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SYMPTOM DIFFERENCES BETWEEN OLDER DEPRESSED PRIMARY CARE PATIENTS WITH AND WITHOUT HISTORY OF TRAUMA

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ABSTRACT

Objective: The current study explored the relationship between past traumatic experiences and current depression in a sample of depressed older adult primary care patients. *Method:* Sixty-six patients were referred from primary care to a psychogeriatric clinic that specialized in the treatment of unipolar depressive disorders. All patients received an extensive psychological assessment. *Results:* Twenty-one percent had a history of trauma reported in their medical charts. Despite no differences found on a clinician-rated measure of depression, those with a trauma history had more depressive symptoms on a self-report measure. *Conclusions:* Although older patients with a history of trauma may not appear more depressed than a non-trauma comparison group, they may be in more psychological distress. The clinical implications of these findings and recommendations for mental health professionals are discussed.
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Traumatic exposure and its psychological and physical health effects in older adults are a relatively neglected area of empirical and clinical investigation. Research on the effects of exposure in younger populations has grown exponentially in the past couple decades. One of the more interesting empirical findings in this literature is that Post-Traumatic Stress Disorder (PTSD) is not the only negative psychological consequence of trauma [1, 2]. The range of trauma-related responses is wide and includes other anxiety disorders, substance abuse/dependence, and depression. The effects of traumatic exposure on current psychopathology, in particular depression, in older adults have not received attention.

The relationship between trauma and depression has been empirically investigated in younger populations. In psychiatric patient and general adult population samples, utilizing retrospective data, depressed adults report greater occurrence of childhood traumas than those who are not depressed [3]. In a nationally representative general population sample of adults, childhood traumas had significant effects on early-onset depression [4, 5]. Albeit small, research also exists on the effects of trauma on the course of depression. In both community and clinical samples of younger women, those with histories of childhood trauma had more persistent courses of depression [6, 7].

Investigation into whether a particular symptom cluster or subtype of depression is related to traumatic events has recently received attention [8]. In a large community epidemiological study of individuals' aged 15 to 64, childhood physical and sexual trauma was associated with major depression with reversed neurovegetative (increased appetite, weight gain, hypersomnia) symptoms. Linking trauma to specific clinical manifestations of depression may help clinicians improve identification and treatment of subsequent psychological distress.

Unlike trauma in late life, depression in the elderly has been well researched. Effects of untreated depression in older adults include psychological impairment, poor life functioning, increased frequency of medical visits, pain, excessive general medical costs, and premature placement in long-term care facilities and hospitalizations [9-11]. Depressed older adults have more severe health problems and higher rates of mortality than those who are not depressed [12, 13]. In addition, older adults have the highest rate of suicide in the United States [14]. Thus untreated depression is debilitating for many older adults, if not fatal.

The interaction between trauma and depression in older adults has important clinical and theoretical implications. Case studies and limited research suggest that recent or distal trauma might interact negatively with the developmental processes associated with aging (e.g., retirement, widowhood, social isolation and physical frailty) to affect physical and mental health functioning [15, 16]. With the increase in frequency of loss events and the decrease in their controllability, the re-processing of trauma may be prevalent, and crucial in the etiology and maintenance of psychopathology in old age. In addition, depressed older adults with a history of traumatic exposure may be even more impaired in terms of depressive or other psychiatric symptomatology, quality of life, susceptibility to

medical illness and service use than depressed older adults without a history of trauma. These patients may also have special management needs that unless addressed may present the impression of treatment-resistant depression.

The current study investigated two questions. One, do depressed older adult primary care patients with a history of trauma have more severe depression based on overall symptom count than a depressed non-trauma comparison group? Two, if there is a difference, are there particular aspects of depression that are more frequently endorsed by trauma survivors? Our hypothesis was that there would be differences, with trauma survivors indicating more depressive symptomatology.

