

Mental Health and Well-being of PhilHealth Frontline Workers



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ABSTRACT

Background The mental health and well-being of PhilHealth frontline workers were investigated to inform decision-makers and organizations in developing policies and programs to promote welfare of employees, thereby subsequently improving productivity and service delivery.

Objectives The study aimed to describe the demographic profile of participants and their level of mental health and well-being as well as to determine if a significant relationship exists between the said variables.

Methodology This is descriptive research that gathered respondents' socio-demographic data. The target population was PhilHealth frontline workers all over the Philippines. Two existing self-report scales were used to measure the mental health and

well-being of respondents. Statistical tools were then used to interpret data.

Results The majority of demographic factors were related to mild anxiety levels. The mean scores suggest that ages 20-29 are more anxious than those aged 50 and above. Other findings noted that the position title of Administrative Aide III and place of assignment in PhilHealth Regional Office II and XII showed a severe level of anxiety. Mean scores also showed mild anxiety as the length of years working in the corporation increased. In conclusion, age, years in service and place of assignment have a significant negative impact on participants' mental health.

Conclusion In conclusion, age, years in service and the place of assignment were the variables found to have a statistically recognizable impact on mental health and well-being of PhilHealth frontline workers. These findings were considered in proposing Mental Health Programs for PhilHealth employees.

Key words Mental Health, Well-being, Frontliner, PhilHealth

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INTRODUCTION

The state of employees' mental health is recently being recognized as a key player in their well-being.[1] Among the employable population, common mental health conditions such as anxiety and depression are prevalent with associated poor physical health and productivity. Undiagnosed and untreated mental health diseases are not only at

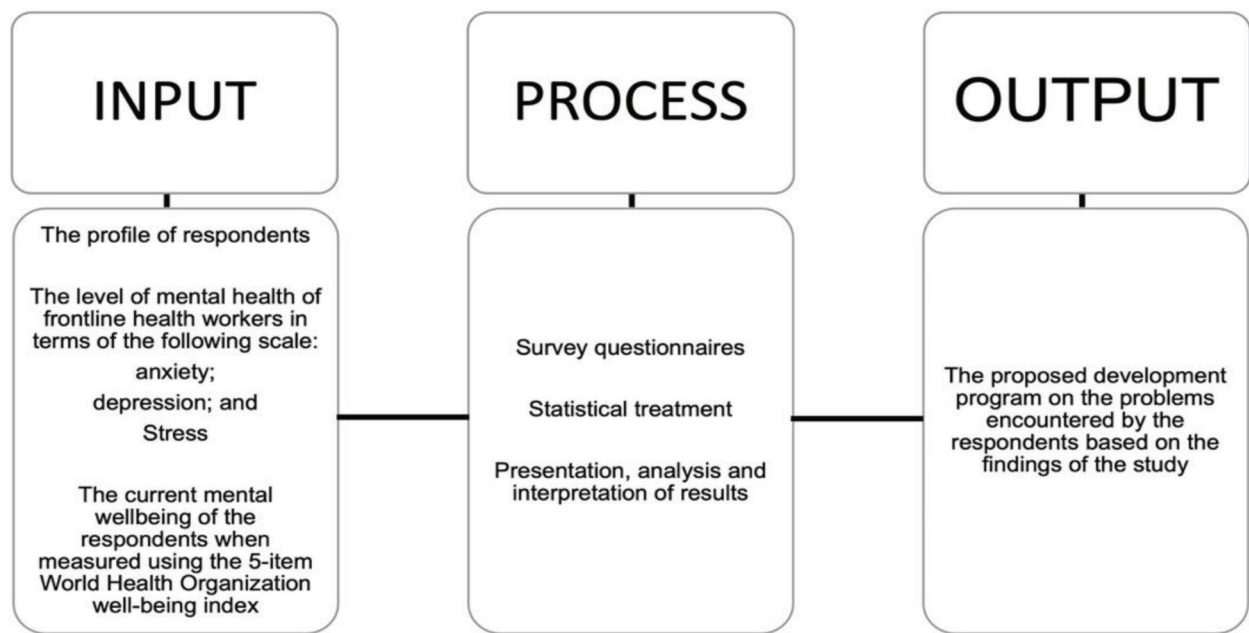


Figure 1 The Research Paradigm

increased risk for absenteeism or low productivity, but also for contracting physical illnesses such as respiratory infections, diabetes and musculoskeletal disorders. In addition, workplace isolation or reduced sense of connectedness can negatively impact work performance, mental health and a general sense of well-being.[2] Sociodemographic factors such as age and gender act as moderators of mental health and subsequently, the work environment as some studies suggest.[5,6]

Meanwhile, the first mental health legislation in the Philippines has been officially signed into law and was enacted as Republic Act No. 11036 on June 21, 2018. Strengthening effective leadership and governance is its major goal which can be achieved by developing and implementing national strategies, policies and regulations that are mental health-related.[3]

During the early phase of the COVID-19 pandemic in the Philippines, one-fourth (28%) of respondents reported moderate-to-severe anxiety levels and one-sixth (16%) reported moderate-to-severe levels of depression and psychological impact.[4] Some studies show that sociodemographic factors such as age and gender can act as moderators of work environment and mental health.

