e-ISSN: 2590-3241, p-ISSN: 2590-325X

Original Research Article

Health profile of bank employees of Ahmedabad city Yash Shah^{1*}, Sudip Bhavsar², Geeta Kedia³

Assistant Professor, Community Medicine Department, Dr. M. K. Shah Medical College, Ahmedabad, India
Assistant Professor, Community Medicine Department, Dr. M. K. Shah Medical College, Ahmedabad, India
Frofessor & Head, Community Medicine Department, B.J. Medical College, Ahmedabad, India
Received: 13-02-2021/ Revised: 12-03-2021 / Accepted: 13-04-2021

Abstract

Background: Banking services has become one of the highly competitive sectors in India. Many studies have found that sedentary lifestyle and mental stress have adverse health outcomes. The job of bank employees is both sedentary in nature and accompanies high levels of mental stress. With this background, the present study was conducted among bank employees in Ahmedabad city. Objectives: (1) To study the socio-demographic profile & health profile of bank employees in Ahmedabad city (2) To know the job related stress & to find out various risk factors in bank employees. Materials & Methods: A cross sectional study was carried out among 360 government & 240 private bank employees of Ahmedabad city. Information was collected using predesigned and pretested questionnaire. Clinical examination (including anthropometric measurements & blood pressure measurements) was carried out of all employees. Statistical analysis was done using MS Excel V. 2010 and Epi info software 7.0. The chi- square test was applied as non-parametric test of statistical significance. Results: Prevalence of musculoskeletal and gastrointestinal problems were found slightly higher in private bank employees (55.42% & 32.88% respectively) than government bank employees (50.28% & 30.28% respectively), while ocular problems were found higher in government bank employees. Overall prevalence of hypertension & diabetes was found 25.67% & 13.17% respectively.29.17% employees were partially satisfied with their job while 63.67% employees were fully satisfied, but still more than half (51.17%) employees were experiencing job stress. Conclusion: Prevalence of various health problems was found high among bank employees. There is need for strengthening adoption of certain interventional measures among this vulnerable group.

Keywords: Bank employees, Prevalence, Hypertension, Risk factors

This is an Open Access article that uses a fund-ing model which does not charge readers or their institutions for access and distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0) and the Budapest Open Access Initiative (http://www.budapestopenaccessinitiative.org/read), which permit unrestricted use, distribution, and reproduction in any medium, provided original work is properly credited.

Introduction

Commercial banks including the nationalized and non-nationalized banks provide banking services to the people in the country. For quite a long period of time nationalized banks in India enjoyed monopoly in the distribution of financial services. The nonnationalized banks provided supportive service in the sector. In the post globalization era, the growing competition among banks made them become much customer centered. In the provision of customer oriented services the employees working in the banks have a formidable role. Excellent services provided and offered by employees can create a positive perception and ever lasting image in the eyes of bank's customers. Success of any organization depends mainly on the human resources of that organization. Banks are no exception to this. The employees of the bank are valuable assets to the organization. One way to build competitive advantage for any organization is to improve the health status and well-being of employees. Employee's health status directly influences employee's work behavior, work attendance and on-the-job performance.

A person spends nearly more than 8 hours a day in the working place till the retirement. Banks are the industries where employees are subjected to various physical demands and prolonged sitting postures which may lead to various health problems. Sedentary lifestyle of the bank employees is responsible for many of the diseases mainly the non-communicable diseases. Increasing competition among bank sector leads to more and more mental stress among the employees,

*Correspondence

Dr. Yash Shah

Assistant Professor, Community Medicine Department, Dr. M. K. Shah Medical College, Ahmedabad,India

E-mail: dryash2607@gmail.com

which is again responsible for various health problems. Ahmedabad is the largest city in the state of Gujarat. It is the financial capital of Gujarat state. It is also the fastest growing city in Gujarat. More and more new banks and their branches have been opened in city since last decade. With the above background, the present study was carried out to assess the health status of bank employees of Ahmedabad city and to find out related risk factors, so that appropriate preventive measures can be recommended for improving their health. This will ultimately augment the productivity of banking sector.

Aims & Objectives

- To study the socio-demographic profile & health profile of bank employees in Ahmedabad city.
- To know the job related stress, to find out various risk factors in bank employees.