METHOD

Participants

This study is part of a larger investigation that was conducted at the University of San Francisco, California, to evaluate the efficacy of treatment of major and minor depression in low income and minority primary care patients aged 60 and above. Study participants were depressed patients who were referred to the larger investigation by primary care physicians at the General Medical Outpatient Clinic and Family Health Center in San Francisco General Hospital, and through North of Market Senior Center, a public health center for older adults. These physicians had been trained to recognize late-life depression and were fully educated about the larger investigation. Recruitment was based on provider referral because one of the primary aims was to test these psychosocial interventions in primary care patients.

Procedure

Within two weeks of a referral, the project assistant telephoned the patient to conduct a brief screen. This consisted of the gathering of basic information, such as assessment of fluency in English and depressive symptomatology. If participants were able to speak English fluently and had depressive symptoms, the assistant explained the research project and invited the patient for a face-to-face appointment. If the patient came to the clinic, a master's or doctoral level graduate student in psychology reviewed the research protocol and procedures with them. If the patient refused to participate, a clinic intake was conducted to assign them into clinical services. If the patient agreed to participate and signed the consent from, the baseline research interview, which included the mood disorders section of the Structured Clinical Interview for Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition, patient edition (SCID-IV-P) [17] was administered. If the patient meet criteria for current major or minor depression, an appointment was scheduled within the next two weeks for a longer pretreatment research interview

to assess symptom severity, quality of life, physical functioning and use of health services.

The current study is based on data from the pretreatment research interview. Patients with current alcohol and other substance abuse, antisocial personality disorder and severe medical illnesses that might restrict participation were excluded from the larger investigation and offered community referrals. Study recruitment took place between 1995 and 1998.

Briefly, patients were randomly assigned to one of three conditions: group cognitive behavioral therapy (CBT), clinical case management (CCM), or the combination of CBT and CCM. Treatment took place over 16 weeks. In general, patients in the CBT group received 90 minutes of treatment once a week; in CCM, depending on their needs, patients were seen 20 to 30 minutes once a week; and in the CBT and CCM condition, patients were seen a combination of the two.

Measures

Lifetime traumatic history was ascertained by a retrospective chart review of intake and progress notes during treatment by the first author who had no previous contact with the patients and was blind to depression assessment scores. Each patient's clinical record was thoroughly reviewed for the presence or absence of lifetime traumatic exposure and the type of exposure. Exposure was classified as follows: vehicular accident (car, boat, train, plane); serious work accident; physical assault (hit, slapped, kicked, beaten up); sexual assault (raped, or made to perform any type of sexual act through force or threat of harm); combat; held captive (kidnapped, abducted, held hostage, prisoner of war); confronted with sudden or violent death (homicide, suicide); assaulted with a weapon (being shot, stabbed, threatened with a knife, gun or bomb); and natural disaster (tornado, hurricane, flood, earthquake). Some traumatic experiences occurred as early as childhood, while others occurred later in life.

To obtain a variety of depressive symptomatology, two measures were administered. Self-report depression was assessed using the Geriatric Depression Scale (GDS) [18]. The GDS is a 30-item measure of depression designed specifically for older adults. Patients are instructed to rate their mood over the past week using yes-no answers to questions concerning symptoms of mood, cognitive complaints and social behavior. Overall symptom severity scores range from zero through 30, with greater numbers indicating greater severity of depression. The GDS has excellent psychometric properties with internal consistency measured by coefficient alpha at .94 and test-retest reliability over a one-week interval of .85 [18].

The Hamilton Rating Scale is a clinician-rated measure of depression (HAM-D) [19, 20]. It contains 17 items on the cognitive, affective, behavioral, and physical aspects of depression. Overall symptom count scores range from zero through 53. Some have argued that the HAM-D is problematic for assessing depression in

older adults due to its heavy emphasis toward somatic symptomatology [21]. Indeed, nine of the 17 items focus on somatic complaints. Interrater reliability and coefficient alpha on the HAM-D were both .90 [18].

