Trauma Informed Care Rural Community Assessment

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Introduction

Trauma is described by the American Psychological Association as “an emotional response to a terrible event (American Psychological Association, 2015). Trauma is estimated to affect more people living in the United States than many chronic diseases, yet receives significantly less attention (van der Kolk, 2014). Trauma may be triggered by many factors including: childhood abuse or neglect, interpersonal violence (IPV), sexual assault (SA), natural disasters, illness, sudden death, oppression, accidents, and historical trauma that has occurred in the community (Substance Abuse and Mental Health Administration, 2014). Trauma before the age of eighteen is estimated to be experienced by 63% of the population in the United States (Felitti, et al., 1998). Twenty-two percent of adult women in the U.S. and 4% of men have been sexually assaulted (Elliot, Mok, & Briere; 2004). One in five U.S. women report being physically assaulted by an intimate partner (Tjaden & Thoennes; 2000). In the elderly U.S. population, 6% reported being significantly abused in the past 30 days (Kellogg, 2005). Finally, 10-20% of US men report combat exposure (Wilson & Keane; 2004).

An individual with trauma history has higher risk for adverse health outcomes which increases use of services (Anda et al., 2006). Individuals who experience trauma show an increased prevalence in mental and physical health problems such as depression, suicide, substance use, liver problems, myocardial ischemia, and chronic obstructive pulmonary disease (COPD) (Felitti, et al., 1998). Therefor we know that trauma history may create increased health care costs but also may increase the opportunity to interface with those who have experienced

higher rates of trauma. (Substance Abuse and Mental Health Administration, 2014). Settings such as substance abuse centers, behavioral health services, emergency health services, and primary care clinics may be opportune locations to connect with clients in a meaningful way (Substance Abuse and Mental Health Administration, 2014). Leadership and policy in these settings that take into account the influence of trauma on an individual and create a trauma informed approach is critical in providing holistic care and increasing health outcomes for those with trauma history (Elliot, Bjelajac, Fallot, Markoff, & Reed, 2005).

Social and health services that are intended to provide support are often re-traumatizing and repressive for many victims of trauma (Substance Abuse and Mental Health Administration, 2014). For example, a typical cervical cancer screening test may be an emotional trigger for a woman who has a personal history or sexual abuse. She may therefore not seek preventative care, increasing the risk of missing a cervical cancer. Any form of medical care that takes away choice and is not sensitive to a person's history from something as basic as having the choice between a female and male provider, to how a blood draw is preformed may be re-traumatizing for someone who has a personal history of trauma. Trauma Informed Care (TIC) is a "program, organization, or system that realizes the widespread impact of trauma and understand potential paths to recovery; recognizes the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and responds by fully integrating knowledge about trauma into policies, procedures and practices and seeks to actively resist re-traumatization" (Substance Abuse and Mental Health Administration, 2014). TIC offers a framework to approach patient care, employee support in an organization, and a safer more therapeutic environment that recognizes the significant impact that trauma history has on the individual.

Literature

Adverse Childhood Experience Study

The Adverse Childhood Experience (ACE) study is one of the most cited and influential research studies that reports the prevalence and effects of childhood trauma in the United States (Felitti, et al., 1998). The ACE study was conducted at the Kaiser Family Foundation between 1995 and 1997. Seventeen hundred adult Kaiser patient participants, mostly middle class, white, and with health insurance, answered a ten question survey measuring their personal adverse childhood experiences (ACE's). Ten questions were asked about experiences of physical or emotional abuse, witnessing abuse, physical or medical neglect, a household member's substance use and experiencing incarceration of a family member. An ACE score was calculated which ranged from zero (no adverse experiences) to ten (experienced all of the adverse events) (Felitti, et al., 1998). Sixty- three percent of the participants had experienced at least one form of ACE and 20% had experienced three or more (Felitti, et al., 1998). Felitti's study also found that individuals with an ACE score of four or more had significantly higher rates of the following mental and physical health problems, all leading to early death: alcohol abuse, depression, suicide, sexual assault, IPV, tobacco use, obesity, chronic obstructive pulmonary disease (COPD), liver disease, ischemic heart disease, unintended pregnancies, substance use, and miscarriages (1998). This study not only demonstrates the high rates of adults reporting a history of ACE's but also uncovered the relationship between ACE's, health care use, and early death (Felitti, et al., 1998). The CDC continues to follow participants (Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Violence Prevention, 2014). The study results suggest the need for healthcare settings to take into account the effect of a higher number of ACE's when providing care to patients

