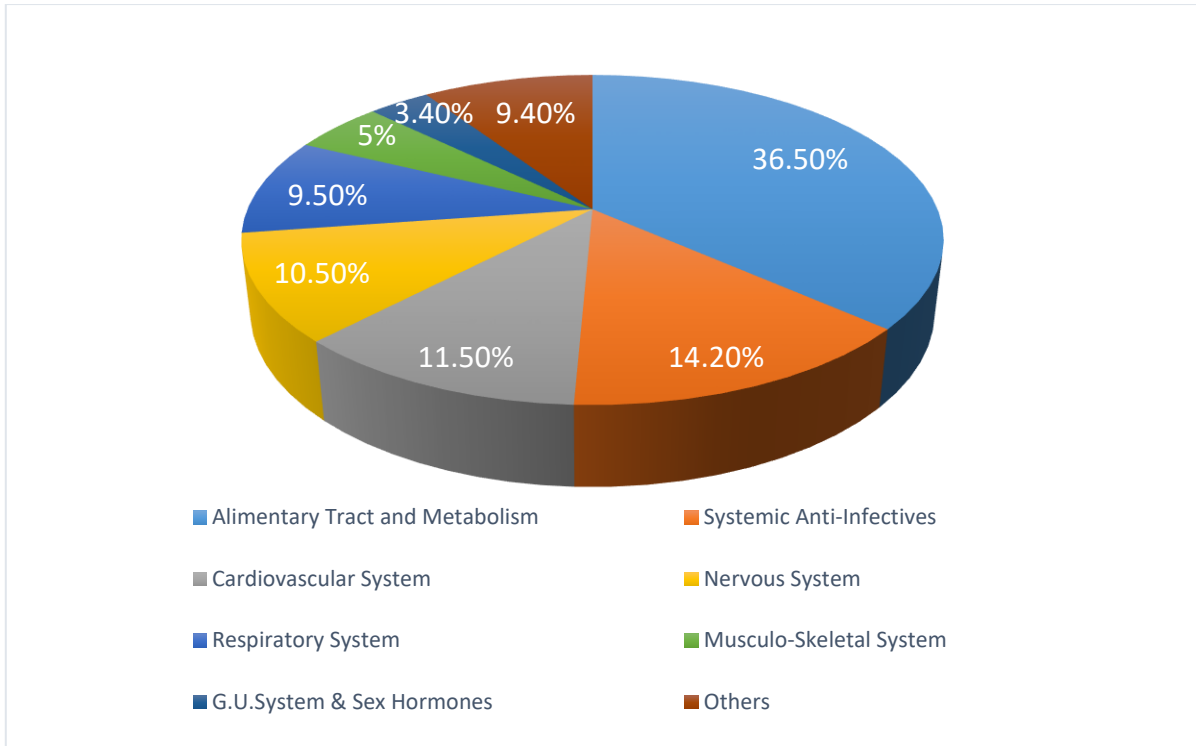


**Chart 1:** *Revenue of Bangladesh Pharmaceutical Industry*

**Source:** Moving Annual Total (MAT) Q3, 2021

**Bangladesh Pharma Industry has high capability in Specialized Pharmaceutical Products:** The industry has a strong research focus on generic formulation development and has previously demonstrated its abilities with the successful development of specialized, high-tech formulations that are difficult to copy. To create strong differentiation, leading companies have focused on specialized dosage delivery systems and successfully developed dry powder inhalers (DPI) and metered dose inhalers (MDI), lyophilized injectable, sterile ophthalmic, oral thin films, prefilled syringes, multi-layer tablets, biological products such as insulin and vaccines, and so on [30].

Work-related stress and its effects on personal life of Pharmaceutical Sales Representatives:  
Bangladesh aspect



**Chart 2:** *Bangladesh Pharmaceutical Market Segments by Share*

**Source:** Moving Annual Total (MAT) Q3, 2021



## **CHAPTER 2**

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# **OBJECTIVE OF THE STUDY**

## **2. Objective of the study:**

### **2.1 General Objective**

- To determine the related & prevalence factors of job stress among Pharmaceutical Sales Representatives (PSRs).