RESULTS

A total of 70 participants were recruited for the study, but four were unable to complete all psychological measures. Sixty-six (24 men and 42 women) participants completed all pre-treatment measures and are included here. The mean age for patients was 65.2 years (SD = 5.9), with a range of 60 through 81. The majority was Caucasian (60.6 percent), with 19.7 percent Black, 6.1 percent Hispanic, 4.5 percent Asian and 9.1 percent identified as other. Most of the patients were divorced (29.2 percent) or widowed (24.6 percent), with a significant minority married (20 percent) and the remainder never married (12.3 percent), separated (9.2 percent) or living with someone in a marriage-type relationship (4.6 percent). Almost half (46.7 percent) of the patients had 12th grade education or below, 23.3 percent had some college, and 30 percent had graduated from college. Average annual household income before tax was $10,576 with a range from $3,000 to $40,000.

Fourteen (21 percent) of the 66 patients were identified as having experienced trauma. One patient was in a serious transportation accident, four experienced physical assault, three experienced sexual assault, one was in combat, one was assaulted with a weapon, two experienced multiple traumas (one had childhood physical abuse and physical assault in the army and the other was physically and sexually assaulted) and two were unspecified.

Patients with a history of trauma and those without a history of trauma were compared on a number of demographic variables including gender, age, educational level, race, and marital status. The only significant differences between the groups found were on age. Trauma survivors were significantly younger than non-trauma comparison group, $t\,(64) = 2.86, p < .01$. The mean age for non-trauma group was 65.94 (SD = 6.25) while the mean age for trauma survivors was 62.43 (SD = 3.25).

To address the question of whether depressed older adult primary care patients with a history of trauma are more depressed in terms of overall symptom count than their non-trauma comparison group, we conducted independent samples t-tests on the average scores of the GDS and HAM-D, which are illustrated in Table 1. Statistically significant differences were found on the GDS, $t(64) = -2.57$, p = .012, with trauma survivors reporting greater depressive symptomatology. The mean for the trauma survivors was 21.71 (SD = 5.65; range 6-29) while the mean for the non-trauma comparison group was 16.77 (SD = 6.56; range 3-29). Trauma survivors and the non-trauma comparison group did not differ on the Ham-D, $t\,(64) = -.48, p = .63$.

Table 1. Differences Between Groups on Depression Measures

Measure	*M*	*SD*	*t*
GDS			
No-trauma	16.68	6.53	−2.57*
Trauma	21.71	5.64	
HAM-D			
No-trauma	14.05	6.54	−.48
Trauma	15.00	5.22	

Note: GDS = Geriatric Depression Scale; HAM-D = Hamilton Rating Scale for Depression.
*$p < .05$

For exploratory purposes, the differences between survivors and their counterparts on the GDS and HAM-D were examined by conducting *t*-tests on individual items. These findings are presented in Tables 2 and 3. Perhaps the most interesting and novel finding of this study is the different symptom pattern between survivors and their counterparts. There were significant differences found on seven items from the GDS (p's range = .04 to .001). Trauma survivors indicated greater impairment on: 1) bothered by thoughts you can't get out of your head ($p = .003$), 2) more problems with memory than most ($p = .001$), 3) think most people are better off than you are ($p = .005$), 4) enjoy getting up in the morning ($p = .03$), 5) prefer to avoid social gatherings ($p = .04$), 6) find it easy to make decisions ($p = .001$), and 7) mind as clear as it used to be ($p = .005$). There were only two significant differences on the HAM-D items, with trauma survivors rated as having more severe depressed mood ($p = .016$) and somatic anxiety ($p = .04$).

DISCUSSION

This study represents a preliminary examination of the impact of traumatic exposure on a community, help-seeking sample of depressed older adults. Findings from this study demonstrate the clinical importance of investigating the effects of trauma on current psychological functioning in late life.

