Psychiatric morbidity in the post-ICU patient-ethnocultural differences

LETTER TO THE EDITOR

Psychiatric Morbidity in the Post-ICU Patient—Ethnocultural Differences

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Indian Journal of Critical Care Medicine (2019): 10.5005/jp-journals-10071-23244

Dear Sir,

Studies on patients from various types of intensive care units (ICUs) in the developed world have shown high rates of post-traumatic stress disorder (PTSD), anxiety and depression as much as 1 in 3–5 intensive care unit (ICU) survivors showing clinically significant symptoms at 1 years follow-up.[1] There are limited data however, on the incidence of psychiatric morbidity of ICU patients from developing countries in general and South Asian countries in particular. Studies of psychiatric morbidity of noncritically ill population from developing countries who have been subject to traumatic events have shown high rates of PTSD, but there is scant information about PTSD in the post-ICU patients from South Asia or India.[2,3]

We would like to share the preliminary results of our project Intensive Care Associated Mental Health Outcomes, which aims to investigate the rates and factors associated with mental health disorders in patients discharged from the ICU, as phase 1 of the study. The study is registered at CTRI/2017/07/008959 and funded by Indian Council of Medical Research.

Our ICU is a 17-bedded mixed medical–surgical unit with a 24-hour intensivist cover and a 1:2–3 nurse: patient ratio, in an 800-bedded public funded university hospital in Eastern India. The principal investigator is a certified intensivist supported by coinvestigators who are trained intensivists and psychiatrists trained and experienced in prior community level PTSD research. A trained clinical psychologist has been recruited full time for the study. We have recruited all consenting adult patients who are admitted to the ICU for >48 hours. Demographic data like age, sex, quality of life scores, presence of risk factors for PTSD, presence of substance abuse, prior psychiatric illness level of social support, etc. and ICU data like severity of illness, comorbidities, sedation scores, delirium, benzodiazepine or steroid use are collected. Patients are followed up with telephonic interviews for 6 months after ICU discharge at predetermined intervals of 14 days, 1 month, 3 months and 6 months. Formally translated and validated versions of the PTSD and Anxiety and Depression screening tools—Impact of events—revised (IESr) and the Hospital Anxiety Depression Scale (HADS) are being used.

In an interim analysis, we found that the rates of positive screening were significantly lower than published data from the western world. To account for possible confounders like cultural factors affecting self-reporting over phone and telephonic interview related fatigue, the psychologist made more than fifty home visits over a radius of 200 km and about a100 face to face interviews at follow ups. Voice recordings of interviews were kept and assessed by trained psychiatrists as needed. A randomly selected group among those who reported scores above the 75th percentile of cohort (but below the cutoff scores in the screening instruments) were also interviewed by two trained psychiatrists.

At the end of phase 1 of the study, where we recruited patients over 14 months, we report that the incidence of probable PTSD and anxiety/depression in our population (331 patients with complete 6 months follow-up out of 527 patients recruited) at 3 months after ICU discharge is 0.3% and 2.7% respectively. When analyzed separately for symptoms of anxiety or depression, neither of the subscale scores crossed the minimum of 7 (Table 1). The mean age, severity of sickness, rate and duration of mechanical ventilation,

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How to cite this article: Tripathy S, Kar N. Psychiatric Morbidity in the Post-ICU Patient—Ethnocultural Differences. Indian J Crit Care Med 2019;23(9):440–441.

Source of support: Nil

Conflict of interest: None

Table 1: Incidence of mental health disorders related to acute illness in indian population

Real rates of screening positive PTSD /anxiety depression as per the defined cutoff scores
Incidence of PTSD symptoms@ l month- 124/331 = 0%
Incidence of PTSD symptoms@ 3-months = 1/331 = 0.3%
Incidence of anxiety depression symptoms@ 1 month = 18/331 = 5.4%
Incidence of anxiety depression symptoms@ 3 months = 9/331 = 2.7%
Rates of PTSD / anxiety depression as per the >75% percentile of cohort scores
Incidence of PTSD symptoms@ 1 month = 124/331 = 37.5%
Incidence of PTSD symptoms@ 3-months = 89/331 = 26.9%
Incidence of anxiety depression symptoms@ 1 month = 81/331 = 24.5%
Incidence of anxiety depression symptoms@ 3 months = 80/331 = 24.2%

PTSD, posttraumatic stress disorder

sedation scores etc. and other factors known to be associated with higher psychiatric morbidity in our cohort are similar to that in previous studies from European/ developed countries.

Our understanding of demographic and sociocultural specifications related to exposure to risk of PTSD and symptom development in non- ICU has grown significantly over the past few decades. Breslau et al. observe that that among Asian Americans, risk for psychiatric disorders is lower among the native-born than among the US-born—both the developmental timing and the duration of experience in the US contributing to increases in risk.[4]

The type (s) of trauma and the risk of exposure to it stays constant in the ICU patients across ethnocultural differences. What may vary is the patients' sociocultural fabric, endorsement of symptoms and coping mechanisms employed. For eg. the disaster work in India like the tsunami in 2004, has shown that the majority of people use cognitive framework 'will of God', prayers, etc. as important coping mechanisms to endure traumatic experiences.[5] Higher levels of social support and use of habit forming substances (betel nut, tobacco, alcohol and cannabinoids) were independent predictors of lower PTSD scores at 3 months in our cohort ($p < 0.05$). Our patients who report 'dreams' or 'flashes of memory like remembering the feeling of a tube in my mouth every time I brush my teeth' are convinced that these events are not unpleasant for them. They have a high level of acceptance and even thankfulness to the doctor/nurse who' helped me by doing this- even though it causes some sequelae now'.

Examining the relationship of cultures to 'traumatic' critical care experience may be necessary for a better understanding of vulnerability, resilience and recovery in critically ill patients in different regions of the world to enable better understanding and tailor therapy.

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