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RESEARCH ARTICLE

PSYCHOSOCIAL IMPACT OF THE COVID-19 PANDEMIC ON EMPLOYEES

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ABSTRACT

COVID-19 has been impacting the physical, mental, and social well-being of employees worldwide. While psychological support is being offered to the frontline workers, other working populations are often neglected. Moreover, although several research papers about this topic are available internationally, no independent study on this subject has yet been conducted among workers in the Middle East. The main objective of this research is to study the psychosocial impact of COVID-19 on employees in the Sultanate of Oman. Primary data was collected from 97 employees using snowball and convenience sampling techniques and analyzed using descriptive statistics and Chi-square analyses along with post-hoc tests. Findings indicated that various workplace, family, and health-related issues arising out of COVID-19 have significantly impacted the psychosocial condition of workers. Non-payment of bonuses had a high impact on non-managerial cadres. Increased medical expenses for family members had a high impact on those in the younger age group. We recommend that the psychosocial condition of workers is recognized as clinically relevant, and that psychosocial support be made available to all workers. The theoretical implications of this research are related to the cognitive theory of anxiety and attribution theory, while practical implications include the impact of COVID-19 on the psychosocial condition of workers. This research is relevant to the Asian as well as global scenarios, as the COVID-19 situation has affected workers alike, worldwide.

KEYWORDS

Psychosocial impact, Occupational health, Worker well-being, Mental health, COVID-19, Pandemic, Stress, Anxiety.

INTRODUCTION

Occupational well-being is a public health concept referring to the prevention of illness in workers, whether such illness is physical, mental, or social in nature, and requires assuring the greatest degree of not only physical well-being but more importantly social and mental well-being among all categories of employees [1]. Occupational health involves a dynamic, ever-changing balance between a worker and his/her working environment. The question arises as to whether the present COVID-19 pandemic has affected occupational health and hygiene, particularly in terms of the mental well-being of employees. Available literature supports the necessity of studying the impact of this unprecedented pandemic fall-out on the often-neglected area of mental health as a factor that influences both social and work environments. This research intends to identify and establish the prevalence of psychosocial conditions affecting the mental and social well-being of employees in the Sultanate of Oman as a result of the

rapidly changing impact of the pandemic. The COVID-19 pandemic has been by far the most impactful outbreak of infectious disease witnessed in recent history, impinging on the lives of millions around the world. The outbreak has had an unprecedented domino effect on global economies and social and political activities [2, 3], affecting the physical, social, and mental well-being of all population groups regardless of social strata. This research aims to highlight how the COVID-19 pandemic has affected the mental and social well-being of workers in Oman and associated variables. This work attains significance in the light of COVID-19 affecting the whole world alike irrespective of geography or the economic condition of the nation.

HEALTH RISK ASSESSMENT AND HIERARCHY OF CONTROLS AT WORKPLACES

The current situation calls for all workplaces to conduct health risk assessments to determine the possibility of exposure to implementing measures based on a hierarchy of risk controls, viz. elimination, substitution, engineering, administration, PPE (personal protective equipment), and community protective equipment [4]. In the case of dealing with COVID-19, the first three controls in the hierarchy are difficult to implement; both elimination and substitution can only be achieved through remote work solutions, while engineering controls require isolating workers by putting up physical barriers. In the absence of the first three controls, the focus lies on the stringent application of the fourth control, i.e., administrative measures, such as physical distancing, encouraging hand washing with a recommended hand wash, sanitizing, seating with two-meter spacing, and restricting the number of people permitted within the workplace. However, the measure claimed to be the least effective of the hierarchy of controls has, in actuality, been found to be the most effective, namely mandating the wearing of masks in all public spaces, whether in the workplace or elsewhere. While any risk assessment process can help to evaluate whether to keep the workplace closed or re-open or downscale the work activities, it may also aid in assessing the capacity of the organization to put effective control measures in place, while still ensuring compliance with local laws and recommendations by national regulatory bodies—such as the Ministry of Health and Ministry of Manpower in Oman—and international regulations by the WHO. A health risk assessment enables one to determine if a facility is a high, medium, or low risk before deciding whether employees should remain working on the premises or whether work-from-home options are applicable. Moreover, based on the results of such risk assessments and the changing epidemiological situation, organizations develop action plans to prevent and mitigate COVID-19-related losses as part of their business continuity processes.

PROBLEM NARRATION

The atmosphere of uncertainty and fear arising out of COVID-19 has resulted in an increased frequency of nervous breakdowns, mental disorders, domestic violence, and suicide, irrespective of the strata of the population or the economic strength of the nation. But initially, there were some miscalculations made. After COVID-19 was declared as the global pandemic [5], in the immediate aftermath, initial reactions were of disbelief, unpreparedness, and a strong sense of denial in which many individuals worldwide supposed that the consequences of the outbreak could not affect them or would be restricted to people of poorer social and economic circumstances or those living in third-world countries. But it proved to be incorrect. Though the first cases of suicide related to COVID-19 were reported in India and Bangladesh, in the early months of the pandemic [6, 7], in Japan too, COVID-19 has led to a spike in suicides [8]. Concerning occupational health, besides physical suffering and symptoms, COVID-19 patients have reported mental and social challenges associated with exposure to the virus. These include anxiety, fear of falling ill and dying, being socially excluded or ostracized, being placed in quarantine, increased medical expenses, and losing one's livelihood. These myriad feelings, fears, and experiences have also resulted in an increased prevalence of loneliness among the general population [9]. Moreover, additional variants of the virus due to mutations have become resistant to available treatment, while severe shortages of health resources such as hospital beds, ventilators, oxygen capacitors, PPE kits for front-line workers, and testing facilities have worsened the situation. These factors could lead to an increased risk of psychiatric illnesses such as post-traumatic stress disorder (PTSD) along with other conditions impacting mental health (10). This impact seems to be more among both the general public and workers with pre-existing psychiatric disorders [11]. Thus, these findings underline the urgent need to focus on people's well-being during the ongoing COVID-19 crisis.

