

# Research in Pharmacy and Health Sciences

## Research Article

### A Cross-sectional Study on the Level of Perceived Stress and Self-reported Morbidity among Call Handlers Working in Call Centers in Gurgaon, India

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#### ABSTRACT

**Objective:** To study prevalence of self reported mental health problems among call center employees and to determine the risk factors associated with them.

**Setting and Design:**

**Study design:** Descriptive cross sectional study

**Study period:** 3months (September – November 2014)

**Sampling technique:** Purposive sampling method. Material and methods: 200 Call centre employee working in a call centre of Gurgaon. Statistical measures: Percentage, proportions, Chi-square test **Results:** Among all 200 call centre employees, 140(70%) were suffering from mental health problems. Anxiety 178(89%) was most common mental health problem. There was significant difference in prevalence of mental illness in relation to age, gender, education, religion, sleep pattern and family history of illness of call centre employee. **Conclusion:** About two third of all the call centre employees are suffering from mental health problems. Long term measures are required to maintain sound mental health of call centre employee.

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#### INTRODUCTION:

Call centers have become an important customer access channel as well as an important source of customer-related information. Frequently, call center employees experience role stress as a result of the conflicting demands of the company, supervisors, and customers.<sup>1, 2</sup>

BPO (Business Process Outsourcing) has been the latest mantra in India today. For many employed in the call center sector, “the daily experience is of repetitive, intensive and stressful work, which frequently results in employee “burnout”. Call centers are established to create an environment in which work can be standardized to create relatively uniform and repetitious activities so as to achieve economies of scale and consistent quality of customer service. This weakens employee autonomy and enhances the potential for management control. Loss of control is generally understood to be an important indicator of work related stress. Besides, the stress, the working hours of call centers may cause sleep disturbances and disturbances in biological rhythm. Physical health also may adversely affects because of irregular and sedentary working hours and unhealthy lifestyles. Job pressure at call centers also may adversely affect social health. Though India with China is in the forefront of ITES

industry, occupational health research in this new industry is lagging.<sup>3</sup>

The Call Center community often defines itself as an industry, with numerous national and international call centers. But there has some dispute amongst researchers as to whether it is appropriate to refer such thing as the “call center industry”. Bain and Taylor (1999) argue that it is more appropriate to use the term “sector” as call centers are found across a wide range of industries and may be similar primarily in terms of their core technologies. Belt, Richardson and Webster (2000) agreed that call centers are not an “industry” as the term generally defined, but rather represent certain ways of delivering various services using the telephone and computer technologies across traditional industry boundaries.<sup>4</sup>

Significant advantages associated with call centers are defined by an increased opportunity to deliver, maintain, capture and recapture customer satisfaction. But call centers can also be viewed as a nexus of customer information that can be translated into marketing strategy and product/service development. The growth of call centers has been fueled by the affordability of sophisticated communications and computer technology (Holland &

Hunt, 1997) coupled with a synergistic increase in a strategic focus on the consumer across a broad spectrum of businesses.<sup>2</sup>

The basic reasons by which employees getting stress in their routine life is non-stop mobile calling, duty to make interaction with customer and complete the target within the time, threat of intensity; make the employees stressful and depressed. Dollard, Dormann, Boyd, and Wine field (2003) assessed two unique stressors associated with the human service work i.e. emotional dissonance, the need to hide negative emotions and client related social stressors. The latter may involved disproportionate customer expectations and verbally aggressive customers. These stressors affect all human service workers, even though they may vary in the extent to which their work involves lasting relationships with customers.<sup>3</sup>

A common stereotype regarding call centre work is that managing phone-based customer interactions all the day is neither complicated nor demanding as most interactions are basic, simple, and scripted. This stereotype, however, is not corroborated by recent research. On the contrary, the majority of previous studies have shown (for a review, see Holman, 2003) that the work of call centre agents is very demanding with respect to various aspects. In order to do the job correctly, call centre agents have to perform several attention-consuming, simultaneous subtasks such as controlling the call via the deployment of sophisticated listening and questioning skills, operating a keyboard to input data into computers, reading often detailed information from a visual display unit, and speaking to customers. Furthermore, as many customers are subjected to long waiting times their satisfaction is negatively affected and thus these tasks are often conducted under high time pressure. Moreover, phone calls with customers are usually short (e.g., 2/5 minutes) and therefore, a call centre agent often communicates with many different customers each day; sometimes with about 100 customers during a typical 8 hour shift. Continuously keeping track of to whom you are speaking and the frequent readjustment to new customers is a further, non-trivial attention requirement. More significantly, call centre agents are usually instructed to be friendly, enthusiastic, polite, and helpful to customers even if customers are rude (which is not a rare event, see Grandey, Dickter, & Sin, 2004; Totterdell & Holman, 2003) and this induces further demands with respect to the volitional presentation of emotions in opposition to those being actually felt, which is referred to as emotional dissonance (e.g., Lewig & Dollard, 2003). As many call centres use monitoring procedures such as test calls and recording of calls (Holman, 2002; Holman, Chissick, & Totterdell, 2002), violations of this norm will be easily detected. Recent research shows that the control of one's own emotions (e.g., by suppression, hiding, or overplaying emotions) can have serious consequences. This form of emotion regulation consumes volitional energies (Baumeister, Bratslavsky, Muraven, & Tice, 1998) and often leads to the development of emotional exhaustion, a component of the burnout syndrome (for reviews of burnout and emotional labor at work see Dormann & Zapf, 2004; Grandey, 2000; Payne & Cooper, 2001; Salovey, Detweiler, Steward, & Bedell, 2001; Schaufeli & Buunk, 2003; Zapf, 2002). Thus, demands for emotion regulation at work can affect health

