A PILOT STUDY ON OCCUPATIONAL STRESS AMONG MEDICAL REPRESENTATIVE WORKING IN CHENNAI REGION, TAMILNADU

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Abstract

Among the fastest-growing industries in the world, the pharmaceutical industry has increased over the years. A pharmaceutical company appoints a medical representative to make their products easily reach healthcare specialists and then be used by the general public. The medical representatives construct a well-built network with professionals like doctors, clinical specialists, medical practitioners, paramedical experts, food technologists, pediatricians and gynecologists, psychiatrists and clinical psychology specialists, etc. The problem of stress is widespread in every job description, and it may affect directly or indirectly in the form of health issues and low productivity; the demands of achieving targets induced stress among a medical representatives. The researcher attempts to study occupational stress among the medical representatives working in the Chennai region. The researcher throws light on this issue with a sample size of 90 medical representatives selected based on the convenience sampling method. The fundamental objective of the study is to identify the factors influencing stress and its impact on medical representatives working in Chennai region. The Cronbach alpha test result is .876, which concluded that the data tested was reliable and valid. The data collected through a well-structured questionnaire has been entered and analyzed using SPSS (version 25). The statistical tools used for the study are descriptive statistics and variance analysis. The study also suggested strategic measures to overcome and reduce stress among medical representatives.

Keywords: Occupational stress, Medical representative, Stress, Pharmaceutical industry

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1. Introduction

At present, pharmaceuticals have become an essential division of the healthcare system around the globe. It plays a vital role by humanizing the excellence of existence. Due to its direct link with the welfare and well-being of human beings, the pharmaceutical industry is strategically essential for developing a healthy and productive nation. Today, the pharmaceutical industry is considered as one of the most significant and rapidly growing global industries. It is a primary source of employment generation and foreign exchange earnings for many countries around the globe.

Pharmaceutical production and consumption are still disproportionately dispersed. The medical representative comes into the picture, and they extend their valuable contribution in dispersing suitably to all the needy. They act as a bridge between pharma companies and professionals. Representing the pharmaceutical company as a medical representative will help to launch new medical products in the market and also promote the products to potential buyers. They are also building valuable and fruitful relationships with doctors through online and offline modes. They deliver efficient and prompt customer service. They implement multiple strategies to raise awareness of the medical products of a particular company.

The various players involved in drug development and introduction, including the pharmaceutical industry, clinicians, advocacy groups and regulatory bodies, must work together to ensure patient access to quality care. While issues such as drug acquisition costs and marketing are often given a high profile, this may cloud perceptions of the industry's commitment to delivering effective new medicines to the patients and healthcare systems that need them.

Statement of problem:

The post of a Medical representative will always be in high demand. The growth prospects of this job profile are continuously enlarging, and they get promoted to a more significant position quickly. They help to enhance sales, and brand knowledge among the public, broaden market share, develop market share, build a relationship and convey product information. Before entering the market, they need to do some analysis like segment, market and competitor along with qualitative and quantitative research, scheduling and delivering the marketing mix. There is some particular skill they require which includes good social talent, understanding skill, communication skill, collaboration skill, time management skill, presentation skill, problem-solving skill, negotiation skill, customer service skill and follow-up skill, along with awareness of modern developments, flexibility and adjustable to challenges, keeping up with new advancements in the medical profession and taking necessary steps to assess their impact on the company's business strategies.

Due to the nature of the work of the medical representatives, occupational stress like work overload, time-bound pressure, a difficult task to attain, lack of breaks, lack of proper working conditions, conflicting work roles and challenging boundaries, long working hours etc were arise. The potential for job development is an essential buffer against everyday stress which causes due to under promotion, job insecurity and lack of training. Even some unpredictable consequences in socioeconomic status may direct to loss of control and which indirectly as a basis stress that too at high level.

2. Review Of Literature

Dominic Mutua, et al. (2023)[1] determined the occupational stress levels and contributing factors among nurses working in the operating theatres at Kenyatta National Hospital. The study found mixed findings on the association between individual factors and occupational stress. There was a difference in occupational stress between the gender, education and age groups. However, there exist no difference in occupational stress and marital status groups. There was no statistically significant relationship between individual internal factors and occupational

Stress. The study also recommends the adoption of measures to enhance staff retention. These measures can include access to appropriate social welfare facilities and performance evaluations leading to job enlargement, promotion opportunities and other forms of recognition.