Neurobiology and Epigenetics

There is extensive research related to the effects of trauma on brain function. Research has shown that there are associations/relationships between traumatic experiences, nuerohormonal changes, brain function, immune function, and genetics. Chronic stress from trauma releases stress hormones such as corticotrophin releasing hormone (CRH), adrenocorticopropin hormone (ACTH), cortisol, and norepinephrine. As seen in animal studies, early life stressors produce changes in the nuerohormonal chemistry that persists into adulthood (Bremner & Vermetten, 2001). These changes occur in many areas of the brain and have significant effects on memory, focus, decision making, and mood. The hypothalamic-pituitary-adrenal (HPA) axis, hypothalamus, limbic system, and the locus coeruleus are all triggered in the stress response (Bremner & Vermetten, 2001; Heim & Nemeroff, 2001). Chronic stimulation and changes in these areas of the brain have significant effect that include lack of self-regulation which is commonly seen in children of abuse.(van der Kolk, 2003). Additionally, a lack of a sense of self and body image, poor impulse control, and distrust in others are found in children who have suffered abuse (van der Kolk, 2003). Disruptions in memory and ability to learn, social problems, and physical illness are symptoms that can be experienced by victims of trauma (van der Kolk, 2003). Being in a persistent state of fear which activates HPA axis is especially damaging to the developing brain and long term health of the child (Heim & Nemeroff, 2001).

Research of DNA changes in traumatized individuals continues to provide new insight. Changes in chromatin, methylation and histone modification are increased for those with histories of trauma (Caspi, Sugden, Moffitt, Taylor, & Craig, 2003; Uddin, et al., 2010; Karsten & Baram, 2013). Caspi, and colleagues found an association between individuals experiencing stressors and trauma and polymorphisms in the serotonin (5-HTT) gene (2003). In this

longitudinal study, individuals carrying the 5-HTT gene mutation with history of stressful life events were more likely to become depressed (Caspi, Sugden, Moffitt, Taylor, & Craig, 2003). This points to the relationship between genetic predisposition and environmental influences for individuals with trauma history to develop depression (Caspi, Sugden, Moffitt, Taylor, & Craig, 2003). Further research has uncovered the effects of stress on the expression of genes responsible for methylation of immune function (Uddin, et al., 2010). This discovery explains the increases in certain autoimmune diseases and illness amongst those with trauma history (Felitti, et al., 1998; Uddin, et al., 2010).

Trauma Informed Care

Trauma Informed Care (TIC) has its roots in behavioral health, child abuse, and substance use settings. New literature is considering the impact TIC may have in health care settings, corrections, and schools. The ACE study uncovered both the high incidence of trauma and its negative health outcomes (Felitti, et al., 1998). With this knowledge, it is important for all health and social services to be aware of the effects of trauma and attempt to avoid re-traumatization in the system. The estimated average lifetime cost per victim of nonfatal child abuse and neglect was $210,012 in 2012 (Center for Disease Control and Prevention, 2012). The high health care costs related to many of negative health outcomes experienced by traumatized people has also increased awareness of TIC in health care settings (Substance Abuse and Mental Health Administration, 2014). This has led to an evaluation of services provided for clients that may have experiences some form of trauma (Substance Abuse and Mental Health Administration, 2014).

