Journal Homepage: -www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI:10.21474/IJAR01/12330
DOI URL: http://dx.doi.org/10.21474/IJAR01/12330

ISSN NO. 2320-5407

RESEARCH ARTICLE

REDUCING THE JOB-RELATED STRESS AMONG NURSING OFFICERS IN A BASE HOSPITAL, SRI LANKA

Indika Wanninayake and Sumal Nandasena

Manuscript Info

Manuscript History
Received: 15 November 2020
Final Accepted: 18 December 2020
Published: January 2021

Key words:-
Stress, Mindfulness Based Stress Reduction

Abstract

Introduction: Stress is a one of risk factors affecting all health categories including nursing officers.

Objective: To implement a "Mindfulness Base Stress Reduction (MBSR)" intervention for nursing officers at base hospital Horana Sri Lanka.

Methodology: Intervention study with randomizing nursing officers for two groups (i.e., control group and intervention group) was conducted in Base hospital, Horana. A sample of 96 nursing officers was randomized to two groups. Prior to randomization, baseline stress level was assessed by "Expanded Nursing Stress Scale" (ENSS). A six-week mindfulness-based stress reduction (MBSR) package was implemented for intervention group. Similar to the baseline assessment, effectiveness of the MBSR package was assessed following the implementation in both groups. Student "t" test was used to compare intervention and non-intervention group.

Initially, 48 participants were selected for each arm. Out of the remaining participants, 42 in non-intervention group and 41 in the intervention group were completed the post intervention assessment, successfully.

Results: Several aspects of stress were improved with the intervention. As examples, perception of stress due to "issues of inpatient care including procedure painful to patient" ($p = 001$), "The death of a patient with whom you develop with a close relationship ($p<0.001$)), Physician(s)not being present when patients dying ($p = 0.001$), "watching the patient suffer"($p <0.001$), were significantly improved in the intervention group.

Conclusion: Result of present study shows benefits of MBSR intervention to reduce perception of stress among nursing officers. The MBSR package is recommended for other hospitals.

Introduction:-

"Stress" is a commonly discussed theme in many organizations. Invariably, it is common in many health care institutions as well. Stress can be defined as "cognitive affective state that occurs when an individual perceives that the demands of an external situation are beyond his or her perceived ability to cope" (Lazarus, 1966; Bhargava-Trivedi2018).Individual work-related stress is developed due to various reasons such as organizational reasons,

Corresponding Author:- Indika Wanninayake

individual reasons and family reasons, etc. The managements of health care organization and the clients demand high quality service may lead to stress.

Although the Sri Lankan evidences are scattered and scanty, work relatedstress(WRS), burn-out and reduce empathy are probably a major problem among health care workforce. In fact in Europe 28% of workers suffer work related stress(European Union & European Foundation for the Improvement of Living and Working Conditions, 1997)The WRS is a serious condition which affects all compartment of health including physical, mental, social and spiritual health (Sheldon et al., 2007).Psychological stress is usually developed when person faces excess environmental demand than his or her adaptive capacity. WRS is associated with severe illness including cardiovascular Diseases(Fishta - Backe,2015)

There are several techniques for stress management. "Mindfulness meditation" which originally came from "Theravada tradition of Buddhism" is used by some organizations to cope stress among their workersKabat-Zinn, J. 1982; Dunne,2015). "Mindfulness" is kind of practice or training which increase awareness of his/her movement, thoughts, and emotions(Bishop, 2004; Weilgosz et al.,2019)There are evidences that "Mindfulness Based Stress Reduction" (MBSR)as cost effective for stress reduction(Lengacher et al., 2015).

Assessing the stress level is important to understand the stress level and the effectiveness of the intervention. Stress levels have assessed using different study instruments. As an example, stress level among nursing officers have assessed by "Nursing Stress Scale" (Gray-Toft , Anderson, 1981).However, it is argued that the stresses are provoked by changing of health care setting and working environment which is not reflected in NSS Therefore, Expanded Nursing Stress Scale(ENSS) have developed with necessary modifications(Milutinovic et al., 2012; Sarafis,p et al., 2016).This study aim to assess the effectiveness of an intervention package to reduce job related stress among nursing officers at a secondary care government hospital in Sri Lanka.

