# **International Journal of Acta Psychopathologica**

2021

Vol.7 No.1

# Mental well-being among Health Care Workers in Najran city

Awad Mohamed Al-Qahtani<sup>1</sup>, Samah Ramadan Ibrahim Elrefaey<sup>2</sup>, Hanan Jaber Hasan Alfifi <sup>3</sup>

- <sup>1</sup>Department of Family and Community Medicine, College of Medicine, Najran University, Najran, KSA
- <sup>2</sup> Assistance professor, phd., Department of community and Mental Health Nursing, College of Nursing, Najran University, Najran, KSA
- <sup>3</sup> Nursing Administration Department, College of Nursing, Najran University, Najran, KSA

\*Corresponding author: Hanan Jaber Hasan Alfifi, Department of Family and Community Medicine, College of Medicine, Najran University, Najran, KSA, Tel: +36522179171; E-mail: dr.hananalfifi@gmail.com

Received date: July 23, 2020; Accepted date: August 04, 2020; Published date: January 25, 2021

Citation: Hanan Jaber Hasan Alfifi (2021) Mental well-being among Health Care Workers in Najran city. Arch Med Vol. 7 Iss.1

**Copyright**: ©2021 Hanan Jaber Hasan Alfifi, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

# **Abstract**

**Background**: Mental wellbeing of healthcare workers directly affects their work productivity and their ability to fully serve their patients.

**Aim**: Assessment of the mental well-being among health care workers and its related risk factors.

**Methods**: Cross-sectional design conducted at Najran university hospital, King Khaled hospital, Najran general hospital-Alshorfah in Najran city, Kingdom Saudi Arabia. The study participants include 517 health care workers. Using one tool consists of three parts; Socio-demographic data, work-related information, the short-form-36 healthy survey.

**Results**: The mean age of the participants was  $33.56\pm8.14$  years. The Mean SD score of studied subjects regarding the total Short Form Health Survey scale was  $91.82\pm29.6$ . There was a highly significant positive effect from age, educational level, economic status, and experience on the total SF36 scale at (p = < 0.01). Also, there was a significant statistical positive effect from marital status and health problems on the total SF36 scale at (p = < 0.05).

**Conclusion**: This study indicated that less than half of the studied subjects had neutral health. Also, about one-quarter of them had positive health. While slightly more than a quarter of them had negative health.

Keywords: Health care workers, Mental well-being.

# Introduction

Nowadays, almost one-fifth of the workforce worldwide is engaged in the health care system. Healthcare systems, health conditions, medical conditions, including dealing with severe emotional problems, suffering, fear, and death (Andrea, & Stefania, 2017).

The hospitals have a high level of work-related stress, a factor known to increase the risk of low mental health wellbeing. physicians are not just role models in the general community about lifestyle but physicians' health practices may also influence how patients are counseled. It has been shown that doctors fail to detect or treat 40%–60% of cases of depression in their patients, almost 40% of individuals who have died by suicide contacted their primary care physician within a month of their suicide, without drawing the attention of the treating doctor or taking appropriate action (Amit et al., 2018).

The mental health well-being of a healthcare professional is an increasingly common topic in research and the media. Currently, there is no universally accepted definition of mental well-being and as a result, Most researchers would describe well-being as covering the interactive results of some different dimensions regarding an individual's subjective state. Dodge and colleagues conducted a multidisciplinary review of past attempts to define well-being and proposed a definition of well-being that includes measurable, operable, and universally applicable combinations (Naylor et al., 2015).

Health care workers' mental health should always be examined to ensure the best outcomes for patients. Furthermore, in case of poor mental well-being among health professionals, they are associated with poor safety patient care outcomes such as medical errors, due to they feel sick at work and,/or feeling disoriented and frustrated. Hence, it is strongly suggested to enhance and improve the overall well-being of workers significantly results in improving the patient experience (Mikolasek et al. 2017) & (Maben et al., 2012).

Finally, a large body of research shows that unintentionally disturbed health care workers or psychopaths put patients at risk of harm and that this is especially true for health care workers with a low level of mental well-being. So, mental health problems among health care workers are an important and healthy underestimated political factor because their well-being appears to be a well-being indicator that has been overlooked in all healthcare

© Copyright iMedPub

systems (Amit et al., 2018). So this study will be carried out to assess the mental well-being of healthcare workers and its related risk factors.