PhilHealth has several programs for the wellness of its employees, one of which is the "PhilHealthy Movement".[7] The physical, mental, emotional and spiritual well-being of PhilHealth employees is

covered in the programs of this policy. However, this policy mostly focused on physical fitness activities instead of mental health. The Mental Health Act mandated that PhilHealth as an employer should have a comprehensive, integrated, effective and efficient mental health program for its workforce.

This research determined mental health and well-being of PhilHealth frontline workers which can be utilized as a potential reference material relevant to the concerned organizations working to develop policies and programs, as well as those concerned with guidelines for health actions aimed at promoting welfare of the workforce in general. This study is a useful springboard for further research, especially for evaluating existing mental health services and exploring further the burnout phenomenon using qualitative data or mixed methods.

One of the objectives achieved in the study was gathering the demographic profile of participants in terms of age, sex, marital status, family systems, position, years of service and place of assignment. Regarding sex, participants were categorized as male, female and those preferring not to disclose. Marital status was categorized as single, married, separated or widowed. Similarly, family systems were grouped as nuclear, joint or independent.

The level of mental health in terms of Depression, Anxiety and Stress was measured using a scale. Their mental well-being was measured using the 5-item World Health Organization Well-being

Index. Furthermore, a significant relationship was determined between the variables namely, demographic profile, mental health and their well-being. Based on these results, mental health programs were identified and recommended for PhilHealth employees.

This present research proposed the hypothesis that the level of mental health of PhilHealth frontline workers in conditions of depression, anxiety and stress was very high. Furthermore, there was no significant difference in the level of mental health and well-being of PhilHealth frontline workers when age, sex and years in service were considered.

METHODS

The research paradigm illustrates the conceptual framework of the study that shows the relationship between input, process and output of the topic.

The *input* contained variables of the study which includes demographic profile and level of mental health of PhilHealth frontline workers in terms of anxiety, depression and stress.

The *process* involved an instrument producing the desired output. The questionnaire (DASS-21) was given to each respondent. The level of mental health of PhilHealth frontline workers was measured and an interventional plan developed to provide means of addressing the situation, as revealed later in this study.

The *output* was the result of the input and process, after processing and analyzing the data. Following data collection and analysis, the researcher was expected to develop and plan for the problems encountered by respondents.

This is a quantitative study that uses the analytic research approach. Data were collected, analyzed and tabulated based on respondents' socio-demographics and present state of mental health and well-being. Descriptive research utilizes instruments such as surveys to explore individuals' preferences, attitudes, interests, practices and concerns[8]. The data was processed using the IBM Statistical Package for Social Sciences Statistics version 26 and analyzed based on the order of problems raised in the Statement of the Problem section.

The target population of this study was the PhilHealth frontline workers, whose names were submitted by different human resource units of the PhilHealth Regional Offices (PROs), to determine the

level of their mental health and well-being. The study was conducted digitally due to travel constraints brought about by the pandemic. The respondents were chosen based on a simple random sampling technique and categorized according to their place of assignment. The list of frontline workers was based on their willingness and convenience to respond. Online platforms were utilized to ensure safety. The respondents' availability limited the proposed number.

The study's respondents were 317 PhilHealth frontline workers all over the Philippines. The minimum sample size was calculated using the statistical software G*Power 3.1.9.7. Power analysis indicated that a minimum sample of 153 respondents would have to demonstrate a multiple regression analysis with seven predictor variables with a medium effect size (0.15), an alpha error probability of 0.05 and statistical power of 0.95. To get a sample representative of the target population, a frequency distribution was calculated by determining the percentage of number of frontline workers per PRO against the total PhilHealth frontline workers nationwide. The frequency distribution was then applied to the minimum sample size (153) to obtain the required respondents per PRO. The data in Table 1 show employees' distribution, required number of respondents and whether the minimum requirement was attained. Table 2 further reveals there were 13 PROs that did not meet the required respondents, specifically PROs National Capital Region (NCR), I, II, III, V, VI, VII, VIII, X, XI, XII, XIII and Bangsamoro Autonomous Region in Muslim Mindanao (BARMM). Only PRO I in Dagupan City did not submit a list of its frontline workers. Hence, the researchers could not send the survey questionnaires, subsequently having no survey response. Despite a written request to conduct the survey and follow-ups, there was still no response. However, the overall required respondents were met, and PRO IV-A had a remarkable turnout of 174 respondents.