Methodology:-

This randomised control intervention study was conducted at the government hospital, Horana, Sri Lanka. The hospital comprised of 501 beds for the inward care with multi-specialties. The study target to nursing officers in the hospital (wards= 157, clinics and out-patient's department = 16, special units – 91). MBSR based intervention was designed. Out of the total number of nursing officers, 147 consented for the study, 96 nursing officers were randomly selected for the study based on the estimated sample. The study comprised of three phases as the (1) initial baseline survey on perception of stress, (2) implementation of the MBSR and (3) assessment of the effectiveness MBSR. The study flow is graphically shown in figure 1.

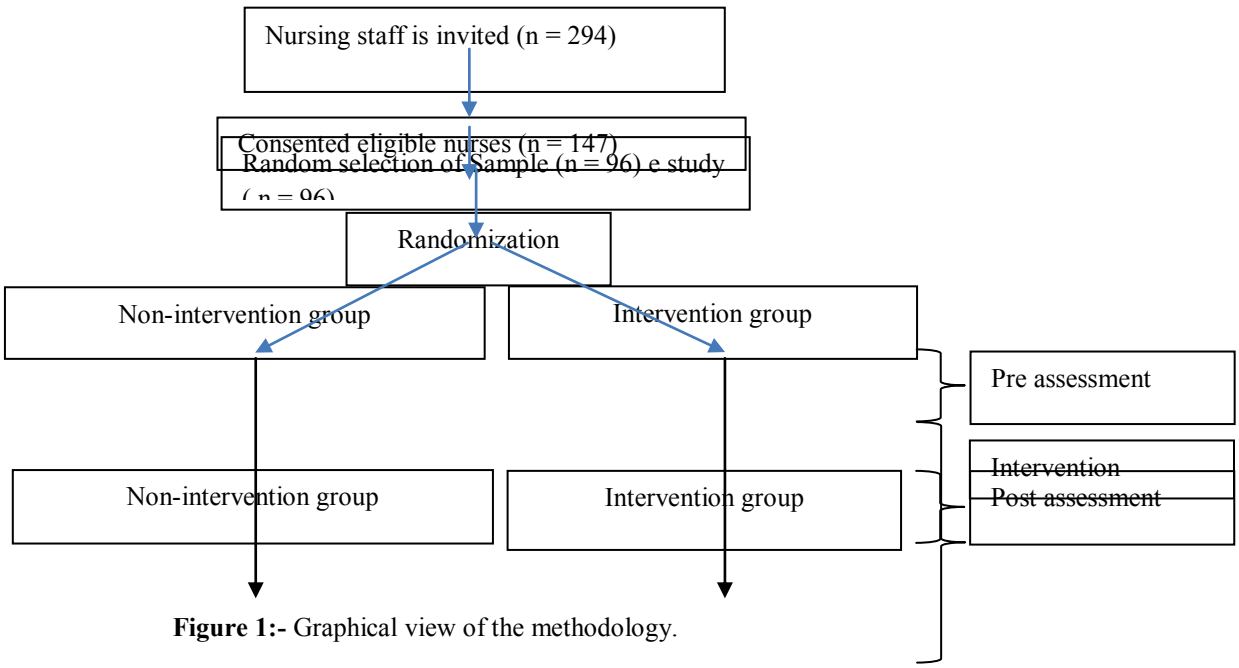

Figure 1:- Graphical view of the methodology.

Initial baseline survey on perception of stress (i.e., pre-assessment):Allselected nurses for the study was requested to complete the(i.e., self-administered) questionnaire. The questionnaire included ENSS which face validated to Sri Lankan context by an expert panel. ENSS comprised of 57 terms. Each question had Likert-scale with five points. Each response of an item measures the stress level as "(1) Never stressful", "(2) Occasional stressful", "(3) Frequently stressful", "(4) Extremely stressful" and "(5) not applicable".