#### Significance of the study:

In recent years the term "well-being" has grown in popularity, and it has potential value for health care workers who are increasingly looking for new and development, evidence-based services to help with their mental health well-being (NHS, 2014 & Sophie et al., 2018). To date, efforts to enhance mental health well-being a range of services and techniques, including stress management, promoting physical activity, relaxation training, and mindfulness meditation, have proven effective. This is in terms of reinforcing the well-being of health care workers, as well as aiding primary prevention efforts in healthy populations (Sophie et al., 2018). As the overall well-being improvement, it significantly contributes to reinforcing the efficiency and effectiveness of the production of health care systems because good health is a vital performance of the tasks. Thus, ensuring the good health of the health care workers is essential not only for them but also for patients (Rahman, Abdul-Mummin, & Naing, 2016).

#### The aim of the study:

- Assessment of the mental well-being among health care workers and its related risk factors.

#### **Research questions:**

- What is the mental well-being of health care workers?
- What are the risk factors that affect mental well-being among health care workers?

#### **Materials and Method:**

Research design: Cross-sectional design

Setting: This study was conducted at Najran university hospital, King Khaled hospital, Najran general hospital-Albalad, and Najran general hospital-Alshorfah in Najran city, Kingdom Saudi Arabia.

Study participants: A convenience sample consists of 517 health care workers from previously mentioned settings, who willing to participate in the study and work for at least one year.

Tools: One tool consists of three parts:

Part one: Socio-demographic data ( age, gender, marital status, educational level, religious, economic status, and health problem)

Part two: It concerned with working related information (hospital, department, profession, and years of experience).

Part three: THE SHORT-FORM-36 HEALTH SURVEY (SF-36) developed by Ware & Sherbourne, (1992), it is an indicator of health status for mental well-being surveys. It includes

36 items contains eight subscales: physical functioning ten items(3,4,5,6,7,8,9,10,11,12), role limitations due to of physical health problems 4 items (13,14,15,16), bodily pain two items(21-22), social functioning two items(20,32), role limitations due to emotional problems three items(17,18,19), emotional well-being five items(24,25,26,28,30), energy/fatigue four items(23,27,29,31), and general health perceptions five items (1,33,34,35,36). It also includes a single item that provides an indication of perceived change in health.

#### Scoring system

Positive health >60%

Neutral 40-60 %

Negative health <40%

Reliability: Reliability pretesting was carried out to test the reliability in terms of Cronbach's Alpha for SHORT-FORM-36 HEALTH SURVEY was 0.89.

#### **Ethical Considerations:**

All ethical issues were considered before conducting the study. The researchers explained the aim of the current study to the health care worker before filling the questionnaire. Where every each one can't start the fill of the questionnaire before the consent. Every one read informed that participation is voluntary, and she/he can withdraw from the study at any time. Health care workers were assured that the data was collected from the questionnaire was remaining confidential and that no personal identification was needed by any means.

#### Procedure:

The researchers will use Google form to collect the data. After that, the researchers shared the link to the participants to gather the data, and all of the participants' responses being gathered in an online spreadsheet. The first section of the survey welcomes participants to the survey followed by an instruction that all participants need to answer every one of the inquiries. The length of time for answering to questionnaire in this survey is between 3-5 minutes per participant, based on the feedback from some of the participants.

## Statistical design:

Data entry and statistical analysis were done using SPSS 20.0 statistical software package. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations and medians for quantitative variables. Spearman rank correlation was used for assessment of the inter-relationships among quantitative variables and ranked ones. To identify the independent predictors of variable, multiple linear regression analysis was used and analysis of variance for the full regression models was done.

Items	N	%			
Age (year)					
22 – <32	240	46.4			
32 - <42	156	30.2			
42 - <52	100	19.3			
52 – 62	21	4.1			
Mean SD 33.56±8.14					
Gender					
Male	190	36.7			
Female	327	63.3			
Marital status					
Single	100	19.3			
Married	417	79.7			
<b>Educational level</b>					
High school	130	25.1			
BSC	308	59.6			
Postgraduate	79	15.3			
Religious					
Moslem	390	75.4			
Christian	108	20.9			
other	19	3.7			
<b>Economic status</b>					
Not enough	175	33.8			
Enough	296	57.3			
Enough & more	46	8.9			
Health problem					
Frequent headache	119	23			
Backache	78	15.1			
Persistent tiredness	96	18.6			
Feet disease	74	14.3			
Sleep disturbance	150	29			

Results: Table (1): Distribution of studied subjects according to demographic data (N=517).