TIC is listed has one of the 4 key dimensions needed to provide equity in Primary Care (Browne et al. 2012). The key components of TIC are: safety, trust/transparency, peer support for

patients and providers, understanding culture, historical, and gender issues, understanding trauma and its impact, sharing power and governance/empowerment, and integrating care/collaboration (Elliot, Bjelajac, Fallot, Markoff, & Reed, 2005; Substance Abuse and Mental Health Administration, 2014; Cleary & Hungerford, 2015). The key components of TIC should be understood by all staff members including receptionists, directors, and direct care workers to fully integrate a TIC approach (Elliot, Bjelajac, Fallot, Markoff, & Reed, 2005; Substance Abuse and Mental Health Administration, 2014). Beyond educating direct care providers, leaders in the organization should recognize and understand the impact of trauma on the clients they serve as well as the vicarious trauma and compassion fatigue that may be experienced by direct care providers of clients with personal trauma history (Substance Abuse and Mental Health Administration, 2014). Attendance at a 6-hour course about TIC or about patient centered care by direct health care providers increases their use of a more trauma informed approach in their patient care (Green, Saunders, Power, Dass-Brailsford, & Schelbert, 2015). Changes in policy and improved education by direct service providers as well as screening tools can be implemented without a large financial investment.

Implementation of TIC in Oregon

Oregon is leading the way in TIC. Coordinated Care Organizations (CCO's) such as HealthShare and CareOregon have established programs such as the Health Resilience Program which incorporate a trauma informed approach (Lockert, L., 2014). Columbia Pacific CCO (CPCCO) is also working with Warrenton High School to develop a TIC approach in the educational setting. On a larger scale The Dalles, Oregon as created a consortium of service settings that have adopted a program called "The Sanctuary Model" in effort to provide more trauma informed approach city-wide. Oregon recently established a statewide organization,

Trauma Informed Oregon, which provides educational opportunities, conferences, and a website to connect and inform others of the work that is being done in the state (Trauma Informed Oregon, 2015).With an increased understanding of the effects of trauma, along with the push to invest in preventative measures in the community, this is an ideal time to assess and implement TIC in the community setting.

Gaps in Literature

There is limited research on TIC. Little is known about longitudinal outcomes in the primary care and school-based health centers (SBHC). To my knowledge there is not any published research that examines the use of TIC in rural and urban settings and differences in the needs and barriers with TIC in these settings. With rural areas offering less anonymity for clients it will be important to consider these aspects in future research and recommendations of TIC programs. No research has mentioned providing TIC to disabled populations, and geriatric health and living settings have not been mentioned in the current research. As TIC is still relatively new in many health care settings, there is hope that as success is shown in primary care it will lead to further research in many other setting types.

Needs Assessment Approach

Columbia County (CC) is an urban rural county in Oregon consisting of seven town centers which include more rural settings and other more urban settings that border the city of Portland. It is bordered on the north and east by the Columbia River, south by Multnomah and Washington Counties, and Clatsop County to the west. The population as of 2013 is 49,402 (U.S. Census Bureau, 2014). Forty-five percent of the county's population live outside of town centers. Columbia County is serviced by Columbia Pacific Coordinated Care Organization (CPCCO).

The Columbia County Teen Health Survey collects data from high school students every two years in grade eleven on topics ranging from substance use, exposure to violence, and access to healthcare. The survey highlights the need to decrease exposure to childhood abuse and trauma exposure in Columbia County (Oregon Health Authority, 2013). Eight percent of teens have been sexually assaulted compared to 5.5 percent statewide (Oregon Health Authority, 2013). In Columbia County, 10.5 percent of teens have been sexually abused by an adult in their lifetime which is higher than the 7.3 percent average for Oregon (Oregon Health Authority, 2013). Twice as many teens were hit, slapped or hurt by a boyfriend or girlfriend than the state average (8.2%). Similar to the Oregon state prevalence, 23.7 percent of Columbia County teens had been physically abused by an adult (Oregon Health Authority, 2013). The Teen Health Survey results for Columbia County indicate that there is increased incidence of trauma in this county compared to the state average. The county has an excellent opportunity to connect with individuals with trauma history in many different social service settings utilizing a trauma informed approach.