Implementation of the MBSR: Once the baseline survey was completed, the study group was randomised as (1) intervention group and (2) non-intervention group. Intervention package was included several sessions of instructions, skills development and introduction of newer techniques of mindfulness. Each session limited to a period of two hours. Contents of the sessionsincluded "sitting meditation"," bodyscan","Hatha Yoga" and "threeminutes breathing space". Further, walking meditation, relaxation exercise and breathing exercise techniques was also used for the programme. Each session was limited for 30 minutes with using the practical sessions. Audio-visual materials were used as appropriate. Table1 gives the content of intervention. The second session was conducted after three days and all the other sessions were conducted one week apart.

Table 1:- Contents of intervention.

	Session	Description
1	Sitting meditation	Directing mind of someone for own body sensation his/her thoughts and his emotions with continues attention to own breath
2	Body scan	Making awareness or attention to body from toes to head looking for any sensation of the body
3	Hatha Yoga	Awareness of strength and balance of the body and its musculature
4	Three-minute breathing space	This event is also a meditation which make attention to body and breath
5	loving kindness meditation	A concept of Buddhism also which promote the kindness and empathy

(3) Assessment of the effectiveness MBSR:One month after implementation of the intervention, effectiveness of the MBSR was assessed with the questionnaire used for the base line survey. Post-assessment questionnaire was administered to both intervention and control group.

Ethical clearance was obtained from University of Colombo Sri Lanaka.

Results:-

Total of 90 (non-intervention group = 47 and intervention group = 43)nurses completed the questionnaire at the pre-assessment. Following the intervention, 83 nurses (non-intervention group = 42 and intervention group = 41) were completed the questionnaire (i.e., post assessment). All nurses completed the post assessment questionnaire (n = 42) were attended all the sessions of the MBSR package.

In terms of age, civil status, qualifications, service period, and social support, intervention and non-intervention group were not different (table 2 and table 3).

Table 2:- Selected socio-demographic and employment characteristics of the study population.

Variable	Non-intervention group n(%)	Intervention group n(%)	Significance P
Age			
20-40 [n(%)]	20(42.55)	23(53.49)	
40-60[n(%)]	27(57.45)	20(46.51)	0.4
Average age (SD)	41.63 (6.45)	41.63 (6.42)	0.9
Civil status			
Unmarried[mean (SD)]	2(4.26)	-	0.2
Married[mean (SD)]	45(95.74)	42(97.68)	
Divorced[mean (SD)]	-	1(2.32)	

Qualification relevant to nursing			
Only Nursing diploma n(%)	45(95.7)	38(88.4)	0.1
Nursing diploma with Post basic diploma or nursing degree n(%)	2(4.3)	5(11.6)	
Service in the relevant unit			
Less than 1years n(%)	11(23.4)	9(20.9)	0.1
1 to 3 years n(%)	7(14.9)	15(34.9)	
More than 3 years n(%)	29(61.7)	19(44.2)	
Total	**47(100.0)**	**43(100.0)**	

Table 3:- Social support of the study population.

Variable	**non-intervention n(%)**	**Intervention n(%)**	**Significance**
Support from Husband/spouse			
Very good support	14(29.8)	21(48.8)	
Good support	14(29.8)	7(16.3)	
Moderate support	4(8.5)	3(7.0))	
Unsatisfactory/No support	15(31.9)	12(27.9)	$\chi^2 = 4.00$
Total	47 (100.0)	43(100.0)	p = 0.257
Support from parents/in-laws			
Very good support	11(23.40)	11(25.85)	
Good support	2(4.25)	-	
Moderate support	7(14.90)	6(13.95)	
Unsatisfactory/No support	23(48.95)	24(85.81)	$\chi^2 = 2.052$
Total	47 (100.0)	43 (100.0)	p = 0.562
Support from servant			
Very good support	3(6.4)	3(7.0)	
Good support	6(12.8)	-	
Moderate support	5(10.6)	5(11.6)	$\chi^2 = 5.893$
Unsatisfactory/No support/no servant	33(70.2)	35(81.4)	p = 0.117
Total	47 (100.0)	43 (100.0)	

ENSS is assessed series of factors that would influence the stress among nursing officers during patient care and nursing care, at emotional needs of patients, with working environment and issues with administrations. The results of the intervention and non-intervention group after the intervention are given in table 4.

Table 4:- Comparison of Nurses response to ENSS after the intervention (intervention vs. non-intervention group).

