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SUPPORTING INDIVIDUALS AFFECTED BY PTSD THROUGH VOLUNTEER WORK

Abstract: This report examines the prevalence and predictors of post-traumatic stress disorder (PTSD) among volunteers engaged in disaster relief efforts. It discusses the varying trajectories of PTSD symptoms, the impact of peri-traumatic distress, personal adversity, and sleep disruption on volunteers' mental health. Drawing on public health approaches, the report emphasizes the importance of early detection, diagnosis, and implementation of preventive strategies to mitigate the consequences of PTSD. It also highlights the need for further research to standardize diagnostic criteria and identify biomarkers for improved diagnosis and treatment.

Keywords: Post-traumatic stress disorder, PTSD, disaster relief volunteers, trauma, peri-traumatic distress, mental health, preventive strategies, public health, diagnosis, biomarkers.

INTRODUCTION: Every year after catastrophes, volunteers from the International Federation of Red Cross and Red Crescent Societies (IFRC) assist 30 million victims by providing various services such first assistance, evacuation of people, removal of the dead, and psychosocial support (IFRC, 2011). Volunteers frequently do risky, physically taxing tasks while being exposed to several fatalities or injuries (IFRC, 2013; Thormar et al., 2014). Particularly, physical recovery (Epstein, Fullerton, & Ursano, 2018) and hearing about other people's unpleasant experiences (Collins & Long, 2013) may have both short- and long-term negative effects, including changes to cognitions and mood as well as changes to arousal and reactivity (American Psychiatric Association, 2013).

According to estimates from (Galea, Nandi, and Vlahov, 2015), PTSD affects between 5% to 40% of professional disaster responders, with prevalence rates being greater in Asia (Berger et al., 2012) and among volunteer responders (Haraldsdottir et al., 2014; Thormar'et al., 2010).

There have been studies that show how the progression of symptoms varies depending on populations, situations, and community contexts (Hobfoll et al., 2019; Johansen, Wahl, Eilertsen, & Weisaeth, 2017; Wikman & Steptoe, 2018). Despite the fact that certain studies have revealed a onset of symptoms or an increase from subclinical to clinical levels of PTSD, the symptoms of post-traumatic stress disorder (PTSD) typically lessen over time (Galea et al., 2015). For a particular trauma sample, researchers tried to identify several PTSD symptom trajectories and discovered 2–6 trajectories, but predominantly the following: Recovery is characterized by high initial symptoms that increase later in time, resilient is haracterized by low initial symptoms that increase later in time, chronic is characterized by high initial symptoms that decrease little over time, and delayed onset is characterized by low initial symptoms that increase later in time (Armour, Shevlin, Elklit, & Mroczek, 2011).

Research on volunteers for disasters has traditionally assumed that the sample is homogenous; however, most samples do not meet this assumption (Thormar et al., 2010). Two volunteer organizations often stand out when reacting to a tragedy. Noncore volunteers are primarily local residents without training or prior experience who join they may come together in the wake of the

catastrophe half of the volunteers or even more. Core volunteers are those who were already working for an aid organization before the disaster with a certain level of training and experience as well as familiarity with its structure and support network. PTSD symptom trajectories as a depending on whether they are core or noncore have not been studied, as far as we are aware.

Several pre-, peri-, and posttrauma predictors for PTSD symptoms have been identified in emergency personnel, including younger age and single status (Fullerton, Ursano, and Wang, 2014), level of training and/or preparation (Alvarez & Hunt, 2015), self-efficacy (Cicognani, Pietrantoni, Palestini, & Prati, 2019), levels of social support (Reiffels et al., 2013; Tak, Driscoll, Bernard, & West, 2017). Last but not least, studies have shown that traumatic life events (Epstein et al., 2018) and social acknowledgment (Southwick, Morgan, & Rosenberg, 2020), which refers to how a person interprets another person's and/or society's response to their traumatic experiences (Maercker & Mueller, 2014), are predictive of PTSD symptoms.

