

NOSOPHOBIA AND THANATOPHOBIA AMONG MEDICAL AND PARA-MEDICAL PROFESSIONALS DURING CORONA VIRUS PANDEMIC- A PSYCHOLOGICAL PERSPECTIVE

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Abstract

This research investigation is an attempt made to examine nosophobia and thanatophobia among the Medical and Para-medical professionals during Corona virus pandemic from a psychological perspective. The sample size for the present study will comprise of 300 randomly selected Medical and Para-medical professionals from two government hospitals (“Kamaraj Government Medical Hospital” in Chidambaram and “Cuddalore District Medical College and Hospital” in Annamalainagar) in Chidambaram District, Tamil Nadu (an area declared as red alert zone during Covid 19 Pandemic). Among the participants 59.3% (178) were males and 40.7 (122) were females. The age range was from 25 years to 49 years (Mean age= 38.2). The tools used for data collection were: (1) DASS-21 Scale and Impact of Events Scale- Revised (IES-R) (Lovibond and Lovibond, 1995) a standardized Psychological scale to assess anxiety, stress, and depression, selected after a comprehensive review of related literature along with (2) SemiStructured Interview Schedule for Nosophobia- designed by the research investigator to procure information on fear of diseases; (3) Semi-Structured Interview Schedule for Thanatophobia- designed by the research investigator to procure information on fear of death; and the (3) Personal Information Schedule, developed by the research investigator to procure relevant demographic information. The primary method of data collection was adopted in this study. The participants were contacted individually, and data was obtained based on face-to-face interview through questionnaire survey after obtaining informed consent. The data collection was spread over a period of 3 months. This research used mixed design both qualitative and quantitative were employed for data collection and analysis of results. The results of this study revealed that thanatophobia and nosophobia were present among Medical and Para-medical professionals dealing with patients during corona pandemic. The outcome of this research indicated that health care professionals adopt various coping strategies to overcome fear death and fear of diseases. Age had a significant negative relationship with depression and anxiety. Medical history has had a significant positive relationship with anxiety, stress, and depression. Stress, anxiety, and depression were found to be significant and positively related in this research.

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INTRODUCTION

Cataclysmic pandemics have been happening at regular intervals throughout human history. The last portion of the 20th and the initial part of 21st century has witnessed the outbreaks of epidemic infectious diseases caused by SARS, EBOLA, ZIKA, MERS, HINI and NIPAH viruses in different parts of the world. Despite the continuous occurrence of these phenomena hitherto intriguing that only modest deliberation has been given to these pandemic incidences in behavioral social sciences and different fields of medicine (Huremovic, 2022).

Covid-19 pandemic has deeply changed social and working environments in many ways. Social distancing policies, mandatory lockdowns, isolation periods, and anxiety of getting sick, along with the suspension of productive activity, loss of income, and fear of the future, jointly influence the mental health of citizens and workers. Workplace aspects can also play an important role on moderating or worsening mental health of people facing this pandemic scenario (Giorgi *et al.*, 2020).

The novel corona virus pandemic has massively confronted India's financial, medical and public health infrastructure. Incapacity to control the corona pandemic in India might have devastating consequences with rampant cases and high mortality that could simply engulf the medical edifice. In India the corona virus patients surpassed 9.74 million within 11 months ensuing the 1st case identified in Kerala in beginning of 2020 (Kumar et al, 2020). Accordingly, tremendous increase in corona patients was observed throughout the nation. In India the corona pandemic has hitherto claimed over 1, 41, 360 lives (COVID-19 update, COVID-19 India, 2020). On 16th September 2020 India documented its peak increase with 97894 corona cases in one day; this raise was the highest in a single day for any nation in the world since the eruption of the pandemic. Maharashtra was the most affected state, Karnataka was in 2nd place, Andhra Pradesh was 3rd and Tamil Nadu was 4th in number of corona pandemic. Persistent increase of the corona pandemic can possibly make India the next COVID-19 hotspot; therefore, the World Health Organization has emphasized that the "future of the pandemic will depend on how India handles it."