Table (1) showed that 46.4% of the studied subjects their age ranged between 22 – <32 with Mean SD 33.56±8.14. As regard gender and marital status, 63.3% and 79.7% of the studied subjects were female and married, respectively. Also, 59.6% of the studied subjects had bachelor education. Moreover, 75.4% of them were Moslem. Likewise, 57.3% of them had enough

income. Furthermore, 29% of them had sleep disturbance

Table (2): Distribution of studied subjects according to work-related information (N=517).

Items	N	%
Hospital		
Najran University Hospital	199	38.5
King Khalid hospital	228	44.1
Najran general hospital-Albalad	60	11.6
Najran general hospital-Alshorfah	30	5.8
Department		
Inpatient department	109	21.1
Outpatient clinic	111	21.5
Emergency department	120	23.2
Operation rooms	98	18.9
Other	79	15.3
Profession		1
Physician	85	16.4
Nurses	338	65.4
Assistant allied worker	60	11.6
Other	34	6.6
Experience		
-1 🗆 5	88	17
- 5≤10	220	42.6
- > 10	209	40.4

Table (2) presented that, 44.1% of the studied subjects working at King Khalid Hospital. Also, 23.2% & 21.5% of the studied subjects working at the emergency department and outpatient clinic, respectively. Moreover, 65.4% of them were nurses. Likewise, 42.6% of the studied subjects had 5-≤10 years' experience.

Table (3): Mean distribution of studied subjects according to SF36 scale (N=517).

	No items	Mean	Mean percent	Range
Physical functioning	10	20.4± 6.8	68	10 - 30
Role limitations due to physical health	4	5.9±2.0	72.7	4 - 8
Role limitations due to emotional problems	3	4.8±1.8	80	3 - 6
Energy/fatigue	4	12.5±5.3	62.5	4 - 20
Emotional well-being	5	16.44±7.1	65.7	5 - 25
Social functioning	2	4.9±2.81	49	2 - 10
Pain	2	6.7±1.3	67	2 - 10
General health	5	17.08±4.6	68.3	5 - 25
Health change	1	3.1±0.99	62	1 - 5
Total scale	36	91.82±29.6	66.05	36 - 139

© Copyright iMedPub

Table (3) indicated that the Mean SD score of studied subjects regarding physical functioning and Energy/fatigue was 20.4± 6.8 and 12.5±5.3, respectively. Also, the Mean SD score of them related to Emotional well-being and General health was 16.44±7.1 and 17.08±4.6, respectively. Additionally, the Mean SD score of studied subjects regarding the total Short Form Health Survey scale was 91.82±29.6.

Figure (1): Percentage distribution of studied subjects related total score SF36 scale (N=517)

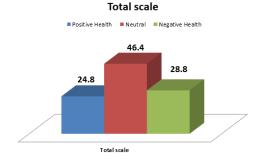


Figure (1) indicated that 46.4% of the studied subjects had neutral health. Also, 24.8% of them had positive health. While 28.8% of them had negative health

Table (4) Relation between demographic data and total score of SF36 scale

Items	Mean SD	X <sup>2</sup>	P-value
Age (year)		F test	
22 – <32	110.54±27.1		
32 - <42	107.4±30.1	6.103	.009**
42 - <52	90.01±22.2		
52 – 62	85.17±24.5		
Gender		T-test	
Male	92.01±19.80	1.470	.051
Female	90.55±23.3		
Marital status		T-test	

Single	99.73±17.38	4.021	.012*
Married	88.10±20.67		
Educational level		F test	
High school	93.11±23.7	7.002	.005**
BSC	100.8±19.40		
Postgraduate	105.47±21.3		
Religious		F test	
Moslem	94.78±19.9	1.087	.062
Christian	92.97±21.05		
other	92.00±24.6		
Economic status		F test	
Not enough	84.77±22.03	8.067	.002**
Enough	102.64±25.5		
Enough & more	108.93±29.8		
Health problem		F test	
Frequent headache	88.71±19.47	5.601	.024*
Backache	89.16±26.61		
Persistent tiredness	93.80±20.40		
Feet disease	96.70±17.80		
Sleep disturbance	95.11±25.60		
Experience		F test	
- 1 □ 5	99.10±24.46	6.774	.009**
- 5≤10	93.69±19.44		
- > 10	84.33±20.81		

Table (4) demonstrated that there was a highly statistically significant relationship between the total score of SF36 scale of studied subjects and their age, educational level, economic status, and experience at (P= < 0.01). Also, there was a statistically significant relationship with their marital status and health problem at (p= < 0.05). While there was no statistically significant relationship with their gender and religion at (p= > 0.05).