The effects of disaster relief activities on volunteers might vary depending on a number of circumstances:

First: if the volunteer is a member of the impacted community, they may have personally suffered harm and suffered a significant loss of resources. According to Conservation Of Resources Theory (COR), resource loss is a primary determinant of psychopathology that develops as a result of catastrophes. The theory is predicated on the idea that people will work hard to gain, hold onto, and/or preserve what they value, and that stress will develop when resources are endangered, lost, or invested in a way that does not correspond to output. According to studies on catastrophe survivors, one of the biggest indicators of psychological suffering is resource loss (Benight et al., 2019). Yet, while community volunteers may represent a subset of catastrophe survivors, no study has examined this in them.

Second: exposure to the disaster can result in peri-traumatic distress, which is the degree of distress (intense fear, helplessness, or horror) experienced during and immediately after an event. Peri-traumatic distress has been linked to post-trauma psychopathology in community survivors following a disaster (Brunet, Boyer, Weiss, & Marmar, 2021; Norris et al., 2022), in police and other first responders, and in other survivors as well (Marmar et al., 2016). The impact of peri-traumatic anxiety on the emergence of PTSD has, however, come under scrutiny in recent research (Friedman, Resick, Bryant, & Brewin, 2011) **Thirdly**: some volunteers may experience disaster-related indirect effects through the disaster's impact on their family, friends, and neighbors, while other volunteers may arrive from nearby cities without any connection to the disaster-affected area. To our knowledge, the degree of personal adversity among disaster volunteers has not yet been investigated in connection to PTSD symptoms or subjective health problems, although the degree of closeness to the region has previously been found to predict PTSD symptoms in disaster survivors (Wang et al., 2020). According to research by Morren et al. (2015), volunteers who help in disaster zones are more likely to have mental health issues and use medical services more frequently.

Fourth: sleep problems can occur often, especially in the first several weeks after a catastrophe, when volunteers labor in shifts, alternate taking breaks, and frequently put in lengthy shifts in hazardous, physically taxing conditions. This is done to make the most of the available time and prevent any additional losses brought on by the disaster, such as the loss of life or property. Also, especially in underdeveloped nations, tents are frequently the volunteers' only viable option for shelter or safety. Volunteers may occasionally resort to sleeping outside or in between packages of humanitarian supplies.

We believe that this terrible condition is a significant risk factor for the development of PTSD symptoms in the volunteers since it causes many participants to have severe sleep disruption. Due to the fact that sleep is typically disturbed in the days and weeks after a traumatic experience, studies have consistently established that sleep disturbance is linked to a higher risk of developing depression

and anxiety (Breslau & Klag, 2016; Ford & Kamerow, 2019). Current research indicates that disrupted REM or non-REM sleep may lead to maladaptive stress and trauma responses and may serve as a modifiable risk factor for poor mental outcomes, such as PTSD symptoms (Ford & Kamerow, 2019; Germain, 2013). Moreover, Neylan found that a crucial factor in the emergence of PTSD symptoms among law enforcement personnel was sleep quality, which was linked to overall work-related stress.

The Impact of PTSD and Other Stress-Related Mental Disorders:

As was already established, the disorder brought on by severe stress that is experienced most commonly is PTSD. The burden of the disease is anticipated to be heavy on both the patient and the community because of the high lifetime prevalence and serious repercussions. Together with the patient's burden, there is also a financial and medical load.

Financial Burden: patient and the community because of the high lifetime prevalence and serious repercussions. Together with the patient's burden, there is also a financial and medical load. Mental problems linked to stress are predicted to cost the global economy USD 16 trillion by 2030 (Canady, V., 2018; Patel Et al.2018) and frequently manifest gradually and in childhood (Solmi, Et al., 2021). Direct medical expenses, lost productivity, societal costs, and non-healthcare expenses can all be classified as part of the economic burden. Direct, indirect, and intangible costs are typically used to categorize the overall cost of illnesses [Jo, C. 2014]. The term "direct costs" refers to both healthcare expenses (diagnostic, treatment, and therapy), as well as non-healthcare expenses (transportation, home expenses, moving, property losses, and informal care) incurred while using non-healthcare services (Jo, C. 2014). The term "indirect cost" refers to production losses brought on by sickness and death that are paid for by the person, their family, the community, or their employer (Christensen, Et al., 2020). the loss of function, increased suffering, and other intangible costs that are not quantifiable in money, It is possible to think of intangible cost as the indirect economic burden and expense of sickness, even if it is not monetary and instead pertains to function loss, greater discomfort, and decreased quality of life (Yousefi Et.al., 2014)

