

## **Occupational health problems of knowledge workers in BPO and KPO industries in Bangalore city**

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**ABSTRACT :** *The explore this study focus on India is a developing country is playing a distinctive role in the service sector. With the onslaught of globalization India has become a preferred destination for IT-BPO and KPO industries. The growth of science and technology and well established educational and research institutes Bangalore has been considered as the hotspot global outsourcing industries. The large populations of well-educated and trained women have taken to the jobs in this new knowledge economy. The objective of the study is to explore and find out the problems of these young people knowledge workers especially the work environment and work pressure on their mental, physical and social health. The study's findings illustrate that there are sever health hazards that need immediate attention from individuals as well as government to not only identify the problems but to come out with good health education and policy.*

**Keywords:** *knowledge workers, Business process outsourcing (BPO), knowledge process outsourcing (KPO), Health hazards, occupational disease*

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### **I. INTRODUCTION**

The knowledge worker includes those in the information technology fields, such as programmers, systems analysts, technical writers, academic professionals, researchers, and so forth. The term is also frequently used to include people outside of information technology, such as lawyers, teachers, scientists of all kinds, and also students of all kinds. Growth of knowledge workers: Globalization has played a major role in export led growth, leading to the enlargement of the job market in India. The factors that contributed to globalization are technological advancement in communication, transport and education. The major force of globalization is the growth of outsourcing IT, BPO and KPO services and increase in skilled professionals. The factors affecting the development of technology generally in India and particularly Bangalore included government institutions, policies after 1991, infrastructure, educational institutions, a large number of scientists and engineers. Bangalore emerged as 'Silicon Plateau' that demonstrated tacit knowledge. Bangalore with innovative techniques and educated, skilled and trained people attracted and facilitated many IT, MNCs, BPOs and KPOs. A large section of graduates and engineers took up jobs in these outsourcing companies. These IT-BPO and KPO industries have been gender neutral providing equal opportunities not only for men and women and even transgender. The companies by adopting best practices in the area of HR to promote the growth have increased the employment opportunities for women. Studies have shown that India has more number of working women than any other country in the world. National Association of Software and Service Companies (2009) stated that 30% of the total work force in IT industries is women professionals.

### **II. LITERATURE REVIEW**

The studies have revealed that huge percentages of workers in knowledge based industries have been facing health problems. Due to long working hours, night shifts, work pressure that is directly producing sever impact on the physical mental and social health. The following studies give us the insight into the problem.

**National Institute of Neuro sciences (NIMHANS), Bangalore** conducted a study in collaboration with Bangalore city police and 12 major hospitals. The study identifies severe stress, competition at the work place and lack of economic security and job satisfaction as the major cause of suicide. Over 200 people including IT professional commit suicide every month in Bangalore city.

**Dipannita (2008)** cited in an article that more and more youngsters especially computer Professionals are prone to disc prolapsed. Bangalore, youngsters are coming up with this complaint due to spine unfriendly habits, leading to disc prolapsed. Orthopedics in the city sees an alarming rise in such cases among youngsters. Most of them come with health problems such as severe back pain. Sitting for prolonged hours at the work place leaves one with more chances of disc prolapsed.

**Reena Patel (2010)** the author in her book “Working the Night Shift”-Women in India’s Call Center Industry, has made an in depth study of women working in nightshifts at call center industry. It reveals how the call centers workers face problems related to work and life and explores the beliefs about women’s work in response to globalization.

**Sharma et al, (2006)**“Computer related health problems among information technology professionals in Delhi”. In this Study they collected data from employers of five knowledge process outsourcing companies (KPO) in India regarding hygiene factors and motivators to explore the application of motivation on hygiene model in the KPO centers. The sample consisted of junior to middle level of management. 50 employees were approached online from each KPO. The study revealed that employers in KPO are satisfied with salary, perks, work culture, interpersonal relations which are hygiene factors. The dissatisfaction is environment centered e.g. long working hours, high volume of work, company policies of recruitment despite incentives being provided attrition rate in about 18-19% in some companies.

#### **OBJECTIVES OF THE STUDY**

- To study and identify the key factors at the workplace which trigger health problems of young people knowledge workers.
- To study the Health Problems of Knowledge Workers in BPO and KPO Industries.

#### **METHODOLOGY**

The research involved both primary and secondary data. For the present study primary data was collected with structured questionnaire based on random sampling method data were gathered through 300 copies of questionnaires were administered to the conducted in selected the questionnaires covered status and occupational health, mental, physical and others problems. Setting of the study conducted in selected BPO and KPO industries in Bangalore city.

