Original Article :

Does Retirement trigger Depression in Bankers A Comparative Study in Nationalized Banks of Kolkata

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Abstract

Background and Aims:
Bankers hold a respectable position in society, and their profession involves a lot of public interaction. Retirement leads to decline in the level of social interaction and respect which might trigger depression. Thus, assessment of the influence of retired life on depression needs comparison between retirees and employees. This study was planned to determine the difference in depression among employees and retirees of selected nationalized banks in Kolkata.

Methods:
An analytical study with cross-sectional design was conducted on retired and working employees of selected nationalised banks in Kolkata from August 2023 to August, 2024 by employing a self-administered predesigned, pre-tested and structured e-questionnaire. A sample size of 172 in each arm was estimated, which were selected using two-stage random sampling technique. Data were analysed using multinomial logistic regression, independent samples median test and Mann-Whitney U test. A p-value of <0.05 was considered significant.

Results:
There was a significant difference between the depression scores of retirees and employees. A higher percentage of employees (72.1%) suffered from depression compared to the retirees (62.5%). Though designation during employment was associated with depression in retirees, its influence on the mental health of the current employees was not noted. In both the groups, regular exercise and satisfaction with financial situation and pursuance of interests/hobbies was protective against depression.

Conclusion:
The dissimilarity between the depression status of the two groups was evident. Contrary to the assumptions, the former workers were less depressed than the present employees.

Keywords:
aged, mental health, PHQ-9, retirement, satisfaction.

Introduction:

Retirement is regarded as a turning point in a person's life when "one chooses to permanently leave the workforce behind."[1] Retired life involves transformation of the roles and relationships associated with an individuals' previous employment which might trigger psychological distress.[2] Mental health in the retired life depends on socio-economic conditions of the individual, availability of health care, attitudes of the elderly, the people in their surroundings, expectations of the society and the presence of a support system.[3] As per findings of a systematic review[4], it is assumed that elderlies from nuclear families are more prone to depression. In such families, the retirees are mostly dependent on the spouse for social support. Hence, death of the spouse during the retirement years could further complicate the situation. At this phase an elderly might be dependent on their children for financial support as well as to overcome their loneliness. When the children are busy in their careers and families and are not able to spare time, feelings of hopelessness and depression might be triggered.3 Apart from these triggers, the Covid-19 pandemic has worsened the distress among most of the individuals especially the retirees due to enormous expenditure in health care.[5]

It is estimated that around 5% adults suffer from depression globally.[6] As per the World Health Organization, 5.7% elderly are depressed.6 National Mental Health Survey 2015-16 revealed nearly one in every 20 Indian suffered from depressive disorder.[7] A survey on mental health of retirees is crucial because nearly 28% retirees suffered from depression as per the systematic review and meta-analysis undertaken by Pabón-Carrasco et al.[8] A possible way of mitigating the adverse impact of retirement on mental health could be social participation as suggested by Shiba et al[9] in their study. Bank employees are chosen as the unit of study because they are subjected to intense working conditions with long working hours for nearly two-third of their lives which makes them prone to both physical and mental ailments. Valente et al[10] found that the overall prevalence of depressive symptoms was 32% among bank employees in Brazil, without any significant difference between men and women. As evident from these studies[8,10], depression is a common mental illness among retirees and often used as a proxy for mental illness in community surveys. The Brazilian study[10] unveiled high effort-low reward and over-commitment as triggers depressive symptoms among bankers. Still, many more influencers of mental health among retired and working bankers may be uncovered.

Banking personnel have lot of public interaction and commands respect in society, both of which declines after retirement which might result in feelings of hopelessness and depression. This study aimed to determine the difference in depression among the employees and the retirees of selected nationalized banks in Kolkata; and to compare the associates of depression among these groups.

Materials and Methods:

Study type, design and participants: An analytical study, cross-sectional in design involving retirees and current employees from two selected nationalized banks in Kolkata was conducted from August, 2023 – August, 2024. The study included retirees who were retired for at least 1 year and were holding the post of a clerk, officer or executive pre-retirement. Among the current employees, those aged 45 years or more with at least 10 years of experience in the banking sector and presently employed as a clerk, officer or executive were included. Those who were unable to answer the questionnaire due to lack of proficiency in operating digital forms, were seriously ill at the time of data collection, were re-employed or compulsorily retired persons were excluded.