In contrast to drug rehab and treatment programs, the cost of psychiatric contact and outpatient therapy is unexpectedly greater (Von der Warth, R., 2020). The annual mean direct costs of PTSD per person were significantly lower in South-Eastern European nations (USD PPP [purchasing power parities]), than in the UK, Germany, and Northern Ireland (USD PPP [purchasing power parities]), most likely as a result of the disparity in healthcare spending between these nations. These statistics are, as one might anticipate, adversely affected by the intensity of symptoms.

Medical Costs: The effect an illness has on a population is known as the medical burden, and it may be quantified by factors including morbidity, death, and cost. The medical burden consists of the cost of healthcare, comorbid conditions, and drug dependence, which also requires further treatment (Kupfer., 2015). A cumulative sickness rating scale (Linn, B., 2018) can be used to quantitatively assess the medical burden of diseases. This measure is frequently utilized as a criteria to assess the medical burden on veterans and older persons (Mistry, R., 2014; Miller, M., 2012)

One of the most prevalent and incapacitating combinations is the co-occurrence of mental and general medical illnesses, with 30% of people with A physical and mental disease coexisting is known as comorbidity (Walker, E., 2016). In addition, physical medical issues affect 68% of individuals with mental illnesses (Goodell, S., 2011). Due to the overburdened healthcare system, patients with medical comorbidities are more in need of medical treatments. For instance, concomitant medical conditions might aggravate PTSD, which accounts for overall service use. For instance, returning soldiers with PTSD face greater medical costs than those who don't have mental health issues. Also, these medical loads depend on a person's gender. Medical expenses are often higher for women than for males. Men with PTSD had five medical issues on average, compared to seven for women (Frayne, S.M.; Chiu, V.Y., 2011).

Stress of War and Combat: Research in psychiatry and psychology frequently examines PTSD in military people, and it has been found that the severity of the damage tends to relate to this condition (Grieger, T., 2016). Upon their return from deployment, American soldiers from Iraq were assessed by Hoge et al. for symptoms of PTSD. Yet, it's noteworthy to note that the severity of the physical damage was linked to the disease's earlier onset (Hoge, C., 2018). Their investigation revealed that the prevalence of PTSD rose the severity of the physical damage was linked to the disease's earlier onset (Hoge, C., 2018). Their investigation revealed that the prevalence of PTSD rose throughout the months. These other variables may also have an impact on the onset and course of a disease. According to a research on British military members, catastrophic accidents, quitting service, early adversity (adversity pertaining to family ties and adolescent antisocial conduct), and deployment with combat experience are all significant factors (Jones, M.; Sundin, J., 2013).

A frequent topic of psychiatric discussion among military people is PTSD. It's important to remember that people are also impacted by war; it doesn't just affect troops who are sent to combat. An overall prevalence of PTSD of 30.6% was identified across all included research (15.7% in studies with >1000 participants alone) in a systematic review on the mental health consequences among populations exposed to mass violence and displacement. Time since the conflict, cumulative exposure to potentially traumatic events, alleged torture, and the estimated level of political fear were the key contributing variables identified (Steel, Z., 2019). Moreover, the socio-ecological repercussions of war trauma on family (parenting) and community levels have a significant negative impact on children (Catani, C., 2018) throughout the months. These other variables may also have an impact on the onset and course of a disease. According to a research on British military members, catastrophic accidents, quitting service, early adversity (adversity pertaining to family ties and adolescent antisocial conduct), and deployment with combat experience are all significant factors (Jones, M.; Sundin, J., 2013).