Table (5) Correlation between domains of SF36 scale.

		1	2	3	4	15	6	17	8	9
		1	ļ <sup>-</sup>					ĺ		
Physical functioning	R									
	p									
Role limitations due to physical health	R	.556								
	p	.008**								
Role limitations due to emotional	R	.310	.104							
problems	P	.024*	.052							
Energy/fatigue	R	.499	.360	.287						
	P	.009**	.020*	.041*						
Emotional well-being	R	.348	.338	.417	.309					
	P	.014*	.028*	.009**	.034*					
Social functioning	R	.487	.462	.560	.414	.466				
	P	.009**	.007**	.004**	.012*	.010*				
Pain	R	.610	.577	.615	.297	.308	.264			
	P	.004**	.004**	.002**	.041*	.022*	.041*			
General health	R	.624	.299	.369	.702	.347	.307	.699		
	P	.001**	.041*	.012*	.000**	.018*	.034*	.001**		
Health change	R	.507	.308	.601	.288	.567	.588	.705	.546	
	P	.008**	.040*	.000**	.024*	.007**	.006**	.000**	.003**	

Table (5) validated that there was a high positive correlation between physical functioning and their Role limitations due to physical health, energy/fatigue, social functioning, pain, general health, and health change at p-value <0.01. While there was a slight positive correlation between physical functioning and their Role limitations due to emotional problems and Emotional well-being at p-value <0.05. But there was no correlation between Role limitations due to emotional problems and their Role limitations due to physical health at p-value >0.05.

Table (6): Multiple Linear regression model

	Unstandardized Coefficients B	Standardized Coefficients  B	_ T	P. value
Age*	.303	.458	6.103	.009**
Educational level*	.352	.472	7.002	.005**
Marital status	.160	.217	4.021	.012*
Economic status*	.366	.501	8.067	.002**
Health problem	.208	.302	5.601	.024*
Experience*	.402	.498	6.774	009**
	ANOV	'A		
Model	Df.	F		e
Regression	6	5.748	.003**	

#### a. Dependent Variable: SF36 scale

b. Predictors: (constant) Age, Educational level, marital status, Economic status, Health problem, Experience

Table (6) revealed that there was a highly significant positive effect from age, educational level, economic status, and experience on the total SF36 scale at (p = < 0.01). Also, there was a significant statistical positive effect from marital status and health problems on the total SF36 scale at (p = < 0.05).

#### **Discussion:**

Healthcare workers are exposed to significant occupational stress. The key to a successful and productive life for everyone is mental well-being. An imbalance can be caused by various stressors and environmental factors (Afsar, Cheema & Masood, 2017). Reorganization of the important Mental well-being has been a component of health. Poor mental health well-being is a risk factor for developing mental health disorders or mental health problems (Nageswaran & Apte, 2020).

Through the data analysis of current study, regarding work-related information, this study revealed that about one-quarter of the studied subjects working at the emergency department and outpatient clinic, respectively. Moreover, two-thirds of them were nurses. Likewise, less than half of the studied subjects had 5-≤10 years' experience. These results were irrelevant with the study conducted by Deng, Sun, Lei & Yang, 2019, who revealed that only one-third of subjects were nurses and only less than one-tenth of subjects worked at emergency units. While, regular with the study performed by Díaz, Rubio, López & Aparicio, 2020, who stated that less than half of studied subjects were a nurse.