Sample size estimation: The formula[11] $\{(Z\alpha/2+Z\beta)^2.(\sigma1^2+\sigma2^2)/\delta^2\}$ was used for sample size (n) estimation. Here $Z\alpha/2=1.96$ at an $\alpha/2$ of 0.05; $Z\beta=0.84$ at a β of 0.20; $\sigma1$ (=11.2) and $\sigma2$ (=7.1) are the standard deviations in depression scores12 of retired and employed, respectively; M1 (=17.5) and M2 (=13.1) are the mean depression scores of retired and employed as given in the study by Zuelke et al[13]; and δ is the difference between M1 and M2 which was assumed to be 4.4 from this study[13]. Considering a design effect of 2 and adding a non-response rate of 20%, the final sample size was calculated as 172 in each arm.

Sampling technique: The samples were drawn with the help of two stage random sampling, where in the first stage two banks out of the twelve nationalised banks in Kolkata were selected by simple random sampling and in the next stage, retirees and working employees were procured from the selected banks by simple random sampling.

Study tool and data collection: The study was conducted from August, 2023 to August, 2024 through a self-administered e-questionnaire (Google form, Alphabet Inc.) which contained Patient Health Questionnaire-9 (PHQ-9)[14] and Modified Satisfaction Scale15. PHQ-9 consists of 10 questions where the first 9 questions are answered on a 4-point likert scale with scores ranging from 0 (not at all) to 3 (nearly every day). Total PHQ-9 score is based on the first 9 questions and it ranges from 1 to 27. Based on the PHQ-9[14] scores, depression

was classified into "None", "Minimal", "Mild", "Moderate", "Moderately severe" and "Severe". The Modified Satisfaction Scale15 had 10 questions answered on a 5-point likert scale (1 = "very satisfied" to 5 = "Very dissatisfied") and assessed satisfaction with different aspects of life. Total satisfaction scores could range from 10 to 50, higher scores denote poorer satisfaction.[15]

The questionnaire was standardized by a team of three subject-specific experts and then pretested on 15 retired and 15 working employees outside the sample and minor modifications were made after pre-testing. The Google form was designed in a way to avoid multiple entries from the same respondent. The form was sent to contact numbers of the selected participants after ensuring anonymity and confidentiality.

Study variables: Depression (as per PHQ_9) was the dependent variable while the independent variables included socio-demographic characteristics, work profile, social activity, exercise, addictions and satisfaction with different aspects in life.

Ethical considerations: Data collection was initiated after approval from the institutional ethics committee of Institute of Post Graduate Medical Education & Research (IPGME&R/IEC/2023/Misc/006, Dated 08.05.23) and from the selected banks. Besides, informed electronic consents were taken from participants. The study abided by the Declaration of Helsinki and ICMR (Indian Council of Medical Research) guidelines for biomedical research on human subjects.

Data management and statistical analysis: The data were collected and entered into Microsoft Office Excel 2016 (Microsoft Corp, Redmond, WA, USA) and analyzed using Statistical Package for the Social Sciences Version 25.0 (IBM, New York City, USA). Statistical tests were done to check for normality (Kolmogorov-Smirnow p-value <0.05 and Shapiro-Wilk test p-value <0.05) and multi-collinearity (Variance Inflation Factor <10 and tolerance >0.1). Mann Whitney U test and independent samples median test were employed to compare depression between the two groups. Multinomial logistic regression was used to test the association between the dependent and the independent factors. A p value of <0.05 was considered significant.

Results:

The final sample included 168 retirees and 172 working employees. While 52.4% retirees were aged 60-64 years, 56.4% working employees were between 55-59 years. In both the groups, a major chunk comprised of males (95.8% retirees, 95.3% working employees) from nuclear families, currently married and with a work experience of 30-39 years in the banking

sector. On an average, the participants worked for 8-10 hours/day. The retirees were mostly graduates and had retired from the post of an officer, while majority of the working population had a post-graduation degree and were at an executive post. Superannuation (79.8%) was the most common mode of retirement for the retired population.

In comparison to the current employees, a higher percentage of retirees were satisfied with the different aspects of life (Table 1).

Table 1: Satisfaction with various aspects of life among the study population. (n=340) .