negatively, especially if Work motivation, identification, and well-being in call centre work 61 intensive negative emotions are aroused or suppressed, and this was also found in call centre work (Grandey et al., 2004; Isic, Dormann, & Zapf, 1999; Lewig & Dollard, 2003; Schaubroeck & Jones, 2000; Totterdell & Holman, 2003; Wegge, van Dick, & Wecking, 2006; Zapf, Isic, Bechtoldt, & Blau, 2003).<sup>5-8</sup>

The possibility of stress having no effect on performance has little, if any, support. Rabinowitz and Stump (1987) suggested that there is a positive relationship between stress and performance. While literature provides stronger evidence for the negative relationship, one final possibility was discussed by Sullivan and Baghat (1992). Given evidence of two diverse outcomes (one suggesting a positive relationship and the other suggesting a negative relationship), one may conclude that the actual relationship is that of an "inverted-U." The inverted-U view of stress and performance contends that the absence of stress creates no motivation to perform.<sup>8</sup>

## Materials and Methods

The primary service providers in Information technology (IT) industry are grouped into: IT software industry, IT enabled service, Internet and e-commerce. There are approximately 916 IT providers registered with National Association of Software and Service Companies (NASSCOM) all over India, of which 202 IT providers are registered in National Capital Region (NCR).

The study design was descriptive cross sectional and the sampling method used was purposive sampling method. The IT professionals working in different sectors were identified and a representative sample was taken to complete the sample size. The study period was from September to November 2014.

The inclusion criteria for subjects to be considered for the study were, firstly the subject should be working in the current job for past six months. Secondly, he/she should be working on the computer for at least 3 hours/day or 15 hours/week. From each group subjects were taken randomly. The investigator took prior permission from respective organizations for doing the study. Days and time were fixed as per the convenience of workers and investigator. The investigator could visit the groups twice a week and interviewed the individuals working in the company. The investigator went about each group for a period of approximately three months to interview as many professionals as possible.

## Data Analysis

Data were analysed by using SPSS version 20. Descriptive analyses were employed to express the data as frequencies and percentages. Kolmogorov-Smirnov and Shapiro-Wilks tests were carried out to test the normality of the data. Inferential statistics (Mann-Whitney and Kruskal-Wallis tests) were applied to detect the differences in median scores in view of non-normal distribution of the data. Bonferroni adjustment was used to investigate the significance among intergroup variables. A p-value of less than 0.05 was considered as statistically significant.

## Results and Discussion

Among all 200 call centre employees, 140(70%) were suffering from mental health problems. Anxiety 178(89%) was most common mental health problem. There was significant difference in prevalence of mental illness in relation to age, gender, education, religion, sleep pattern and family history of call centre employee.

The reason of joining the call centre was to earn money among 43% of the employees included in the study, 32%

joined because of a good working environment and a mere 19% joined because of the attractive lifestyle offered in the call centres/BPOs.

Anxiety was the most commonly encountered mental health problem affecting almost 90% of the call centre employees, while depression and stress affected 5% each of the remainder of the employees.

Diabetes mellitus and HTN were seen in 15% and 11% respectively of the call centre employee's family. A family history of psychiatric illness constituted only 1%.