LITERATURE REVIEW

According to [12] a disaster or crisis of sufficient magnitude may precipitate the development of PTSD, anxiety, and depression in the population. In terms of COVID-19, as weeks have progressed into months, various mutations of

the SARS-CoV-2 virus have created waves of infections resulting in community transmission [13]. This worsening situation has brought about increased rates of anxiety, depression, suicide, and pandemic fatigue, forcing governments to close international borders and impose national lockdowns and curfews. These measures have, in turn, led to increased loneliness, social isolation, and uncertainty [14, 15]. Moreover, the mental health implications of the pandemic have been exacerbated for those with pre-existing mental illnesses, as well as a result of the lack of mental health infrastructure and the overwhelming information deluge on social media, often fraught with misinformation [16, 17 too concluded that the constant barrage of catastrophic information reported on various media platforms, as well as the ongoing stress of living with the pandemic, is affecting both the mental and emotional well-being of the public. The available literature on the psychosocial impact of COVID-19 describes the increased prevalence of psychosocial stress, anxiety, anger, depression, and PTSD in the general population [18, 19, 20]. As regards the mental health of the public, the main psychological impact of the pandemic to date appears to be elevated levels of stress and anxiety. However, with the introduction of a new measure that people have not witnessed before – quarantine – the levels of loneliness, depression, self-harm, and suicidal tendencies too are expected to rise [13]. The working class, a large proportion of the general population, has been suffering from psychosocial problems after the onset of COVID-19. Various activities at the workplace and various situations in the workers' families were affected by the pandemic. Even slight changes in their health too created stress and anxiety because of fear of COVID-19. Below three sub-sections of the literature review highlight the impact of changes in workplace-related situations, family-related situations, and health-related situations caused by COVID-19 on the psychosocial condition of the working class which led to the formulation of hypotheses.

IMPACT OF CHANGES AT WORKPLACE ON PSYCHOSOCIAL CONDITION OF WORKERS

The emerging literature on occupational health consequences of COVID-19 has identified the occurrence of pandemic anxiety syndrome among workers due to changes at the workplace as a result of COVID-19 [21]. The pandemic has had a severe effect on the working population. Some lost jobs and their livelihoods, some faced salary reductions, and others have had to accept transfers to remote locations. These situations have impacted the psychosocial condition of both men and women, as according to [17] women too have suffered increased isolation and despair due to COVID-19 job losses. The impact of COVID-19 on the working population has been very harsh developing even suicidal tendencies. [22] initially forecast an increase in suicide cases, a repercussion arising as much from the economic downturn following the COVID-19 pandemic as the outbreak itself. The health and safety of workers has become an utmost important aspect of the HRM function. [23] studied various issues including health and safety, or in other words, the well-being of the workers at the workplace after the COVID-19 situation. Their study included assessing the challenges of remote working, employees' well-being, downsizing employees, and resilience of the institution during the pandemic. The resilience of the institutions was dependent on the resilience of the workforce and the article concluded that it is a challenging task and varies with the age group of the employees. The study [24] conducted literature review in the areas of work and organizational psychology concerning the emerging changes in the workplace. They concluded that financial measures at the workplace such as reduction of resources, cost cutting, etc. have negatively impacted the mental health of workers. Another group of researchers [25] in their literature review found that when close contact with a person infected by COVID-19 happens at the workplace, it affects the mental well-being of the workers. The fear of the spread of infection from people at the workplace will have an adverse effect on employee well-being [26, 27, 28] in their study on the impact of COVID-19 on the mental well-being of workers in the fashion retail stores in Spain, observed that the changes at the workplace and greater environment have been attributed to workers developing ongoing stress, and a sense of fatigue and a detached attitude towards work. [29] conducted a literature review on the psychological condition of workers linked to workplace factors that were changed after COVID-19 and concluded that they can result in worsening the mental health of workers. [30] conducted studies among German and Swiss employees and found that changes made due to COVID-19 have impacted work life. According to [31] various aspects related to the workplace such as salary deduction have shown adverse impacts on employee engagement which is a psychological condition more than a physical condition.

H1: Workplace-related situations arising out of the COVID-19 crisis have not impacted the psychosocial condition of workers in the Sultanate of Oman

IMPACT OF CHANGES IN FAMILY-RELATED SITUATIONS ON PSYCHOSOCIAL CONDITION OF WORKERS

This pandemic has disturbed the family life as well. A study from the Canadian Perspectives Survey Series has identified a rise in family-related stress due to the COVID-19 pandemic in adults [32] that could increase the risk of domestic violence and child abuse [30]. Specifically, there is emerging evidence that the pandemic has caused psychosocial stress in the general population [33] as well as among children and adolescents (34), although the effect on parental psychosocial stress has yet to be determined. According to [30] the COVID-19-influenced changes in private life have impacted the mental condition of the workers.

During the Pandemic, disruptions in school schedules, child-care, and work-from-home routines, the financial impact of being laid off present challenges and risks to families' mental health [35]. The financial burden and financial deprivation affect families. The effects of job loss and or unemployment have a ripple effect on the immediate family and in many cases the dependent family [36]. In a study involving the effects of quarantine on medical students' mental well-being and learning behaviors, it was observed that students felt emotionally detached from family, friends, and their social circle and an overall reduction in their work performance and study period [37].