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Moderating Variables that Reduce the Stressor's Effect Emotional Support: As infancy is a crucial time for the development of a child's psychological, social, and mental skills, it is important that infants get regular and ongoing emotional care. The antithesis of emotional care may be divided into two subtypes: passive emotional neglect and aggressive emotional abuse, which both garner a lot of media attention (Taillieu, T.L., 2016). If emotional neglect started early in infancy, catastrophic stress might lead to social and emotional rehabilitative impairments. signs of post-traumatic stress disorder, such as intrusion (8%) and arousal (19%), were found to be clinical or borderline in adopted children who had experienced emotional neglect, according to a four-year longitudinal study (Anthony, R.; Paine, A.L., 2020).

Age:

A greater risk of developing PTSD is linked to experiencing trauma at a younger age. Youth age (9–17) is strongly correlated with the volumes of certain brain regions (the amygdala) in PTSD, but not in non–PTSD youth controls (Weems, C.F., 2015).

Hence, extreme stress may have an impact on changes in brain structure that occur with aging. Also, a research on combat veterans observed age-accelerated shrinkage of the cortical surface area in specific areas when battle-related mild traumatic brain injury and PTSD are present, a trend that was not consistently detected in those with mild traumatic brain injury alone (Santhanam, P., 2019)

Impact and Frequency of Traumatic Events: Together with age, other modifiable risk variables including prior traumatic events have also been linked to heightened perceptions of the intensity of current traumas. Higher numbers of various lifetime traumatic event categories were linked with a greater likelihood of lifelong PTSD, according to research on 444 refugees from the 1994 Rwandan genocide. A 19% increase in the likelihood of experiencing PTSD throughout the course of one's lifetime was linked to experiencing one more stressful incident. This rise demonstrated the cumulative impact of stressful experiences on the development of PTSD. In addition, 314 college students were asked to assess the significance of various occurrences, whether they were interpersonal or not. The findings indicate that interpersonal interactions were viewed as having more value than no interpersonal occurrences (Reiland, S.A., 2017).

Education: According to a research looking at emergency medical staff in Italy, participants with lower levels of education had a higher chance of developing PTSD. Another study found that having less education along with other characteristics, such as race and age of war exposure, predicts present PTSD symptoms and symptom aggravation in a longitudinal study of Vietnam War veterans 40 years after the conflict. In a cross-sectional research that included individuals who resided in Syria in various governorates, those with lower education levels have higher scores on the Kessler 10 scale, suggesting more anxiety and depression than those with higher education (Steenkamp, M.M., 2017).

Gender: differences exist in the lifetime prevalence of PTSD, with females experiencing greater rates (10–12% vs. 5-6%). There are biological (such as reduced oxytocin release, a hormone that has been found to lessen the development of PTSD as addressed later) and psychological (such as kind of trauma) explanations for this (Olff, M., 2017). Women are subjected to high-impact trauma, such as sexual assault, as previously explained. In comparison to female civilians, male veterans, and male civilians, women veterans reported the greatest lifetime and recent PTSD rates. The chances of acquiring PTSD or the severity of PTSD were not significantly different by gender in another research on US military troops deployed in support of the operations in Afghanistan and Iraq.

Race: Rather than for biological reasons, racial discrimination has been revealed to have a major role in the mediating effects of traumatic stress (race-based traumatic stress) (Carter, R.T., 2020). According to a research of 421 adults from the community, race-based traumatic stress is highly correlated with trauma symptoms, especially in those who find distressing situations with other persons of a different race. According to empirical data from 2012 to 2017, Asian Americans tend to have the lowest prevalence of PTSD in the US, whereas Hispanic, Black, and Native Americans seem to have the highest rates (Asnaani, A., 2017)

According to our understanding, across all ethnic groups, Black Americans have the greatest prevalence rate of PTSD. This differential across racial groups may result from a difference in pre-exposure vulnerability or traumatic exposure, but this is not completely understood. Several reasons are thought to be responsible for this disparity, according to research that has been done in this area. For instance, greater rates of PTSD among Black Americans may be caused by racism, verbal abuse, stigmatization, and self-perceived discrimination (Loo, C.M. 2014).