Throughout the Covid-19 pandemic several issues associated to the physical and mental-health of doctors and physician were identified. It was observed that healthcare professionals experience a greater amount of work stress than the general populations. Elevated levels of suicidal ideation were also found in these groups consequently doctors had trouble in sharing their mental health problems with their colleagues or employers (Galbraith *et al.*, 2021). During the recent corona pandemic, shutting down of International and state borders, and area wise lockdown has affected health care workers and their families leading to undue harmful psychological effects.

Covid-19 pandemic seriously affected all the front-line workers engaged directly in managing corona patients and were at a relatively larger risk than public. The front-line workers like doctors, nurses, sanitation workers, policemen, community health workers and other volunteers throughout the globe are completely in devastating circumstances, incapable of making appropriate decisions and furthermore were unable to work under extreme

pressures. The major causes for such psychological consequences were the heavy workload/work hours, inadequate personal protective equipment, zealous media news, insufficient social support (Spoorthy *et al.*, 2020). It affected not only their personal and family life, but also caused moral damage resulting in mental illness such as depression, post-traumatic stress disorder and even ideas of suicide (Roy *et al.*, 2021).

Thanatophobia is an intense fear of death or dying process. Sigmund Freud considered death as the goal of life. Carl Jung viewed death as part of life cycle. Fear of death is common among human being and is considered as the root of all anxieties. Thus, the understanding the inevitability of death and dying is indispensable to our existence (Sinoff, 2017). Pandemics eruptions more often occur with diverse life-threatening issues. Healthcare workers were at a higher risk of being afflicted with COVID-19 than the public. Burnout was prevalent among health care workers especially among doctors and support staff members during corona pandemic (Khasne et al, 2020). Healthcare professionals treating corona patients are exposed to inflated stress levels and subsequently experience higher rates of psychiatric morbidity, like the circumstances that prevailed during the SARS and H1N1 epidemics. In fact, suicide among healthcare workers in Europe was reported during the COVID-19 pandemic (Lakhani et al, 2020).

The term ‘nosophobia’ is derived from the Greek words ‘nosos’ and ‘phobos’ which means ‘disease’ and ‘fear’ respectively. Nosophobia is an intense fear of contracting a life-threatening disease or illness. It usually refers to irrational fear of certain specific disease. Nosophobia among health care professionals depends on the risk perception in dealing with patients and the fear of disease varied based on the type of disease (Obono & John, 2021). Studies indicated that the frontline healthcare workers reported fear of being infected while treating corona patients (Lakhani et al, 2021). Among health care worker the fear of becoming sick or death, feelings of helplessness, depression, anxiety, loneliness, and stigma were seen as the top main psychological issues. In pandemic situations, healthcare professionals are more prone to both transient and enduring psychological problems because of fears of disease contagion, getting quarantined, and the likelihood of spreading the infection to family and friends (Mamun et al, 2021).

The novel corona virus is an exceedingly infectious respiratory illness which causes severe risk to the health care workers leading to substantial amount of anxiety, depression, and stress. Prior research on corona virus pandemics has indicated that the psychological consequences of contagious epidemic may prevail long after the episode, with harmful ramifications on the well-being and leading to post-traumatic stress disorder, depression, and stress amid health-care workers. Under corona pandemic circumstances, the health care professionals are anticipated to attend and manage the disturbing experiences of corona patients and the sudden demise of friends and family members. Consequently, health care workers tend to experience psychological distress, including depression, and anxiety (Alnazly et al, 2021). Batra et al (2020) through meta-analysis found the main reasons for psychological distress were anxiety, depression, PTSD, sleep deprivation, and exhaustion.

Need for the Present Study

The role of healthcare professionals in mitigating pandemic situations tends to be pivotal. Throughout any pandemic, the burdens on healthcare personnel are bizarre and enduring. Dawn of the novel corona virus in Wuhan, China, in late 2019 and the ensuing meteoric escalation of it across the globe have severe physical and psychological consequences upon health care professionals involving elevated threat of contagion, loneliness, fatigue, and lack of contact with family. Work-related stress inordinately impinges on healthcare workers. Dealing with the psychological issues of medical workers is significant for the better preclusion and management of the pandemic.

