

**PERCEIVED STRESS: A COMPARATIVE STUDY OF STUDENT
NURSES FROM MAINSTREAM AND MINORITY RELIGIOUS
GROUP IN PAKISTAN**

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ABSTRACT

The objective of the present study is to investigate the difference between the minority student nurses and their dominant counterparts in Karachi, Pakistan, in their scores of perceived stress. It was hypothesized that the minority (Christian) student nurses would score higher on perceived stress than their dominant (Muslim) counterparts. Data was gathered from different nursing schools of Karachi, Pakistan. The sample consisted of 556 student nurses of age's 19 years-30 year with mean age of 21.41years.comprised of two groups, that is, 252 Christians (mean age= 21.57) and 304 Muslims (mean age= 21.289). Pakistani version of Perceived Stress Scale was used to measure the level of perceived stress in both groups of subjects. Descriptive statistics were used for view of characteristics of sample in a summarized way and t- test was used to analyze the mean difference in the scores of perceived stress between Christian and Muslim student nurses. Result indicates that there is a statistically significant mean difference in the scores of perceived stress between Christian and Muslim student nurses ($t = -3.103$, $df = 554$, $p < .002$). Findings of this study identify that the level of perceived stress in nursing students who belong to minority groups significantly higher than their dominant counterparts.

Keywords: *Perceived Stress, nurses, trainee, minority.*

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INTRODUCTION

Stress is the body's reaction to a change that requires a physical, mental or emotional adjustment or response. Stress can come from any situation or thought that makes the individual to feel frustrated, angry, nervous, or anxious (Morrow, 2011). Holmes and Rahe (1967) argue that any life change that requires numerous readjustments can be perceived as stressful. Stress refers to experiencing events that are perceived as endangering one's physical or psychological well-being (Edward et al., 2003). Cognitive-relational theory describes stress as a relationship between person and his or her environment that is appraised as exceeding to person's resources and threatening for his or her well-being. According to Lazarus and Folkman (1994) appraisal involves two steps: whether we judge a situation as a threat (primary appraisal), and whether we believe we can cope with it (secondary appraisal). This theory further emphasizes the reciprocal nature and continues interaction between individual and the environment, which can be changed overtime due to several factors, such as, improvement in personal abilities, coping effectiveness and altered requirements.

Everyone experiences stress when confronted by life events that conflict with their values, beliefs, or life circumstances. Usually people react to and cope with these stressors in ways that make stress manageable (Glanz & Schwartz, 2008). According to Herman (2001), "Stress is a perceptual event--not an external one". It is how you perceive stress and what are your resources to control it which determines the impact of stress, as Lazarus (1966) proposed that for an event or situation to be considered stressful, it must be perceived as stressful via perceptual processes. However, Stressful situations, whether long-term or short-term, can lead to different emotional problems, as arguments have been made that up to 80% of all illnesses are stress-related either directly or indirectly (Astin, Shapiro & Schwartz, 2000).

Some stressors are acute and some are chronic and the source of the stress can be within the individual or in the form of motives or desires. Wildgust (1986) and McKay, Buen, Bohan and Maye (2010) found that stress in the learning environment is important to the positive motivation of a student, but stress beyond a motivational level can lead the student toward negative consequences. Generally students are prone to different kind of stressors, such as pressure of studies, obligation to succeed, uncertainty related to future and adjustment related issues. Moreover, different kind of emotional problems,

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family problems and other social and environmental problems can also negatively affect student's learning abilities and their academic performance. In students, succumbing to stress can lead to detriments in psychological functioning, such as symptoms of anxiety, depression, negative mood, physical functioning and sleep difficulties (McKinzie, Altamura, Burgoon & Bishop, 2006; Stecker, 2004).

Stress in nursing students may result in psychological distress, academic and behavior problems, and physical complaints. Evidences suggested that employees in health related professions (Quyen, 2007; Kathleen & Cary, 1996) such as nursing suffers more stress than other professional group (Patricia, 2005). Although it is apparent from the literature review that the stress among nursing students is significantly high (Romano, 1992; Beck & Srivastava, 1991; Carter, 1982) and the level of stress is higher in student nurses than trained nurses (Jones & Johnston, 1997; The Irish Nurses Organization, 1993). But very small material is available regarding the psychological problems among nursing students belong to disadvantage groups i.e. ethnic, racial or religious minorities.