The differences between the trauma survivors and a non-trauma comparison group on the overall symptom count of the GDS and HAM-D are curious. Older patients with a history of trauma were not rated as more depressed than a non-trauma comparison group by a clinician, however they reported that they were more depressed. As mentioned previously, the GDS emphasizes the affective aspects of depression, while the HAM-D emphasizes somatic complaints. One explanation for these findings may be that the somatic depressive symptoms

Table 2. Scores on the Geriatric Depression Scale of Depressed Patients With and Without History of Traumatic Exposure

	Patients With Trauma (N = 14)		Patients Without Trauma (N = 52)		
Geriatric Depression Scale	Mean	*SD*	Mean	*SD*	t (df = 64)
Satisfied with life	.63	.49	.71	.47	–.59
Dropped activities	.50	.50	.29	.47	1.49
Life empty	.52	.50	.71	.47	–1.35
Often bored	.58	.50	.64	.50	–.44
Hopeful future	.35	.48	.43	.51	–.56
Thoughts can't get out of head	.61	.49.	.93	.27	–3.23**
Good spirits most of time	.51	.50	.50	.52	.13
Afraid bad going to happen to you	.54	.50	.57	.51	–.22
Feel happy	.71	.46	.86	.36	–1.30
Often feel helpless	.75	.44	.93	.27	–1.95
Often feel restless/fidgety	.52	.50	.64	.50	–.82
Prefer to stay at home	.62	.49	.86	.36	–2.04
Worry about future	.75	.44	.71	.47	.27
More memory problems	.37	.49	.85	.38	–3.88***
Wonderful to be alive	.25	.44	.43	.51	–1.30
Often downhearted	.72	.45	.79	.43	–.49
Worthless now	.50	.50	.71	.47	–1.49
Worry about future	.69	.47	.79	.43	–.68
Life is exciting	.65	.48	.64	.50	.03
Hard to start new projects	.65	.48	.86	.36	–1.78
Feel full of energy	.80	.40	.93	.27	–1.37
Situation is hopeless	.26	.44	.54	.52	–1.95
Most people better off than you are	.37	.49	.79	.43	–3.14**
Frequently upset over little things	.65	.48	.71	.47	–.46
Frequently feel like crying	.59	.50	.64	.50	–.36
Trouble concentrating	.55	.50	.79	.43	–1.77
Enjoy getting up in morning	.48	.50	.79	.43	–2.28*
Avoid social gatherings	.73	.45	.93	.27	–2.13*
Easy to make decisions	.59	.50	.93	.27	–3.41***
Clear mind as before	.63	.49	.93	.27	–2.97**

*$p < .05$, **$p < .01$, ***$p < .001$.

Table 3. Scores on the Hamilton Rating Scale of Depressed Patients With and Without History of Traumatic Exposure

Hamilton Scale	Patients With Trauma (N = 14) Mean	*SD*	Patients Without Trauma (N = 52) Mean	*SD*	t (df = 64)
Depressed mood	1.96	1.03	1.21	.89	2.48*
Work and activities	1.48	1.02	1.50	.65	–.09
Genital symptoms	.25	.52	.36	.63	–.65
Somatic symptoms gastrointestinal	.52	.64	.29	.47	1.52
Loss of weight by history	.56	.83	.79	.98	–.88
Loss of weight by staff	.15	.64	.64	1.28	–1.37
Insomnia early	1.06	.85	1.36	.93	–1.15
Insomnia middle	1.19	.82	.93	.92	1.05
Insomnia late	.79	.85	.57	.76	.87
Somatic symptoms general	1.02	.67	.86	.53	.83
Feelings of guilt	.92	.93	.86	.86	.24
Suicide	.54	.96	.36	.63	.67
Anxiety psychic	1.00	1.20	1.36	1.15	–.99
Anxiety somatic	.81	1.09	1.50	1.02	–2.14*
Hypochondriases	.92	1.01	1.07	1.38	–.38
Insight	5.77^{e-02}	.31	.00	.00	.70
Retardation	.35	.56	.57	.65	–1.30
Agitation	.50	.90	.79	.89	–1.06

*$p < .05$

between these groups do not differ. However, these patients report that emotionally they feel differently. This study demonstrates how, even among individuals diagnosed with depression, trauma history may add vital information to understanding psychological impairment.