Both globally and in the Indian context there is a dearth of empirical literature to comprehend the issues of healthcare professionals during pandemic situations from a psychological perspective. Review of related literature leads to the conclusion that there are no substantial scientific research involving nosophobia and thanatophobia along with distress, depression and anxiety relating to the demographical variables. Hence in this regard this is a pioneering study in Indian context to mitigate the lack of empirical knowledge pertaining to the psychological issues of healthcare professionals. There is an imperative need for research to alleviate the psychological crisis of healthcare workers under corona virus pandemic conditions (Centers for Disease Control and Prevention, 2020).

This research will identify and enumerate the coping strategies adopted by healthcare professionals to alleviate nosophobia and thanatophobia which will be of immense help for the therapists. In addition, this study will also make available two tools to assess nosophobia and thanatophobia which would be useful for researchers in future research. Furthermore, this study will represent the first psychological consequences of COVID-19 outbreak upon the Medical and Para-medical professionals in Indian milieu which will sensitize the psychology community in rendering professional help. This study will uncover the web of relationship that exists between demographic variables (age, gender, occupation, marital status, and medical history) and psychological variables (nosophobia, thanatophobia, distress, depression, and anxiety) which would provide significant insights in resolving psychological issues encountered by Medical and Para-medical professionals during corona virus pandemic.

METHOD

Sample: The sample size for the present study will comprise of 300 randomly selected Medical and Para-medical professionals from two government hospitals (“Kamaraj Government Medical Hospital” in Chidambaram and “Cuddalore District Medical College and Hospital” in Annamalainagar) in Chidambaram District, Tamil Nadu (an area declared as red alert zone during Covid 19 Pandemic). Among the participants 59.3% (178) were males and 40.7 (122) were females. The age range was from 25 years to 49 years (Mean age= 38.2).

Tools Used:

The following four scales were used in this research study for data collection.

1. *Informal Personal Information Schedule*: A Personal Information Schedule was designed by the research investigator to procure relevant demographic information from the participants.
2. *DASS-21 Scale and Impact of Events Scale- Revised (IES-R)*: This scale was constructed by Lovibond and Lovibond (1995). This is a self-report measure for depression, anxiety and stress. Each item is rated on a 4-point Likert scale, ranging from 'not at all or never applicable' to 'definitely or very often applicable' with scores ranging from (0 to 3). Higher the score designates a high level of depression, anxiety, stress and vice-versa. The DASS-21 constitutes good psychometric properties. It has established internally consistency, $.85 \leq \text{Cronbach's } \alpha \leq .91$, test-retest reliability, $.74 \leq r \leq .85$.
3. *Semi-Structure Interview Schedule for Nosophobia*: An informal interview schedule was designed by the research investigator to procure information on nosophobia from Medical and Para-medical professionals. This schedule consists of open-ended questions eliciting responses from the participants regarding their feelings and reactions pertaining to the fear of diseases based on the nature of their job.
4. *Semi-Structure Interview Schedule for Thanatophobia*: An informal interview schedule was designed by the research investigator to procure information on thanatophobia from Medical and Para-medical professionals. This schedule consists of open-ended questions eliciting responses from the participants regarding their feelings and reactions pertaining to the fear of death or dying based on the nature of their job.

Data Collection: The primary method of data collection was adopted for the present research study. The participants were contacted individually by the field investigator and data was obtained based on questionnaire survey after obtaining informed consent. The booklets containing four questionnaires, namely, (1) the DASS- 21 Scale, (2) the Semi-Structured Interview Schedule for Nosophobia, (3) the Semi-Structured Interview Schedule for Thanatophobia, and (4) the Personal Information Schedule were randomly distributed to 100 Medical professionals and 200 Para-medical professionals (Sample Size= 300). The data collection was spread over a period of 3 months.

Research Design: This research is a mixed design study since both qualitative and quantitative methods have been employed for data collection and analysis.

Statistical Analysis: The content analysis, Chi- Square and correlation were the statistics analysis done.