Satisfaction	Retirees (n_1=168)	Employees (n_2=172)
	Number (%)	Number (%)
1. Your bodily fitness		
Very dissatisfied	1 (0.6)	1 (0.6)
Dissatisfied	4 (2.4)	19 (11)
Neither satisfied nor dissatisfied	26 (15.5)	23 (13.4)
Satisfied	98 (58.3)	97 (56.4)
Very satisfied	39 (23.2)	32 (18.6)
2. The activities you carry out		
Very dissatisfied	1 (0.6)	1 (0.6)
Dissatisfied	5 (3)	13 (7.6)
Neither satisfied nor dissatisfied	15 (8.9)	20 (11.6)
Satisfied	111 (66.1)	111 (64.5)
Very satisfied	36 (21.4)	27 (15.7)
3. Your relationships to other people		
Very dissatisfied	1 (0.6)	-
Dissatisfied	-	3 (1.7)
Neither satisfied nor dissatisfied	11 (6.5)	18 (10.5)
Satisfied	108 (64.3)	105 (61)
Very satisfied	48 (28.6)	46 (26.7)
4. Time you devote to your hobbies		
Very dissatisfied	-	5 (2.9)
Dissatisfied	1 (0.6)	18 (10.5)
Neither satisfied nor dissatisfied	28 (16.7)	36 (20.9)
Satisfied	105 (62.5)	86 (50)
Very satisfied	34 (20.2)	27 (15.7)
5. Your mental capabilities		
Very dissatisfied	-	1 (0.6)
Dissatisfied	-	4 (2.3)
Neither satisfied nor dissatisfied	13 (7.7)	15 (8.7)

Satisfied	101 (60.1)	100 (58.1)
Very satisfied	54 (32.1)	52 (30.2)
6. Your esteem/respect in society		
Very dissatisfied	-	2 (1.2)
Dissatisfied	1 (0.6)	3 (1.7)
Neither satisfied nor dissatisfied	15 (8.9)	24 (14)
Satisfied	109 (64.9)	98 (57)
Very satisfied	43 (25.6)	45 (26.2)
7. Your esteem/respect among your family and friends		
Very dissatisfied	-	1 (0.6)
Dissatisfied	2 (1.2)	1 (0.6)
Neither satisfied nor dissatisfied	14 (8.3)	15 (8.7)
Satisfied	88 (52.4)	101 (58.7)
Very satisfied	64 (38.1)	54 (31.4)
8. Your physical attractiveness		
Very dissatisfied	-	2 (1.2)
Dissatisfied	-	6 (3.5)
Neither satisfied nor dissatisfied	29 (17.3)	25 (14.5)
Satisfied	104 (61.9)	111 (64.5)
Very satisfied	35 (20.8)	28 (16.3)
9. Your financial situation		
Very dissatisfied	-	4 (2.3)
Dissatisfied	6 (3.6)	10 (5.8)
Neither satisfied nor dissatisfied	21 (12.5)	29 (16.9)
Satisfied	109 (64.9)	102 (59.3)
Very satisfied	32 (19)	27 (15.7)
10. Life in general		
Very dissatisfied	1 (0.6)	3 (1.7)
Dissatisfied	1 (0.6)	3 (1.7)
Neither satisfied nor dissatisfied	13 (7.7)	17 (9.9)
Satisfied	110 (65.5)	116 (67.4)
Very satisfied	43 (25.6)	33 (19.2)

The participation in cultural activities was higher among retirees (48.2%) than employees (32.0%). The employees could attend social gatherings 2-3 times in a year, but most retirees (58.3%) could attend such gatherings more frequently. More number of retirees (77.4%) were exercising at least 5 days/week compared to the employees (57%). Proportionately, the percentage of individuals with substance use habits

was higher among the working group (23.3%) compared to retirees (19.6%). While 18.2% of the addicted retirees had developed addiction post retirement, 57.1% retirees had quit their past addictions after retirement.

A higher percentage of retirees (37.5%) did not suffer from depression compared to the working employees (27.9%) (Figure 1). Depression status of retirees (median = 2.0) was significantly better than employees (median = 3.0) (Table 2).

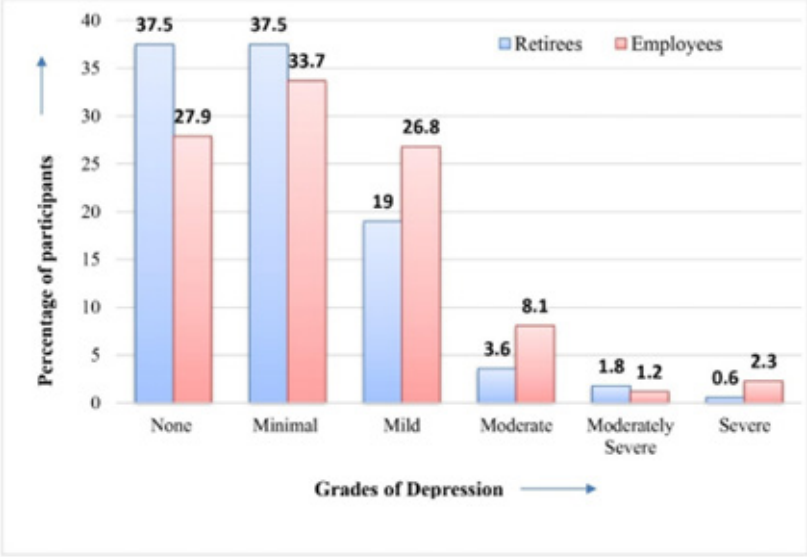


Figure 1: Percentage bar diagram illustrating distribution of the study population according to their mental health status. (n=340) .