Columbia County CCO and those a part of the Community Action Committee recognize the needs of individuals with trauma history. They also recognize that the large percentage of clients obtaining social and medical service settings likely have some form of trauma history. Implementing a TIC approach in service settings that care for clients with personal trauma offers a new way to improve care for employees who struggle with vicious trauma and burnout as well. Prior to implementing large scale changes in the organizations it is important to first assess the needs, strengths, and weaknesses of the current programs from client, employee, and objective experiences. The goal of this project is to conduct a needs assessment within Columbia County for an improved trauma informed approach.

Methods

Participants

Participants in the needs assessment include clients from Rainier Public Health clinic, SAFE of Columbia County Domestic Violence Shelter and CCMH. Employees and Administrators from all locations including the prenatal clinic and Amani Child Abuse Center were surveyed. Clients at the child abuse center and prenatal clinic were not surveyed as they did not fit the inclusion criteria due to age and vulnerable population. Inclusion criteria include: status as a current client or patient receiving services, age over fifteen years old, or a current employee involved in direct patient care or leadership. Exclusion criteria include client in current crisis, and age below fifteen years old.

Survey

The needs assessment occurred in the month of January 2016 for thirty days at the following locations: SAFE of Columbia County Domestic Violence Shelter, Rainier Public Health Clinic, Columbia County Mental Health Clinic (CCMH), Public Health Prenatal Clinic, and the Amani Center for Child Abuse. Each setting had been chosen because they serve a diverse group of patients with increased risk for trauma. Each setting had volunteered for the needs assessment and was interested in improving their use of TIC for clients and employees. The needs assessment included client surveys and employee/administrative staff surveys.

The client/patient survey used had been adapted from the Trauma Informed Practice Scale, an evidence based survey developed by the University of Michigan for assessing TIC use in a substance use, domestic violence, or group mental health setting in both English and Spanish (Sullivan & Goodman, 2015). The 25-39 question survey has the following subscales:

"environment & mutual respect", "access to information", "opportunities for connection", "emphasis on strengths", "culture responsiveness/inclusivity", and "social support/support for parenting" (Sullivan & Goodman, 2015). Additional questions were added to this survey that included the needs of primary care and mental health clients and incorporated subscales titled "access to information" and "screening". Fourteen of the 39 questions related specifically to those in mental health and domestic violence programs and were not included in the surveys that participants visiting the primary care setting completed as they did not apply. It is recognized that the addition of new questions to the TIPs survey have no proven validity and are not evidence based. The questions chosen relate to literature surrounding trauma screening in primary care settings. (Substance Abuse and Mental Health Administration, 2014). The scale for each question ranges from 0 (not at all true) to 3 (very true) with the option to choose "I don't know".

The employee and administrative survey was emailed to all employees and administrators in all five organizations using the Survey Monkey tool. As no current evidence-based survey exists for measuring the employee/administrative experience, fourteen questions were chosen which related to the key themes of TIC. Each of these questions related to the subscales mentioned in the client survey. Again, the surveys were scored on a 0-3 numeric score. A comment section will be included for the questions related to strengths and barriers.

During the month of January clients were presented the survey in both English and Spanish by front desk staff at CCMH and Rainier Primary Care Clinic with the option to decline when checking in at the front desk. At the Domestic Violence shelter the option to take the survey was presented during mealtime and could decline. Each location had a locked box with a slot that clients were asked to return the survey in order to protect confidentiality. For the employee

survey, a Survey Monkey questionnaire link was emailed to all employees and administrative staff members the first week of January with the incentive to be entered to win one of two $10 Starbucks gift cards. A full description of survey and aims of the study was provided to each participant. Participants were informed that the data planned to be compiled with all settings in the county and would not be directly linked to their service location. Services and employment will not be affected by survey answers and no person working at the organization will see responses. No personal identifiers will be collected on the survey and the ability to opt-out or decline at any time was offered. Although surveys are simply assessing service experiences a disclaimer that the survey may trigger an emotional response for some participants will be included. Digital surveys are password protected and only accessible by an outside personnel conducting the study. All surveys will be destroyed after data is recorded.