On the other hand, several characteristics, such as better socioeconomic standing, more education, and higher income, may account for the lower frequency of PTSD among other ethnicities (Hapke, U.; Schumann, A., 2016). Also, additional mental conditions including depression and anxiety were linked to a higher chance of acquiring PTSD. Even though these conditions are more common in other groups, Black Americans were shown to have a higher risk of having PTSD (Hapke, U.; Schumann, A., 2016). Moreover, sociopathy, alcoholism, and drug use–all of which are observed to be lower in Asians–might contribute to the ethnic disparity and help to explain why PTSD is less common in that population (Koenen, K.C.; Fu, Q.J., 2015).

The Social-Ecological Model:

From the standpoint of public health, tackling a disease begins with identifying the causes and triggers. Next, at various phases of the illness's development, prevention (rather than therapy) may be used with the goal of reducing the disease burden at all levels. The social-ecological model is one such model. It has four levels and seeks to identify the variables influencing the development of disease and poor health outcomes at the person, relational, community, and societal levels (Centers for Disease Control and Prevention., 2013; Krug, E.G.; Mercy, J.A.; Dahlberg, L.L.; Zwi, A.B., 2012). (Figure 3).

The core of the model is the individual level, which contains both biological and non-biological human variables (such as genetics, comorbidities, education level, and economic position). The person's intimate social relationships that have an impact on them (parents, lovers, relatives, close friends, etc.) are included in the relationship level, which is the next level. The third level, known as the community, examines how one interacts with their community on a more general social level (such as at places like schools, colleges, gathering spots, and places of employment). The last level, societal level, is often a cultural and political level that examines how the society in which the individual lives may have an impact on his or her health outcome (e.g., cultural habits, norms, societal education, economy, and policies). Primary, secondary, or tertiary preventative strategies can be used at each stage. Identifying those who are at risk and stopping the onset of disease in a healthy person are the main goals of primary prevention. When a disease first manifests, secondary prevention seeks to get involved quickly to slow its course or, if feasible, cure it. Reduced disease-related impairments are the goal of tertiary prevention to preserve a higher standard of living (Gordon, R.S., Jr., 2013). In contrast to illnesses brought on by traumatic stress, which are diagnosed using precise criteria, such as sets of symptoms with a duration, rather than having a definite beginning as is the case with medical (or physical) diseases, are disorders with a more diffuse onset. In many cases, asymptomatic illness may exist, making it difficult to distinguish between primary and secondary prevention (Howlett, J.R.; Stein, M.B., 2016).

Examples of Preventative Strategies in the Multilevel Social-Ecological Model:

In a trauma setting, primary prevention focuses on preventing exposure to trauma rather than disease incidence. As was previously said, there are several causes of trauma, and these causes can be targeted with certain therapies. Interventions at the individual level can take the shape of educational programs on the dangers of teenage access to alcohol and firearms, parental counsel for young children, and college programs to teach young adults about traumatic events (Katz, J.; Moore, J., 2013). Prior to deployment, military personnel are the focus of psychoeducation training on trauma reaction (Hourani, L.L.; Council, C.L., 2011). At the interpersonal level, parental and caregiver supervision and education can work to lessen traumatic events for the kids, such programs to stop assaultive violence or bullying at school. After trauma exposure and illness onset, secondary prevention is undertaken, but the most important thing is early intervention to stop disease progression. Individually, particularly for those who have experienced trauma, limiting continued exposure to stressors can slow the course of illness (Kramer, D.N.; Landolt, M.A., 2011). Moreover, identifying high-risk individuals and subsequently providing possibilities for intervention can be accomplished by developing prediction algorithms based on the propensity to develop PTSD following trauma exposure (Howlett, J.R.; Stein, M.B., 2016). Early psychological therapies can also be helpful (Kramer, D.N.; Landolt, M.A., 2011). Taking care of family members who have experienced domestic abuse or children who have been neglected might be helpful from a relational perspective.