#### **LIMITATIONS**

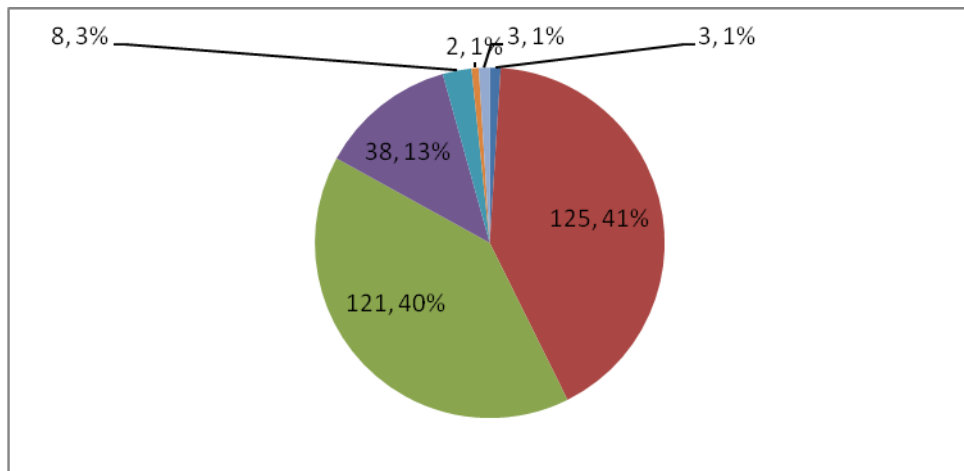
The research has been conducted in Bangalore city among the randomly selected respondents in the city based BPO and KPO industries.

### **III. RESULTS AND DISCUSSION CONCLUSIONS**

Age is an important independent variable which is said to determine the way in which people perceive and define the situation in which they participate and organize and reorganize their day to day activities including their job. Age also determines the risk taking capacity vis-a-vis number of challenges that people encounters in their struggle for living and protect and promote in their livelihoods. Age also plays an important role because among other things it influences the behaviour that take place around performing one’s task at work situation. Productivity in terms of output depends upon and determined by age composition of the work force. Employers faced with the stiff competition and to ensure better quality of service they prefer young workers to old workers and even middle age workers. BPO and KPO units attract a large number of young, educated and energetic people.

**Table-1.1 Age composition of the sample**

<b>Age composition</b>	<b>Frequency</b>	<b>Percent</b>
Below 20	3	1.0
21 – 25	125	41.7
26 – 30	121	40.3
31 – 35	38	12.7
35 – 40	8	2.7
41 – 45	2	.7
45 & above	3	1.0
<b>Total</b>	<b>300</b>	<b>100.0</b>

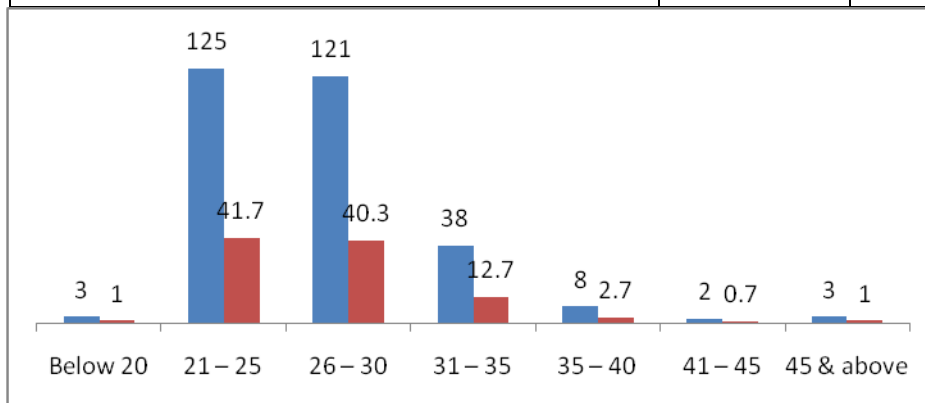


It can be found from table 4.2 in the sample of the study nearly 81% of the sample are in the age group of 21-30 years followed by little more than 12% of sample in the age group of 31-35 years. With the increasing in age the number of workers reduces and visa-versa. This shows among other things that BPO and KPO industries are predominately dominated by young people. This has certain implications not only for the structure, stability, productivity and continuity of labour but also for industrial relations that came to prevail in BPO and KPO industries.

**The work place:** Work environment and work experience are said to be the important factors that influence the workers commitment to work physically and mentally. In the knowledge based economy the talent, creativity usage of skills, high degree of professionalism and innovative practices and tacit knowledge is considered to be vital. More over the IT BPO and KPO industries face tough competitions, uncertainty, unpredictability and new challenges which require knowledge workers to deliver high quality complex work. That means the workers have to adhere to strict timelines working according to client time zone, as a result the workers may experience repetitive, intensive stressful work. The computer work has generated a new form of occupational health hazards. The computer related problems is leading to modern occupational and life style diseases.

**Table-1.2 the nature of health problems**

The nature of health problems	Frequency	Percent
Physical ailments (Headache, Back pain, Fever, Throat infection)	89	29.7
Psycho-somatic disorder (Stress, depression, fatigue)	13	4.3
Sleep disorder	16	5.3
None	182	60.7
<b>Total</b>	<b>300</b>	<b>100.0</b>



The study therefore focuses on understanding problems that affect the mental, physical and social health problems of knowledge workers in BPO and KPO Industries. Age, Sex, Education and marital status as pointed in knowledge worker belong to age group between 21-25 and majority graduates married.