Minority stress theory posits that minority individuals experience psychosocial "stress as derived from minority status" (Meyer, 1995) because of sociocultural stigmatization and discrimination (Holder & Vaux, 1998; Meyer, 2003). The theory points out that the association between health problems and social situations in minorities may be indirect. Stressors are unique, chronic and socially based (Meyer, 2003). Stress in response to difficult social response is the variable which results in health problems when mounting up for long time (Meyer, 2003; Meyer & Northridge, 2007).

Many undergraduate nursing students undergo considerable stress due to different factors, thus few of the international researches were approached in this field of minorities. however, in Pakistan, no researches were done to analyze perceived stress in trainee nurses and the difference between the two groups, so depth researches are needed to clarify the magnitude of the problem and to emphasize whether causal factors or stressors are mostly related to daily hassles, live events or academic related problems or due to having difference in religious beliefs. Therefore, it was hypothesized that the minority (Christian) student nurses would score higher on perceived stress than their dominant (Muslim) counterparts.

METHOD

Participants

The sample of study comprised of 556 female trainee nurses (304 Muslim & 252 Christian) from different schools of nursing situated in Karachi, Pakistan. The age range of the participants was between 19-30 years with mean age of 21.41 years (SD= 2.250) for total sample. While the mean ages of the Muslim and the Christian trainee nurses were 21.28 years (SD= 2.279) and 21.57 SD= 2.209) years respectively. Only full time trainee Pakistani national nurses were participated in the present study as a sample.

Measure

Perceived Stress Scale (PSS)

Perceived Stress Scale (PSS) is a 10-item questionnaire which measures the global perceived stress in relation to health-related outcomes. It is originally developed by Cohen, Kemark and Melmistream (1983) which has translated and adapted by Mushtaq and Ahmad (2013). The Cronbach's $\alpha = .832$ for the adapted version of PSS. The total score is a measure of the degree to which an individual appraises his or her life as unpredictable, uncontrollable, and overloaded over the preceding month. The maximum PSS score of 40 indicates the highest level of stress. The PSS-10 is reliable, valid, and economical tool with sound psychometric properties. Its internal consistency is reported satisfactory (Cronbach's $\alpha = 0.78$). PSS scores have been shown to correlate with self-reported health and health services measures, health behavior measures, smoking status, and help seeking behavior.

Procedure

The researcher obtained the list of recognized nursing schools and approached them through the administration of Institute of Clinical Psychology, University of Karachi. After getting permission from the authorities of the randomly selected nursing schools, the explanation regarding research and instructions on how to answer the instrument was presented to the students of these nursing schools. Demographic information form was filled in by the examiner individually followed by the administration of the Perceived Stress Scale in group setting during school timings on the sample.

RESULTS

Table 1
Demographic Characteristics Study Sample

variables	Groups	<i>M</i>	<i>SD</i>	<i>f</i>	%
Age	Christian Students	21.57	2.209	---	---
	Muslim Students	21.289	2.279	---	---
Educational level					
1st year	Christian Students	---	---	55	9.9
	Muslim Students	---	---	101	18.2
2nd year	Christian Students	---	---	73	13.1
	Muslim Students	---	---	118	21.2
3rd year	Christian Students	---	---	75	13.5
	Muslim Students	---	---	59	10.6
4th year	Christian Students	---	---	49	8.8
	Muslim Students	---	---	26	4.7

Table 9
Difference in Mean Scores of Perceived Stress of Minority Trainee Nurses and their Dominant (Muslim) Counterparts

<i>Groups</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>Sig.</i>
Christian Students	252	28.37	6.304	-3.103	554	.002
Muslim Students	304	16.64	6.741			