RESULTS AND DISCUSSION

The results summarized in table 1 indicates that majority of the Medical and Para-medical professionals have reported to experience negative feelings when their patients die such as being scared (48.3%), getting worried (19.7%) and feelings anxious (10.3%). Only around 21.7% of the Medical and Para-medical professionals have reported not being scared when their patients die.

This outcome is in accordance with certain prior research findings which have indicated that death anxiety tends to be prevalent among health care professionals due to enhanced awareness that death is inevitable when they get exposed to diseases and suffering of patients (Hamid Sharif Nia et al., 2016). From table 2 it is inferred that the major feelings experienced by Medical and Para-medical professionals while attending pandemic patients were, namely, anxiety (57%) followed by helplessness (22.3%) and fear (20.7%). These outcomes were in accordance with that of Lee, Park, and Jang (2022) that stress and anxiety to viral epidemic led to burnout among Dental care professionals. Similarly, Spoorthy, Pratapa, Mahant (2020) also found that due to COVID 19 pandemic the mental health of health care workers was affected resulting in increased stress, anxiety, depressive symptoms, and insomnia.

Table 3 shows that the majority of the Medical and Para-medical professionals appear uncomfortable (46%) and tensed (26%) as compared to 28% professionals who have reported to be comfortable while attending patients with contagious diseases. Recent research studies found that health care professionals involved in the direct diagnosis of COVID 19 patients display fear of contracting the disease (Cabarkapa et al, 2020). The table 4 portrays that the Medical and Para-medical professionals appear apprehensive when the patients discuss about their death, the outcome signifies that mostly the reactions of the health care professionals feel bad (49%) and sad/worried (17.7%) and only 33.3% of the health care professionals tend to be reassuring to their patients. The reason for the lack of reassurance to COVID- 19 patients from the part of healthcare professionals might be attributed to their burnout which has been universally documented as an important concern affecting the physical and psychological well-being of health care professionals (World Health Organization, 2020).

The results in table 5 enumerate the coping strategies adopted by Medical and Para-medical professionals associated with overcoming the fear of death. In this research 4 major strategies were identified widely adopted by health care professionals to cope with fear of death. Results indicated that “Positive thinking” (36%) emerged as the major coping strategy, followed by “exercise” (28.7%) and “counseling” (21%) subsequently “prayer” (14.3%) was adopted by health care professionals to counter thanatophobia. Research studies that have explored the coping strategies of health care professionals to overcome death anxiety have found certain common themes to be beneficial. Individual coping strategies and adjustment appear crucial to overcome burnout among nurses. Accentuating individual development and capacity building to control emotions are found essential to counter stress among nurses attending dying patients (Dorz et al., 2003). Widespread studies have also identified the role of cultural and religious factors influencing death anxiety among health care workers. Numerous experimental studies have revealed significant information that can be applied to enhance the psychoeducation about death and dying content for health care professionals (Hamid Sharif Nia et al., 2016).

Table 10 evidently designates that the health care professionals attending patients with serious illness tend to adopt certain coping strategies to overcome the fear of diseases. The outcome of this research has enumerated that most health care professionals (32.3%) adopt “exercise,” followed by “precautions” taken by around 20.7% of health care professionals, next “yoga” is

being practiced by 19% of the health care professionals and subsequently 15% and 13% of the health care professionals have adopted “prayer” and “Good Diet” respectively as means to cope with fear of diseases. Promotion of self-care has been emphasized and recommended for health care professionals beginning from the fulfilling of basic needs such as food, drink, rest and sleep (Maben & Bridges, 2020). Studies also have revealed that indoor recreational activities and relaxation exercises on daily basis contribute towards the management of fear of diseases among health care professionals (Kar et al, 2020).