### **2.2 Specific objectives**

- To assess the working time of Pharmaceutical Sales Representatives (PSRs) and its effect on them.
- To study the impact of stress upon medical representatives.
- To analyze the stress of medical representatives & its impact on them.
- To detect the degree of occupational stress upon the PSRs.
- To identify the work life balance of PSRs.
- To know whether work stress affects their personal life.
- To assess the critical result of stress of PSRs.
- To propose efficient alternatives to mitigate the limitations.

### **2.3. Scope of the study:**

This research focuses on the following areas:

- This study will help that organization do more research.
- It is useful to determine the employer's degree of satisfaction with the welfare measure.
- This research will help the company in determining areas of employee unhappiness with their jobs.
- This research assist in making a managerial decision for the organization.

### **2.4. Limitations of the study:**

- ✚ The survey is influenced by the respondents' biases and prejudice. As a result, complete correctness cannot be guaranteed.
- ✚ The study is confined to the Pharmaceutical Representatives working in and around Dhaka City.
- ✚ There may have been hesitancy of Participants to share personal information associated to their Workplace.

## **CHAPTER 3**

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# **METHODOLOGY**

### **3. Methodology:**

The study uses a survey approach with a descriptive research design. For this study, the researcher has employed both primary & secondary data. Secondary information was gathered from readily available books, magazines, research papers, articles, and websites.

#### **3.1. Area of Study:**

Dhaka has been selected as the study area by the researcher. With such a population of 8.9 million as of 2011 and approximately 21.7 million people living in the Larger Dhaka Area. Dhaka is the capital and biggest metropolis of Bangladesh as well as the 8<sup>th</sup> largest and 6<sup>th</sup> highest densely populated city on the planet. Generally, a large number of physicians in Dhaka city for huge population, that's why a large number of Pharmaceutical Representatives are here.

#### **3.2. Target Population:**

The survey (google form) link was sent to 150 PSRs approximately working in Dhaka city via Facebook Messenger, WhatsApp, and many other social media platforms. I have collected responses from 150 to 100 people.

#### **3.3. Pilot Study:**

A pilot study was conducted before the suggested research study was carried out to find out the validity of the created questionnaire and determine how long it took respondents to complete it. Ten pharmaceutical sales representatives covering the total population participated in the study.

#### **3.4. Sampling Design:**

100 PSRs (Pharmaceutical Sales Representatives) from various pharmaceutical organizations participated in this descriptive cross-sectional research. PSRs that were interested in taking part in this study were chosen by convenient sampling. All of the subjects had excellent educational credentials, and the investigator asked the PSRs to complete an online questionnaire.

#### **3.5. Data Collection:**

The survey's completion was voluntary. A supervised self-administered questionnaire was used to obtain the data. The PSRs spent around 15 minutes filling out the questionnaire. Microsoft Excel was used to gather and enter all the data for analysis.

## **CHAPTER 4**

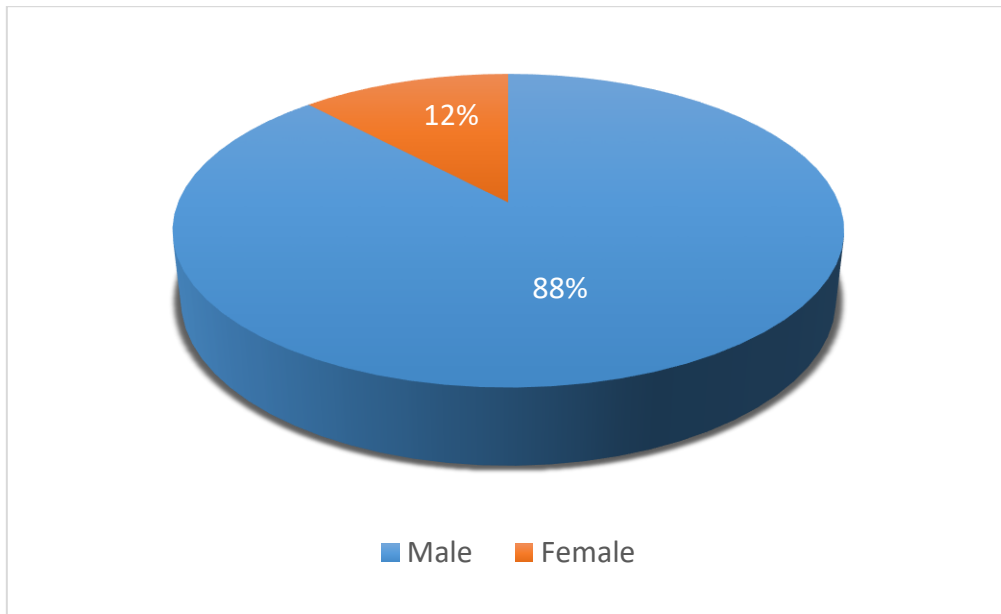
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# **RESULTS & DISCUSSION**