The current cross-sectional survey included 517 respondents and revealed a less than half of studied subjects had neutral health. Also, about one-quarter of them had positive health. While slightly more than a quarter of them had negative health. Another finding in the present study was that the mean score of physical functioning and Energy/fatigue were 20.4± 6.8 and 12.5±5.3, respectively. Also, the

Mean SD score of them related to Emotional well-being and General health was 16.44±7.1 and 17.08±4.6, respectively. These results may due to around two-thirds of subjects were female, more than three quarters were married that increase burden on the subject's health, about half of studied subjects worked at critical units "operation room, the emergency department" and all of them suffered from a health problem related their job. These results supported the study conducted by Johnson et al., 2018, who detected that workers in mental healthcare reported that their well-being is worse than employees in other healthcare sectors. Also, Walton, Murray & Christian, 2020, who reported that around half of studied health workers suffered from negative health. While, regular with the study performed by Lai et al., 2019, who have revealed a high risk of developing unfavorable mental health outcomes and may require psychological support or interventions. And, similar with the study done by Hasan & Tumah, 2019, who showed that participants suffered from a moderate level of occupational stress and psychiatric distress. While, support with the study by Hedayati & Hedayati, 2019, who concluded their study based on the consequences and significance of nurses' mental health stress tolerance and negative emotions in these individuals should be reduced.

Regarding the relation and linear regression the present study reported that there was a highly significant positive effect from age, educational level, economic status, and experience on the total SF36 scale at (p = < 0.01). Also, there was a significant statistical positive effect from marital status and health problems on the total SF36 scale at (p = < 0.05). These results supported the study by Hatch et al., 2018 titled in, who showed that both physical and psychological dimensions of workability differed by age and occupational burnout. Also, regular with the study done by Cheng & Cheng, 2017, who reported that mental health affected by shift work, experience, and health problem.

Related to the correlation between SF36 scale domains, the current results there was a high positive correlation between physical functioning and their Role limitations due to physical health, energy/fatigue, social functioning, Pain, General Health, and Health change at p-value <0.01. While there was a slight positive correlation between physical functioning and their Role limitations due to emotional problems and Emotional well-being at p-value <0.05. These results cohort with the study performed by Bazazan, Dianat, Mombeini, Aynehchi & Jafarabadi, 2019, who reported that Quality of life (QoL), mental health problems and fatigue were correlated among nurses. Also, relevant to the study performed by Al-Mutairi, 2019, who revealed a significant decrease in the quality of life among nurses who have work-related LBP among nurses.

### **Conclusion:**

Based on the overall findings of the current study, the researchers can conclude that is less than half of the studied subjects had neutral health. Also, about one-quarter of them had positive health. While slightly more than a quarter of them had negative health, there was a highly significant positive effect from age, educational level, economic status, and experience on mental well-being among health care workers at (p = < 0.01). Also, there was a significant statistical positive effect from marital status and health problems on them at (p = < 0.05).

© Copyright iMedPub

#### Recommendation:

- Our findings highlight the need for additional research on health care workers' mental health with an increasing number of subjects and different settings.
- Provide psychological support sessions for health care worker at the workplace
- Administrative hospitals largely responsible for stress and job dissatisfaction in-home care work
- Provide educational training for health care workers about maintain mental health and factors related.
- Additional research about factors influenced the mental health of health care workers.

## **Acknowledgment:**

The authors extend their appreciation to the Deputyship for Research& Innovation, Ministry of Education in Saudi Arabia for funding this research work through the project in the ninth research phase (through the initiative of social sciences number of the contract)

#### **Conflict of interest**

No conflict of interest in the current study was found.

#### **References:**

- Afsar, B., Cheema, S., & Masood, M. (2017). The role of emotional dissonance and emotional intelligence on job-stress, burnout, and well-being among nurses. International Journal of Information Systems and Change Management, 9(2), 87-105.
- 2. Al-Mutairi, M. D. (2019). Quality of Life among Nurses with Low Back Pain: A Review. Open Journal of Nursing, 9(11), 1138-1142.
- Amit, K., Pookala S., B., and Sumalatha, R. (2018). Study of quality of life among health workers and psychosocial factors influencing it, Ind Psychiatry J; 27(1): 96–102.doi: 10.4103/ipj. ipj\_41\_18
- 4. Andrea, T., & Stefania, D., S. (2017). Exploring Factors that Affect the Well-Being of Healthcare Workers, International Journal of Business and Management; Vol. 12, No.(6).
- Bazazan, A., Dianat, I., Mombeini, Z., Aynehchi, A., & Jafarabadi, M. A. (2019). Fatigue as a mediator of the relationship between quality of life and mental health problems in hospital nurses. Accident Analysis & Prevention, 126, 31-36.
- Cheng, W. J., & Cheng, Y. (2017). Minor mental disorders in Taiwanese healthcare workers and associations with psychosocial work conditions. Journal of the Formosan Medical Association, 116(4), 300-305.
- Deng, J., Sun, Y., Lei, R., & Yang, T. (2019). Job Stress and Healthcare Quality among Chinese Healthcare Workers: The Mediating Effects of Public Service Motivation. American journal of health behavior, 43(4), 705-716.
- 8. Díaz Ramiro, E. M., Rubio Valdehita, S., López Núñez, M. I., & Aparicio García, M. E. (2020). Sleep habits as predictors of psychological health in healthcare professionals.
- Hasan, A. A., & Tumah, H. (2019). The correlation between occupational stress, coping strategies, and the levels of psychological distress among nurses working in a mental health hospital in Jordan. Perspectives in psychiatric care, 55(2), 153-160.