Sabine sonnentag (2023)[2] analyzed health and well-being and predicted perceived work characteristics and behaviour at the workplace. The study highlighted the excellent topics in the technology-enabled connectivity to work, dynamism in health, micro-interventions and well-being. It included a cross-cultural and international outlook and addressed issues related to diversity and inclusion in organizations. This provided suggestions on how research can proceed in the future and pointed to practical implications that can improve employee health and well-being.

Shang Zhang (2023)[3] revealed that the mental health of construction employees working in the construction industry of mainland China is feeble. It also highlighted the basic understanding of the mental health stressors, coping strategies, and outcomes of construction employees in mainland China. The results of 336 respondents revealed that the stressors experienced could be categorized into

demanding work time requirements, threats at the workplace, poor reward, work-family conflict, poor work conditions, and poor social support. Problem-focused coping strategies were generally preferred to passive emotion-focused and maladaptive coping, which are strongly associated with poor mental health outcomes. They concluded that the prevalence rates of medium to highly severe levels of depression, anxiety, and stress were higher and resulting in poor mental health outcomes.

Ioannis Pantelis Adamopoulos (2022)[4] studied the positive and negative effects and their significant impact on occupational burnout measures scales and education in PHCS during the COVID-19 pandemic. It highlighted the impact of period COVID-19 pandemic on the PHCS association and correlations with occupational burnout. A review was conducted with the help of published papers perching criteria at Scopus, Science Direct, Web of Science, and Veritas & Elsevier Journals cached out the positive and negative effects. The researcher concluded that only a few papers are published based on the very contemporary title, and it was identified that only a few articles were classified as eligible according to the previously established criteria.

Nicolas Lopez (2022)[5] explored the firefighter's occupational stress critical factors along with the high-stress levels areas working in Kuwait. Their job is considered the most stressful since they are responding to emergencies with hazardous activities. The researcher used psychological contracts as an exploratory tool that guides potential factors in their lifestyle and work environment, expectations, etc. and identified which topics discussed are more significant as an occupational stressors for the firefighters. Witnessing and experiencing traumatic events during missions and fear of injuries are the top stressors among the firefighters in the region and that perception regarding the presence of stressors is inversely correlated with age.

Tin May Li et al. (2021)[6] investigated the adverse effect of work-related factors on mental health and whether the organizational strategies satisfy these effects or not. Through the questionnaire, details have been collected regarding pandemic-related work conditions among 1499 Taiwanese nurses working full time. Increased working hours, occupational stigma and redeployment were assessed based on the study. In logistic regression analysis, the study revealed that increased working hours and occupational stigma were associated with adverse mental health and intention to leave. The study concluded that the efforts to decrease stigma and organizational strategies, including being adopted to improve nurses' health during a pandemic.

Objectives of the study:

- To analyze the factors influencing occupational stress among medical representatives
- To investigate the effect of stress on medical representatives
- To suggest measures to overcome the drawbacks

3. Materials And Methods

The sampling method used for data collection from the medical representatives was convenience sampling. The well-structured questionnaire was used to collect the necessary information from the study's respondents. The questionnaire has been divided into two parts; part A consists of the demographic variable, and Part B consist of the occupational stress scale developed by Srivastav and Singh (1981). The scale consists of 12 factors having 46 items; each rated on a five-point scale. The questionnaire was pre-tested and then used. Both primary and secondary data have been used for the study. The statistical package used for the analysis is SPSS version 25, and the statistical tools used were descriptive and Anova.