Variable	Intervention		Non-intervention		P
	n	Mean (SD)	n	Mean(SD)	
Performing procedure which is painful to patient	41	1.93(0.412)	42	2.38(0.69)	**0.001**
Patient ask questions which I don't know the answer	38	2.34(1.21)	41	3.05(1.61)	**0.032**
When the management of the patient is inappropriate	40	2.05(0.90)	39	3.13(1.36)	0.079
Patient making unreasonable demands	39	2.23(1.44)	41	2.85(1.71)	0.083
Patient's family making unnecessary demands	41	1.88(1.23)	41	2.56(1.53)	**0.029**
Listening and talking to patient about his/her impending death	39	2.00(0.89)	41	2.37(0.97)	0.083
Physicians are not present in medical emergency	41	2.95((1.22)	42	3.24(1.25)	0.293
Disagreement concerning the patient treatments	40	2.45(1.43)	38	3.08(1.50)	**0.062**
Having to deal with violent patient	39	2.26(1.16)	39	2.54(1.25)	0.306
Inadequate information from physician about patient conditions	39	2.23(1.16)	40	2.73(1.30)	**0.079**
The death of patient	40	2.08(1.12)	42	2.69(1.09)	**0.014**
Having to deal with abusive patients	36	1.94(1.01)	42	2.26(1.31)	0.240
The death of a patient with whom you develop with a close	39	2.08(0.93)	41	3.00(1.20)	**0.000**

relationship					
Physician(s)not being present when patients dying	36	2.47(1.28)	42	3.12(1.23)	**0.001**
Watching a patient's suffer	39	1.79(0.86)	42	2.79(1,37)	**0.000**
Fear of making mistakes in treating a patient	41	2.02(1.13)	42	3.29(1.47)	**0.000**
Making a decision concerning a patient when the physician unavailable	40	2.03(1.07)	42	2.38(1.36)	0.194
Feeling inadequately trained for what I have to do	41	2.49(1.54)	38	3.08(1.7)	0.143
Having to make decision under pressure	38	2.63(1.10)	42	2.81(1.17)	0.488
Feeling helpless who fails to improve	41	2.12(1.14)	41	2.44(1.05)	0.195
Being in-charge with inadequate experience	40	2.18(1.15)	42	3.00(1.5)	**0.007**
Not enough time to provide emotional support to the patients	41	2.15(1.22)	42	2.57(1.42)	0.147
Feeling inadequately prepared to help family of patient	39	2.18(1.34)	41	2.41(1.32)	0.438
Being the one that has to deal with patient's family	40	2.05(1.34)	41	2.27(1.57)	0.502
Feeling inadequately prepared to help patients for their emotional needs	41	1.93(0.88)	42	2.43(1.42)	0.057
Not enough time to deal with needs of patient's family	39	2.03(1.33)	42	2.90(1.66)	**0.011**
Not knowing whether patient's family will report you for inadequate care	40	2.18(1.39)	42	2.86(1.34)	**0.020**
Having to deal with abuse from patient's family	39	2.03(1.33)	42	2.90(1.66)	**0.011**
Conflict with supervisor	41	2.71(1.25)	39	2.97(1.27)	0.346
Doing duties in other units due to lack of staff	41	2.24(1.07)	41	2.83(1.48)	**0.043**
Unpredictable duty roster	40	2.40(1.39)	42	3.14(1.28)	**0.014**
Breakdown of computers/Equipment	39	2.49(1.19)	40	2.75(1.13)	0.316
Uncertainty regarding the operations and functioning of the specialized equipment	40	2.10(0.81)	38	2.79(1.42)	**0.010**
Lack of support from my immediate supervisor	40	2.38(1.06)	42	2.86(1.42)	0.087
Criticism by the supervisor	40	2.45(1.06)	38	3.08(1.23)	0.098
Criticism by nursing administration	41	3.12(1.21)	42	3.48(1.35)	0.211
Lack of support with nursing administration	39	2.44(1.27)	42	3.12(1.28)	**0.013**
Not enough staff to cover the unit	40	2.30(1.02)	42	2.81(1.13)	**0.035**
Lack of support from other health care administrators	40	2.33(1.41)	40	3.05(1.44)	**0.034**
Being held accountable for things over which I have no control	39	2.23(1.22)	41	3.12(1.40)	**0.003**
Experiencing discrimination on the basis of sex	36	4.50(1.207)	41	4.05(1.413)	0.139
Criticism by physician	40	2.45(1.037)	42	3.64(1.322)	**0.000**
Being sexually harassed at work place	41	4.32(1.3120	41	4.44(1.001)	0.657
Being blamed that anything that goes wrong	39	2.92(1.596)	41	3.02(1.458)	0.767
Lack of Opportunity share experience and feelings with other workers in the setting	41	1.76(1.200)	41	3.12(1.568)	**0.000**
Conflict with physician	40	2.98(1.405)	41	2.98(1.294)	0.998
Lack of opportunity to discuss matters with other personal in the work setting	41	2.05(1.182)	40	2.50(1.261)	0.100
Experience discrimination because of ethnicity and race	38	3.84(1.717)	42	3.45(1.756)	0.319
Difficulty In working with the particular nurse(Nurses)inside my immediate work setting	41	2.56(1.501)	39	3.08(1.384)	0.114
Being expose to health and safety hazards	40	2.40(0.900)	40	2.50(1.038)	0.647
Too many non-nursing tasks are required such as electrical works	37	2.45(1.483)	41	2.83(1.548)	0.286
Having to organized doctors work	40	2.45(1.616)	41	3.73(1.467)	**0.000**
Difficulty of working with nurses opposite sex	40	2.65(1.791)	41	2.54(1.845)	0.780