Materials & Methods

The present study of cross sectional nature was conducted at government & private banks in Ahmedabad city. In pilot study, the prevalence of any health problem among bank employees was found approximately 76%. Considering this prevalence, sample size was calculated with the help of formula Sample size $n = 4pq/L^2$ and allowable error was taken as 5%. Calculated sample size was 506 but for the convenience, the sample size was decided to be 600. List of government and private banks in Ahmedabad city was obtained from Reserve Bank of India. Ratio of government and private banks in Ahmedabad city is approximately 60:40. So out of the total calculated sample size, 60% of the bank employees were decided to be taken from government banks and rest from the private banks. Thus 360 government bank employees and 240 private bank employees were decided to include in the study.

Inclusion & Exclusion criteria

Shah et al www.ijhcr.com

e-ISSN: 2590-3241, p-ISSN: 2590-325X

The employees who were present in banks at the time of visit and those who gave verbal consent for involving in the study were included. Those employees who were working in the bank for less than 1 year were excluded from the study

Data Collection

List of the branches of both government and private banks were obtained from the internet. Branches from the list were randomly selected. All the employees including officers, clerks & sub-staff of the selected bank branches were included in the study. This process was continued till the sample size was met both for government & private bank employees. Before collecting the data prior permission of managers of respective bank branches was taken. All the selected bank branches were visited with prior appointment. Verbal consent of each employee was taken. A predesigned and pretested questionnaire was used for data collection. Information was collected regarding the socio-demographic profile, physical health profile, job related stress, what kind of problems faced by the bank employees etc. All of the participants were clinically examined. Their height, weight and blood pressure were measured and findings were recorded in the proforma.

Measurement Techniques:

- For measuring height, the subject was made to standerect looking straight on a level surface with heelstogether and toes apart without shoes. Height was recorded to the nearest 0.5 cm.
- For measuring weight, the subject was asked to stand upright on the weighing scale bare footed and weight was recorded to the nearest 0.5 kg.
- Body mass index (BMI) was calculated by [weight in kg / (height in meter)²] formula
- Blood pressure was measured using OMRON digital equipment in sitting position. Two readings were taken at an interval of 5 minutes, and the average value of the measurements was used for the analysis. JNC 7 was used for classification.

Data analysis:

Data entry was done in Microsoft Excel and Data were analyzed using Epi Info software. Mean values of height, weight, BMI and blood pressure were determined.

Results

Table 1: Socio-demographic profile of study population

		Government employees No.(%)	Private employees No.(%)	Total No.(%)
Age	20-39	233(64.72)	191(79.59)	424(70.67)
	≥40	127(35.28)	49(20.41)	176(29.33)
Sex	Male	289(80.28)	182(75.83)	471(78.5)
Sex	Female	71(19.72)	58(24.17)	129(21.5)
	≤ Secondary	89(24.72)	16(6.66)	105(17.5)
Litamany Status	Higher secondary	16(4.45)	7(2.92)	23(3.83)
Literacy Status	Graduate	180(50)	127(52.92)	307(51.17)
	Post Graduate	75(20.83)	90(37.5)	165(27.5)
Present work position	Manager/officer	109(30.28)	150(62.5)	259(43.17)
	Clerk	186(51.67)	67(27.92)	253(42.17)
	Sub-staff	65(18.05)	23(9.58)	88(14.66)
	Class I	264(73.33)	172(71.67)	436(72.67)
Socio-economic class	Class II	64(17.78)	56(23.33)	120(20)
	Class III	32(8.89)	12(5)	44(7.33)
	< 5 years	40(11.11)	82(34.17)	122(20.33)
Job Experience	5- 10 years	131(36.39)	79(32.91)	210(35)
, ,	> 10 years	189(52.5)	79(32.92)	268(44.67)

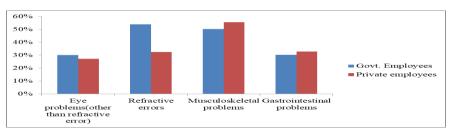


Fig. 1: Ocular, musculoskeletal and Gastrointestinal problems among bank employee

Prevalence of refractive error was found significantly different in government and private bank employees. Majority of participants were using spectacles for correction of refractive error.