The table 6 shows that majority of the Medical and Para-medical professionals have reported to experience anxiety while attending patients with serious ailment can be classified under two category, those who ‘often’ experience anxiety (27.7%) and those who ‘sometimes’ experience anxiety (53.3%). Around 19% of the health care professionals dealing with seriously ill patients have reported “not at all” experiencing anxiety. Current research clearly indicates that many healthcare workers come upon substantial amount stress, anxiety and depression owing to COVID 19 pandemic (Spoorthy, Pratapa, Mahant, 2020). Certain research studies have also found that self-efficacy and social support led to the reduction in anxiety and stress experienced by frontline health care professionals attending COVID 19 patients (Xiao et al, 2020). Table 7 signifies that the majority of the health care professionals (64.7%) do not manifest any physical symptoms due to fear of diseases. The physical symptoms manifested among health care professionals such as ‘Discomfort- 19%,’ ‘Palpitation- 8.3%, and ‘Sweating- 5%,’ appeared negligible. This outcome is contrary to the findings of Chew et al, (2020) observed that the general physical symptoms manifested among health care workers attending pandemic victims are headache, throat pain, joint/muscle pain, cough, and sputum. The results in table 8 regarding undue precautions undertaken by healthcare professionals compared to a common man was found to be not significant, this may be due to the transformations in contagious disease control measures taken by health care professionals worldwide because of Corona pandemic.

From the table 9 it is understood that majority of the health care professionals (63.3%) have reported to be worried regarding their personal health “sometimes,” and around 28% of health care professionals have reported to be worried about their personal health “often,” were as about 11% seem to be “excessively” worried about their personal health. Many prior research studies have documented that those health care workers treating patients with serious contagious illness patients frequently experience psychological stress. The frontline and non-frontline health care workers have reported considerable worries about their health due to COVID 19 pandemic (Yuki Sahashi et al., 2021). One prospective reason for perceived apprehension regarding their health is due to “infodemic” the wide-spread substantial misinformation about the pandemic prevalent in the news media and social media (Cinelli, 2020). The result in table 11 specifies that Depression had a positive correlation with anxiety, stress and medical history in the level of 0.01 and also there is a negative correlation between Age at the level of 0.05. Followed by Anxiety had positive correlation with Stress and Medical history at the level of 0.01. It also had negative relationship with Age in the level of 0.01. Stress had positive correlation between Medical History.

REFERENCE

- Alnazly E, Khraisat OM, Al-Bashaireh AM, Bryant CL (2021) Anxiety, depression, stress, fear and social support during COVID-19 pandemic among Jordanian healthcare workers. *PLOS ONE*. Vol. 16(3).
- Batra, K., Singh, T. P., Sharma, M., Batra, R., & Schvaneveldt, N. (2020). Investigating the Psychological Impact of COVID-19 among Healthcare Workers: A Meta-Analysis. *International Journal of Environmental Research and Public Health*, 17(23). <https://doi.org/10.3390/ijerph17239096>
- Cabarkapa S, Nadjidai SE, Murgier J, Ng Chee H. Ng (2020). The psychological impact of COVID-19 and other viral epidemics on frontline healthcare workers and ways to address it: a rapid systematic review. *Brain Behaviour, Immunity- Health*. 8:100144.
- Chew N.W.S., Lee G.K.H., Tan B.Y.Q., Jing M., Goh Y., Ngiam N.J.H. (2020). A multinational, multicentre study on the psychological outcomes and associated physical symptoms amongst healthcare workers during COVID-19 outbreak. *Brain, Behaviour and Immunity*. 88:559–565.
- Cinelli M, Quattrocioni W, Galeazzi A et al. (2020). The COVID-19 social media infodemic. *Scientific Reports*. 10:16598.
- COVID-19 update, COVID-19 India. (2020). Ministry of health and family Welfare. MoHFW.
- Dorz S, Novara C, Sica C, Sanavio E. (2003). Predicting Burnout among HIV/AIDS and Oncology health care workers. *Psychology and health*. 18:677–84.
- Galbraith, N., Boyda, D., McFeeters, D., & Hassan, T. (2021). The mental health of doctors during the COVID-19 pandemic. *BJPsych bulletin*, 45(2), 93-97.
- Giorgi, G., Lecca, L. I., Alessio, F., Finstad, G. L., Bondanini, G., Lulli, L. G., & Mucci, N. (2020). COVID-19-related mental health effects in the workplace: a narrative review. *International journal of environmental research and public health*, 17(21), 7857.
- Huremović, D., & Sales, P. M. G. (2022). The COVID-19 Outbreak and the HIV Pandemic. In *HIV Psychiatry* (pp. 571-579). Springer, Cham.
- Kar, S. K., Arafat, S. Y., Kabir, R., Sharma, P., and Saxena, S. K. (2020). “Coping with Mental Health Challenges During COVID-19,” in *Coronavirus Disease 2019 (COVID-19). Medical Virology: From Pathogenesis to Disease Control*, ed. S. Saxena (Singapore: Springer), 199–213.

