Relationship between Mindful Eating and Mental Well-being among Clinical Nurses

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PURPOSE

This study examined the degree of mindful eating practice in clinical nurses and its effect on their mental well-being. Based on this, it aims to provide basic data for developing intervention programs to help nurses develop healthy dietary habits and maintain mental well-being.

METHOD

This study was a descriptive investigation to identify clinical nurses' mindful eating status and its related factors including dietary behavior, mental well-being, and occupational stress. In this study, a structured questionnaire was used. The subjects were 205 nurses in three hospitals in Seoul, Kyunggi, and Chungnam in South Korea, who provided informed consent. Data were analyzed using Statistical Packages for Social Sciences (IBM SPSS version 18; Armonk, NY, USA). The threshold for statistical significance was set at $p<0.05$ for all analyses. The general characteristics and variables of study subjects were calculated using real numbers, percentage, average, and standard deviation. Mindful eating habit score, mental health score, and stress score according to the general characteristics of study participants were analyzed using t-test or one-way ANOVA. The relationship between study participants' mindful eating, mental health, and stress was analyzed using Pearson's correlation coefficient. A multiple regression analysis was conducted to examine the effect of the general characteristics, mental health, and stress on participants' mindful eating.

CONCLUSION

The mean MEQ score was similar to that of college students in Korea. The MEQ score was higher in nurses with better mental health, lower in obese people than who have normal body weight, and lower as job stress score was higher. It is needed to develop mindful eating skills for nurses who in busy and demanding clinical scenes. Also, it might be helpful to enhance their mental health and reduce job stress among clinical nurses.

RESULTS

The major findings are summarized as follows. Only 1.5% of the total subjects responded that they took care of their health on a daily basis. The subjects believed that stress management (39.9%) and exercise (30.5%) were the most important in health management. They managed their health through rest (46.8%), exercise (22.5%), and stress management (17.6%). The first reason for not being able to take care of their health was lack of time (64.4%). Among the Mindful eating questionnaire (MEQ) subcategories, a logistic regression was performed on variables that were identified as significant in the univariate. The average MEQ score was higher for subjects with better mental health; the score was lower for obese subjects than non-obese ones. Moreover, the MEQ score tended to be lower when stress was higher. Among the MEQ subcategories, disinhibition was higher when mental well-being and dietary pattern were higher, and lower in obese than non-obese subjects. Emotional response was higher when the subject was older and had better mental health, and lower in obese individuals than non-obese ones. Distraction was higher in subjects without children than those with children.

Table 1. Mindful eating according to the general characteristics

Variables	Categories	Mindful eating											
		Total	T or F (*p*)	Disinhibition	T or F (*p*)	Awareness	T or F (*p*)	External cues	T or F (*p*)	Emotional response	T or F (*p*)	Distraction	T or F (*p*)
Sex	Female	2.74±0.28	-0.719	2.70±0.61	-0.353	2.42±0.51	0.405	2.23±0.48	-0.989	3.10±0.59	-0.132	3.27±0.46	-0.874
	Male	2.80±0.28	(.473)	2.76±0.68	(.725)	2.37±0.52	(.686)	2.36±0.42	(.324)	3.13±0.68	(.895)	3.38±0.55	(.383)
Obesity	Yes	2.53±0.37	-2.564	2.28±0.49	-3.041	2.36±0.42	-0.502	2.24±0.48	-0.007	2.71±0.71	-2.942	3.08±0.64	-1.370
	No	2.77±0.26	(.020)	2.75±0.62	(.003)	2.43±0.52	(.616)	2.24±0.48	(.995)	3.14±0.57	(.004)	3.30±0.44	(.188)
Marriage	Yes	2.74±0.30	-0.307	2.67±0.67	-0.795	2.41±0.49	-0.448	2.24±0.48	-0.122	3.19±0.57	2.110	3.24±0.48	-1.427
	No	2.76±0.25	(.759)	2.74±0.56	(.428)	2.44±0.54	(.655)	2.25±0.47	(.903)	3.02±0.60	(.036)	3.33±0.44	(.155)
Have children	Yes	2.72±0.29	-0.205	2.70±0.68	1.066	2.37±0.42	-0.135	2.17±0/48	-1.128	3.17±0.59	0.970	3.21±0.48	-2.109
	No	2.73±0.29	(.838)	2.56±0.62	(.289)	2.39±0.62	(.893)	2.28±0.43	(.262)	3.05±0.67	(.334)	3.42±0.46	(.037)
Perceived economic status	High	2.59±0.18		2.46±0.44		2.51±0.53		2.29±0.52		2.46±0.93[a]	4.195	3.24±0.63	
	Middle-high	2.64±0.31	3.082	2.61±0.69	0.852	2.27±0.47	1.220	2.21±0.47	.233	2.98±0.65[b]	(.007)	3.16±0.46	1.001
	Middle	2.77±0.27	(.029)	2.74±0.69	(.467)	2.45±0.53	(.304)	2.24±0.46	(.873)	3.14±0.56[c]	a<c,	3.29±0.45	(.394)
	Low-middle	2.79±0.25		2.71±0.62		2.45±0.32		2.15±0.64		3.31±0.46[d]	a<d	3.35±0.46	
Current duty	3-shift	2.75±0.27		2.62±0.63		2.46±0.55		2.28±0.46		3.05±0.58		3.33±0.46	
	2-shift	2.77±0.16	0.073	2.68±0.49	1.370	2.66±0.41	1.548	2.36±0.48	1.407	3.02±0.49	1.817	3.14±0.41	1.575
	Standing	2.75±0.30	(.974)	2.79±0.63	(.253)	2.36±0.48	(.203)	2.17±0.48	(.242)	3.19±0.61	(.145)	3.25±0.47	(.197)
	Other	2.69±0.20		3.04±0.31		2.43±0.49		2.51±0.68		2.58±0.63		2.89±0.38	