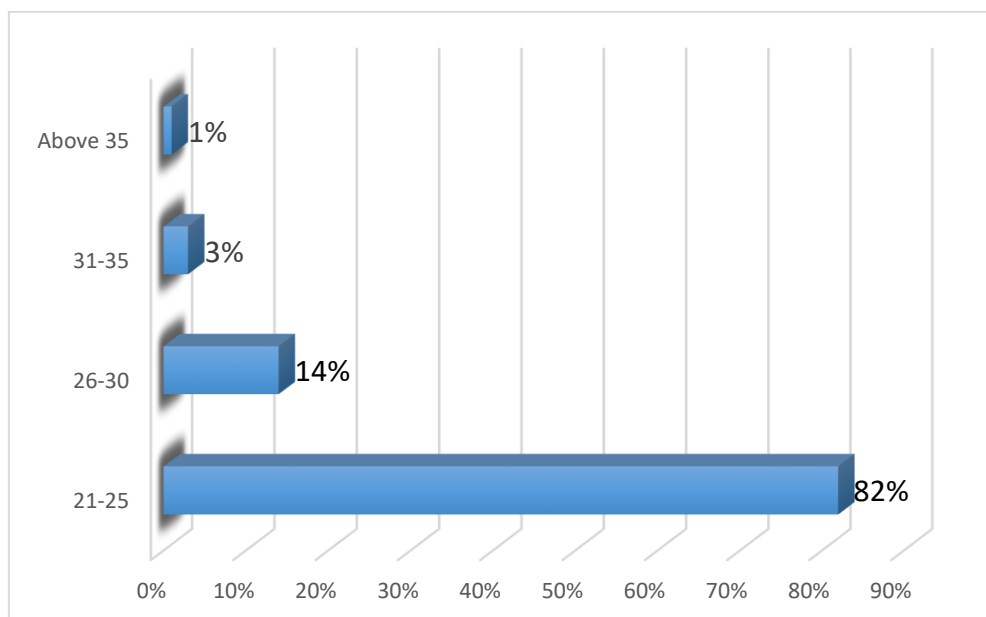
## 4. Results & Discussion:

### 4.1. Demographic Characteristics of Respondents:

Requests were sent to 150 PSRs, of whom 100 were responded. All of them are working as a Sales Representatives in Pharmaceutical Company. Majority of the respondents were male (88%) and 12% were female.