This study used two existing tools to measure mental health and well-being of participants which are the Depression, Anxiety and Stress Scale - 21 Items (DASS-21) and the World Health Organization (WHO) Well-being Index (WHO-5). These self-report scales are well-studied and have statistically sound results of reliability and consistency. It was interpreted based on its three subscales which are Depression, Anxiety and Stress. Raw score was multiplied by 2

Table 1 No. of Employees, Required Respondents and Actual Respondents

| Place of Assignment | No. of PhilHealth Frontline Workers | % | Required Respondents | No. of Actual Respondents | Reached Requirement Yes or No |
|---------------------|-------------------------------------|----------------|----------------------|---------------------------|-------------------------------|
| PRO NCR | 407 | 20.45% | 31 | 21 | No |
| PRO CAR | 53 | 2.66% | 5 | 39 | Yes |
| PRO I | - | 0.00% | 0 | - | No |
| PRO II | 89 | 4.47% | 7 | 6 | No |
| PRO III | 180 | 9.05% | 14 | 11 | No |
| PRO IV-A | 143 | 7.19% | 11 | 174 | Yes |
| PRO IV-B | 149 | 7.49% | 11 | 11 | Yes |
| PRO V | 77 | 3.87% | 6 | 5 | No |
| PRO VI | 139 | 6.98% | 11 | 8 | No |
| PRO VII | 148 | 7.44% | 11 | 8 | No |
| PRO VIII | 97 | 4.87% | 7 | 5 | No |
| PRO IX | 70 | 3.52% | 5 | 5 | Yes |
| PRO X | 55 | 2.76% | 4 | 3 | No |
| PRO XI | 128 | 6.43% | 10 | 7 | No |
| PRO XII | 52 | 2.61% | 4 | 3 | No |
| PRO CARAGA | 74 | 3.72% | 6 | 5 | No |
| PRO BARMM | 129 | 6.48% | 10 | 6 | No |
| Total | 1,990 | 100.00% | 153 | 317 | Yes |

and final score was interpreted based on the severity columns which are normal, mild, moderate, severe and extremely severe.

For the WHO-5 Well-being index, the raw score was multiplied by 4 to give the final score from 0 representing the worst imaginable well-being to 100 being the best possible well-being. Based on instructions of the tool, it was recommended to administer the Major Depression (ICD-10) Inventory if the raw score was below 13 or if the participant had answered 0 to 1 to any of the five items. A score below 13 indicated poor well-being and was an indication to test for depression under ICD-10. For this study, "poor well-being" shall be reflected if the raw score was below 13 or if the patient had answered 0 to 1 to any of the five items. Other scores shall be reflected as "good well-being".

These tools were converted online using Google Forms. In compliance with the Data Privacy Act of 2012, Data Privacy Disclosure was included in the survey tool before the questionnaire portion. This study ensured ethical considerations were complied with by having informed consent prior to answering the scales/tools, and an option to terminate their participation at any time. Following the data

privacy section, fields containing demographics were included in the tool. The reliability test was performed on research instruments based on pilot testing of data with 21 respondents and they were reliable with a Cronbach alpha of 0.974 (excellent) for DASS-21 and 0.887 (good) for WHO-5. All materials for data collected were kept in secured storage and destroyed upon completion of the study.

RESULTS

The majority (136 or 42.9%) of respondents belonged to the age group 30-39. This was followed by 95 (30.0%) respondents between the ages of 40-49. Moreover, 48 (15.1%) belonged to the age group 20-29 while 36 (11.4%) belonged to the age group 50-59 and 2 (0.6%) were in the age group 60 and above.

Most respondents were female with their numbers at 199 (62.8%), whereas 112 (35.3%) were male and 6 (1.9%) preferred not to say.

Many of the respondents were married with their numbers at 189 (59.6%) respondents being married, while 121 (38.2%) were single. The rest

Table 2 Frequency and Percent Distribution of Demographic Profile of the Respondents

| Variable | Frequency | % | Cumulative % |
|-------------------------------------|------------------|----------------|---------------------|
| Total | 317 | 100.00% | 100.00% |
| Age | | | |
| 20 - 29 | 48 | 15.14% | 15.14% |
| 30 - 39 | 136 | 42.90% | 58.04% |
| 40 - 49 | 95 | 29.97% | 88.01% |
| 50 - 59 | 36 | 11.36% | 99.37% |
| 60 and above | 2 | 0.63% | 100.00% |
| Sex | | | |
| Female | 199 | 62.78% | 62.78% |
| Male | 112 | 35.33% | 98.11% |
| Prefer Not to Say | 6 | 1.89% | 100.00% |
| Marital Status | | | |
| Single | 121 | 38.17% | 38.17% |
| Married | 189 | 59.62% | 97.79% |
| Widowed | 5 | 1.58% | 99.37% |
| Legally Separated | 2 | 0.63% | 100.00% |
| Family Systems | | | |
| Independent | 17 | 5.36% | 5.36% |
| Nuclear | 263 | 82.97% | 88.33% |
| Joint | 37 | 11.67% | 100.00% |
| Years in Service | | | |
| 1-5 | 74 | 23.34% | 23.34% |
| 6-10 | 121 | 38.17% | 61.51% |
| 11-15 | 61 | 19.24% | 80.76% |
| 16-20 | 32 | 10.09% | 90.85% |
| 21-25 | 29 | 9.15% | 100.00% |
| Position Title | | | |
| Administration Services Assistant C | 1 | 0.32% | 0.63% |
| Administrative Aide III | 1 | 0.32% | 0.95% |
| Administrative Aide IV | 1 | 0.32% | 1.27% |
| Administrative Aide VI | 51 | 16.09% | 17.34% |
| Administrative Officer I | 5 | 1.58% | 18.92% |
| Cash Clerk III | 5 | 1.58% | 20.50% |
| Chief Social Insurance Officer | 11 | 3.47% | 23.97% |
| Clerk III | 56 | 17.67% | 41.64% |
| Collecting Officer | 1 | 0.32% | 41.96% |
| Driver II | 4 | 1.26% | 43.22% |
| Executive Assistant II | 1 | 0.32% | 43.54% |
| Fiscal Clerk III | 1 | 0.32% | 43.86% |
| Fiscal Controller I | 5 | 1.58% | 45.44% |
| Fiscal Examiner A | 1 | 0.32% | 45.76% |
| Human Resource Management Officer I | 1 | 0.32% | 46.08% |
| Social Insurance Assistant I | 113 | 35.65% | 81.73% |
| Social Insurance Assistant II | 15 | 4.73% | 86.46% |