It could be noticed that a considerable number of factors are different between intervention and non-intervention group after the intervention. Out of the factors assessed related to patient care (n = 15), nine factors were significantly different. Out of the factors assessed related to nursing care (n = 7), two factors were significantly different. Out of the factors assessed related to emotional needs of the patients (n =7), three factors were significantly different. Out of the factors assessed related to issues with administration (n =12), seven factors were

significantly different. Out of the factors assessed related to issues with working environment (n =13), three factors were significantly different.

Disscussion:-

Mindfulness is bringing attention on one's experience of the present moment without judgment or attachment to outcomes. It encourages individuals to make changes in their thoughts, feelings and bodily responses(Botha,Gwin, Purpora, 2015). These interventions help the individuals toskilfully adapt of unpleasantthoughts, feelings, situations and events(Raj- Kumarp2018).Mindfulness is practice or developing skill of self-awareness in Buddhist teachingVipassana"(Dunne,2015). It is also called insight meditation.Sri Lankan follow 'Theravadi' tradition of Buddhists, 'Vipassana' is a known thing to them. However this type of MBSR programmes came from Western scholars.Kabat-Zinn (1982) developed the Mindfulness-Based Stress Reduction (MBSR) program, which is a clinical program to facilitate adaptation to medical illness.

At present both western type MBSR programmes and Mindfulness programmes conducted by Buddhist monks are in rising popularity in Sri Lanka. Applicability of Mindfulness practices has been realizing by Sri Lankan organizations especially in education sector. Sri Lankan health sector also has made some isolated efforts especially in private sector.

In the present study, as estimated by the sample size, 96 nursing officers were randomized to two groups. Prior to the intervention, stress level was assessed and repeated after the intervention. The intervention attempted to assess the effectiveness of an intervention package among nursing officers in a government hospital. Pre assessment of the nursing officers was followed by six-week intervention. The intervention includes Mindfulness Based Stress Reduction programme.

Due to time factor and some administrative issues this study was limited 6 weeks instead of 8.However some previous studies also varied in duration too.

The range of intervention may be eight week(2.5 hour sessions a week,four week(30 minute session per week) 10 month programme(2.5 hour session per month)

This was due to the limitation of practicality and resources. Nevertheless, some of the previous studies had limited to four weeks. Patricia et al (2008) have done study among nursing officer which consists of four week programme sessions of 30 minutes and daily practice of fifteen minutes. This study also has been shown reduction of stress.

We have used professional trainer who has vast experiences in conducting MBSR programmes in private sector companies and International Schools to conduct MBSR intervention.