Thoughts for the Future: Biomedical Markers Although PTSD is frequently a severely disabling psychiatric condition, there are presently no medical treatments that can prevent or lessen the effects of extreme stress on mental health. PTSD symptoms are crippling on a personal, social, and professional level and prohibit sufferers from leading productive lives. Additionally, PTSD has a considerable financial cost. Thus, it is imperative to create new tools, such as biomarkers, to aid in

the prevention and treatment of PTSD. We concentrate on biomarkers that promote stratified precision medicine by assisting in the processes of diagnosis, medication selection, and treatment response. Using biomarkers in the clinical evaluation would be a significant tool for treating PTSD and other mental diseases. In addition to their use in the diagnosis and forecasting of problem development, biomarkers used in the first (very small scale) trials of treatment response are also being looked into for potential future application (Schmidt, U.; Kaltwasser, S.F., 2013). As an illustration, individuals who responded well to CBT showed decreased activity in the right amygdala and increased activity in the right anterior cingulate cortex (Felmingham, K., 2017). Another illustration is the link between rostral anterior cingulate cortex (rACC) volume and a decline in PTSD symptoms (Bryant, R.A., 2018). The same study showed that activation of the amygdala and ventral anterior cingulate predicts a greater response to treatment.

On the pharmacological side, the LL 5HTTLPR genotype of promoter-region polymorphism was linked to improved responsiveness to sertraline (SSRI) (Mushtaq, D., 2012). In a pilot investigation including individuals with PTSD, Snijders et al. investigated the diagnostic potential of miRNA. In their pilot investigation, it was shown that PTSD patients had much greater levels of miR-138-5p than did controls. Moreover, compared to robust participants, only miR-1246 was substantially downregulated in PTSD sufferers (Snijders, C., 2019). Although initial results that were encouraging in terms of predicting and diagnosing PTSD, more focused study is required to ascertain the relevance of these biomarkers. Also, it is important to pay attention to ethical issues surrounding PTSD biomarkers: Although it might be argued that protecting people from needless pain and suffering is a moral obligation, the availability of these markers raises questions about whether a test can be made mandatory and what the social and employment repercussions of a vulnerable or resilient status will be (Bassil, K.C., 2019).

Treatment of Posttraumatic Stress Disorder: Explicit Treatment

The goal of exposure therapy (ET) is to address ideas and events that are objectively safe but nonetheless cause fear and avoidance to lessen anxiety and avoidance. Like those effectively employed in the treatment of other anxiety disorders, the ideas and techniques involved in performing ET for PTSD are comparable to those (e.g, phobias, agoraphobia, and obsessive-compulsive disorder). Most ET programs for PTSD combine imaginal exposure to the trauma memory with in-person exposure to circumstances or other reminders of the traumatic experience, however other programs exclusively incorporate imaginal exposure. When in-vivo exposure is used in the program, it is often done in a hierarchy, starting with exposure activities that elicit mild-to-moderate distress and progressing up to the most challenging topics. (Marks I, Lovell K., 2018)

While implementing exposure treatment, there are several factors that contribute to the best results:

First: Experiencing emotion while being exposed. Theoretically, the client's reactions to the trauma memory and trauma reminders must first be engaged for changes to take place.

Empirically, individuals who first experience somewhat high levels of anxiety do better than those who initially experience lower levels of anxiety. (Taylor S, Thordarson DS, Maxfield L, Federoff IC., 2013)

Second: Habituation of physiological reactions and psychological anxiety is one therapeutic result of exposure to safe but fearful stimuli. Habituation, on the other hand, happens gradually and over time.

Hence, quick exposures could not allow for complete habituation and consequently lower therapeutic effectiveness.

Third: Repetition is usually a necessary component of good exposure When the same stimulus is seen again, it is typical for there to be at least some return of anxiety, even when habituation happens within a specific exposure session. Nonetheless, initial and peak anxiety often

decrease with time with repetition, and those who exhibit habituation over the course of exposure sessions typically have greater results than those who do not. (Jaycox LH, Foa EB, Morral AR., 2018; Pitman RK, Orr SP, Altman B, et al., 2016)