DISCUSSION

Trainee nurses face many potential sources of stress on everyday basis, from the clinical setting, the educational setting and from their own personal lives. Some of which are exemplified as, financial concerns, lack of perceived social support, emotional sufferings due to frequent exposure to deaths of patients, sickness, long traveling or away from home and conflicts with patients, their relatives and with colleagues and senior staff. Trainee nurses also have greater work load and considerably shorter holidays. Another study conducted in nursing population showed that greater number of subjects had moderate level of stress (97%) whereas 3% had severe stress. Environmental factors found to have maximum contribution (40%) among the factors contributing to stress followed by the interpersonal factors (30%). The academic factors had only 19% contribution whereas the intrapersonal factors contributed minimally (The Irish Nurses Organization, 1993; Nitasha & Amandeep, 2011). Studies have also highlight some other factors of stress among nurses like, religious, racial or ethnic discrimination.

Religious or ethnic discrimination may occur at any place such as, work place, educational institutions, and professional training centers, when an individual or group receives unjust or unfair treatment on the basis of their ethnicity or because of their religious faith or lack of faith that set them apart from others. Substantial research has documented that minority individuals bear an increased burden of exposure to negative health outcomes and risk factors when compared with dominant social groups. For example, according to Harrell (2000) students belong to minority group share additional stress due to their inferior position in any society. Another study reported that racial preference can influence nursing employment which results in feelings of inadequacy, anger, hatred and all affecting an individual's perceived levels of stress. Racial differences might also contribute to increased vulnerability to stress due to differences in exposure to stressors such as discrimination, poverty, lack of resources and poor education (Mafalo, 2005, 2006). Ullrich and Fitzgerald also wrote that "stress is a result from an imbalance between the demands of the workplace and the individual's ability to cope". The finding of the present study also confirms that minority (Christian) trainee nurses in Pakistan having high level of perceived stress ($t = -3.103$, $df = 554$, $p < .002$) as compare to their dominant counterpart (Muslim) trainee nurses. We may conclude that belongingness to minority group could be another important stressor in trainee nurses, as Clark, Anderson, Clark and Williams (1999) also indicate that racist

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discrimination, hostility, and prejudice are stress stimuli, experienced by racial/ethnic minority, leading to low self-esteem, helplessness, depression, anxiety, and hypertension. The higher level of stress faced by members of stigmatized minority groups may be caused by factors like poor social support and low socioeconomic status, however the most well understood causes are interpersonal prejudice and discrimination (Pascoe & Richman, 2009).

Findings of this study would be helpful to identify the stressors of nursing students, particularly for those who belong to minority groups and the interventions for those stressors, which can be implemented in nursing schools. It will also play an important role to highlight the issues and problems of nursing students, in order to get attention of researchers to conduct further researches for making improvement in this neglected population. Although the present study provide an information regarding level of general stress among minority student nurses in comparison of their dominant counterparts but there is further need to explore the relationship between level of minority related stress and psychological wellbeing of nurses.

REFERENCES

- Astin, J.A., Shapiro, S.L., & Schwartz, G.E.R. (2000). Meditation. In: D.W. Novey (Ed.), *Clinician's Complete Reference to Complementary and Alternative Medicine*, Mosby, St. Louis, MO, pp. 73-85.
- Beck, D. L., & Srivastava, R. (1991). Perceived level and sources of stress in baccalaureate nursing students. *Journal of Nursing Education*, 30(3), 127-133.
- Carter, E. W. (1982). Stress in nursing students: Dispelling the myth. *Nursing Outlook*, 248-251.
- Clark, R., Anderson, N. B., Clark, V. R., & Williams, D. R. (1999). Racism as a stressor for African Americans: A biopsychosocial model. *American Psychologist*, 54, 805-816.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 385-396.