Table 2: Comparative analysis between PHQ-9 scores obtained by the retirees and the employees. (n=340)

PHQ-9 Score	Retired (n_1=168)	Working (n_2=172)
Median	2.0	3.0
IQR (Q_3, Q_1)	4.3, 0	6.3, 0
Independent samples median test	**0.030**	

Among current employees, belonging to an age group of 55-59 years and having a working experience of 30-39 years seemed to be protective against mild to severe depression. Holding an executive post pre-retirement was observed to prevent mild to severe depression among retirees. Those retirees working for 8-10 hours/day on an average had a higher odds ratio of having minimal depression compared to those working for less than 8 hours during their period of employment. Apart from regular exercise, being satisfied/very satisfied with the time devoted to own hobbies and satisfaction with one's financial situation appeared to be protective against mild to severe depression in both the groups. Additionally, being satisfied/very satisfied

with one's bodily fitness was defensive against mild to severe depression in retirees (Figure 2).

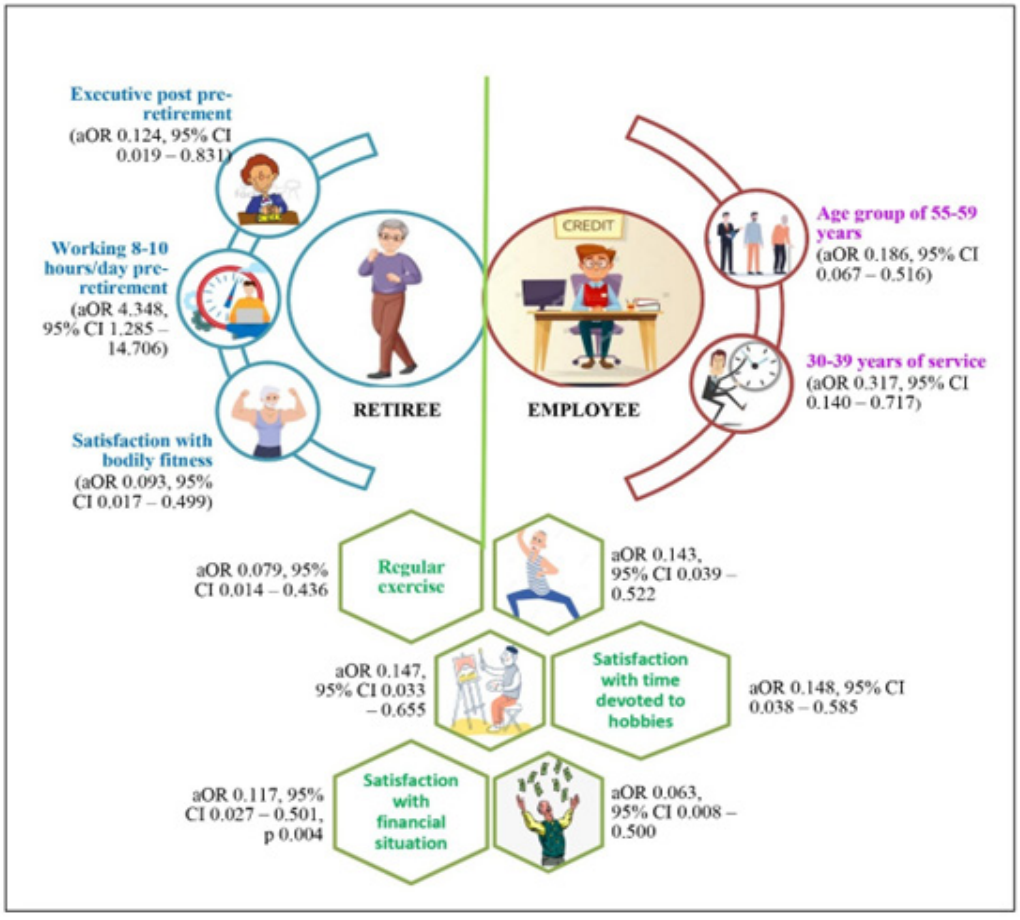


Figure 2: Mind map comparing the associates of depression observed to be significant on multinomial logistic regression among the retirees and the employees. (n=340).