Analysis and interpretations:

Table No: 1.1 Demographic factors of the respondents

Variable Name	CATEGORY	NUMBER OF RESPONDENTS	PERCENTAGE
Gender	Male	69	76.7
	Female	21	23.3
	TOTAL	90	100.00
Age	Less than 20 years	13	14.4
	21 – 30 years	35	38.9
	31 – 40 years	34	37.8
	Above 41 years	8	8.9
	TOTAL	90	100.00

Education	UG	42	46.7
	PG	14	15.6
	PROFESSIONAL COURSES	4	4.4
	DIPLOMA	30	33.3
	TOTAL	90	100.00
Marital Status	Married	47	52.2
	Unmarried	43	47.8
	TOTAL	90	100.00
Type Of Family	Nuclear family	54	60.0
	Joint family	36	40.0
	TOTAL	90	100.00
Members In Family	Less than 2	16	17.8
	2 – 4	29	32.2
	4 – 6	23	25.6
	More than 6	22	24.4
	TOTAL	90	100.00
Children	One	51	56.7
	Two	21	23.3
	Three	15	16.7
	Above three	3	3.3
	TOTAL		100.00
Monthly Income	Below 20000	33	36.7
	20001 – 30000	25	27.8
	30001 - 40000	14	15.6
	Above 40001	18	20.0
	TOTAL	90	100.00
Work Experience	Less than 2 years	27	30.0
	2 – 4 years	32	35.6
	4 – 6 years	20	22.2
	More than 6 years	11	12.2
	TOTAL	90	100.00
Work Timing	Less than 7 hours	25	27.8
	7 – 10 hours	27	30.0
	10 – 12 hours	22	24.4
	More than 12 hours	16	17.8
	TOTAL	90	100.00
Type Of Organization	Indian	41	45.6
	Multinational	49	54.4
	TOTAL	90	100.00

Source: Primary data collection

Interpretation:

The study population comprised 90 medical representatives working with various national and multinational companies in Chennai. Based on the demographic study of the medical representative, it is found that, out of 90 respondents, 77% were male, and the balance 23 % were female. 38.9% of medical representatives were in the age group of 21 – 30 years, followed by the age group of 31 – 40 (37.8%) and the age group lesser than 20 years (14.4 %). Only 8.9 % of the respondents were below the age group of 20. Based on the educational qualification of the respondent, the majority (46.7 %) of them have completed a bachelor's degree, and 33.3 % have completed a diploma. Only 4.4 % of the respondents have a professional qualification. Regarding the marital status of the respondents, 52.2% of them were married, and the balance, 47.8 % per cent were unmarried. Regarding the type of family, 60% of the respondents fell under the nuclear family, followed by 40% under the joint family.

With regards to the number of members in the family, nearly 32.2 % of the family size is in the group of 2-4 members, 25.6 % was in the size of 2-4 members, and 24.4 % were in a family size of more than six members. Nearly 56.7%of the respondents were with one child, 23.3% were with two children, followed by 16.7 % with three children. 36.7 % of the respondent's monthly income is less than 20000, followed by 27.8 % of the respondent's monthly payment between 200001 to 30000. 20% of the respondents earn more than 40001, and the balance, 15.6 %, make 30001 to 40000. 35.6 % of the respondents had work experience of 2-4 years, followed by 30% having

less than two years of work experience and 22.2 % having 4 to 6 years of experience. 12.2 % of the respondents have more than six years of work experience. Regarding the working hours of the respondents, nearly 30 % of the respondents work 7 to 10 hours per day, followed by 27.8 % who work less than 7 hours per day. Most respondents (54.4%) work for multinational companies, and 45.6% work for Indian companies.

Hypothesis:

Ho1: There is no significant difference between gender and the occupational stress factors among the respondents

Ho 2: There is no significant difference between the income level and the occupational stress factors among the respondents

Ho 3: There is no significant difference between the work experience and the occupational stress factors among the respondents