Table 2: Association of job duration with musculoskeletal problems& gastrointestinal problems

Job Experience	Musculoskeletal problems		Gastrointestinal problems	
	Yes (%)	No (%)	Yes (%)	No (%)
< 5 years	45(36.89)	77(63.11)	30(24.59)	92(75.41)
5- 10 years	88(41.9)	122(58.1)	63(30)	147(70)
> 10 years	157(58.58)	111(41.42)	95(35.45)	173(64.55)
	$X^2 = 21.15$, df = 2, p = 0.00002		$X^2 = 4.86$, df = 2, p = 0.088	

Prevalence of musculoskeletal problems was found increasing with increase in the job experience and this difference was found statistically significant. Prevalence of gastro-intestinal problems was

also found increasing with increase in the job experience. But this difference was not found statistically significant.

Table 3: Information regarding physical measurements

	Government employees(n=360) Mean ± SD		Private employees(n=240) Mean ± SD	
	Male	Female	Male	Female
Weight (kg)	69.91±12.64	54.32±12.69	70.39±11.98	56.07±12.07
Height(m)	1.67±0.08	1.57±0.08	1.68±0.07	1.56±0.07
BMI (kg/m ²)	24.88±3.69	22.01±3.70	24.84±3.88	22.83±3.90

Table 4: Distribution of study population based on various psycho-social health problems

		Government employeesNo.(%)	Private employeesNo.(%)	TotalNo.(%)
Job stress	Yes	167(46.39)	140(58.33)	307(51.17)
	No	193(53.61)	100(41.67)	293(48.83)
Feeling of	Yes	141(39.17)	75(31.25)	216(36)
tiredness	No	219(61.83)	165(68.75)	384(64)
Disturbed family life	Yes	67(18.61)	34(14.17)	101(16.83)
	No	293(81.39)	206(85.83)	499(83.17)
Job satisfaction	Fully	249(69.17)	133(55.42)	382(63.67)
	Partially	88(24.44)	87(36.25)	175(29.17)
	Not satisfied	23(6.39)	20(8.33)	43(7.16)
Depression	Yes	43(11.94)	37(15.42)	80(13.33)
	No	317(88.06)	203(84.58)	520(86.67)
Hair loss	Yes	140(38.89)	87(36.25)	227(37.83)
	No	220(61.11)	153(63.75)	373(62.17)
Tota	ı	360	240	600

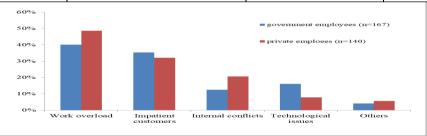


Fig 2: Reasons for stress reported by bank employees (n=307; multiple responses allowed)

The mean \pm SD systolic/ diastolic blood pressure was $123.55\pm9.61/75.01\pm7.66$ mm Hg in government bank employees while $126.38\pm10.71/77.72\pm7.59$ mm Hg in private bank employees. Overall Prevalence of pre-hypertension was found 45.17%. Prevalence of hypertension among the government bank employees was 26.94% while among private bank employees it was 23.75%. Of the 154

employees with hypertension, 92(59.72%) were known cases while 62(40.26%) were newly detected during the study. 9.44% of total government bank employees were newly detected as having hypertension during the study. Similarly 11.67% of total private bank employees were newly detected as having hypertension during study. Prevalence of both hypertension and diabetes was found higher in manager/officer compared to clerks and sub-staff.

Table 5: Association of various risk factors with prevalence of Hypertension and Diabetes among bank employees

Risk factors		Hypertension		Diabetes	
		Present	Absent	Present	Absent
		(n=154)	(n=446)	(n=79)	(n=521)
		No. (%)	No. (%)	No. (%)	No. (%)
	Yes(n=119)	37(31.09)	82(68.91)	21(17.65)	98(82.35)
Tobacco chewing	No(n=481)	117(24.32)	364(75.68)	58(12.06)	423(87.94)
, and the second		$X^2 = 2.29$, df = 1,p = 0.13		$X^2 = 2.606$, $df = 1$, $p = 0.106$	
	Yes(n=103)	39(37.86)	64(62.14)	20(19.42)	83(80.58)
Smoking	No(n=497)	115(23.14)	382(76.86)	59(11.87)	438(88.13)
		$X^2 = 9.69$, df = 1,p = 0.0018		$X^2 = 4.25$, df = 1,p = 0.039	
A 1 1 1	Yes(n=78)	28(35.9)	50(64.1)	15(19.23)	63(80.77)
Alcohol	No(n=522)	126(24.14)	396(75.86)	64(12.26)	458(87.74)
Consumption		$X^2 = 4.91$, df = 1,p = 0.026		$X^2 = 2.884$, df = 1,p = 0.089	
ВМІ	< 25(n=363)	80(22.04)	283(77.96)	39(10.74)	324(89.26)
	$\geq 25(n=237)$	74(31.22)	163(68.78)	40(16.88)	197(83.12)
		$X^2 = 6.34$, df = 1, p = 0.011		$X^2 = 4.71$, df = 1, p = 0.029	
Family history	Yes	79(31.22)	174(68.78)	29(18.95)	124(81.05)
	No	75(21.61)	272(78.39)	50(11.19)	397(98.81)
	$X^2 = 7.08$, df = 1, p = 0.0077 $X^2 = 6.017$, df = 1, p = 0.014		$X^2 = 7.08$, df = 1, p = 0.0077		= 1, p = 0.014