Table 2. Correlations between dietary intake pattern, mindful eating, mental well-being, and occupational stress

		Dietary intake pattern	Mindful eating						Mental well-being	Occupational stress
			Total	Disinhibition	Awareness	External cues	Emotional response	Distraction		
Dietary intake pattern		1	.230(.001)	.300 (<.001)	.094 (.179)	-.163 (.020)	.198 (.005)	.086 (.221)	.214 (.002)	-.020 (.782)
Mindful eating	Total	.230 (.001)	1							
	Disinhibition	.300 (<.001)	.708 (<.001)	1						
	Awareness	.094 (.179)	.497 (<.001)	.138 (.051)	1					
	External cues	-.163 (.020)	.113 (.112)	-.307 (<.001)	.237 (.001)	1				
	Emotional response	.198 (.005)	.649 (<.001)	.523 (<.001)	-.061 (.387)	-.290 (<.001)	1			
	Distraction	.086 (.221)	.550 (<.001)	.288 (<.001)	.024 (.731)	-.168 (.017)	.315 (<.001)	1		
Mental well-being		.214 (.002)	.352 (<.001)	.293 (<.001)	.164 (.019)	-.073 (.295)	.295 (<.001)	.184 (.008)	1	
Occupational stress		-.020 (.782)	-.269 (<.001)	-.139 (.053)	-.163 (.021)	-.003 (.963)	-.211 (.003)	-.131 (.067)	-.355 (<.001)	1

Table 3. Factors influencing on mindful eating in nurses by multiple regression

Dependent variables	Independent variables†	*β*	95% CI		t (*p*)
			Lower limit	Upper limit	
Mindful eating (total)	Mental well-being	.219	.003	.013	2.960 (.003)
	Obesity (yes)	-.219	-.343	-.088	-3.326 (.001)
	Occupational stress	-.168	-.001	.000	-2.364 (.019)
	Model F (*p*)			6.767 (<.001)	
	Adj. R^2			.195	
Disinhibition	Mental well-being	.213	.007	.028	3.219 (.002)
	Dietary intake pattern	.213	.019	.089	3.079 (.002)
	Obesity (yes)	-.182	-.691	-.119	-2.788 (.006)
	Model F (*p*)			10.003 (<.001)	
	Adj. R^2			.152	
Emotional response	Age	.217	.005	.029	2.763 (.006)
	Mental well-being	.217	.006	.027	3.024 (.003)
	Obesity (yes)	-.216	-.722	-.181	-3.297 (.001)
	Perceived economic status (low-middle)	.486	.306	1.242	3.262 (.001)
	Perceived economic status (middle)	.565	.304	1.187	3.331 (.001)
	Perceived economic status (middle-high)	.403	.353	1.374	3.339 (.001)
	Model F (*p*)			7.157 (<.001)	
	Adj. R^2			.225	
Distraction	Have not children	0.194	.015	.479	2.109 (.037)
	Model F (*p*)			4.449 (.037)	
	Adj. R^2			.029	

CI, confidence interval; † Dummy variables: Obesity, 0, normal; Perceived economic status, High, 0; Marriage, yes, 0; Have children, yes, 0

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