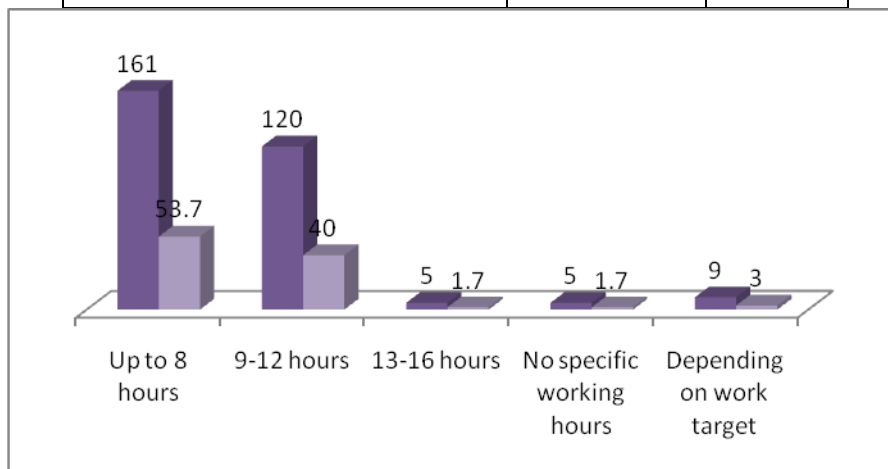
**Physical health problems.** These were mostly in form of musculoskeletal disorders, digestive disorders, and eye, voice and hearing problems. The sedentary lifestyle also causes overweight/obesity. The burn out stress syndrome (BOSS) is commonly observed among young people working in BPO and KPOs. The symptoms of this syndrome include chronic fatigue, insomnia and complete alteration of the 24 hour biological rhythm of the body, leading to sickness, absenteeism and high attrition rate.

**Digestive problems:** per cent (80%) reported digestive disturbances. Others reported various digestive disturbances such as hyperacidity, bloating, flatulence and constipation. The respondents were also involved in conversation that helped the researcher to find other common problems like eye problem (dryness), headache due to eye strain was also common, varying degrees of throat problems affecting their voice such as hoarseness, irritating cough, inability to modulate voice and breathing difficulties, hearing problems and obesity.

**Psychosocial problems:** The various psycho-social problems were in the form of disruptive family relations, poor recreation opportunity, eating habits. Very bad family relations were reported by only 5 (16.66%) of women knowledge workers in BPO and KPO. 15 (50%) reported average domestic bliss, while 10 (33.33%) had very good family support. 19 (63.33%) respondents reported that their off days and holidays did not coincide with that of spouse and other family members adversely affecting quality of family life. To cope with these problems different workers preferred different ways to relax and rest. They reported various hobbies such as gardening, music, books, shopping, and yoga as the way out to relax and de-stressing. Some reported having unhealthy eating habits in form of fast and junk foods.

**Table-1.3 working hours**

working hours	Frequency	Percent
Up to 8 hours	161	53.7
9-12 hours	120	40.0
13-16 hours	5	1.7
No specific working hours	5	1.7
Depending on work target	9	3.0
<b>Total</b>	<b>300</b>	<b>100.0</b>



The knowledge workers are expected to work according to the time schedule of foreign outsourcing countries. Therefore the work hours which knowledge workers are expected to work varies. Work hours have become rather flexible, work from home, work during night etc. have been followed depending upon situations. It can be found from the table-1.3 that 40.0 % of the sample reported to work from 9-12 hours per shifts. 53.7% reported to work from 13-16 hours and 1.7% of the sample reported no fixed hours. 3% reported the number of the work hours they work depend upon and determined by the work load. This shows that more than 53 % of the sample work for more than 10 hours. For the extra hours when there is more than 8 hours of work they get

attractive benefits like special identity, perks and incentives, they also get an extra benefits of getting gift vouchers and additional points that gets accumulated for their promotion and increment in salary. It can be observed that workers are generally exposed to work associated work pressure.

#### **IV. CONCLUSION**

The present studies on explore the problems that these workers face are fairly well known what is not however clearly known or properly understood are the problems of knowledge workers. Baring some sketchy reports in the media. This paper concludes that knowledge workers have become increasingly proven to a wide range of psycho-somatic diseases and disorders. If properly not attended these problems lead to de-generative disorders affecting the vital organs of human body like heart, liver, kidney, brain so on and so forth. It is time that the government which receives lot of revenue from these BPO and KPO sectors comes out with strong solid health policy and policies relating to industrial relations in these sectors. The policies must include periodic health examination and early diagnosis and very importantly health education about preventive and control of life-style disorders that mainly comes from workplace due to unhealthy habits.

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