Comparison of the two groups by their selected socio-demographic characteristics (table 2) and the social support (table 3) showed that there was no significant difference between two groups. Therefore, the differences in the factors in the post intervention could be attributed to the impacts of the intervention.

As significant association is seen in many variables of ENSS(table 4),the study show the potential benefits of MBSR to reduce perceived stress among nurses in many factors.

Jhonson et al(2018) have done systemic review on effects of MBSR .They review 23 studies with good, moderate and low quality in methodology. Considering outcome of study, it reveals MBSR may help to reduce emotional exhaustion strongly and significant increase in personal accomplishment (a dimension of burnout), (occupational) self-compassion, quality of sleep, and relaxation.

Similar findings have shown in the similar interventions conducted in other studies as well. Shaprio et al (2005) emphasized that there are potential benefits for health care workers by MBSR intervention. Perhaps the present study and study by Patricia et al are important to assess the short-term intervention which would be more practical in large scale implementation in the government hospitals.

However though there are benefits in MBSR, still we have to do further study for elaborating benefits. In the evaluation of study, we have assessed ENSS only. Qualitative portion of data collection such as participant feeling after intervention….etc might have added more validity to the study.

According to previous studies, drop out rate of MBSR intervention is less than 20% (Kabat-Zinn, 1982). Dropout rate in the present study including the non-intervention group was 16%. Probably this shows the affinity of nursing officers to involve in a research project of this nature. Importantly, it shows the potential for scaling up the similar intervention for other health care institutions.

Present study selected the both intervention group and non-intervention group from the same hospital. Selection of the control from the same hospital may likely to contaminate the intervention package content with the participants of control group (i.e., non-intervention group) which leads to reduce the estimate of impact of intervention. However, selection of the control from the same hospital is important to identify a group with same level of institutional impact for the stress.

The stress among health care workers is not uncommon. Perhaps, stress has a negative impact on the physical health, mental health and social heath. Nursing officers are important category of health care team which is generally exposed to stress due to their nature of work and working environment. Growing demand of the health care industry which increases the indoor and outdoor patient caring leads to increase work load. MBSR offers non-invasive cost effective and internationally well-established model for reducing stress among nursing officers. Basis of mindfulness practice is to help people to alter their perception for painful thoughts and emotions. As described earlier, the results of the present study show the success of the intervention.

Reccomendations:-

As this intervention is a non- invasive and cost effective method, it can be introduced to other institutions. Further studies are suggested to other curative settings and other health professional categories to explore benefits of MBSR

References:-

1. Bhargava, D., Trivedi, H.(2018).A Study of Causes of Stress and Stress Management among Youth.IRA-International Journal of Management & Social Sciences (ISSN 2455-2267), 11(3), 108-117. http://dx.doi.org/10.21013/jmss.v11.n3.p1
2. Bhui, K.Dinos,S.Miecznikowska,M.Jongh,B.Stansfeld,S .(2016). Perception of work stress cause and effective interventions in employees working in private and non governmental organization a quality study. BJPsychBulletin(40), 318-325.DOI: 10.1192/pb.bp.115.050823
3. Botha, E,,Gwin, T,,Purpora, C., (2015). The effectiveness of mindfulness based programme in reducing stress experienced by nurses in adult hospital setting : a systematic review of qualitative evidence protocol.JBI database of systemic Review and Implementation Reports, 13(10), 21-29DOI: 10.11124/jbisrir-2015-2380
4. Bruke,M.Davis,M.Otte,C.Mohr,D.(2005) Depression and cortisole response to psychological stress: A meta analysis. Psycho endocrinology,(30) 846-856. DOI:10.1016/j.psyneuen.2005.02.010
5. Cohens,S.Devert,D.Miller, G. (2010). Psychological stress and Disease .JAMA, (298)
6. Dagget,T.Molla, A.Belachew,T (2016). Job related stress among nurses working in Jimma Zone Public hospital south west Ethiyopia: A cross sectional study .BioMedCenter Nursing, 15(39).DOI 10.1186/s12912-016-0158-2
7. Dunne, J.D.(2015). Buddhist style of Mindfulness: A Heuristic Approach Hand book of Mindfulness and Self Regulation,251-70 (New York).DOI:10.1007/978-1-4939-2263-5_18
8. Dunning, D.L. (2018). The effect of mindfulness based intervention on cognition and mental health in children and adolescent a meta analysis of randomized control trials.The Journal of Child Psychol psychiatry,60(3),244-258. DOI:10.1111/jepp.12980
9. Fishta, A. Backe, E.M. (2015). Psychosocial stress at work and cardiovascular diseases: an overview of Systemic Review. International Archive of Occupational and Environmental Health,997-1000. DOI: 10.1007/s 00420-015-1019-0
10. Gray-Toft, P. Anderson, J. (1981). The Nursing Stress Scale: Development of an Instrument.Journal of Behaviour Assessment, 4(1), 11-23.DOI:10.1007/BFO1321348