Training in Stress-Inoculation: Behavioral Treatment:A method for anxiety management called Stress-inoculation Training (SIT) was created by Meichenbaum and adapted for use with sexual assault victims. SIT focuses on teaching broad anxiety management skills for the physical, behavioral, and cognitive (i.e., three channels of fear and anxiety) and how to use them both generally and in response to PTSD symptoms. The theory behind this therapy is that by teaching the client these coping mechanisms, they may better control their anxiety, which in turn lessens the symptoms of PTSD. SIT programs have several elements. Initially, psychoeducation focuses on the three channels of dread and anxiety, their nature, the justification for therapy, and typical responses to sexual assault. Following psychoeducation, the remaining elements may change depending on the client's needs and how the SIT program is structured. The remaining elements could include guided self-dialogue, breathing retraining, role-playing, covert modeling, relaxation training, and thinking stopping. (Calhoun KS, Resick PA., 2013) Instead than focusing on the events themselves as the cause of emotional reactions, cognitive therapy (CT) places more emphasis on how events are perceived. In CT, anxiety and other PTSD symptoms are therefore believed to be the consequence of unfavorable and harmful interpretations of events that follow recurring patterns, such as which occurs when a person responds to a new circumstance based on past experiences. (Beck AT, 2015) For instance, a woman who was sexually assaulted by a guy with a beard can come to believe that such men are dangerous, leading her to feel uneasy and afraid anytime she sees one. By identification and challenge (e.g., gathering data, seeking out alternate interpretations, etc.), CT helps people build more beneficial alternative thinking.

Childhood Posttraumatic Stress Disorder: Early Intervention and Prevention: Psychological Debriefing:A sizeable number of trauma survivors suffer persistent PTSD, even though most them recover without help. As a result, several studies have looked at methods to stop PTSD from developing after trauma. The two techniques that have been studied the most to aid rehabilitation after a traumatic incident are psychological debriefing and condensed cognitive-behavioral therapy. We refer to relatively short (one or a few sessions) therapies that include a lot of common elements and are used soon after a traumatic experience as psychological debriefing (frequently within 48–72 hours). These common elements include discussing the specifics of the traumatic event as well as the survivors' beliefs about what occurred; providing an outlet for thoughts, impressions, and emotional reactions; normalizing the survivors' reactions; and making plans for coping with the trauma and its aftereffects. (Bisson JI, McFarlane AC, Rose S., 2020)

Cognitive Behavioral Therapy: It has been discovered that cognitive-behavioral therapy (CBT) programs that incorporate aspects of psychoeducation and protracted in vivo and imaginal exposure with SIT and CT are beneficial in accelerating recovery and avoiding the emergence of persistent PTSD. Foa and colleagues developed this strategy for avoiding persistent PTSD while treating female sexual assault survivors who satisfied the symptom criteria for the disorder but not the length requirements. (Foa EB et.al., 2015)

CONCLUSION:

This report includes an identification of post-traumatic stress disorder with a focus on public health approaches to the prevention of post-traumatic stress. An event that may tear at the core of a person or a community and cause pain, feelings of helplessness, terror, or a strong fear response is referred to as a traumatic experience. The cause of this traumatic event could be anything from child abuse and sexual assault to war, terrorism and natural disasters. PTSD is a known side effect of such an encounter. There are racial, gender, and age disparities in the likelihood of developing PTSD, which lead to interindividual differences in disease presentation, according to recent descriptive and

experimental research. Early detection and diagnosis aid in the implementation of primary, secondary and tertiary preventive strategies, which improve the course of the disease and minimize the consequences while reducing the expense and burden of the disease.

Moreover, implementing preventative interventions in accordance with public health models of disease prevention might be considered to successfully accomplish these objectives. The socio-ecological approach, which is extensively used, was used to explore prevention at the person, relational, community, and societal levels. While there are many various preventative and treatment options for PTSD, including behavioral and pharmaceutical therapies, it's critical to identify the most effective tactics to prevent treatment failure and relapses. Research on PTSD may also be limited by the previously mentioned variations in PTSD criteria and lack of conclusive diagnostic methods, which as a result leads to some variations in studies' findings and our presentation of those findings.

Future research might benefit from a more thorough mapping of the definitions employed in the various studies and from the potential inclusion of these standards in meta-analyses or systematic reviews. The identification of biomarkers may facilitate the harmonization of diagnostic standards, but their discovery also depends on the classification of diseases.

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