e-ISSN: 2590-3241, p-ISSN: 2590-325X

Only 30.17% of bank employees were doing exercise regularly whereas 50.33% of bank employees were not doing any exercise in the present study. Around 25% of bank employees took sick leaves in previous year because of health problems. 15.83% of government and 18.33% of private bank employees were found to be involved in regular health check-up practices.. Out of those who were going for regular health check-ups, 32.67% had gone for more than once in a year. With regard to self-medication practices, 59.72% of government bank employees and 47.08% of private bank employees reported that they never took self-medication. Self-medication practice was more prevalent in clerical staff.

The present study to assess the health profile of bank employees using a pre-designed questionnaire was largely dependent upon information given by the respondents. Although bank employees were informed to provide the information independently and honestly, mutual influence between them could not be entirely ruled out.In present study, the mean duration of experience among government bank employees was 13.81 ± 9.83 years while among private bank employees it was 8.14 ± 5.32 years. In the study done by Ismail IM et al [1]mean duration of work experience was 17.4 ± 11.3 years.Bank employees constitute a great range of computer users who on the average spend six hours/day working with computer.[2] So, they are prone for developing various visual problems. In present study, most common eye problem was found eye tiredness/pain followed by eye strain, which is consistent with the finding in the study done by Pereira M. et al [3] among the bank employees of Udupi and Manipal.Prevalence of musculoskeletal problem was found to be 48.33% in the present study. In the study done by Suleiman SK et al [4]the prevalence of musculoskeletal disorder was 33.8%. Among various musculoskeletal problems most commonly reported problem was back pain. Study conducted by GhorbanaliMohammadi [5]among bank employees in city of Kerman, Iran showed similar findings. In study done by Kaur H. et al [6]the prevalence of low back pain was found to be 34%. Musculoskeletal problems were found more common in those who had more work experience.

Prevalence of GIT problems in the present study was 31.33% with maximum prevalence for constipation (18.61% in government bank employees and 23.75% in private bank employees). It was followed by acidity, gas trouble, piles and fissure. As bank employees are engaged in sedentary type of work, they are more prone to develop constipation. Prolonged constipation leads to development of piles and fissures

In present study, 39.5% of employees had BMI \geq 25 kg/m². In the study done by Ismail IM et al [1] 36% of employees were found as having BMI ≥ 25 kg/m². This cut off value is considered as obese group according to Indian standards (according to WHO standards obese group is those with BMI $\geq 30 \text{ kg/m}^2$). In present study the prevalence of smoking was found 17.17%. This prevalence is less when compared with general population.[7]The reason for this is most of the bank employees are aware of the harmful effects of smoking. In study done by Lokare et al,[8] prevalence of smoking among bank employees was 10%, while study done by Shivaramakrishna et al [9]among the bank employees of Belgaum city, it was 25.9%. Prevalence of alcohol consumption among bank employees was found to be 13% in current study. Similar finding (13.5%) was observed in study conducted by Rao V. et al [10]among bank employees in and around Manipal town. The prevalence of hypertension in present study was found 25.67%. In some of the studies conducted in northern parts of Karnataka state, the prevalence of hypertension among the bank employees found to be 28.35% and 31% in Bijapur. [11-12] Of 154 bank employees having hypertension, 92(59.74%) were known case while 62 (40.26%) were newly detected in the current study. In the study done by Ganesh KS et al [13]out of 85 participants with hypertension, 47 (55%) were known case and 38(45%) were newly diagnosed. Significant association was found between BMI and hypertension. Those having BMI $\geq 25 \text{ kg/m}^2$ were at a high risk of developing hypertension as compared with those who had BMI < 25 kg/m². Similar findings were reported by Todkar et al [14] and Das et al. [15] Obesity causes hypertension by activating the renin-angiotensin-aldosterone system, increasing sympathetic activity, promoting insulin resistance and leptin resistance, increased cholesterol levels, increased procoagulatory activity and by endothelial dysfunction. Further mechanisms include increased renal sodium reabsorption, causing a shift to the right of the pressure natriuresis relationship and resulting in volume expansion. Prevalence of diabetes was found 13.17%. Smoking was found significantly associated while alcohol was not found significantly associated with prevalence of diabetes. In the study conducted by Parashar P et al [16]among the bank employees of Meerut district the prevalence of diabetes was 20%. In their study, smoking and alcohol were not found significantly associated with diabetes prevalence. In the study conducted among bank employees of Nigeria by AbidoyeRO et al [17]smoking was not significantly associated but alcohol was significantly associated with diabetes prevalence.