(Continued)

Table 2 Frequency and Percent Distribution of Demographic Profile of the Respondents (Continued)

| Variable | Frequency | % | Cumulative % |
|------------------------------|-----------|--------|--------------|
| Social Insurance Officer I | 24 | 7.57% | 93.69% |
| Social Insurance Officer II | 12 | 3.79% | 97.48% |
| Social Insurance Officer III | 8 | 2.52% | 100.00% |
| Place of Assignment | | | |
| PRO NCR | 21 | 6.62% | 6.62% |
| PRO CAR | 39 | 12.30% | 18.93% |
| PRO I | - | 0.00% | 18.93% |
| PRO II | 6 | 1.89% | 20.82% |
| PRO III | 11 | 3.47% | 24.29% |
| PRO IV-A | 174 | 54.89% | 79.18% |
| PRO IV-B | 11 | 3.47% | 82.65% |
| PRO V | 5 | 1.58% | 84.23% |
| PRO VI | 8 | 2.52% | 86.75% |
| PRO VIII | 8 | 2.52% | 89.27% |
| PRO IX | 5 | 1.58% | 90.85% |
| PRO X | 5 | 1.58% | 92.43% |
| PRO XI | 3 | 0.95% | 93.38% |
| PRO XII | 7 | 2.21% | 95.58% |
| PRO CARAGA | 3 | 0.95% | 96.53% |
| PRO BARMM | 5 | 1.58% | 98.11% |

were widowed or legally separated, which scaled at 5 (1.6%) and 2 (0.6%), respectively.

Table 2 reveals that many respondents were living with their immediate family members (263 or 83.0%) as compared to those living independently (17 or 5.4%) and living with immediate and extended family members (37 or 11.7%).

For the position title, the bulk of respondents are Social Insurance Assistant I (113 or 35.7%). This is followed by Clerk III and Administrative Aide VI at par with each other at 56 (17.7%) and 51 (16.1%).

Most (174 or 54.9%) of the respondents come from PRO IV-A (CALABARZON). This is followed by PRO CAR (39 or 12.3%) and PRO NCR (21 or 6.6%), while the least comes from PROs XI and CARAGA which both scaled at 3 or 1%.

The average mean score, standard deviation and descriptive interpretation of each demographic characteristic was included in the survey. The sample population had a mean score of 6.69 and 6.65 units away from the average. All demographic factors showed a *normal* level of depression. This means that PhilHealth frontline workers have *no depression*. All demographic factors showed *normal*

level of stress. This means that PhilHealth frontline workers are *not stressed*.

It also revealed that anxiety level of PhilHealth frontline workers in most demographic factors are *mild*, except the marital status category in which anxiety level is *normal*. However, Administrative Aide III indicates *severe* level of anxiety. In the same way, frontline workers in PROs II and XII reflected a *severe* level of anxiety. This is illustrated in the Table 3 of the appendix section.

Similarly, all demographic factors showed *good* level of well-being. This reveals that PhilHealth frontline workers maintain *good* well-being and continuously feel good about themselves.