- Khasne, R. W., Dhakulkar, B. S., Mahajan, H. C., & Kulkarni, A. P. (2020). Burnout among Healthcare Workers during COVID-19 Pandemic in India: Results of a Questionnaire-based Survey. *Indian journal of critical care medicine: peer-reviewed, official publication of Indian Society of Critical Care Medicine*, 24(8), 664–671.
- Kumar, S., Kumar, D.T., Christopher, B. P., & Doss, C.G.P. (2020). The rise and impact of COVID-19 in India. *Frontiers in Medicine*. 22 (7).
- Lee SA, Park JE, Jang JH. (2022) Correlation between Stress and Anxiety to Viral Epidemics (SAVE) and Burnout among Korean Dental Hygienists during the COVID-19 Pandemic: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*. Vol. 19, (6): 3668.
- Maben, J., and Bridges, J. (2020). Covid-19: supporting nurses' psychological and mental health. *Journal of Clinical Nursing*. 29, 2742–2750.
- Mamun MA, Sakib N, Gozal D, et al. (2021). The COVID-19 pandemic and serious psychological consequences in Bangladesh: A population-based nationwide study. *Journal of Affective Disorders*. 279: 462-472.
- Okoi Nta Obono& Etim John John (2021). Nosophobia, hypochondriasis, and willingness of people to seek healthcare amidst the COVID-19 pandemic in Calabar Metropolis of Cross River State, Nigeria. *Open Journal of Psychiatry & Allied Sciences*. Vol. 12 (1). 36-42.
- Padder, Altaf Hussain. "Healthcare waste management." *Int. J. Trend Sci. Res. Dev* 3 (2019): 908-911.
- Padder, A. H. (2022). Economic Development and Post Covid-19 : Reflections on the Global South. *Stochastic Modeling & Applications*, 26(3), 39–45.
- Roy, S., Bhunia, G. S., & Shit, P. K. (2021). Spatial prediction of COVID-19 epidemic using ARIMA techniques in India. *Modeling earth systems and environment*, 7(2), 1385-1391.
- Sharif Nia, Hamid & Lehto, Rebecca & Ebadi, Abbas & Peyrovi, Hamid. (2016). Death Anxiety among Nurses and Health Care Professionals: A Review Article. *International Journal of Community Based Nursing and Midwifery*. 4. 2-10.
- Sinoff, Gary. (2017). Thanatophobia (Death Anxiety) in the Elderly: The Problem of the Child's Inability to Assess Their Own Parent's Death Anxiety State. *Frontiers in Medicine*. Vol. 4.
- Spoorthy MS, Pratapa SK, Mahant S. (2020) "Mental health problems faced by healthcare workers due to the COVID-19 pandemic-A review." *Asian Journal of Psychiatry*. Vol. 51: 102119.

- World Health Organization. (2020). Mental health and psychosocial considerations during the COVID-19 outbreak, World Health Organization.
- Xiao H., Zhang Y., Kong D., Li S., Yang N. (2020). The effects of social support on sleep quality of medical staff treating patients with coronavirus disease 2019 (COVID-19) in January and February 2020 in China. *Medical Science Monitor*; 26.
- Yuki Sahashi, Hirohisa Endo, Tadafumi Sugimoto, Takeru Nabeta, Kimitaka Nishizaki, Atsushi Kikuchi, Shingo Matsumoto, Hiroyuki Sato, Tadahiro Goto, Kohei Hasegawa & Yuya Matsue. (2021). Worries and concerns among healthcare workers during the coronavirus 2019 pandemic: A web based cross-sectional survey. *Humanities and Social Science Communications*. 8: 41. 1-8.