Data Analysis

Beginning in February 2016, the client, provider, and site data were entered into excel. The data from all settings were compiled together. Utilizing suggestions from the University of Michigan TIP Scale, frequency scores, averages, and percentages of responses were created which ranged from 0, “not at all true” to 3, “very true”. Scores were developed for each of the following subscales: “environment & mutual respect”, “access to information”, “opportunities for connection”, “emphasis on strengths”, “culture responsiveness/inclusivity”, and “social support/parenting support” (Sullivan & Goodman, 2015). After data had been analyzed the county-wide data was presented to the organization leaders, community, and CPCCO at the Community Advisory Committee (CAC).

Results

A total of 31questionnaires were completed by clients at the two clinics... Although surveys were provided to sites in English and Spanish, no Spanish language surveys were received. A total of 73 employees completed a survey during the 30-day period using the Survey Monkey tool. The sample size of the client survey was smaller than expected; however, the sample size was sufficient enough to provide insight into strengths and weaknesses of the organization.

The client survey showed that the service settings strengths included the areas of "cultural competency", "family", "privacy", and "information. Ninety-eight percent of respondents felt that it was "somewhat true" or "very true" that their religious/spiritual beliefs, sexual orientation, and cultural differences were respected. Ninety-two percent of respondents thought it was "somewhat true" or "very true" that service setting provided education about how abuse affected their children and strengthened the relationships with their children. One hundred percent of respondents felt that it was "somewhat true" or "very true" that their strengths were recognized in program. Ninety-three percent of the clients felt their privacy was respected. Ninety-four percent of clients felt it was "somewhat true" or "very true" that the program provided opportunities to learn about the effects of abuse social, physically, and emotionally.

The client survey showed that the service settings areas for improvement included "screening/intervention", "connection" and "safety". The survey revealed the greatest area for improvement was "screening/intervention". Thirty-four percent of clients reported it was "untrue" or "a little true" that a staff member had asked if they have ever been hit, slapped, pushed against something, put down, or controlled by a partner. The survey did reveal that of those who were asked, 95% of the clients felt comfortable discussing this with the staff member and 100% felt it was "somewhat true" or "very true" that they were supported and offered services. Only 29% of respondents felt it was "very true" that their program provided an

opportunity to connect with others and engage in peer support. Although it should be considered that in the primary care setting this attribute of the program is not relevant. 80% of respondents felt it was “very true” that they felt safe in the building surroundings and in the waiting room, bathrooms, and hallways at the setting location. Overall, the client responses were positive, with only minor room for improvement.

The employee survey showed that the organizations’ strengths included the areas of “support”, “cultural competency”, and “understanding trauma”. Seventy-four point five percent of respondents felt it was “somewhat true” or “very true” that their administrators recognized their stress, they could talk about it, and they felt safe. The average rating from employees regarding how they felt their sites respected and understood other cultures, peoples’ sexual orientation, socioeconomic difficulties, and immigration status was 2.55, with 0 being “Untrue” and 3 being “Very True”. Seventy percent of employees have heard of Trauma Informed Care and 87% of employees stated it was “somewhat true” or “very true” that they understood how trauma effects an individual’s mental and physical health.

The employee survey showed that the organizations’ areas for improvement included “job stress”, “screening”, “services” and “continuing education”. Thirty-three percent of respondents felt it was “somewhat true” or “very true” that their job was affecting their personal life, they were burned out, or their stress level was affecting how they cared for clients. Although there was a large number of respondents that rated their job stress as high, there was only an average rating of 1.1 on a scale of 0 to 3 stating that their job was affecting their lives and they were burned out was only “a little true”. Employees were divided in whether they ask every client about their current exposure to abuse and trauma with 30% stating it was “untrue” and 44% stating it was “very true”. Employees were also split on barriers to screening. 49% of

employees felt it was “untrue” or “a little true” that there were barriers to screening and 51% felt that that it was “very true” or “somewhat true” that there were barriers to screening. Thirty-five percent of employees reported difficulties with referring patients in a timely manner to substance abuse and mental health services. Finally, an average of 36.6% of employees felt it was “untrue” or only “a little true” that they had opportunities to learn more or are offered continuing education about how trauma effects people.