H2: Family-related situations arising out of COVID-19 crisis have not impacted the psychosocial condition of workers

IMPACT OF CHANGES IN HEALTH SITUATION ON PSYCHOSOCIAL CONDITION OF WORKERS

Another psychosocial impact of COVID-19 has been the rise of a mental state known as pandemic fatigue, as a result of behavioral changes attributed to the pandemic [38]. Symptoms of anxiety and depression are common among both COVID-19 patients and survivors [9]. Apart from severe uncomfortable physical symptoms, COVID-19 disease can lead to psychological complications, such as restlessness, delirium, and agitation. People with pre-existing mental and physical disorders too are vulnerable to COVID-19 (SARS-CoV-2) infection and may stand at a higher health risk and even death [38' 39] surveyed Canadian social workers and found that employees are concerned about their personal health and reported that they felt stressed due to health concerns arising out of the COVID-19 situation. [25] in their extensive literature review concluded that the mental health of the front-line workers was amplified by the ongoing media coverage of the death and carnage due to the pandemic. Such misinformation added to the mental agony when someone is affected by any small illness. A lot of misinformation about health causes stress particularly, when the employees are working from home and get some health issues and in such cases, misinformation could be stressful [40]. Similarly, several studies corroborate that misinformation on social media during the pandemic can cause a psychological impact [8; 41].

H3: Health-related situations arising out of COVID-19 crisis have not impacted the psychosocial condition of workers

The available literature on the impact of COVID-19 on the psychosocial condition of workers indicates that though literature is available on this topic, most of it confines to frontline employees and healthcare workers but not to the managers and other categories of workers [29, 42, 43, 39, 2].

This is aptly taken care of in this research which covered both managerial and non-managerial cadres of all other categories of workers.

RESEARCH OBJECTIVE

The objective of this study is to evaluate the impact of the ongoing COVID-19 pandemic on the psychosocial condition of employees in the Sultanate of Oman.

METHODOLOGY

This primary research is based on the data collected from employees in the Sultanate of Oman through a self-administered questionnaire. The informed consent form was embedded in the questionnaire which assured that no personal data will be collected, the data will be used for research purposes only and can be made available to the subjects (respondents) upon request. The questionnaire was reviewed for integrity and ethics by the committee of experts. Data were analyzed using the SPSS platform (version 17.0). Descriptive statistics were used to explain the effect of the COVID-19 pandemic on the employees' psychosocial conditions. A Chi-squared test of independence was conducted to evaluate associations between the respondents' demographic characteristics and their mental conditions [44]. A post-hoc analysis was conducted with the help of Cramer's V value to determine

the strength of the association wherever a statistically significant relationship was identified [45].

SAMPLING

As sampling frames were not available, a random sampling technique could not be used [46]. As such, it was decided to use non-probability sampling techniques. Of the non-probability sampling techniques available, a snowball sampling technique was chosen as it was difficult to identify employees who faced difficult situations at the workplace and home or those who faced health issues due to COVID-19 [47]. The idea was that those who encountered such situations might know of others who had faced similar situations. The sample was drawn from the overall population comprising all employees in Oman [48]. The sample size consisted of 97 employees working in both private and public sectors in Oman and both managerial and non-managerial cadres.

DATA SCREENING

Data regarding the psychosocial impact of situations that had arisen due to COVID-19 was collected from the employees. A total of six common workplace situations, seven family-related issues, and six health-related issues were presented to each respondent. Subsequently, the respondents were presented with the aforementioned situations and were asked to identify the psychosocial condition that they had experienced due to these changes. Four components of psychosocial conditions were identified, including feeling 'anxious', 'angry', 'stressed', and 'sad or depressed' [9, 49, 21]. They were also given an option of "ignored", which indicates that the given change was either ignored by the respondent or did not impact the respondent's psychosocial state. As indicated in the limitations section, most of the employees who faced these situations or issues had already left the country, and those who were currently working might not have faced some of these situations. Hence, it was decided to screen out those who had not faced the given situations because their psychosocial condition may not have been impacted as a result [50]. Thus, some of the given situations did not apply to up to 50 percent of the respondents. After the screening, only those subjects for whom each situation was applicable were considered during the analysis to determine the frequency of psychosocial conditions arising as a result of the situation.

VALIDITY AND RELIABILITY OF THE QUESTIONNAIRE

The questionnaire was subjected to reliability and validity tests. A Cronbach's value of 0.868 indicated the high reliability of the instrument used [51]. In addition, a face validity test was conducted to ensure that the instrument measured what it is supposed to measure, i.e., the psychosocial impact of COVID-19 on employees [48].

RESEARCH FRAMEWORK

CHART 1: RESEARCH FRAMEWORK OF THE IMPACT OF COVID-19 ON THE PSYCHOSOCIAL CONDITION OF WORKERS

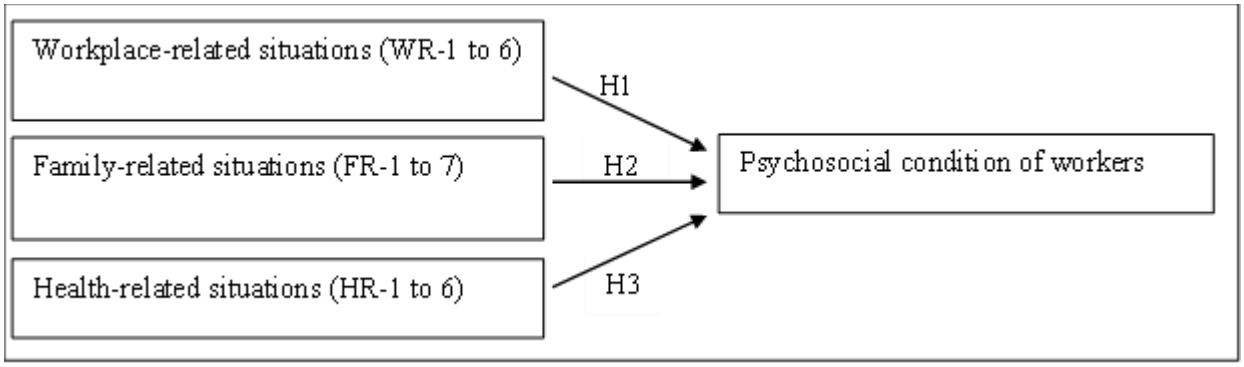

Chart 1 presents the proposed research framework for this current research. Various COVID-19-influenced factors grouped into workplace-related (WR), family-related (FR), and health-related (HR) have impacted the psychosocial condition of the workers. The WR factor has 6 variables, the FR factor has 7 variables, and the HR factor has 6 variables. The applicability of these variables is presented in Tables 2, 6, and 10 respectively, their impact on the psychosocial condition of workers is demonstrated in Tables 3, 7, and 11 respectively and the hypotheses are tested through chi-square Goodness-of-Fit tests and presented in tables 4, 8 and 12 respectively. The association between the impact and the demography of the respondents is presented in tables 5, 9, and 13 respectively.