- Hatch, D. J., Freude, G., Martus, P., Rose, U., Müller, G., & Potter, G. G. (2018). Age, burnout, and physical and psychological work ability among nurses. Occupational Medicine, 68(4), 246-254.
- 11. Hedayati, C., S., & Hedayati, C., B. (2019). Mental health assessment among nurses in Shohadaye-Lenjan Hospital. Journal of Fundamentals of Mental Health, 21(5), 362-365.
- Johnson, J., Hall, L. H., Berzins, K., Baker, J., Melling, K., & Thompson, C. (2018). Mental healthcare staff well-being and burnout: A narrative review of trends, causes, implications, and recommendations for future interventions. International journal of mental health nursing, 27(1), 20-32.
- 13. Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., ... & Tan, H. (2020). Factors associated with mental health outcomes among health care workers exposed to coronavirus disease in 2019. JAMA network open, 3(3), e203976-e203976.
- 14. Maben, J., Peccei, R., Adams, M., Robert, G., Richardson, A., & Murrells, T. (2012). Exploring the relationship between patients' experiences of care and the influence of staff motivation, affect, and wellbeing. Southampton: NIHR Service Delivery and Organisation Programme.
- Mikolasek, M., Berg, J., Witt, C. M., & Barth, J. (2017). effectiveness of mindfulness- and relaxation-based health interventions for patients with medical conditions: A systematic review and synthesis. International Journal of Behavioral Medicine, 25, 1–16. https://doi.org/10.1007/s12529-017-9679-7.
- Murray, M., Murray, L., & Donnelly, M. (2016). A systematic review of interventions to improve the psychological wellbeing of general practitioners. BMC Family Practice, 17(1), 36. https://doi.org/10.1186/s12875-016-0431-1.CrossRefGoogle Scholar.
- 17. Nageswaran, K., & Apte, S. (2020). Assess the Psychological well being among Nurses. International Journal of Nursing Education and Research, 8(1), 82-84.
- 18. Naylor, C., Imison, C., Addicott, R., Buck, D., Goodwin, N., Harrison, T., Curry, N. (2015). Transforming our health care system: Ten priorities for commissioners. Google Scholar
- 19. NHS. (2014). NHS Five Year Forward View. Google Scholar
- 20. Pawar, B.S. (2016). Workplace spirituality and employee well-being: An empirical examination. Employee Relations, Vol. 38 (6), pp. 975-994.
- 21. Rahman, H. A., Abdul-Mummin, K., & Naing, L. (2016). A study into psychosocial factors as predictors of work-related fatigue. British Journal of Nursing, 25(13), 757-763. https://doi.org/10.12968/bjon.2016.25.13.757
- Sophie, A., Tarra, L., P., Rachael, O., Charlotte, K., Benjamin, K. (2018). Measuring Wellbeing in a Healthcare Setting: a Qualitative Study of Staff and Service User Perspectives, Applied Research in Quality of Life, vol.15:(1). pp 127–145.
- Walton, M., Murray, E., & Christian, M. D. (2020). Mental health care for medical staff and affiliated healthcare workers during the COVID-19 pandemic. European Heart Journal: Acute Cardiovascular Care, 2048872620922795.
- 24. Ware, J.E., & Sherbourne C.D. (1992). The Short- Form 36 Health Survey (SF-36): I. Conceptual framework and item selec-tion. Med Care;30:473–83.