Significant differences on the exploratory analyses of individual GDS and HAM-D items were noteworthy. Trauma survivors indicated greater impairment on: depressed mood, somatic anxiety (physiologic concomitants of anxiety on gastrointestinal, cardiovascular, and respiratory systems), bothered by thoughts you can't get out of your head, more problems with memory than most, think most

people are better off than you are, enjoy getting up in the morning, prefer to avoid social gatherings, find it easy to make decisions, and mind as clear as it used to be. Though these items were on depression scales, difficulty with or impaired concentration, anhedonia and sleep difficulties are symptoms shared by depression and PTSD. These items appear somewhat similar to the re-experiencing (bothered by thoughts, problems with memory, hard to make decisions, mind not as clear as it used to be) and avoidance symptoms (prefer to avoid gatherings) of PTSD. Perhaps this means that these patients were not more depressed per se, but actually were experiencing more traumatic stress or anxiety symptoms. It may be the case that in these patients, depression may be secondary to other psychological impairments, which were not getting detected.

Though there has been speculation that the relation between depression and PTSD may be illusionary because of similarity in symptoms, empirical investigation has shown that depression and PTSD are related but independent sequelae of traumatic events [1, 2, 22]. Future empirical and clinical investigations of the impact of trauma in older adults should include a more broad range of trauma responses, especially depression, and investigations of depression in older adults should include the measurement of trauma events.

There was a significant age difference between trauma and non-trauma comparison groups. One explanation is that there may be a higher mortality rate among trauma survivors such that trauma may have prevented survivors from reaching old age. This is in agreement with previous research that has found exposure to catastrophic stress to be associated with mortality among survivors [23].

There are several limitations of the current study. First is the relatively small sample size. Replication using more participants is sorely needed. Second, the generalizability of these results may be limited because the current sample may not be representative of the general population of older adults residing in the community.

Third, it is possible that some individuals with a history of trauma failed to disclose this during assessment or treatment and thus did not get labeled as trauma survivors. It has been hypothesized that the current cohort of older individuals were not encouraged to openly discuss personal matters such as sexual abuse [24]. Other reasons for non-disclosure may be prior negative experiences after disclosure in the past, and shame of traumatic experiences. Wolkenstein and Sterman [24] point out that in the course of therapy, many older clients had disclosed histories of trauma, although none had reported this at the time of intake. Thus some of the patients in the depression treatment study may not have reached a point in therapy where they felt comfortable disclosing trauma.

Perhaps, clinicians may not have noted patient's trauma histories in their charts in order to protect privacy. In addition, intake procedures at the time of study did not require that clients be asked about their trauma history. Thus, there may be more trauma survivors in the sample than noted. Alternatively, it may be that the

patients identified as trauma survivors in this study are the ones for whom negative consequences of traumatic exposure were still persistent.

The reliability and validity of the chart reviews is unknown and may have yielded an underestimate of traumatic exposure. Having only one clinician conduct the retrospective chart reviews may have biased the reporting of the data, and the absence of inter-rater agreement excludes determining the reliability. Although based on a much less adequate measure than would be preferred, chart reviews are often acceptable in preliminary investigations such as this one.

Since patients were treated in one of three conditions with varying lengths and differing therapeutic intensities, the charts reviewed for all patients were not the same in length or detail. For instance, patients seen in the combined group and case management arm were seen more frequently and intensely than those seen in the group therapy condition alone. Though with more detail in chart notes, there may have been more data to recognize or clinicians to mention trauma, we did not find more trauma survivors in any of the treatment conditions over another.

The findings from this study illustrate possible enhancements for geriatric providers in clinical practice. Physical and mental health provider's attitudes may impede detection of trauma. Clinicians may find it difficult or uncomfortable to ask about traumatic experiences and may have little experience in doing so or may not have the time to discuss. Wolkenstein and Sterman [24] point out that initial questioning about traumatic experiences however signal patients that it is acceptable and appropriate to discuss these issues. One clinical implication of our findings is that providers should screen for exposure to traumatic events. The Brief Trauma Interview [25], a clinician-administered interview developed to be a sensitive and efficient method for determining whether an individual has experienced exposure to ten types of events that meet the DSM-IV criteria [17] specified for the diagnosis of PTSD, may be helpful in this process.