CORRELATION ANALYSIS

Hypothesis 1: There is a significant correlation among Age, Years in Service, Depression, Anxiety, Stress and Well-being

Results of the Pearson's Correlation analysis shown in Table 4, revealed that there was a significant moderate positive relationship between Depression and Anxiety, $r=.678$, $N=317$, $p<0.001$, and a significant strong positive relationship exists

Table 3 Status of Anxiety of the Respondents

| Variable | n | Mean (95% CI) | Standard Deviation | Descriptive Interpretation |
|-------------------------------------|----------------|--------------------------|-------------------------------|---------------------------------------|
| Total | 317 | 8.83 | 6.511 | Mild |
| Position Title | | | | |
| Administration Services Assistant C | 1 | 4.00 | . | Normal |
| Administrative Aide III | 1 | 18.00 | . | Severe |
| Administrative Aide IV | 1 | 6.00 | . | Normal |
| Administrative Aide VI | 51 | 10.31 | 6.979 | Moderate |
| Administrative Officer I | 5 | 11.60 | 10.714 | Moderate |
| Cash Clerk III | 5 | 7.60 | 12.759 | Normal |
| Chief Social Insurance Officer | 11 | 4.55 | 5.447 | Normal |
| Clerk III | 56 | 8.68 | 5.491 | Mild |
| Collecting Officer | 1 | 4.00 | . | Normal |
| Driver II | 4 | 6.50 | 5.745 | Normal |
| Executive Assistant II | 1 | 4.00 | . | Normal |
| Fiscal Clerk III | 1 | 14.00 | . | Moderate |
| Fiscal Controller I | 5 | 6.00 | 5.099 | Normal |
| Fiscal Examiner A | 1 | 12.00 | . | Moderate |
| Human Resource Management Officer I | 1 | 8.00 | . | Mild |
| Social Insurance Assistant I | 113 | 8.69 | 6.734 | Mild |
| Social Insurance Assistant II | 15 | 8.80 | 4.887 | Mild |
| Social Insurance Officer I | 24 | 7.58 | 6.487 | Normal |
| Social Insurance Officer II | 12 | 10.50 | 4.681 | Moderate |
| Social Insurance Officer III | 8 | 11.50 | 6.740 | Moderate |
| | Average | 8.616 | 6.814 | Mild |
| Age | | | | |
| 20 - 29 | 48 | 11.13 | 6.430 | Moderate |
| 30 - 39 | 136 | 8.40 | 6.138 | Mild |
| 40 - 49 | 95 | 8.82 | 7.149 | Mild |
| 50 - 59 | 36 | 7.67 | 5.747 | Normal |
| 60 and above | 2 | 4.00 | 5.657 | Normal |
| | Average | 8.004 | 6.224 | Mild |
| Sex | | | | |
| Female | 199 | 9.32 | 6.698 | Mild |
| Male | 112 | 7.93 | 5.813 | Normal |
| Prefer Not to Say | 6 | 6 | 9.33 | Moderate |
| | Average | 8.630 | 8.480 | Mild |
| Marital Status | | | | |
| Single | 121 | 8.79 | 6.529 | Mild |
| Married | 189 | 8.95 | 6.545 | Mild |
| Widowed | 5 | 6.80 | 6.099 | Normal |
| Legally Separated | 2 | 2 | 4.00 | Normal |
| | Average | 7.135 | 5.500 | Normal |

(Continued)

Table 3 Status of Anxiety of the Respondents (Continued)

| Variable | n | Mean (95% CI) | Standard Deviation | Descriptive Interpretation |
|-------------------------|----------------|------------------|-----------------------|-------------------------------|
| Family Structure | | | | |
| Independent | 17 | 6.35 | 5.350 | Normal |
| Nuclear | 263 | 263 | 8.90 | Mild |
| Joint | 37 | 37 | 9.41 | Mild |
| | Average | 8.220 | 6.093 | Mild |
| Place of Assignment | | | | |
| PRO CAR | 39 | 10.46 | 6.719 | Moderate |
| PRO NCR | 21 | 9.52 | 6.129 | Mild |
| PRO II | 6 | 15.00 | 8.649 | Severe |
| PRO III | 11 | 11.45 | 9.802 | Moderate |
| PRO IV-A | 174 | 8.21 | 5.698 | Mild |
| PRO IV-B | 11 | 9.64 | 9.416 | Mild |
| PRO V | 5 | 9.20 | 8.075 | Mild |
| PRO VI | 8 | 11.50 | 7.982 | Moderate |
| PRO VII | 8 | 8.50 | 4.106 | Mild |
| PRO VIII | 5 | 4.00 | 5.831 | Normal |
| PRO IX | 5 | 4.00 | 4.243 | Normal |
| PRO X | 3 | 5.33 | 2.309 | Normal |
| PRO XI | 7 | 7.14 | 7.559 | Normal |
| PRO XII | 3 | 15.33 | 5.033 | Severe |
| PRO CARAGA | 5 | 3.60 | 4.336 | Normal |
| PRO BARMM | 6 | 10.67 | 9.522 | Moderate |
| | Average | 8.972 | 6.588 | Mild |
| Years in Service | | | | |
| | Average | 8.666 | 6.472 | Mild |