RESULTS AND DISCUSSION

DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE

Out of the 97 respondents, 18.6 percent were 21–30 years of age, 48.5 percent were 31–40 years, and 32.0 percent were over 40 years of age. With regards to job position, 53.6 percent and 46.4 percent of the respondents were employed in non-managerial and managerial roles, respectively. With two missing values, 55.8 percent of the respondents represented the manufacturing sector whereas 44.2 percent were employed in the service sector (Table 1).

WORKPLACE-RELATED SITUATIONS

67 percent of the respondents indicated that they faced salary deductions since the COVID-19 pandemic had begun, 49.5 percent were transferred to other locations, 76.3 percent had not received their bonuses, 57.7 percent were forced to go on long leave without pay, 64.9 percent had other benefits such as their phone allowances stopped, and 75.3 percent had been subject to organization-imposed travel restrictions (Table 2). All of these situations were found to have impacted their psychosocial condition and mental well-being, as will be empirically proven in subsequent sections of this research.

TABLE 1: DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE

Variable		n	%
Age group	21–30 years	18	18.6
	31–40 years	47	48.5
	41–50 years	21	21.6
	Above 50 years	11	11.3
Position	Non-managerial	52	53.6
	Managerial	45	46.4
Sector*	Production / Manufacturing	53	55.8
	Service	42	44.2

* Two values missing

TABLE 2: CHANGES IN WORKPLACE-RELATED SITUATIONS DUE TO COVID-19

Situation		Applicable		Not applicable		Total	
		n	%	n	%	n	%
WR-1	Salary deduction	65	67.0	32	33.0	97	100.0
WR-2	Transfer from work location	48	49.5	49	50.5	97	100.0
WR-3	Non-payment of bonus	74	76.3	23	23.7	97	100.0
WR-4	Forced long leave without salary	56	57.7	41	42.3	97	100.0
WR-5	Deduction of benefits	63	64.9	34	35.1	97	100.0
WR-6	Travel restrictions by organization	73	75.3	24	24.7	97	100.0

These findings complement the findings of [52] which indicate that the COVID-19 pandemic has, without a doubt, significantly impacted the working environment. The drop in the expatriate population in Oman over 2020 and 2021, when waves of infections were peaking, is a clear indicator of job losses (More than 215,000, 2021), particularly because the country had previously boasted a large expatriate population at the start of the pandemic in December 2019, representing nearly 46% of the total population [38]. Currently, the expatriate population makes up only 38.8 percent of the population, clearly indicating that many expatriates have left the country as a result of the ensuing financial crisis and loss of jobs due to the pandemic [53].

The occurrence or threat of a job loss has a cascading psychosocial effect, not only on the worker in question but on his/her entire family, as will be demonstrated subsequently. Moreover, the loss of income and productivity suffered by businesses due to lockdowns and restrictions on movement has been transferred to workers in the way of salary deductions, non-payment of bonuses for the preceding year, and reductions in allowances. Similarly, in the USA, despite front-line staff such as

healthcare workers facing considerable risk to their health and safety while performing their duties, laws in Washington have reportedly placed restrictions on the ability of the local government to provide bonuses to employees based on work already completed. The reason is that, because the employees have already been paid for previous work, public funds cannot be used in the way of bonuses [54].

IMPACT OF CHANGES IN WORKPLACE-RELATED SITUATIONS ON PSYCHOSOCIAL CONDITION OF WORKERS

Table 3 presents the frequency of psychosocial conditions experienced by employees due to the occurrence of workplace-related situations brought about by COVID-19. Overall, these situations were found to substantially affect the psychosocial condition of the employees. Except for travel restrictions which affected only 76.7 percent of respondents, all other situations appeared to have had a large impact on the psychosocial condition of the employees. Salary deductions were found to have caused psychosocial conditions among 95.4 percent of respondents, while 94.6, 91.7, 85.7, and 85.1 percent were psychosocially affected by forced long leaves without pay, workplace transfers, benefit deductions, and non-payment of bonuses, respectively.

HYPOTHESIS TESTING – H1

The null hypothesis (H1) that workplace-related situations arising out of COVID-19 have not impacted the psychosocial condition of the workers is tested using the Chi-square Goodness-of-Fit test. As indicated in Table 4 below, statistically significant and very high chi-square values ($p<0.0005$) suggest that the hypothesis be rejected and conclude that the workplace-related situations arising out of COVID-19 have resulted in the workers experiencing psychosocial problems such as anxiety, anger, stress, and depression. Thus, it can be concluded that the changes that happened at the workplace due to COVID-19 have impacted the psychosocial condition of the workers.