**Chart 3:** *Percentage of male & female Respondents.*



**Chart 4:** *Percentage Respondents by Age.*

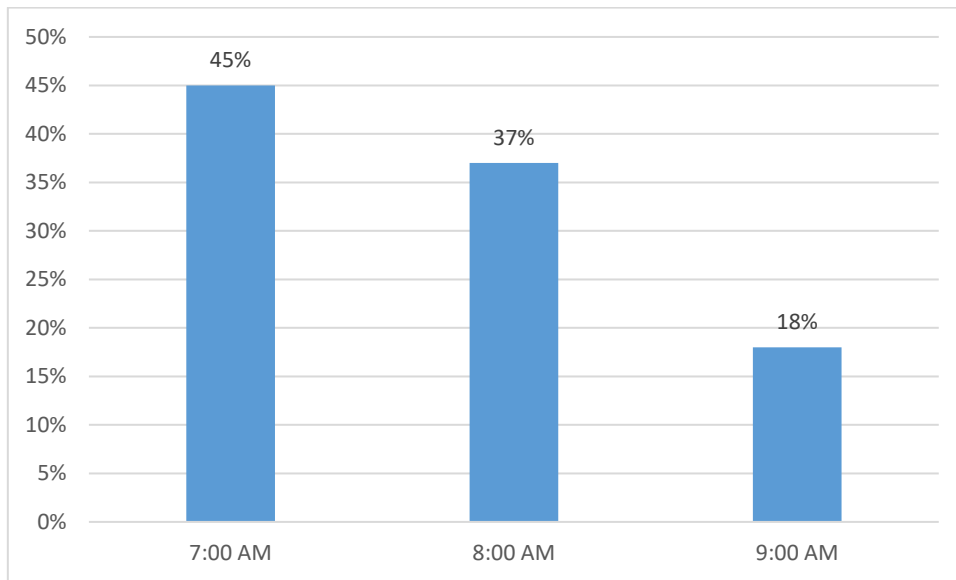
Among the overall respondents, 82% are 21-25 years, 14% are 26-30 years, 3% are 31-35 years and 1% are above 35 years old. Religion, Marital status and many other demographic profile of respondents PSRs are respectively shown below in table 1.

<b>Characteristic</b>	<b>Response rate (%)</b>
<b>Gender</b>	
Male	88%
Female	12%
<b>Age (years)</b>	
21-25	82%
26-30	14%
31-35	3%
Above 35	1%
<b>Marital Status</b>	
Married	24%
Unmarried	70%
Single	6%

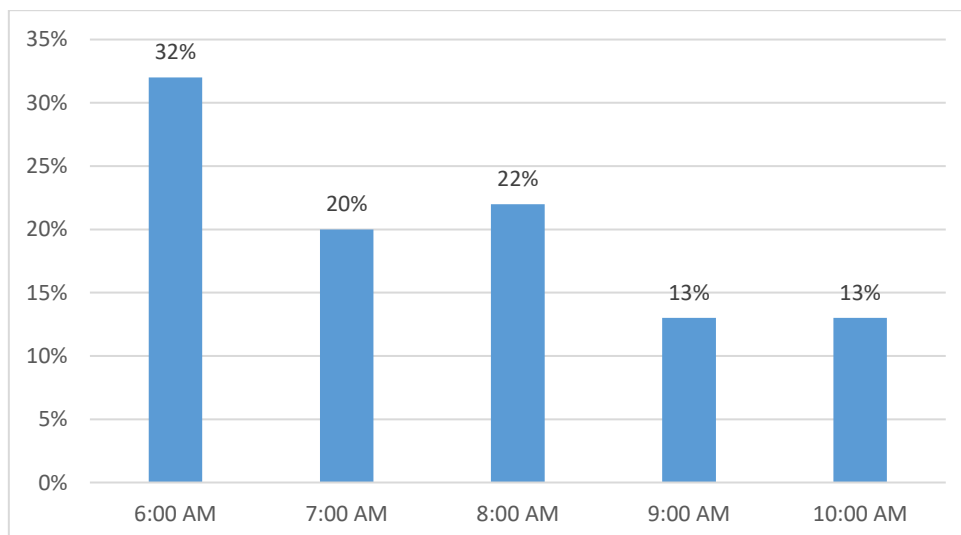
**Table 1:** *Demographic characteristic of Respondents.*

#### 4.2. PSRs Reporting and Closing Time:

Among 100 respondents, 45% start their daily work at 7 am, 37% start at 8 am, and the rest 18% start at 9 am. 32% of Respondents close their work at 6 pm, 20% close at 7 pm, 22% close at 8 pm, 13% close at 9 pm, and the rest 13% close at 10 pm.