A positive family history of diabetes was significantly associated with diabetes prevalence in this study. Aravindalochanan V et al [18] from their study reported similar findings. Banking, like other services, has become one of the highly competitive sectors in India. Stress is unavoidable on the part of the employees as the systems, procedures; techniques are getting complicated with the use of advanced technology. Every employee cannot cope with such rapid changes which are taking place in the jobs. This will lead to arising of stress among employees. In the present study 51.17% of bank employees were feeling job stress. 36% of bank employees reported feeling of tiredness on most of the working days. 16.83% of bank employees felt disturbed family life due to their job.

The prevalence of stress was found higher in private bank employees compared to government bank employees and this difference was found statistically significant. Similar findings observed in the studies conducted by Katyal S. et al [19] and Nadeem Malik, [20] while in the study conducted by Samartha V. et al [21]there was no statistical significant difference in stress level between government and private bank employees. Most common cause of job stress was reported work overload by both government and private bank employees. Similar finding was found in the studies conducted by Tilottama Azad [22]in Bhopal and RajendranJayashree [23]in Chennai. Stress was found statistically significant with work position in the bank in the present study, while in study conducted by G. Radha [24] there was no significant difference between level of occupational stress and the different categories of respondents.

Self-medication which is a form of irrational use of drugs is fast becoming a global issue. Self-medication practice (either very often or rarely) was reported by 45.33% of the bank employees in present study. In a study conducted by Oluyemi JA et al [25]the prevalence of self-medication practice among the bank employees was found

Conclusion

From the findings of present study it was evident that high morbidity attributed to sedentary work has already taken roots in banking professionals and it is a matter of great concern. Along with the sedentary work, they are continuously exposed to computer work which had caused frequent visual problems among the bank employees. Musculoskeletal symptoms have cumulative effect on the subjects with initial symptoms being mild and temporary and later with increasing years assuming more intense and permanent nature. Physical health problems can become the barrier for discharging the duties efficiently. High prevalence of stress was found among bank employees. Prevalence of pre-hypertension, hyper-tension and obesity was also high. Stress has a negative effect on the health of the bank employees.

Acknowledgements

- I would like to thank all the participants who have honestly participated with their full co-operation and provided their valuable time for the study.
- I am also grateful to authors/editors/ publishers of all those articles & journals from where the literature for this study has been reviewed and discussed.