Table No 1.2 Anova – Gender and Occupational stress among the respondents

		Sum of Squares	df	Mean Square	F	Sig.	
Role overload	Between Groups	11.488	1	11.488	7.770	.007	Rejected
	Within Groups	130.112	88	1.479			
	Total	141.600	89				
Role ambiguity	Between Groups	.122	1	.122	.081	.776	Accepted
	Within Groups	131.478	88	1.494			
	Total	131.600	89				
Role conflict	Between Groups	6.336	1	6.336	4.297	.041	Rejected
	Within Groups	129.764	88	1.475			
	Total	136.100	89				
Unreasonable group and political pressure	Between Groups	13.728	1	13.728	11.372	.001	Rejected
	Within Groups	106.228	88	1.207			
	Total	119.956	89				
Responsibility for persons	Between Groups	3.683	1	3.683	3.476	.066	Accepted
	Within Groups	93.217	88	1.059			
	Total	96.900	89				
Under participation	Between Groups	6.632	1	6.632	5.391	.023	Rejected
	Within Groups	108.257	88	1.230			
	Total	114.889	89				
Powerlessness	Between Groups	9.245	1	9.245	12.882	.001	Rejected
	Within Groups	63.155	88	.718			
	Total	72.400	89				
Poor peer relations	Between Groups	7.838	1	7.838	6.644	.012	Rejected
	Within Groups	103.818	88	1.180			
	Total	111.656	89				
Intrinsic improvement	Between Groups	5.724	1	5.724	4.503	.037	Rejected
	Within Groups	111.876	88	1.271			
	Total	117.600	89				
Low status	Between Groups	.310	1	.310	.335	.564	Accepted
	Within Groups	81.346	88	.924			
	Total	81.656	89				

Strenuous working condition	Between Groups	4.143	1	4.143	2.942	.090	Accepted
	Within Groups	123.913	88	1.408			
	Total	128.056	89				
Unprofitability	Between Groups	.216	1	.216	.182	.670	Accepted
	Within Groups	104.406	88	1.186			
	Total	104.622	89				

Source: Primary source of data collection

Interpretation:
From the above Table 1.2, the researcher infers that there exists a significant difference between Occupational stress factors with relation to the gender of the respondents. From the table it is found that there is no significant relationship between the study variable like Role ambiguity (F=.081, P=.776), responsibility for persons (F=3.476, P=.066) low status (F=.335, P=.564) , strenuous working conditions (F=2.942, P=.090) and unprofitability (F=.182, P=.670) and the gender of the respondents. With reference to the rest of the factors like Role overload, Role conflict, Unreasonable group and political pressure, Under participation, Powerlessness, Poor peer relations and Intrinsic improvement are statistically significant.

Table No 1.3 Anova – Income level and Occupational stress among the respondents

		Sum of Squares	df	Mean Square	F	Sig.	Conclusion
Role overload	Between Groups	4.931	3	1.644	1.034	.382	Accepted
	Within Groups	136.669	86	1.589			
	Total	141.600	89				
Role ambiguity	Between Groups	7.600	3	2.533	1.757	.161	Accepted
	Within Groups	124.000	86	1.442			
	Total	131.600	89				
Role conflict	Between Groups	15.550	3	5.183	3.698	.015	Rejected
	Within Groups	120.550	86	1.402			
	Total	136.100	89				
Unreasonable group and political pressure	Between Groups	.906	3	.302	.218	.884	Accepted
	Within Groups	119.050	86	1.384			
	Total	119.956	89				
Responsibility for persons	Between Groups	8.629	3	2.876	2.802	.045	Rejected
	Within Groups	88.271	86	1.026			
	Total	96.900	89				
Under participation	Between Groups	1.689	3	.563	.428	.734	Accepted
	Within Groups	113.200	86	1.316			
	Total	114.889	89				
Powerlessness	Between Groups	1.493	3	.498	.604	.614	Accepted
	Within Groups	70.907	86	.825			
	Total	72.400	89				
Poor peer relations	Between Groups	14.927	3	4.976	4.424	.006	Rejected
	Within Groups	96.729	86	1.125			
	Total	111.656	89				
Intrinsic improvement	Between Groups	11.352	3	3.784	3.063	.032	Rejected
	Within Groups	106.248	86	1.235			
	Total	117.600	89				
Low status	Between Groups	7.965	3	2.655	3.099	.031	Rejected
	Within Groups	73.690	86	.857			
	Total	81.656	89				
Strenuous working	Between Groups	12.613	3	4.204	3.132	.030	Rejected
	Within Groups	115.443	86	1.342			

condition	Total	128.056	89				
Unprofitability	Between Groups	2.184	3	.728	.611	.610	Accepted
	Within Groups	102.438	86	1.191			
	Total	104.622	89				

Source: Primary source of data collection

Interpretation:

From the above Table 1.3, the researcher infers that there exists a significant difference between Occupational stress factors with relation to the income level of the respondents. From the table it is found that there is significant relationship between the study variable like Role conflict (F=3.698, P=.015), Responsibility for persons (F=2.802, P=.045) Poor peer relations (F=4.424, P=.006), Intrinsic improvement (F=3.063, P=.032), Low status (F=3.099, P=.031) and Strenuous working condition (F=3.132, P=.030) and income level of the respondent.