**Chart 5: PSRs Reporting Time**



**Chart 6: PSRs Closing Time**



### 4.3. Exploring stress and responsibility of PSRs:

Variables	Yes	No	May be
Do you have to maintain any daily formalities with company?	88%	12%	
Do you enjoy this job?	84%	16%	
The targets Company given are achievable-	82%	18%	
Your work is interesting-	66%	14%	20%
You have time to rest outside of work-	60%	22%	18%
Does work stress affect your personal life?	54%	26%	20%
Is this stress creating distance with the family?	70%	30%	
Can you give enough time to family?	60%	40%	
Do you prefer this job for any member of your family?	51%	19%	30%

**Table 2:** *Exploring Stress and Responsibility of PSRs.*

Among all respondents, 84% of respondents enjoy their job, and 82% can meet their Target sales quantity. On the other hand, 54% of PSRs feel stress in their personal life, and 70% Feel distance from family. Moreover, 51% prefer their job to any member of their family. 40% of respondents do not give enough time to their families.

#### 4.4. Determining the level of stress:

Variables	Always	Often	Sometimes	Rarely	Never
How often do you feel highly stressed from your job?	35%	20%	34%	9%	2%
How often do you have a hard time relaxing?	33%		64%		3%
You get enough time for your hobbies-	37%		55%		8%

**Table 3:** *Determining the level of stress.*

35% of respondents always feel stressed, 20% feel often, 34% sometimes, and 9% rarely. Most importantly 2% of respondents never feel stress. 37% of respondents always get enough time for their hobbies, while 55% get sometimes and 8% never get any time.

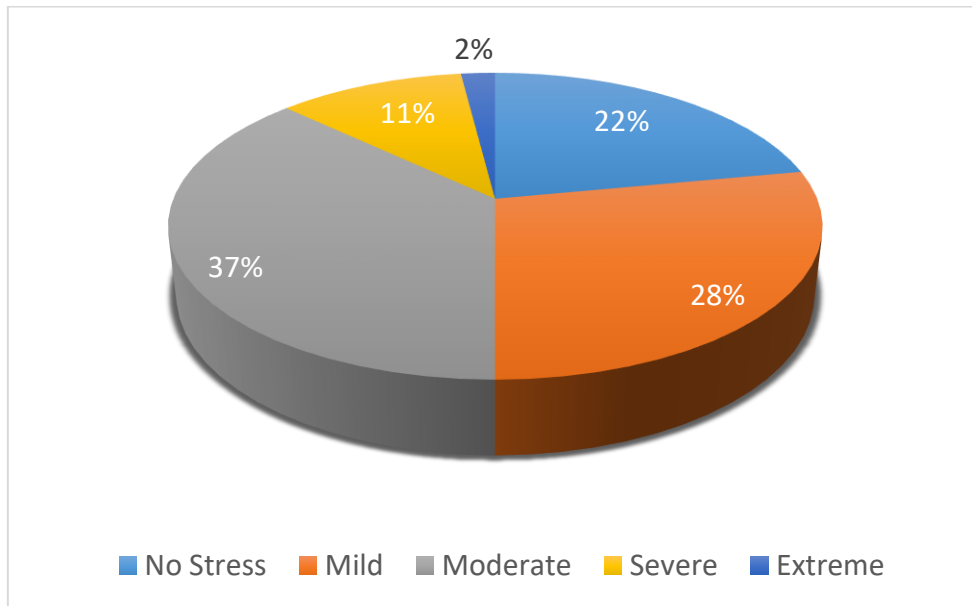
#### 4.5. Exploring work life balance:

Variables	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
You have enough time to complete your work-	28%	45%	21%	5%	1%
You have a good work-life balance-	25%	41%	24%	6%	4%

**Table 4:** *Exploring work life balance.*

In case of work life balance, approximately 65% of respondents have a good work-life balance and 10% do not have a good work-life balance. 24% respondents are neutral to talk about their work life balance.