References

- Ismail IM, Kulkarni AG, Kamble SV, Borker SA, Rekha R, Amruth M. Prevalence of hypertension and its risk factors among bank employees of SulliaTaluka, Karnataka. Sahel Medical Journal. 2013; 16:139-43.
- Sheddy JE, Shaw-McMinn PG. Diagnostic and treating computer related vision problems. California: Butherworth Heinemann, 2003.
- Pereira M, Sebastian A, Ashalatha S. Body Mechanics and Perceived Physical Health Problems among Computer Users. International Journal of Health Sciences and Research (IJHSR). 2013; 3(11):73-9.
- Sulaiman SK, Kamalanathan P, Ibrahim AA, Nuhu JM. Musculoskeletal disorders and associated disabilities among bank workers. International Journal of Research in Medical Sciences. 2015; 3(5):1153-8.
- Mohammadi G. Musculoskeletal symptoms among bank office workers: two years follow-up survey. Journal of Musculoskeletal Research, 2015, 1450018.
- Kaur H, Bindra S, Sinha AGK. Epidemiological Features of Low Back Pain in Bank Employees of North India. International Journal of Health and Rehabilitation Sciences, 2014; 3(1):30-38.
- Gupta R, Gupta VP, Sarna M, Bhatnagar S, Thanvi J, Sharma V et al. Prevalence of coronary heart disease and risk factors in an urban Indian population: Jaipur heart watch-2. Indian Heart Journal. 2002; 54:59-66
- Lokare L, Nekar MS, Mulkipatel SY, Venktesh M. Metabolic equivalent task score and risk factors of coronary heart disease in bank employees. International Journal of Biological & Medical Research. 2012; 3:1627-30
- Shivaramakrishna HR, Wantamutte AS, Sangolli HN, Mallapur. Risk factors of coronary heart disease among bank employees of Belgaum city- Cross sectional study. Al Ameen Journal of Medical Science. 2010; 3:152-159
- Rao V, Rao Prassanalakshmi. High prevalence of coronary risk factors among bank employees in India. International Journal of Medicine and Public Health. 2014; 4(4):500-3
- Gudadinni M, Nuchhi U, Yadavannavar M, Sorganvi VM. A Cross-sectional study of risk factors of coronary heart disease among bank employees of Bijapur city. Indian Journal of Forensic Medicine and Toxicology. 2013; 7(1):254-87.
- Yadavannavar MC, Shailaja S Patil, VeenaAlgur. Prevalence of hypertension in some occupational groups of Bijapur city. International Journal of Current Research and Review. 2011; 3(8):42-48
- Ganesh KS, Deivanai SN. Prevalence and risk factors of hypertension among bank employees in urban Puducherry,

Conflict of Interest: Nil Source of support:Nil

- India. The international journal of occupational and environmental medicine. 2014; 5(2):94-100.
- Todkar SS, Gujarathi VV, Tapare VS. Period prevalence and sociodemographic factors of hypertension in rural Maharashtra: A cross-sectional study. Indian Journal of Community Medicine. 2009; 34:183-7
- Das SK, Sanyal K, Basu A. Study of urban community survey in India: Growing trend of high prevalence of hypertension in a developing country. International Journal of Medical Science. 2005: 2:70-8
- Parashar P, Maroof KA, Bansal R, Ahmad S, Pant B. Prevalence and risk factors of diabetes among bank employees of Meerut District. Indian Journal of Preventive & Social Medicine. 2009; 40(3&4):157-161.
- Abidoye RO, Izunwa RD, Akinkuade FO, Abidoye GO. Interrelationships between lifestyle and diabetes mellitus, overweight/obesity and hypertension in Nigeria. Nutrition and Health. 2002; 16(3):203-13.
- Aravindalochanan V, Kumpatla S, Rengarajan M, Rajan R, Viswanathan V. Risk of diabetes in subjects with sedentary profession and the synergistic effect of positive family history of diabetes. Diabetes Technology & Therapeutics. 2014; 16(1):26-32.
- Katyal S., Katyal R. "Prevalence of occupational stress among bankers." International Journal of Humanities and Social Science Invention. 2013; 2(4):53-6.
- Naddem Malik. A study on occupational stress experienced by private and public banks employees in Quetta City. African Journal of Business Management. 2011; 5 (8):3063-3070.
- Samartha V, Begum M., Lokesh. A comparative analysis of occupational stress among the employees in public and private sector banks in DakshinaKannad district. International Journal of Conceptions on Management and Social Sciences. 2014; 2(2): 2357-2787
- Tilottama Azad. Managing Stress among Banking Sector Employees in Bhopal. IRC's International Journal of Multidisciplinary research in social & management sciences. 2014; 2(2):44-48
- Rajendran Jayashree. Stress management with special reference to public sector bank employees in Chennai. International Journal of Enterprise and Innovation Management Studies (IJEIMS).2018; 1(3):34-39.
- G. Radha. Occupational stress among the bank employees in Tiruvarur district of Tamilnadu. Indian Streams Research Journal, 2014;4(2):9
- Oluyemi JA, Yinusa MA, Abdullateef R, Sunday A, Kehinde K. Factors Influencing the Practice of Self-Medication among Bankers in Selected New Generation Banks in Ilorin Kwara State Nigeria. Journal of sustainable development in Africa. 2015; 17(1):76-94.

Shah et al www.ijhcr.com