TABLE 3: IMPACT OF CHANGES IN WORKPLACE-RELATED SITUATIONS ON PSYCHOSOCIAL CONDITION OF WORKERS

Situation	Psychosocial condition – n (%)						
	Anxious (a)	Angry (b)	Stressed (c)	Sad or depressed (d)	Psychosocial condition (a to d)	Ignored	Total
WR-1	17 (26.2)	13 (20.0)	17 (26.2)	15 (23.1)	62 (95.4)	3 (4.6)	65 (100.0)
WR-2	11 (22.9)	14 (29.2)	14 (29.2)	5 (10.4)	44 (91.7)	4 (8.3)	48 (100.0)
WR-3	10 (13.5)	22 (29.7)	13 (17.6)	18 (24.3)	63 (85.1)	11 (14.9)	74 (100.0)
WR-4	4 (7.1)	20 (35.7)	18 (32.1)	11 (19.6)	53 (94.6)	3 (5.4)	56 (100.0)
WR-5	10 (15.9)	18 (28.6)	19 (30.2)	7 (11.1)	54 (85.7)	9 (14.3)	63 (100.0)
WR-6	17 (23.3)	13 (17.8)	11 (15.1)	15 (20.5)	56 (76.7)	17 (23.3)	73 (100.0)

TABLE 4: RESULTS OF CHI-SQUARE GOODNESS-OF-FIT TESTS

Variable	Total who faced this situation	Experienced psychosocial problems	Did not experience psychosocial problems	Chi-square	df	p-value
WR-1	65	62	3	53.554	1	.000
WR-2	48	44	4	33.333	1	.000
WR-3	74	63	11	36.541	1	.000
WR-4	56	53	3	44.643	1	.000
WR-5	63	54	9	32.143	1	.000
WR-6	73	56	17	20.836	1	.000

These findings correspond with a recent report focusing on the impact of COVID-19 on suicidal tendencies among people in the USA [20]. According to the report, physical distancing policies, mandatory lockdowns and curfews, isolation, quarantine periods, and anxiety over getting sick, along with an absence or reduction in productive activity and loss of income leading to fear of the future, have all influenced the mental health of citizens at large and workers in particular [29] too presented similar results. According to them, the workplace environment can play a defining role in either moderating or worsening the mental health of workers during the current pandemic.

ASSOCIATION OF IMPACT WITH DEMOGRAPHY OF THE RESPONDENTS

Table 5 presents the association between the employees' demographic characteristics and the psychosocial condition experienced due to changes in workplace situations. The psychosocial condition experienced due to the non-payment of bonus (WR-3) was found to be significantly associated with the age group of the respondents ($p = 0.012$); moreover, the effect size indicated a strong association between these two variables (Cramer's $V = 0.385$). A contingency table analysis indicated that employees aged 21–30 years and those above 50 years old more frequently experienced psychosocial conditions related to the non-payment of bonuses. Similarly, psychosocial conditions experienced due to the non-payment of bonuses were strongly linked with job position (Cramer's $V = 0.289$), an association that was also statistically significant ($p = 0.013$). Post-hoc tests indicated that employees in non-managerial positions experienced a greater frequency of psychosocial conditions due to non-payment of bonuses compared to those in managerial positions.

TABLE 5: X^2 TESTS OF INDEPENDENCE ALONG WITH POST-HOC TESTS

Variable	Demographic variable	p-value	Effect size (Cramer's V)	Contingency table analysis (Cross tabulation)
WR-3	Age group	0.012 Significant	0.385 Strong	Experienced psychosocial problems: 21–30 years; Above 50 years Ignored: 31–50 years
WR-3	Position	0.013 Significant	0.289 Strong	Experienced psychosocial problems: Non-managerial position Ignored: Managerial position

The study [55] made similar conclusions and indicated that the impact of financial deductions was greater on the portion of the workforce under 40 years of age. The non-payment of employee bonuses and employee compensation has been an ongoing source of discussion in several countries during the course of this pandemic.

FAMILY-RELATED SITUATIONS

Overall, 49.5 percent of the respondents indicated that their families had been obliged to move back to their home country after this pandemic. In addition, 55.7 percent faced difficulties due to overdue school fees for their children, 58.8 percent had to bear medical expenses for aged or ailing parents, 72.2 percent faced financial difficulties due to overdue mortgages or loan payments, 62.9 percent reported the job loss of at least one family member, and 56.7 percent had lost loved ones. In addition, 64.9 percent of the respondents indicated that they or a family member had been compelled to return to a working environment despite the presence of one or more reported cases of COVID-19 (Table 6).

TABLE 6: CHANGES IN FAMILY-RELATED SITUATIONS DUE TO COVID-19

Situation		Applicable		Not applicable		Total	
		n	%	n	%	n	%
FR-1	Family moved back to home country	48	49.5	49	50.5	97	100.0
FR-2	Overdue school fees for children	54	55.7	43	44.3	97	100.0
FR-3	Medical expenditures for parents	57	58.8	40	41.2	97	100.0
FR-4	Loss of life of a loved one	55	56.7	42	43.3	97	100.0

FR-5	A family member had to return to work where COVID-19 was reported	63	64.9	34	35.1	97	100.0
FR-6	Overdue mortgage or loan	70	72.2	27	27.8	97	100.0
FR-7	Job loss of a family member	61	62.9	36	37.1	97	100.0

These findings are in line with conclusions offered by [56] during a survey of parents in Pennsylvania and Texas, USA. The researchers reported that working-class respondents depended largely on their income to meet household expenditures, which includes providing education for children and meeting health expenses for their dependents. Although some parents coped well, it was clear that parental stress emerged as an area of concern . [57] conducted comparable research to assess levels of pandemic-related stress in Germany during the current pandemic to gain a better idea of the challenges faced by parents. Several respondents had to deal with workplace issues such as transitioning to remote or online work while attending to their children who were also transitioning to home-schooling, all the while maintaining physical distancing, curfews, and lock-downs; these factors were found to have a profound and complex impact on families, further compounded by economic difficulties and job losses. A similar finding was reported in another study which indicated that the closure of schools and businesses created a sense of social isolation and added financial distress to those affected [58].