Dissemination of Results

A report was prepared for each site location with county wide data as well as information from the literature about TIC, implementing TIC components in their specific sites, and suggestions on how to get started. This information will be presented at the April CPCCO’s CAC meeting. At this meeting teams will be formed with the goal of brainstorming changes for the county and the five agencies that participated in this assessment.

Discussion

CPCCO’s most recent community needs assessment in 2014 chose the following issues as their health focus: Obesity, Substance Use, and Mental Health (Community Assessment Survey, 2014). Research demonstrates that individuals with Adverse Childhood Events (ACE’s) and a history of personal trauma are at significantly higher risk for obesity, substance use, and mental health concerns such as depression and suicide (Anda et al., 2006). An investment in providing a trauma informed approach in primary care, behavioral health, and social service settings would serve to address underlying health concerns identified by the CCO’s and also many other physical and mental health needs of the county.

The surveys collected, although a small response, show that the county has many strengths. The county's greatest areas of strength reside in respecting and promoting cultural competency. Both clients and employees felt that cultural, sexual, gender, and socioeconomic differences were respected and considered. The survey also showed that these organizations are supportive, both for employees and for clients. Clients felt that they were provided information and resources in regards to their families. Employees felt that although their jobs created stress, they were able to discuss this with supervisors and felt comfortable doing so.

The surveys also uncovered areas for improvement that will benefit employees and patients. Responses from employees and clients both uncover the need for improved screening tools for abuse, safety, and trauma history. Although employees and clients felt that there was poor screening, the survey did show that of those clients who were screened they felt comfortable discussing this with their provider and felt supported. This result provides hope that incorporating better workflows and reminders for providers as well as educating all staff would improve the care and services for clients.

Finally, job stress and burnout for employees was another area of significance in the results. For those employees with direct client/patient care it is important to consider creating schedules, environments, and support systems that balance the vicarious trauma and stressors associated with caring for clients and patients with trauma history. Job stress affects a staff member's personal and work life which hinders them from providing care at their maximum potential. When working with patients that have trauma history and complex health and social needs it is helpful to create organizational time for collaboration between staff members, case study review, and time to talk about difficult-to-handle situations. This removes the sense of isolation often felt by the provider and allow for more open support and dialogue.

Conclusion

Each setting will have distinctly different needs based on the client population and services provided yet certain themes are necessary to integrate a trauma-informed approach (SAMHSA, 2014). Leaders, staff, and administrators at all levels in an organization must understand how trauma affects an individual's experiences and behaviors. All people at all levels of the organization, must recognize signs of trauma and the affect trauma has on an individual's behaviors and health. Screenings, assessment tools, and workflows should be established. Having resources available to refer patients as needed as well as establishing employee assistance, workforce development, and ongoing education to promote a culture based in the trauma-informed approach should be considered in the settings. Finally, establishing protocols, practices, and options which avoid re-traumatization of clients and staff should also be considered. (SAMHSA, 2014).

A trauma-informed organization cannot exist without leaders and policy that support and invest in a trauma informed approach. The environment must promote a sense of safety that is inviting, well lit, and inclusive to all cultures and sexual identities. For employees an environment of openness, non-punitive and collaborative is necessary. For example, a waiting room that respects privacy and allows for seating arrangements that do not feel unsafe may create an inviting environment for clients.

Engagement and collaboration between clients, patients, family members and service sites in development of programs allow all voices to be heard and provides equity within an organization. The connection between healthcare, schools, law enforcement, housing services, and social services must have a common understanding of a trauma-informed approach. Training and development is also important for trauma screening and interventions. This can be

accomplished with changes to work flows in the electronic medical records that support screenings as well as increasing referrals in locations where services are not present on site. And finally an evaluation process is necessary to create goals to re-evaluate changes made and see progress (SAMHSA, 2014). Introducing a trauma informed approach begins with assessing the current strengths and weaknesses within an organization. Once these areas are identified, collaboration between service sites and clients allow for new developments. Many toolkits exist that aid organizations in implementing TIC. There is hope that although many individuals have experienced trauma in their lives the service settings they work with can offer more holistic and individualized care with their trauma history in mind.

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