Table No 1.4 Anova – Work experience and Occupational stress among the respondents

		Sum of Squares	df	Mean Square	F	Sig.	Conclusion
Role overload	Between Groups	10.358	3	3.453	4.165	.008	Rejected
	Within Groups	71.297	86	.829			
	Total	81.656	89				
Role ambiguity	Between Groups	7.924	3	2.641	1.837	.147	Accepted
	Within Groups	123.676	86	1.438			
	Total	131.600	89				
Role conflict	Between Groups	8.246	3	2.749	1.849	.144	Accepted
	Within Groups	127.854	86	1.487			
	Total	136.100	89				
Unreasonable group and political pressure	Between Groups	.022	3	.007	.005	.999	Accepted
	Within Groups	119.934	86	1.395			
	Total	119.956	89				
Responsibility for persons	Between Groups	6.416	3	2.139	2.033	.115	Accepted
	Within Groups	90.484	86	1.052			
	Total	96.900	89				
Under participation	Between Groups	4.300	3	1.433	1.115	.348	Accepted
	Within Groups	110.589	86	1.286			
	Total	114.889	89				
Powerlessness	Between Groups	2.635	3	.878	1.083	.361	Accepted
	Within Groups	69.765	86	.811			
	Total	72.400	89				
Poor peer relations	Between Groups	23.270	3	7.757	7.547	.000	Rejected
	Within Groups	88.386	86	1.028			
	Total	111.656	89				
Intrinsic improvement	Between Groups	16.841	3	5.614	4.791	.004	Rejected
	Within Groups	100.759	86	1.172			
	Total	117.600	89				
Low status	Between Groups	8.248	3	2.749	3.221	.027	Rejected
	Within Groups	73.408	86	.854			
	Total	81.656	89				
Strenuous working condition	Between Groups	6.662	3	2.221	1.573	.202	Accepted
	Within Groups	121.394	86	1.412			
	Total	128.056	89				
Unprofitability	Between Groups	1.768	3	.589	.493	.688	Accepted
	Within Groups	102.854	86	1.196			
	Total	104.622	89				

Source: Primary source of data collection

Interpretation:

From the above Table 1.3, the researcher infers that there exists a significant difference between Occupational stress factors with relation to the work experience of the respondents. From the table it is found that there is a significant relationship

between the study variable like Role overload (F=4.165, P=.008), Poor peer relations (F=7.547, P=.000) Intrinsic improvement (F=4.791, P=.004) and Low status (F=3.221, P=.027)

4. Suggestions And Conclusion

Medical representatives hold utmost importance concerning the companies and act as an intermediary between pharma companies and professionals. Medical representatives will sell and promote medical products such as medical equipment, solutions, prescription medicines, and drugs manufactured by different healthcare facilities. They make sure that a medical facility has the appropriate medical supplies to work and provide for its patients. The study revealed that the medical representatives in Chennai had experienced occupational stress due to the nature of the work. Gender, income level, work experience, and qualification-related demographic variables were significantly associated with the occupational stress factors. Based on the study, supportive recommendations have been identified. Measures should be taken to eliminate or minimize stress by guaranteeing job security, job satisfaction and a pleasant working environment. The companies should employ the representatives based on the individual's qualifications, skills and potentials. The precise training and direct staff support program will give some added value and helps to reduce stress. Most often, the issues identified by the representatives need to be addressed in time, and proper guidance to be provided. Better understanding and cooperation among the representatives, organizations and customers is needed in order to avoid confusion which is the main reason for occupational stress. Flexi timing and flexible working conditions are to be given to protect the mental health and well-being of the medical representatives.

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