

The Effect of Gender on the Response to Stress among Mortuary Workers

A Pilot Study

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Abstract:

Background: Working in the mortuary, where there is human dissection, is emotionally painful. In Iraq, the condition is not good because of the nature of the mortality, the incidence and the gender factors; we analyse this, in the current paper.

Patients and Methods: A Depression Anxiety Stress Scale 21(DASS 21) Arabic version Scale was performed on 20 staff working in the mortuary of Azadi Teaching Hospital in Kirkuk city-Iraq. There were 20 workers, the sex ratio for male: female was 14:6. The DASS 21 scale is a quantitative measure of distress along 3 axes of depression, anxiety and stress among otherwise normal population; it is not a categorical measure of clinical diagnoses.

Results: The impact of dealing with dead bodies, victims of violence in the war area, seems to have affected both genders in general. The female gender, however, seems to have had the psychological state worse affected, and among the 3 categories, there was higher incidence of depression among the female gender.

Conclusion: The health authorities need to monitor the mortuary staff psychological profile on regular basis and find means to reduce the incidence of depression, anxiety and stress, especially among the workers. The occupation is associated with psychological distress especially among female gender.

Key words: Stress, Mortuary, Health Professionals, War.

Introduction:

Health professionals serve one of the most challenging and stressful professions. Ineffective control of occupational stress leads to burnout of the staff ⁽¹⁾.

The adverse health consequences of the Iraq War (2003-2011) were profound. At least 116,903 Iraqi non-combatants and more than 4,800 coalition military personnel died over the 8-year course ⁽¹⁾. The proximity to stressors is associated with higher levels of positive and negative psychological impact ⁽²⁾. Physical proximity is considered to be a

major contributory factor to both positive and negative psychological effects of secondary exposure to trauma ⁽³⁾. Certainly, blame and lack of appreciation of the job of workers dealing with disasters is found to have negative effect on the psychological state ⁽⁴⁾.

Exposure to the dead has been an important subject for traumatic stress research, considering that such exposure is a risk factor for posttraumatic stress disorder (PTSD). Individuals required to handle the dead from war are exposed to

multiple stressors. In a study, during the first gulf Iraqi war, it was obvious that the psychological trauma was inflicted after exposure to a dead body, compared to psychological status prior to exposure to dead body⁽⁵⁾. The current pilot study aims to assess the psychological states of staffs working in the mortuary of one of the Iraqi hospitals.

Patients and Methods:

The Depression Anxiety Stress Scale 21(DASS 21) Arabic version questionnaire distributed to the 20 staff members working in the mortuary of Azadi Teaching Hospital in Kirkuk city-Iraq, which is a general hospital deals with the management of mass casualties due to acts of violence? The study was conducted during the period between the November and December 2012. The city of Kirkuk has a population of 1,250,000 and it has been one of the cities particularly affected by the acts of violence like explosions, assassinations etc... following the 2003 invasion Kirkuk city has multiethnic inhabitants. In addition to civil mortality due to natural causes, the mortuary of this city is busy with unpredictable number of dead bodies brought through following post explosion mass casualties.

Original DASS 21 Scale (Arabic version) was distributed to 20 workers. The DASS questionnaire is a brief check out of the psychological distress endured just immediately after a major incident⁽²⁾. The DASS 21 scale is a quantitative measure of distress along 3 axes of depression, anxiety and stress among otherwise normal population.

The age range was 27-45 years for the female workers and the age range for the male was 31-58 years.

The working female staff were; nurses (2 staff), administration (1 staff),

laboratory and biology (3 staff). The remaining were male workers. There were four male body dissectors staff, one was a nurse, one was radiology technician, 3 were with biology degree, and five administrative workers.

In addition to civil mortality, the mortuary of this city is busy, with unpredictable number of dead bodies brought to the mortuary after mass post explosion casualties.

Results:

The questionnaires were analyzed in a period between December 2012 and June 2013. On closer look of the questionnaire, the components for each psychological abnormality involved different severity of each of the scales (anxiety, stress and depression).

The assessment data in the mortuary department was as follows: The overall findings in this department were; (65%) of the staff suffered from stress, (65%) had anxiety; and (70%) of the workers had depression.