Table 4 Correlation between the Variables

| | | Depression | Anxiety | Stress | Well-being | Age | Years in Service |
|-------------------|---------------------|------------|---------|---------|------------|--------|------------------|
| Depression | Pearson Correlation | 1 | .678 ** | .817 ** | -.483 ** | -.046 | .007 |
| | Sig. (2-tailed) | | <.001 | <.001 | <.001 | .419 | .898 |
| Anxiety | Pearson Correlation | | 1 | .775 ** | -.350 ** | -.106 | -.054 |
| | Sig. (2-tailed) | | | <.001 | <.001 | .059 | .336 |
| Stress | Pearson Correlation | | | 1 | -.446 ** | .007 | .034 |
| | Sig. (2-tailed) | | | | <.001 | .904 | .541 |
| Well-being | Pearson Correlation | | | | 1 | .138 * | .064 |
| | Sig. (2-tailed) | | | | | .014 | .259 |
| Age | Pearson Correlation | | | | | 1 | .669 ** |
| | Sig. (2-tailed) | | | | | | <.001 |

between Depression and Stress, $r=.817$, $N=317$, $p<0.001$. This implies that people with depression are somewhat likely to have anxiety but more prone to feeling stressed. There was a significant weak negative relationship between Depression and Well-being, $r=-.483$, $N=317$, $p<0.001$. This indicated that individuals with depression are less likely to have poor well-being. However, no significant relationship existed between Depression and Age, $r=-.046$, $N=317$, $p=.419$, and Years in Service and Depression, $r=.007$, $N=317$, $p=.898$.

There was a significant strong positive relationship between Anxiety and Stress, $r=.775$, $N=317$, $p<0.001$. This implied that people with anxiety were more likely to feel stressed. In contrast, there was a significant weak negative relationship between Anxiety and Well-being, $r=-.350$, $N=317$, $p<0.001$. This suggested that individuals with anxiety were less likely to have poor well-being. However, there was no significant relationship between Anxiety and Age, $r=-.106$, $N=317$, $p=.059$, and Years in Service and Anxiety, $r=-.054$, $N=317$, $p=.336$.

There was a significant weak negative relationship between Stress and Well-being, $r=-.446$, $N=317$, $p<0.001$. This indicated that stressed people were less likely to have poor well-being. However, no significant relationship existed between Stress and Age, $r=.007$, $N=317$, $p=.904$, and Years in Service and Stress, $r=.034$, $N=317$, $p=.541$.

There was a significant weak positive relationship between Well-being and Age, $r=-.138$, $N=317$, $p<.014$. This implied that older individuals have good well-being. However, there was no significant relationship between Years in Service and Well-being, $r=.064$, $N=317$, $p=.259$.

Hypothesis 2: There is no significant difference among Sex, Civil Status, Family Structure, Place of Assignment and Position Title with Depression, Anxiety, Stress and Well-being

Table 5 found in the appendix illustrates the one-Way ANOVA for comparison of Depression, Anxiety, Stress and Well-being when PhilHealth Frontline Workers are grouped according to place

of assignment, where a significant difference was noted. The rest of the grouped variables (Sex, Civil Status, Family Structure, and Position Title) showed no significant difference with Depression, Anxiety, Stress and Well-being as predetermined in the hypothesis.

There was a statistically significant difference between Place of Health Assignment groups and Anxiety as shown by one-way ANOVA $F(15,301)=1.84$, $p=0.029$. A Tukey post hoc test showed that PhilHealth Frontline Workers assigned in PROs CAR, II, III, VI, XII and BARM were more anxious than the others. There was no statistically significant difference between Place of Assignment groups and Stress ($p=0.162$), and between Well-being and Place of Assignment groups ($p=0.252$).

DISCUSSION

The results showed that age, years in service and place of assignment are important to their mental health and well-being. Thus, each of these factors are discussed below.

Age

Age and well-being have a positive significant relationship with a $p = 0.014$ which corroborates with previous studies.[9,10] The mean scores suggest that ages 20-29 are more anxious than those aged 50 and above. This implies that young adults are more likely to suffer from poor mental health which corroborates with other studies.[11,12] Even those frontline workers aged 30-49 are of concern having mild level of anxiety. This result contrasts with several studies which found that there was a negative relationship between age and mental health. [13,14,15] This contradiction of results may be from the limited sample for older age groups of this study. However, our results suggest that age remains to be an important factor in the mental health and well-being of PhilHealth frontline workers, which should be considered in mental health programs that will be formulated by the corporation.

Table 5 One-way ANOVA for comparison of Depression, Anxiety, Stress and Well-being when PhilHealth Frontline Workers are grouped according to Place of Assignment (PROs)