Discussion:

Retirement is a phase of transition which has the capability to trigger significant changes in the professional and social domains of a retired person. These changes may in turn have an impact on the mental health of the retiree. On comparing depression among the currently employed and the retired bankers in the present research, a noteworthy difference between the two groups was observed. Higher percentage of retirees were not depressed. Unlike our observations, Kim et a1[16] in their longitudinal study on 458 married men and women from New York aged between 50 and 72 years suggested that being continuously retired was associated with a greater number of depressive symptoms in male retirees. Another study done by Zuelke et al[13] in Germany did not report a significant difference in depressive symptoms between the working and retired.

As per this German study[13], depression was not associated with voluntary retirement, rather it was associated with ill health related retirement. Supporting the findings of the present study, Heide et al[17] in their systematic review of longitudinal studies, Reitzes et al[18] in their follow-up study and Olesen et al[19] in their secondary data analysis of Danish national registries reported that the participants were less depressed post-retirement compared to the time when they were still working.

In the present study, those retirees working for 8-10 hours/day pre-retirement were more likely to be depressed. Corroborative to these findings, the follow-up survey by Reitzes et al [18] revealed that retirees with heavy workload pre-retirement were more prone to depression. This suggests that working for long hours during employment could precipitate depression even post-retirement. A qualitative study done by Oliffe et al[20] on 30 Canadian men aged 55 to 82 years (mean age = 67.8) suffering from depression revealed that loss of job triggered depression. Some of the participants of the in-depth interviews done by Oliffe et al[20] said that, employment helped them to tackle their depression by providing them "something to do". Contrary to this[18], in our study, working employees at the verge of retirement were less likely to be depressed. Even a prospective study done by Fleischmann et al[21] on British civil servants pointed out that mental health improved for a short period before and immediately after retirement, but these changes were not static and were governed by the working conditions of the individual pre-retirement. Akin to the observations of the British study[21], the present research also identified that retirees at executive post pre-retirement that involved decision making were less likely to be depressed. Employees in stressful jobs and not involved in decision making were also recognized to be depressed in the meta-analysis by Theorell et al[22], but such an association was not seen in the present research.

The present study confirmed the role of leisurely activities in preventing depression post retirement highlighted by Oshio et al[23] in their study in Japan. Regular exercise and being content with one's financial situation were also observed to be protective against depression in the present study. Supportively, Reitzes et al[18] also described that higher income was defensive against depression for the working population. Another study by Byles et al[24] where they collected data from 21,608 participants from New South Wales, Australia with age ranging between 55 and 69 years found that retired men witnessed a significant increase in psychological distress, but retirement among women did not trigger psychological

distress. Such an influence of gender on depression among retirees was not evident in the present research. Impact of time since retirement on health was not perceived by Newton et al[25] or the present study. This could be because most of the retirees adopt a healthy lifestyle soon after retirement and then continue it for their remaining life. Similar to the present research, most studies[13,17-19], discussed here did not identify retirement as a trigger for depression.

The study had many strengths like inclusion of adequate number of subjects by random sampling, use of a validated tool and involvement of educated participants. Besides, this study would guide the policy makers to focus more on the needs of the retired and working employees and to come up with more efficient ways to address the health related and social issues surrounding the retirees to help them sustain their identity.

Despite the notable strengths of this study, several limitations should be acknowledged. The inclusion of only two banks may have restricted the generalizability of the findings. Additionally, the results could have been influenced by the unique circumstances of the COVID-19 pandemic. The under-representation of female participants and reliance on a self-rated tool for assessing depression further highlight areas that may affect the robustness and applicability of the conclusions.

Conclusion:

Dissimilarity between depression among the two groups of bankers was evident. The former workers were less depressed than the present employees. In both the groups, regular exercise, engaging in hobbies and financial satisfaction were protective against depression. Thus, contrary to our assumption, retirement does not trigger depression. This study focuses on the need for further research with longitudinal design to clearly understand the influence of retirement on bankers.

Recommendations:

1. Promotion of healthy lifestyle for current employees like regular exercise to culminate in healthy ageing.
2. Restriction of working duration to 8-10 hours/day to help the bankers devote more time to their interests and maintain their mental health.
3. Pre-retirement financial counselling sessions to help the employees plan a financially secure retirement.

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Conflict of Interest:

Nil

Funding Sources:

Nil

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