11.Galantino,M.Baime,M.Magurire,M.Szapary,P.Farrar,J(2005).Short communication association of psychological and physiological measures of stress in health care professionals during 8 week mindfulness meditation programme: mindfulness in practice. Stress and Health, 21,255-261 http://doi.org/10.1002/smi.1062
12. Jhonson,S.Gur,R.David,Z.Currier,E.(2015). One session Mindfulness Meditation : A randomized controlled study of effect on cognition and mood. Mindfulness, DOI 10.1007/sl 2671-013-0234-6
13. Kelsey,L. Whittemore, A. Evans, A.S.Thompson,D.(1996).Methods in Observational Epidemiology. Oxford University Press
14. Kelvin, M. Minn, M. (2017). Sample size for a cross sectional, Cohort or Clinical Trial Studies
15.Lengacher,C.Reich,R.Patrerson,C.Shelton,M.Shivers,S(2019). **A large randomized trial: Effects of mindfulness-based stress reduction (MBSR) for breast cancer (BC) survivors on salivary cortisol and IL-6.** Biological Research for Nursing,1(11). https://doi.org/10.1177/1099800418789777 PMID: 30079756
16.Milutinovic,D.Golubovic,Boris,Brkic,N.Prokes,B.(2012).Professional stress and health in ICU Nurses in Serbia.ArhHigRada, (63),171-180.DOI:10.2478/10004-1254-63-2012-2140
17. Poulin,P. Mackenzie, C. Soloway,G. Karayolas, E. (2008). Mindfulness training as an evidence –based approach to reducing stress and promoting well-being among human service professionals.International Journal of Health Promotion and Education,46(2), 72-80. DOI:10.1080/14635240.2008.10708132 .
18.Rosser,W. Skinner, E. Beers, J. Jennings, P.(2012). Mindfulness Training and Teachers professional Development: An emerging area of Research and practice. Child Development Perspectives, 6 .167-173. DOI:10.1111/1.1750 8606.2012.00238
19.Srafis,P.Rousaki,E.Tsounis,A.Malliarou,M.(2016). The impact of occupational stress on nurses caring behaviours and their health related quality of life. BMC Nursing, 15(1), 56,DOI 10.1186/s12912-016-0178-y
20.Shaprio,S.Astin,J.Bishop,S.Cardova,M .(2005). Mindfulness Based Stress Reduction for Health Care Professionals : Result from a Randomized trial. International Journal of Stress Management,12 (2),164-176.DOI:10.1037/1072-5345.12.2.164
21.Vogus, T. Sutclifte, K. (2012). Organizational Mindfulness and Mindful Organizing: A Reconciliation and Path forward. Academy of Management Learning and Education, 11 (4), 722-733.DOI: 10.5465/amle.2011.0002C
Gordon,W.Griffith, M. Shonin, E.Zangeneh,M(2014)Work related Mental Health and job performance: can mindfulness help?, International Journal of Mental Health and Addiction,12(2),129-137
22.Wielgosz, Goldberg, S. Karal, T. Dunne, J.Davidson, R. (2019).Mindful Meditation and Psychopathology.Annual Review of Clinical Psychology, 15,285-316 DOI.org/10.1146/annurev-clinpsy-021815-093423
23.Chen Y,Guo Y Lin L Lee Y Hu P Ho J Shiao S (2020) Development of the Nurses' Occupational Stressor scale International Journal of EnviornmentReserch and Public Health,17,649. DOI:10:3390/ijerph17020649.