| Factors | N | Mean | Std. Deviation | F | df | p |
|----------------|----------|-------------|---------------------------|----------|-----------|----------|
| Depression | | | | 1.292 | 15 301 | .205 |
| PRO CAR | 39 | 9.08 | 6.119 | | | |
| PRO NCR | 21 | 7.43 | 6.668 | | | |
| PRO II | 6 | 8.33 | 5.854 | | | |
| PRO III | 11 | 6.91 | 9.934 | | | |
| PRO IV-A | 174 | 6.09 | 5.745 | | | |
| PRO IV-B | 11 | 9.45 | 10.994 | | | |
| PRO V | 5 | 6.40 | 5.367 | | | |
| PRO VI | 8 | 8.50 | 11.940 | | | |
| PRO VII | 8 | 4.75 | 6.497 | | | |
| PRO VIII | 5 | 2.00 | 2.828 | | | |
| PRO IX | 5 | 6.00 | 7.483 | | | |
| PRO X | 3 | 3.33 | 1.155 | | | |
| PRO XI | 7 | 3.43 | 4.721 | | | |
| PRO XII | 3 | 14.00 | 17.776 | | | |
| PRO CARAGA | 5 | 5.20 | 4.604 | | | |
| PRO BARM | 6 | 7.00 | 6.782 | | | |
| Anxiety | | | | 1.840 | 15 301 | .029 |
| PRO CAR | 39 | 10.46 | 6.719 | | | |
| PRO NCR | 21 | 9.52 | 6.129 | | | |
| PRO II | 6 | 15.00 | 8.649 | | | |
| PRO III | 11 | 11.45 | 9.802 | | | |
| PRO IV-A | 174 | 8.21 | 5.698 | | | |
| PRO IV-B | 11 | 9.64 | 9.416 | | | |
| PRO V | 5 | 9.20 | 8.075 | | | |
| PRO VI | 8 | 11.50 | 7.982 | | | |
| PRO VII | 8 | 8.50 | 4.106 | | | |
| PRO VIII | 5 | 4.00 | 5.831 | | | |
| PRO IX | 5 | 4.00 | 4.243 | | | |
| PRO X | 3 | 5.33 | 2.309 | | | |
| PRO XI | 7 | 7.14 | 7.559 | | | |
| PRO XII | 3 | 15.33 | 5.033 | | | |
| PRO CARAGA | 5 | 3.60 | 4.336 | | | |
| PRO BARM | 6 | 10.67 | 9.522 | | | |

(Continued)

Table 5 One-way ANOVA for comparison of Depression, Anxiety, Stress and Well-being when PhilHealth Frontline Workers are grouped according to Place of Assignment (PROs) (Continued)

| Factors | N | Mean | Std. Deviation | F | df | p |
|------------|-----|-------|----------------|-------|-----------|------|
| Stress | | | | 1.367 | 15 301 | .162 |
| PRO CAR | 39 | 10.05 | 5.477 | | | |
| PRO NCR | 21 | 9.71 | 7.163 | | | |
| PRO II | 6 | 12.00 | 4.899 | | | |
| PRO III | 11 | 8.91 | 10.597 | | | |
| PRO IV-A | 174 | 7.41 | 5.499 | | | |
| PRO IV-B | 11 | 10.36 | 11.587 | | | |
| PRO V | 5 | 5.60 | 4.561 | | | |
| PRO VI | 8 | 11.25 | 9.192 | | | |
| PRO VII | 8 | 8.50 | 4.870 | | | |
| PRO VIII | 5 | 6.40 | 4.775 | | | |
| PRO IX | 5 | 4.00 | 4.243 | | | |
| PRO X | 3 | 7.33 | 4.619 | | | |
| PRO XI | 7 | 6.86 | 5.984 | | | |
| PRO XII | 3 | 14.00 | 8.000 | | | |
| PRO CARAGA | 5 | 6.00 | 4.690 | | | |
| PRO BARMM | 6 | 7.67 | 4.633 | | | |
| Well-being | | | | 1.224 | 15 301 | .252 |
| PRO CAR | 39 | 72.72 | 19.593 | | | |
| PRO NCR | 21 | 65.33 | 29.889 | | | |
| PRO II | 6 | 70.00 | 17.844 | | | |
| PRO III | 11 | 76.73 | 23.516 | | | |
| PRO IV-A | 174 | 78.60 | 17.245 | | | |
| PRO IV-B | 11 | 79.64 | 20.665 | | | |
| PRO V | 5 | 85.60 | 13.446 | | | |
| PRO VI | 8 | 85.00 | 9.971 | | | |
| PRO VII | 8 | 78.00 | 17.105 | | | |
| PRO VIII | 5 | 85.60 | 8.295 | | | |
| PRO IX | 5 | 75.20 | 29.719 | | | |
| PRO X | 3 | 89.33 | 15.144 | | | |
| PRO XI | 7 | 80.00 | 14.967 | | | |
| PRO XII | 3 | 68.00 | 30.199 | | | |
| PRO CARAGA | 5 | 75.20 | 15.849 | | | |
| PRO BARMM | 6 | 82.00 | 12.066 | | | |

Years in Service

The mean result for years in service and anxiety was mild and it was the same result for all years in service groups. This implies that they are generally mildly anxious as the length of years working in the

corporation increases (n = 317, M = 8.666). This output supports previous studies on intensified level of anxiety with years of service.[16] On the contrary, there was no significant relationship found between anxiety and years in service (p = 0.336), which

was the same for some studies done for the same variables.[17] However, the mean result for this factor was of concern which needs to be addressed.