APPENDIX

TABLE 1: Showing the feelings of Medical and Para-medical Professionals towards their dying patients.

Feelings Towards their Dying Patients	No. of Responses	Percentage (%)
Anxiety	34	10.3%
Worry	59	19.7%
Scared	142	48.3%
Not Scared	65	21.7%

$$X^2 = 95.88; p < 0.01$$

TABLE 2: Showing the feelings of Medical and Para-medical Professionals while attending pandemic patients.

Feelings when attending pandemic patients	No. of Responses	Percentage (%)
Anxious	171	57%
Fear	62	20.7%
Helpless	67	22.3%

$$X^2 = 75.74; p < 0.01$$

TABLE 3: Showing the feelings of Medical and Para-medical Professionals while dealing with patients having contagious diseases.

Feelings while attending patients with contagious diseases	No. of Responses	Percentage (%)
Comfortable	84	28%
Uncomfortable	138	46%
Tensed	78	26%

$$X^2 = 21.84; p < 0.01$$

TABLE 4: Showing the reactions of Medical and Para-medical professionals when patients discuss about their death.

Reactions when patients discuss about their death	No. of Responses	Percentage (%)
Feel Bad	147	49%
Sad/ Worried	51	17.7%
Reassuring	102	33.3%

$X^2 = 102.31$; $p < 0.01$

TABLE 5: Showing the strategies of Medical and Para-medical professionals to cope with the fear of death.

Coping Strategies to overcome the fear of death	No. of Responses	Percentage (%)
Positive Thinking	108	36%
Exercise	86	28.7%
Prayer	43	14.3%
Counseling	63	21%

$X^2 = 31.7$; $p < 0.01$

TABLE 6: Showing the frequency of anxiety regarding proneness to diseases experienced by Medical and Para-medical professionals while attending patients with serious ailments.

Anxiety experienced while attending patients with serious illness	No. of Responses	Percentage (%)
Often	83	27.7%
Sometimes	160	53.3%
Not at all	57	19%

$X^2 = 57.38$; $p < 0.01$

TABLE 7: Showing the physical symptoms manifested by Medical and Para-medical professionals due to fear of diseases.

Physical Symptoms	No. of Responses	Percentage (%)
Discomfort	57	19%
Palpitation	25	8.3%
Sweating	15	5%
No Physical Symptoms	203	64.7%

$X^2 = 234.59$; $p < 0.01$

TABLE 8: Showing whether Medical and Para-medical professionals undertake undue precautions based on their perception concerning vulnerability to diseases.

Undue precautions based on perception concerning vulnerability to diseases	No. of Responses	Percentage (%)
Yes	165	55%
No	135	45%

$X^2 = 3.0$, Not Significant

TABLE 9: Showing the worries regarding personal health among the Medical and Para-medical professionals.

Worries regarding Personal Health	No. of Responses	Percentage (%)
Sometimes	181	63.3%
Often	84	28%
Excessive	35	11.7%

$X^2 = 110.42$; $p < 0.01$

TABLE 10: Showing the coping strategies of Medical and Para-medical professionals to overcome the fear of diseases.

Coping Strategies to overcome the fear of Diseases	No. of Responses	Percentage (%)
Exercise	97	32.3%
Prayer	49	15%
Good Diet	35	13%
Precautions	62	20.7%
Yoga	57	19%

$X^2 = 36.24$; $p < 0.01$

TABLE 11: Showing the relationship between demographic variables with anxiety, stress and depression among Medical and Para-medical professionals.

Variables	N	Depression	Anxiety	Stress	Age	Gender	Medical History	Marital Status
Depression	300	1	0.803**	0.821**	-0.115*	-0.002	0.488**	0.047
Anxiety			1	0.807**	-0.152**	-0.021	0.529**	0.088
Stress				1	-0.025	0.018	0.551**	-0.011
Age					1	-0.107	-0.087	-0.189**
Gender						1	0.055	0.001

Medical History							1	-0.025
Marital Status								1

***** Pearson Correlation is significant at 0.01 level (2-tailed)***

**** Pearson Correlation is significant at 0.05 level (2- tailed)***