Pakistan Journal of Psychology

- Smith, E.E. et al. (2003). Stress, Health and Coping. In *Introduction to Psychology* (14th ed.) p. 493.
- Glanz, K., & Schwartz, M.D. (2008). Stress, coping, and health behavior. In K. Glanz, B.K. Rimer & K. Viswanath (Eds.), *Health behavior and health education: Theory, research, and practice* (pp. 211-236). San Francisco, CA: Jossey-Bass.
- Harrell, S.P. (2000). A Multidimensional Conceptualization of Racism Related Stress: Implications for the Well-Being of People of Color. *American Journal of Orthopsychiatry*, 70 (1), 42-57.
- Herman, J. (2001, Fourth Quarter). Looking for some relief? *Excellence in Nursing Education*, 2 (4).
- Holder, J.C., & Vaux, A. (1998). African American professionals: Coping with occupational stress in predominantly White work environments. *Journal of Vocational Behavior*, 53(3), 315-333.
- Holmes, T.H., & Rahe, R.H. (1967). The Social Readjustment Rating Scale. *Journal of Psychosomatic Research*, 11 (2): 213-8. doi:10.1016/0022-3999(67)90010-4
- Jones, M.C., & Johnston, D.W. (1997). Distress, Stress and Coping in First Year Student Nurses. *Journal of Advance Nursing*, 26, 475-482.
- Kathleen, A.M., & Cary, L.C. (1996). Stress in Mental Health Professionals: A Theoretical Overview. *International Journal of Social Psychiatry*, 42(2): 82-89. doi: 10.1177/002076409604200202.
- Lazarus, R. (Ed.) *Psychological Stress and the Coping Process*. New York: McGraw-Hill; 1966.
- Lazarus, R., & Folkman, S. (1994). *Stress, appraising, and coping*. New York: Springer.
- Mafalo, E.P. (2005/2006). South African nurses unite. *Nursing Update*, 29 (11), 14-15. African Sky Publishing: Pretoria.

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- McKay, K.A.C., Buen, J.E., Bohan, K.J., Maye, J.P. (2010). Determining the relationship of acute stress, anxiety, and salivary alpha-amylase level with performance of student nurse anesthetists during human-based anesthesia simulator training. *AANA J*, 78(4), 301-309.
- McKinzie, C., Altamura, V., Burgoon, E., & Bishop, C. (2006). Exploring the effect of 80 stress on mood, self-esteem, and daily habits with psychology graduate students. *Psychological Reports*, 99, 439-448
- Meyer, I.H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, 36(1), 38-56.
- Meyer, I.H. (2003). Prejudice, social stress and mental health in lesbian, gay and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129, 674-697.
- Meyer, I.H., & Northridge, M.E. (Eds.). (2007). *The health of sexual minorities: Public health perspectives on lesbian, gay, bisexual and transgender populations*. New York: Springer.
- Morrow, A.R.N. (2011). Stress Definition-About.com, Death and Dying. Retrieved from www.dying.about.com/od/glossary/g/stress.htm.
- Mushtaq, R., & Ahmad, R. (2013). Translation and Adaptation of Perceived Stress Scale: Reliability Estimates and Factor Analysis. Unpublished article.
- Nitasha, S., & Amandeep, K. (2011). Factors associated with Stress among Nursing Students. *Nursing and Midwifery Research Journal*, 7 (1), 12-21.
- O' Ragon, P. (2005). *Students under Pressure*. Retrieved on Dec 29, 2013 from www.inmo.ie/Attachment.aspx?nAttID=1078
- Pascoe, E. A., & Richman, L. S. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin*, 135, 531-554.
- Quyen, D.D. (2007). *Depression and Stress among the First Year Medical Students in University of Medicine and Pharmacy, Hochiminh, Vietnam*.

Pakistan Journal of Psychology

- Romano, J.L. (1992). Psycho educational interventions for stress management and wellbeing. *Journal of Counseling and Development*, 71, 199-202.
- Stecker, T. (2004). Well-being in an academic environment. *Medical Education*, 38(5), 465-478 student life-change stress and stress symptoms.
- The Irish Nurses Organization (1993). *The experience of stress amongst Irish nurses*. Dublin: INO and the National Council for Nurses in Ireland.
- Ullrich, A., & Fitzgerald, P. (1990). Stress experienced by physicians and nurses in the cancer ward. *Social Science & Medicine*, 31, 1013-1022.
- Wildgust, B.M. (1986). Stress in the anesthesia student. *AANA J.*, 54 (3), 272-278.