IMPACT OF CHANGES IN FAMILY-RELATED SITUATIONS ON PSYCHOSOCIAL CONDITION OF WORKERS

Table 7 shows the frequency of psychosocial conditions experienced by the employees due to the occurrence of family issues as a result of COVID-19. It can be observed that almost all of the respondents (>90 percent) experienced some degree of psychosocial distress (i.e., at least one psychosocial condition). Specifically, psychosocial conditions were reported by 93.8 percent of employees whose respective families had been obliged to move back to their home country due to COVID-19, with almost half of the affected sample (43.8 percent) feeling anxious as a result. Furthermore, 94.4 percent of the respondents developed psychosocial conditions due to overdue school fees; within this segment, the majority felt angry (25.9 percent) and stressed (37.0 percent). The analysis revealed that anger and stress were the most common psychosocial conditions brought about due to other family issues related to COVID-19, except for the loss of a loved one, which unsurprisingly had a greater portion of the respondents feeling sad or depressed (38.2 percent).

TABLE 7: IMPACT OF CHANGES IN FAMILY-RELATED SITUATIONS ON PSYCHOSOCIAL CONDITION OF WORKERS

Situation	Psychosocial condition – n (%)						
	Anxious (a)	Angry (b)	Stressed (c)	Sad or depressed (d)	Psychosocial condition (a to d)	Ignored	Total
FR-1	21 (43.8)	7 (14.6)	8 (16.7)	9 (18.8)	45 (93.8)	3 (6.3)	48 (100.0)
FR-2	10 (18.5)	14 (25.9)	20 (37.0)	7 (13.0)	51 (94.4)	3 (5.6)	54 (100.0)
FR-3	9 (15.8)	12 (21.1)	21 (36.8)	8 (14.0)	50 (87.7)	7 (12.3)	57 (100.0)
FR-4	6 (10.9)	13 (23.6)	12 (21.8)	21 (38.2)	52 (94.5)	3 (5.5)	55 (100.0)
FR-5	9 (14.3)	17 (27.0)	22 (34.9)	12 (19.0)	60 (95.2)	3 (4.8)	63 (100.0)
FR-6	11 (15.7)	17 (24.3)	25 (35.7)	13 (18.6)	66 (94.3)	4 (5.7)	70 (100.0)
FR-7	13 (21.3)	15 (24.6)	17 (27.9)	14 (23.0)	59 (96.7)	2 (3.3)	61 (100.0)

HYPOTHESIS TESTING – H2

The second null hypothesis (H2) – family-related situations arising out of COVID-19 have not impacted the psychosocial condition of the workers, was tested using the Chi-square Goodness-of-Fit test (Table 8). The null hypothesis will be rejected as the chi-square values of all situations are high and statistically significant ($p<0.0005$). This finding indicates that the family-related situations arising out of COVID-19 have resulted in the workers experiencing psychosocial problems such as anxiety, anger, stress, and depression. Thus, it can be concluded that the changes that happened in the family set-up due to COVID-19 have impacted the psychosocial condition of the workers.

TABLE 8: RESULTS OF CHI-SQUARE GOODNESS-OF-FIT TESTS

Variable	Total who faced this situation	Experienced psychosocial problems	Did not experience psychosocial problems	Chi-square	df	p-value
FR-1	48	45	3	36.750	1	.000
FR-2	54	51	3	42.667	1	.000
FR-3	57	50	7	32.439	1	.000
FR-4	55	52	3	43.655	1	.000
FR-5	63	60	3	51.571	1	.000
FR-6	70	66	4	54.914	1	.000
FR-7	61	59	2	53.262	1	.000

During the pandemic, the predominant anxieties expressed by the expatriate workforce in Oman have been related to geographical distance from their families and continual travel restrictions [59]. The findings of the current research regarding the impact of COVID-19 on employees in Oman are supplemented by information sourced from existing literature. The World Bank predicted that economic activity in the MENA region (Middle East and North Africa) was expected to fall by over 4 percent in 2020, as tourism, and exports were severely disrupted by the pandemic [60]. A researcher and writer dedicated to migrant rights, [59] reported that, in some cases, employers have been unable to pay compensation and benefits to outgoing employees. The Canadian Perspectives Survey indicated that financial insecurities resulting from changes in working conditions—much like those described in our survey—were the primary cause of increases in family stress [32].

ASSOCIATION OF IMPACT WITH DEMOGRAPHY OF THE RESPONDENTS

Table 9 highlights associations between the employees' demographic characteristics and the psychosocial condition experienced due to changes in family setup. Psychosocial conditions experienced due to medical expenditures for aged/ailing parents were found to be associated with the age group. This association was both statistically significant ($p = 0.024$) and strong (Cramer's $V = 0.408$). The contingency table analysis revealed that employees aged 21–30 years and those above 50 years more frequently experienced psychosocial conditions related to medical expenditures for aged/ailing parents compared to employees in other age groups. In addition, there was an association between age group and psychosocial conditions experienced due to the return of a family member to a workplace where a COVID-19 case had been detected, with employees in younger age groups more frequently experiencing some form of psychosocial distress as a result of this situation (Cramer's $V = 0.439$; $p = 0.007$).

TABLE 9: X^2 TESTS OF INDEPENDENCE ALONG WITH POST-HOC TESTS

Variable	Demographic variable	p-value	Effect size (Cramer's V)	Contingency table analysis (Cross tabulation)
FR-3	Age group	0.024 Significant	0.408 Strong	Experienced psychosocial problem: 21–30 years; Above 50 years Ignored: 31–50 years
FR-5	Age group	0.007 Significant	0.439 Strong	Experienced psychosocial problem: 21 to 30 years; 31 to 40 years; Above 50 years Ignored: 41 to 50 years

Similarly, according to [61] a postdoctoral fellow working on community-based aging projects at the Harvard Joint Center for Housing Studies, job losses arising from COVID-19 can lead to economic hardship and/or exacerbate the illness of caregivers due to stress, thereby disrupting the process of care for the aged or elderly.