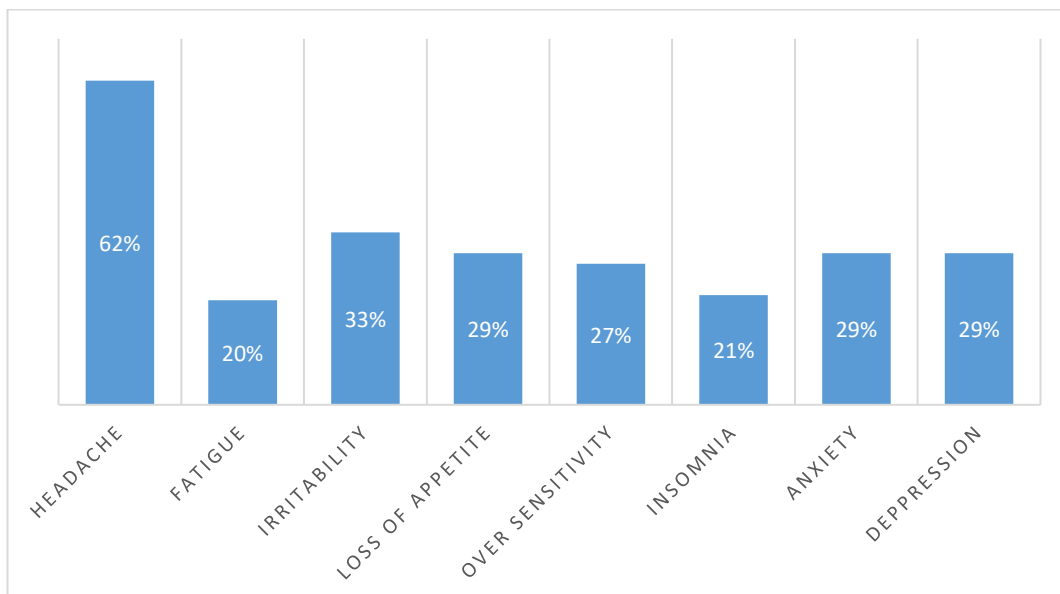
#### 4.6. Level of Job Stress of PSRs:



**Chart 7: Level of Job Stress**

Among 100 respondents, 22% of PSRs do not feel any Stress, 28% of respondents PSRs feel mild stress, 37% feel moderate, 11% of PSRs feel severe stress, and 2% feel extreme stress.

#### 4.7. PSRs experienced result of stress:



**Chart 8: Result of Stress**

As a result of stress, 62% of respondents' PSRs experienced Headache, 20% experienced fatigue, 33% experienced Irritability, 29% experienced Loss of Appetite, 27% experienced Over Sensitivity, 21% Suffering Insomnia, 29% experienced Anxiety and 29% are in depression.

The outcomes of this study, which focuses on the relationship between stress and various aspects of the workplace, suggest that PSRs are concerned regarding their job insecurity because despite their hard work, there aren't any good policies for rewards and promotions, their jobs interfere with their personal lives, and they are constantly under pressure to perform better. These results provide additional evidence in support of past research showing PSRs experience stress primarily as a result of insufficient incentives, competing demands for their time in their personal and professional lives, and pressure to increase performance [1].

Findings also show that they must leave their families and live away from home, which contributes to their lack of focus at work and subpar performance at work. Even though the majority of individuals make a comfortable living, their jobs are often viewed as having poor social worth, which can cause mental stress.

The outcomes of this study support the idea that although the stress score levels are on the higher side, they are not the highest ones. Therefore, we can claim that their stress levels have reached alarmingly high levels, and if these stages are not verified at this time, there is a possibility that the health and emotional effects of their job stress will worsen and that their stress levels will be challenging to manage. The aforementioned finding is previously confirmed by several research, which show that the presence of high degrees of stress may have various detrimental effects on physical and psychological health [20].

## **CHAPTER 5**

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# **CONCLUSION**

## **5. Conclusion:**

According to this report, JIS is exerting pressure on PSRs. The PSR profession is currently being subjected to a number of significant changes, and it is not yet obvious how well-equipped the field is to handle them. Any change in the nature of a job description or the hours worked must be taken into account in the context of the PSRs who will implement and be impacted by the changes. To explore deeper into the many causes of JIS and the potential remedies for improving JIS in PSRs, more research is required.

## **CHAPTER 6**

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