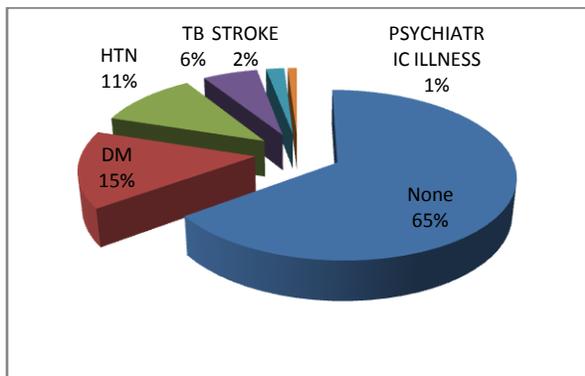


Fig 1: Distribution of study subjects in accordance with family history

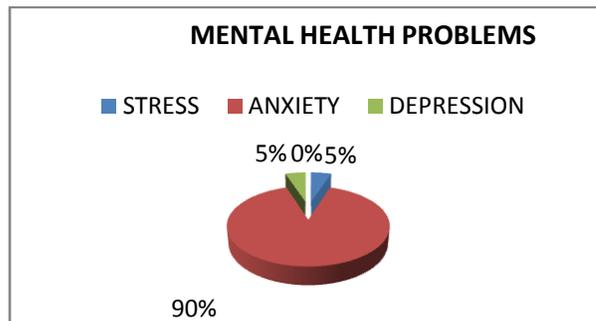


Fig. 2: Distribution of study subjects in accordance with mental health problems

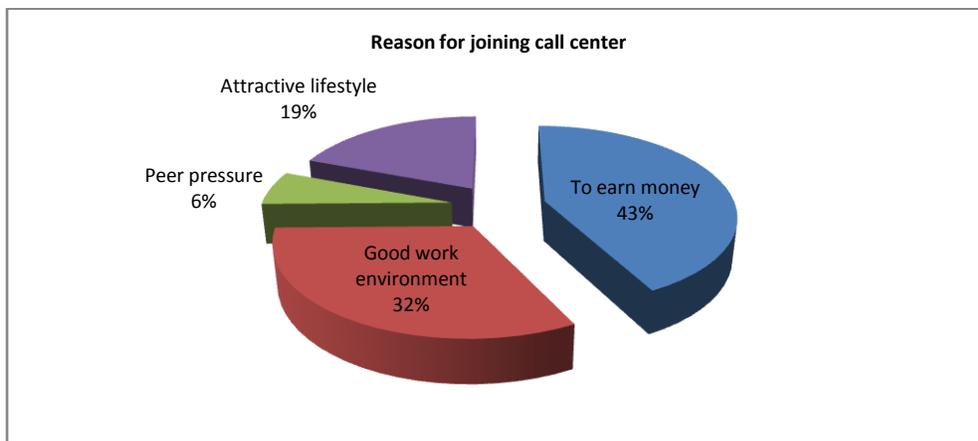


Fig. 3: Distribution of study subjects according to reason for joining call center

Table No-1- Distribution on the basis of presence and absence of Mental problem

S. No	Variable	Mental problem	No Mental Problem	Chi square	P value	
1	Gender	Male	94 (63.51%)	54 (36.49%)	11.4	0.0007
		Female	46 (88.46%)	6 (11.54%)		
2	Age	<30 years	134 (72.04%)	52 (27.96%)	5.281	0.0216
		> 30 years	6 (42.85%)	8 (57.15%)		
3	Marital status	Married	28 (73.68%)	10 (26.32%)	0.3032	0.5819
		Unmarried	112 (69.14%)	50 (30.86%)		
4	Residence	Urban	128 (71.11%)	52 (28.89%)	1.058	0.3036
		Rural	12 (60%)	8 (40%)		
5	Education	< graduation	34 (85%)	6 (15%)	5.357	0.0206
		> Graduation	106 (66.25%)	54 (33.75%)		
6	Religion	Hindu	102 (65.38%)	54 (34.62%)	7.208	0.0272
		Muslims	14 (87.5%)	2 (33.5%)		
		Others	24 (85.71%)	4 (14.28%)		

S. No	Variable	Mental problem	No Mental Problem	Chi square	P value	
7.	Days absent due to illness	<10	112 (66.67%)	56 (33.33%)	0.0000	1
		>10	28 (87.5%)	14 (12.5%)		
8.	Job duration	< 2 years	74 (75.54%)	28 (27.45%)	0.644	0.4222
		> 2 years	66 (67.34%)	32 (32.65%)		
9.	Working hours	< 8 hours	2 (50%)	2 (50%)	0.1093	0.7409
		> 8 hours	138 (70.41%)	58 (29.59%)		
10.	Monthly income	<25000	94 (72.31%)	36 (27.69%)	0.9419	0.3318
		>25000	46 (65.71%)	24 (34.28%)		

Females were more affected than males with 88.46% in comparison to 63.51% males affected with some or the other kind of mental disorder.<sup>9-12</sup> The followings are the findings among the employees with Mental Health Problems- One-hundred twelve employees were absent for 10 days or less within the year of study. Ninety-four employees earned less than 25,000 INR as their monthly salary and Seventy-four were employed for less than 2

years, whereas employees with mental health problems working for more than 2 years in the same company were only sixty-six.

There is an immediate need for the concerned authorities to collaborate and enforce suitable preventive measures.<sup>13, 14</sup>The relevant and necessary knowledge about the ergonomic needs of these problems require probing. To create public awareness about this emerging public health

importance, the author had written an article titled, "Coal mines of the 21st Century" in a leading medical newspaper in Delhi- Drug Today Medical Times.

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