The incidence of depression, stress and anxiety among the 14 male workers in the mortuary of Kirkuk was very high. About (64%) of the staff suffered from anxiety, depression and/ or stress. However, anxiety was extremely severe in (20%) of the cases and more than (15%) of the workers suffered severe depression, and in less than (10%) of the cases the stress was extremely severe.

Among the 6 female workers, the incidence of depression was (83%), out of which more than half was extremely severe. More than (66%) of the staff suffered from anxiety, out of which in (33%) of the cases it was extremely severe. The incidence of stress was (66%), among which (16%) has been extremely severe (tables 1-4).

Table (1): the overall incidence of psychological distress among workers in the mortuary of Kirkuk.

Total No. 20	Normal	Abnormal	Abnormal %
DASS Depression	6	14	70%
DASS Anxiety	7	13	65%
DASS Stress	8	13	65%

Table (2): The incidence of psychological status of male workers in the mortuary of Kirkuk.

Total No. 14	Normal	Mild	Moderate	Severe	Extremely sever	Total Abnormal No.	Abnormal %
DASS Depression	5	4	0	3	2	9	64%
DASS Anxiety	5	4	1	0	4	9	64%
DASS Stress	5	2	3	3	1	9	64%

Table (3): The incidence of psychological status of female workers in the mortuary of Kirkuk.

Total No. 6	Normal	Mild	Moderate	Sever	Extremely severe	Total Abnormal No.	Abnormal %
DASS Depression	1	0	2	0	3	5	83%
DASS Anxiety	2	1	0	1	2	4	50%
DASS Stress	2	0	1	2	1	4	66%

Table (4): The overall incidence of extremely severe psychological anomaly according to gender among health professionals working in mortuary.

	DASS Depression	DASS Anxiety	DASS Stress
Female	50%	33.3%	16.6%
Male	14%	28.5%	7%

Discussion:

It was expected that those who are close proximity to disaster will suffer most. The hospital environment, the casualty and mortuary health professionals, are particularly affected. This is what one

observes in the current study. Bodies of victims of violence are usually dissected by the mortuary staff according to the Iraqi law, and the on call general surgeons provide the death certificate

after inspecting the body. Relatives of the corpse often are under pressure and may become abusive. They are pushing to have the death certificate provided instantly so they can bury the body according to the Islamic religion. The postmortem have therefore to be done promptly. The unthankful critiquing relatives of the victims increase the psychological assault in our series; found out when interviewed. The female employee is taking part in the manpower of the mortuary workers, in respect of the female victims of war and normal death. Exposure to the dead has been an important subject for traumatic stress research, considering that such exposure is a risk factor for posttraumatic stress disorder (PTSD). Individuals required to handle the dead from war are exposed to multiple stressors. In a study, during the first Iraqi gulf war, it was obvious that the psychological trauma was inflicted after exposure to dead bodies, compared to psychological status prior to exposure to this^(4, 6).

The reaction of health professionals to disasters and stress can vary compared to the normal civilians. In a study, it is revealed that the nurses had a lower level of post-traumatic stress disorder (PTSD) symptoms and higher self-rated health, life satisfaction, and perceived coping in comparison with the civilians exposed to earthquake and tsunami. Coping techniques can vary and is an attempt to remain resilient⁽⁷⁾.

This pilot study has limitations such as the small sample size and selection bias. These preliminary results may not be conclusive but can give us many meaningful clues evidenced by internal consistency. A larger study based on this pilot study will help generate objective data for occupational stress of Iraqi health professionals.

The overall incidence of psychological problems is undoubtedly higher among the mortuary workers compared to the normal population, anecdotes state. In our series the female gender had extremely severe depression and the overall incidence of psychological problems as higher than the male gender working in the same profession.

The mediating role of posttraumatic stress symptomatology on the association between war zone exposure and sex has revealed no significant interactions with sex^(7, 8). These findings suggest the important influence of post-traumatic stress disorder on physical health symptoms for both men and women. We have a different experience in the current paper, our female employee were suffering more than the male gender.

Conclusion:

Undoubtedly a worker of the mortuary in Kirkuk, where there is high number of explosions, exposes the staff to stress, depression and anxiety. This is more so for in the female workers. The local health directorate has the obligation to take necessary action to reduce this problem by securing the mortuary, prevent abusive behavior from families of dead, and dealing with the staff of the mortuary properly.

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