Patient attitudes or lack of awareness may impede detection of trauma as well. Bechtle, Follette, and Varble [26] found that 40 percent of older women did not label their sexual assault experiences as acquaintance rape, date rape, or marital rape at the time it occurred. Such specific terminology about traumatic experiences was not available to earlier cohorts. Those authors recommended behaviorally specific terms when assessing trauma to help clarify any language discrepancies for older adults. Thus, physical and mental health providers should assess for trauma in older adults with very concrete language. For example, instead of asking an older patient, "Have you ever been sexually abused?" a more specifically worded question such as, "Has anyone ever tried to do something sexual to you by using force or threatening to harm you, this includes inappropriate touching, fondling or oral, anal, or vaginal penetration with body parts or objects?"

Another clinical implication of these findings is for treatment. If indeed depressed older adults with a history of trauma experience greater psychological distress than their comparisons without a history of trauma, clinicians may want to

approach their treatment differently. Information is sorely lacking on the treatment of trauma-related distress in older adults. Patients with a history of exposure may have more complicated constellation of symptoms and thus require supplemental or different medications or therapies. Techniques that allow for review of traumatic material, modification of unhelpful thinking, and skills deficits that can occur as a result of trauma may need to be developed or integrated into existing treatment modalities.

Although some trauma-related distress therapy interventions are similar to those used in PTSD with younger adults (i.e., education about symptoms, enhancement of social support, and providing of coping tools to more effectively manage symptoms), special developmental considerations of older adults are rarely addressed. For example, psychotherapy with older adults often needs to occur at a slower pace than therapy with younger people due to sensory problems and learning rates [27]. One well-known geriatric psychotherapy, life review, has recently received support in older adult trauma survivors [28]. Life review is a directed therapy of reminiscence, in which a therapist helps the patient to organize and evaluate memories of the consecutive stages of life. Integration of the traumatic event into discussion of the stages of life may have great potential as a therapeutic tool.

Recommendations for future research are plentiful. The cross-validation of these findings in other samples with a special emphasis on other possible differing clinical presentations is critical. Although the findings from this study show significant differences in depressive symptomatology, it is important to see if these differences are clinically significant and related to poorer functioning as well. Future investigations on the long-term effects of trauma on current depression need to control for history and distinguish first onset and re-occurrence as the relationships between trauma and current depression may be due to the mediating effect of depression earlier in life [3]. Though the pathways require further delineation, the two appear intricately linked; traumas are associated with increased risk of depression in adolescence and early adulthood and early onset of depression is associated with greater risk of recurrence later in life [3]. To date, it has not yet been fully determined if trauma mostly effects first onset or creates vulnerabilities that lead to increased risk of perseverance. A history of trauma in older adults may be associated with a longer duration of episodes and more frequent reoccurrence.

Another important area for future inquiry is the relation between timing of exposure and its subsequent effects, in particular on depressive outcomes in late life. Currently, the research literature regarding differences on the effects of trauma that occurred early in life versus trauma that occurred later in adulthood, which comes mainly from cross-sectional design, is equivocal. In a community sample, younger adults had higher PTSD responses to ten potentially traumatic events than middle-aged or older adults [29]. However, others have found that older adults have higher rates of psychopathology following a traumatic event than

younger individuals [30]. This may be dependent, in part, on the type and severity of stressor to which the individual was exposed.

In sum, this exploratory report suggests that trauma history is relatively common in older primary care patients and may impact their presentation of psychological symptoms. Clinicians are an important potential source of assistance for traumatized older adults and should be alert to the possibility of trauma underlying their depression. Recognition of the role trauma plays in the manifestation of depression better informs diagnosis, referral and treatment.

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