HEALTH-RELATED SITUATIONS

Of the 97 employees approached in this research, 66.0 percent had suffered from fever and flu since the beginning of the pandemic, 45.4 percent had experienced heart-related illness, and 43.3 percent had experienced lung-related illness. Breathlessness, throat infections, and loss of sense of smell were reported by 42.3, 56.7, and 41.2 percent of the respondents, respectively (Table 10).

TABLE 10: HEALTH-RELATED SITUATIONS EXPERIENCED DURING THE COVID-19 PERIOD

Situation		Applicable		Not applicable		Total	
		n	%	n	%	n	%
HR-1	Fever and flu	64	66.0	33	34.0	97	100.0
HR-2	Heart-related illness	44	45.4	53	54.6	97	100.0
HR-3	Lung-related illness	42	43.3	55	56.7	97	100.0
HR-4	Breathlessness	41	42.3	56	57.7	97	100.0
HR-5	Throat infection	55	56.7	42	43.3	97	100.0
HR-6	Loss of smell	40	41.2	57	58.8	97	100.0

The literature shows that, as the pandemic unfolded, many people began experiencing health conditions similar to that of COVID-19 [35]; moreover, COVID-19 has had a cascading effect on other health problems [62]. The current pandemic has overwhelmed healthcare systems globally with a knock-on effect on the time, resources, and health personnel available to diagnose and treat other diseases; this has led to people avoiding seeking medical help for other health problems due to the imminent threat of contracting COVID-19. Furthermore, the overwhelming influx of information concerning the symptoms and psychological effects of COVID-19 has further fueled anxiety over acquiring the illness, even in the context of normal health concerns.

IMPACT OF CHANGES IN HEALTH ON PSYCHOSOCIAL CONDITION OF WORKERS

Table 11 displays the frequency of psychosocial conditions experienced by the employees concerning the occurrence of health issues arising due to the COVID-19 pandemic. For the most part, minor health problems such as fever/flu and throat infections were more frequently ignored (14.1 and 9.1 percent, respectively). In contrast, other health problems related to the heart, lungs, and loss of sensitivity to smell were less frequently ignored (2.3, 4.8, and 2.5 percent, respectively). Nevertheless, the majority of the respondents were either anxious (ranging from 14.3–35.0 percent of respondents) or stressed (ranging from 34.5–50.0 percent of respondents) by health issues brought about by the COVID-19 pandemic.

TABLE 11: IMPACT OF CHANGES IN HEALTH ON PSYCHOSOCIAL CONDITION OF WORKERS

	Psychosocial condition- n (%)						
Situation	Anxious (a)	Angry (b)	Stressed (c)	Sad or depressed (d)	Psychosocial condition (a to d)	Ignored	Total
HR-1	13 (20.3)	4 (6.3)	32 (50.0)	6 (9.4)	55 (85.9)	9 (14.1)	64 (100.0)
HR-2	12 (27.3)	4 (9.1)	20 (45.5)	7 (15.9)	43 (97.7)	1 (2.3)	44 (100.0)
HR-3	6 (14.3)	7 (16.7)	20 (47.6)	7 (16.7)	40 (95.2)	2 (4.8)	42 (100.0)
HP-4	10 (24.4)	6 (14.6)	16 (39.0)	8 (19.5)	40 (97.6)	1 (2.4)	41 (100.0)

HR-5	17 (30.9)	4 (7.3)	19 (34.5)	10 (18.2)	50 (90.9)	5 (9.1)	55 (100.0)
HR-6	14 (35.0)	3 (7.5)	14 (35.0)	8 (20.0)	39 (97.5)	1 (2.5)	40 (100.0)

HYPOTHESIS TESTING – H3

Null hypothesis (H3) that health-related situations arising out of COVID-19 have not impacted the psychosocial condition of the workers is tested using Chi-square Goodness-of-Fit test. As indicated in Table 12 below, statistically significant and very high chi-square values ($p<0.0005$) suggest that the hypothesis be rejected and conclude that the health-related situations arising out of COVID-19 have resulted in the workers experiencing psychosocial problems such as anxiety, anger, stress, and depression. Thus, it can be concluded that the health-related issues that the workers experienced during COVID-19 have impacted their psychosocial condition.

TABLE 12: RESULTS OF CHI-SQUARE GOODNESS-OF-FIT TESTS

Variable	Total who faced this situation	Experienced psychosocial problems	Did not experience psychosocial problems	Chi-square	df	p-value
HR-1	64	55	9	33.063	1	.000
HR-2	44	43	1	40.091	1	.000
HR-3	42	40	2	34.381	1	.000
HP-4	41	40	1	37.098	1	.000
HR-5	55	50	5	36.818	1	.000
HR-6	40	39	1	36.100	1	.000

According to Jane Webber, an expert in trauma counseling at Kean University in New Jersey, the current pandemic has resulted in many people existing in a constant state of fear and heightened state of arousal, akin to the experiences of war veterans or those forced to live in conflict zones (3), with a decade-long experience of working with military veterans suffering from PTSD, calls this a "chronic threat response", where the affected person remains in a continued state of hyper-arousal as a survival mechanism. Although some degree of anxiety concerning symptoms of illness is natural, people may experience overwhelming fear and anxiety during a pandemic in light of their exposure to the continual news cycle, especially if some of their symptoms correspond to those commonly seen in COVID-19 cases [63]. Anxiety is considered a leading cause of chest pain and other physical symptoms and increases fear of infection. The National Alliance on Mental Health reports that most people with anxiety experience one or more symptoms, ranging from a sense of apprehension or dread to feeling jumpy, restless, or irritable to outright panic attacks.

ASSOCIATION OF IMPACT WITH DEMOGRAPHY OF THE RESPONDENTS

Table 13 presents associations between the employees' demographic characteristics and the psychosocial condition experienced due to changes in health. Psychosocial conditions experienced due to throat infections were found to be significantly associated with job position (p = 0.010). The effect size supported a strong association between these two variables (Cramer's V = 0.373). The contingency table analysis indicated that employees in non-managerial positions more frequently felt psychosocial distress compared to employees in managerial positions.