Place of Assignment

The place of assignment was related with mild level of anxiety ($n=317$, $M=8.972$). Alarming, there are moderate to severe mean results for specific PhilHealth Regional Offices (PROs). However, it should be noted that there was a limited number of sample size for some regions such as PRO II with $n=6$, PRO III with $n=11$, PRO VI with $n=8$, and PRO BARMM with $n=6$ as compared to the turnout of PRO CAR with $n=39$ and PRO IVA with $n=174$. Upon computing for the one-way ANOVA, a significant difference in place of assignment and anxiety came out with $F(15,301)=1.84$, $p=0.029$. PhilHealth frontline workers assigned in PROs CAR, II, III, VI, XII and BARMM were found to be more anxious than those assigned in other regional offices. This implies that there are certain areas in the corporation's regional offices that have increased incidence of mental health concerns which can be supported by previous studies done on certain regions.[18]

Importance of Identifying Workers with Depression, Anxiety and Stress

The results revealed that PhilHealth Frontline Workers have significant negative levels of mental health when grouped according to age, years in service and place of assignment. The performance of frontline employees is critical in promoting industrial economic growth.[19] The COVID-19 pandemic revealed the poor foundation of the country's health systems as well as mental health status of frontline workers involved in pandemic response efforts. Evidence showed that stress contributes to health problems, poor relationships and low productivity in the workplace. Some research also suggests that a significant relationship exists between stress, anxiety and depression with age. It is suggested that young employees are more psychologically sensitive due to their lack of professional experience, and therefore have higher levels of stress and anxiety.[20,21] In contrast, some studies suggest that the level of stress increases with age. Stress can have a significant impact on physical and mental well-being, which may ultimately affect the productivity of workers.[22]

Stress can deflate motivation and morale, which eventually leads to poor workplace performance. Hence, it is important to identify employees' mental health status, more so the efforts to decrease stress, depression and anxiety in the work environment to increase productivity.

CONCLUSION AND RECOMMENDATION

In conclusion, age, years in service, and place of assignment were the variables found to have a statistically recognizable impact on mental health and well-being of PhilHealth frontline workers. Overall, this research supports previous studies that identified various demographic factors and its relationship with depression, anxiety, stress and well-being. These findings were considered in proposing Mental Health Programs for PhilHealth employees.

Studies regarding the COVID-19 pandemic revealed its harmful impact on mental health of workers, subsequently affecting their overall wellbeing.[23,24] However, this pandemic is not the sole reason for issues on mental health and wellbeing. Evidence suggests that there are other key players such as heavy workload,[25,26] workplace safety issues [27,28] and office's physical setup.[29] Addressing these factors would result in improved job satisfaction, work engagement and enhance employee productivity.[17] Based on the study's findings and points raised in the discussion, the following recommendations discussed in the next paragraphs were proposed.

Evidence-based interventions and programs shall be developed to support frontline workers' health and wellbeing on a long-term perspective. Necessary expertise of health, wellness and behavioral science experts should be leveraged to guide implementation of these solutions and ensure clear evaluation design, analysis and iteration to inform continual evaluation and improvement.

An organizational knowledge base (information, tools and resources) should be created and shall be designed to improve the resilience and wellbeing needs of frontline workers and their supervisors in times of crisis, recovery and rebuilding.

Adequate staffing levels in operations and fair pay for workers should be ensured. Help-seeking behaviors should be encouraged. This should be supported by making mental health resources in the

workplace accessible and available for workers in distress.

The corporation should increase efforts to destigmatize mental health issues in the workplace and continuously condemn and combat stigmatization of workers with mental health issues.

Ensure a wider and more actionable dialogue about mental health in the workplace and engage frontline workers in the decision-making processes in co-creating new policy development.

Consider the opportunity for digital technology and other innovative approaches to ensure access to effective training and ongoing support and guidance among frontline workers and in the overall healthcare workforce.

The organization needs to come up with its own mental health program pursuant to Republic Act No. 11036, Mental Health Act.

Future studies on mental health and wellbeing should be conducted with focus on qualitative research approach and utilizing regression modeling with a wider scope to cover officers and other employees to explore the variability of mental health relative to demographic factors.

LIMITATIONS

There was a low turnout of respondents since out of the seventeen regional offices only four were able to reach the minimum number of respondents. Aside from the usual research methodological limitations (ie, limited internet connection in some regions, no free time to answer surveys), another possible reason was the attitude of Filipinos towards mental health

wherein stigma is still a barrier.[30,31] Further research was recommended with higher number of participants by encouraging all offices to participate in this type of study for a more generalizable and conclusive result.

DISCLAIMER

PhilHealth has already issued its Mental Health Program through Corporate Order No. 2022-0082 on November 22, 2022. This study was conducted from August to November 2022; thus, it was not possible to consider the recently issued mental health program for its officers and employees.

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AUTHORS' CONTRIBUTIONS

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2. Statistical Analysis: A. Design, B. Execution, C. Review and Critique

3. Manuscript Preparation: A. Writing the First Draft, B. Proofreading and Revision C. Submission and Coordinating

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