TABLE 13: X^2 TESTS OF INDEPENDENCE ALONG WITH POST-HOC TESTS

Variable	Demographic variable	p-value	Effect size (Cramer's V)	Contingency table analysis (Cross tabulation)
HR-5	Position	0.010 Significant	0.373 Strong	Experienced psychosocial problem: Non-managerial position Ignored: Managerial positions

The current pandemic and related factors have resulted in the rise of a phenomenon known as 'COVID-19 anxiety syndrome', the symptoms of which mimic those of other mental health conditions, including stress, anxiety, and PTSD. This phenomenon has been exacerbated by continuous widespread media coverage as the world has waged war on this invisible threat. Despite the recent rollout of vaccinations and reports of decreases in the number of infections, some people nevertheless continue to experience this syndrome, which was first said to manifest as curfews and lockdowns restricted outside access due to fear of transmission, frequent checking for symptoms despite not being in a high-risk environment and avoiding social or community engagements [30].

CONCLUSION

The emergence of the COVID-19 pandemic as a global crisis over the past few years has drastically impacted all dimensions of human life, including employment. Above all, the working class has been the worst-hit segment of society, an outcome that is intertwined with other societal components. The current research was conducted to identify the impact of COVID-19 on the psychosocial conditions of employees in Oman. Over the course of the last two years, a great many expatriate employees in Oman, many of whom faced difficult situations arising out of COVID-19, have left the country. Those struggling to continue in their jobs have faced various adverse situations, including salary deductions, the loss of previously granted benefits, and even forced long leave without pay. Moreover, COVID-19 has impacted various dimensions of potential family-related stress, in the form of the migration of families to their home countries, struggles to pay mortgages or expenses related to children's schooling and the care of elderly or ailing parents, and the loss of near ones. These situations have caused immense psychosocial distress among workers in Oman, particularly younger employees and those in non-managerial positions. Thus, it can be concluded that the COVID-19 pandemic has contributed to significant, quantifiable levels of psychosocial distress among employees in Oman, and therefore needs to be recognized as clinically relevant. It is imperative that further research be conducted to evaluate the psychosocial effects of COVID-19 on people in general, and employees in particular, not just at the micro level within specific firms, but also at the macro level at the industry and global level.

While a lot is being done to ensure the physical health of employees, it remains crucial that psychosocial support also be made available to all workers in Oman. Hence, the authors recommend that comprehensive risk assessments be performed to help identify and mitigate COVID-19-related occupational hazards to mental health to determine the possibility of exposure to implementing an appropriate area- and activity-specific hierarchy of risk controls. In the case of reducing COVID-19 transmission, the first three hierarchies of controls have not been effective because the elimination of the virus is currently not guaranteed. Substitution fits into the same category, although engineering controls such as isolating workers by putting up barricades have been implemented. In the absence of the non-availability of the first three controls, what is practiced is the stringent application of administrative controls. However, mandates regarding the wearing of masks in all public spaces, be it in the workplace or other social environments, remain the most effective measure. Similar controls may be necessary to ensure the mental well-being of the workforce.

PRACTICAL IMPLICATIONS OF THE STUDY

The practical implications of this study include the identification and application of a hierarchy of controls at the workplace to prevent untoward anxiety during the ongoing COVID-19 pandemic. This must be communicated widely to the working community. The findings of this study are important in the current scenario, as while the virus cannot be completely eliminated, it is socioeconomically imperative that work should continue in the vast majority of offices, factories, and other work environments. Thus, this study highlights the importance of the mental well-being of the working population, an area that should not be neglected while addressing the current pandemic.

THEORETICAL IMPLICATIONS OF THE STUDY

In this research, we have attempted to capture the response of employees in Oman toward unfavorable conditions arising out of the ongoing COVID-19 situation. Accordingly, this study has addressed certain theoretical aspects related to the mental health and psychosocial condition of employees. According to the cognitive theory, anxiety, fear, anger, and depression are the primary psychosocial conditions of an employee [64] and these are addressed in this research. The attribution theory by [65] explains the individuals' perception of and given responses to certain common experiences, issues, and situations arising as a result of the current pandemic.

LIMITATIONS OF THE STUDY

This study included employees working in industrial establishments such as construction and manufacturing firms as well as those working in service industries, such as hospitals, hotels, restaurants, hypermarkets, and educational institutions. Overall, the sample included in the study consisted of workers engaged in both the private and public sectors in the Sultanate of Oman. However, the population surveyed was restricted to employees who had access to digital platforms and could respond to the questionnaire, and thus could not include grass-root employees in menial roles such as drivers, gardeners, etc. As a significant number of affected employees had left Oman in the wake of the economic impact of the pandemic (More than 215,000 expat workers left Oman, 2021), [66] coupled with the ramifications of the pre-existing economic crisis as a result of declining oil prices [66] this research is limited to only those workers affected by the COVID-19 pandemic who had remained in Oman.

FUTURE SCOPE

This study can be extended to other countries within the Middle East region. Moreover, similar research can be conducted in the near future within the same population, as many workers are now returning to Oman as the situation stabilizes and the adverse effects of the pandemic are coming under control. Further, the study can also be conducted among the subsection of the workforce that left Oman due to COVID-19 prior to this study.

COMPETING INTERESTS

The authors declare no competing interests.

DATA AVAILABILITY STATEMENT

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

INFORMED CONSENT:

Informed consent was obtained from all participants and/or their legal guardians.

ETHICAL APPROVAL

All procedures performed in this study were in accordance with the ethical standards of the College. The questionnaire was reviewed and approved by the Academic Integrity and Ethics Committee of Modern College of Business and Science, as per the MCBS Policy Manual, 2018.

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