Journal of Affective Disorders 151 (2013) 78–84

Contents lists available at ScienceDirect

Journal of Affective Disorders

journal homepage: www.elsevier.com/locate/jad

Research report

The impact of group counseling on depression, post-traumatic stress and function outcomes: A prospective comparison study in the Peter C. Alderman trauma clinics in northern Uganda

Etheldreda Nakimuli-Mpungu [a,b,c,*], James Okello [c,d], Eugene Kinyanda [a,c,e], Stephen Alderman [c], Juliet Nakku [a,b,c], Jeffrey S. Alderman [c], Alison Pavia [c], Alex Adaku [c,f], Kathleen Allden [c,g], Seggane Musisi [a,b,c]

[a] Makerere University, Faculty of Health Sciences, Kampala, Uganda
[b] Butabika National Referral Mental Hospital, Kampala, Uganda
[c] Peter C. Alderman Foundation, Bedford, New York, United States
[d] Gulu University, Department of Psychiatry, Gulu, Uganda
[e] Medical Research Council, Entebbe, Uganda
[f] Arua Regional Referral Hospitals, Arua, Uganda
[g] Dartmouth University, Geisel School of Medicine, Department of Psychiatry, New Hampshire, United States

ARTICLE INFO

Article history:
Received 23 April 2013
Accepted 17 May 2013
Available online 17 June 2013

Keywords:
Depression
Post-traumatic stress
Function
Group counseling
War trauma
Northern Uganda

ABSTRACT

Background: The effectiveness of group interventions for adults with mental distress in post-conflict settings is less clear in sub-Saharan Africa.
Aim: To assess the impact of group counseling intervention on depression, post-traumatic stress and function outcomes among adults attending the Peter C. Alderman Foundation (PCAF) trauma clinics in northern Uganda.
Methods: 631 War affected adults were enrolled into PCAF trauma clinics. Using a quasi-experimental design, assessments were conducted at baseline, at 3 and 6 months following initiation of care. Multivariate longitudinal regression models were used to determine change in depression, post-traumatic stress and function scores over time among group counseling participants and non-participants.
Results: In comparison to non-participants, participants had faster reduction in depression scores during the 6-month follow-up period [$\beta=-1.84$, 95%CI (−3.38 to −0.30), $p=0.019$] and faster reduction in post-traumatic stress scores during the 3-month follow-up period [$\beta=-2.14$, 95%CI (−4.21 to −0.10), $p=0.042$]. At 3-month follow up, participants who attended two or more sessions had faster increase in function scores [$\beta=3.51$, 95%CI (0.61–6.40), $p=0.018$] than participants who attended only one session.
Limitations: Selection bias due to the use of non-random samples. Substantial attrition rates and small sample sizes may have resulted in insufficient statistical power to determine meaningful differences.
Conclusion: The group counseling intervention offered in the PCAF clinics may have considerable mental health benefits over time. There is need for more research to structure, standardize and test the efficacy of this intervention using a randomized controlled trial.

1. Introduction

The burden of depression and post-traumatic stress symptoms in post-conflict settings is a major public health concern worldwide (de Jong et al., 2003; Betancourt et al., 2013; Luitel et al., 2013). While several studies have consistently shown a positive association between war-related trauma and post-traumatic stress disorder (PTSD) (Steel et al., 2009), emerging data from prospective evaluations of mental disorders before and after conflicts indicate that depression may be more related to the persisting conditions of poverty and structural adversity than war-related trauma (Kohrt et al., 2012). Regardless of the etiology, both depression and post-traumatic stress are associated with comorbid psychiatric disorders and substance use problems (Norman et al., 2010; Zatzick et al.,

* Correspondence to: Makerere University College of Health Sciences, School of Medicine, Department of Psychiatry, P.O. Box 7072, Kampala, Uganda. Tel.: +256 715 105276.
E-mail addresses: ethelmpungu@yahoo.com, enakimul@jhsph.edu (E. Nakimuli-Mpungu).

0165-0327/$ - see front matter © 2013 Elsevier B.V. All rights reserved.
http://dx.doi.org/10.1016/j.jad.2013.05.055

2012) and often are disruptive to social, interpersonal, academic and work functioning (Milenkovic et al., 2013). It is imperative that adequate, empirically supported interventions are available to treat individuals diagnosed with significant levels of these symptoms, and thus prevent progression to full blown psychiatric syndromes.

Population surveys in the northern region of Uganda which experienced two decades of civil wars (1987–2008) indicate high prevalence estimates of both depression and post-traumatic stress symptoms (Roberts et al., 2008; Vinck et al., 2007). In order to enhance mental health service delivery in this post-conflict region, the Ugandan government institutions (Ministry of Health/Butabika National Referral Hospital and the Makerere University Department of Psychiatry) and the Peter C. Alderman Foundation (PCAF) initiated a public–private partnership which led to the establishment of four PCAF trauma clinics in four districts in the region (Nakimuli-Mpungu et al., 2013). Given the evidence that combined pharmacological and psychosocial interventions are optimal for treating mental neurological and substance use (MNS) disorders (Patel and Thornicroft, 2009), the partnership has endeavored to provide routine psychological treatments to individuals initiating care in the trauma clinics. PCAF, the private partner recruits, supports training and provides salary support to social workers and trauma counselors who deliver psychosocial interventions, thereby boosting the numbers of patients receiving both pharmacological and psychosocial treatments.

Group interventions have become increasingly popular for supporting persons affected by chronic illness (Sherman et al., 2004a, 2004b). In Uganda, clinical trials of adapted western psychotherapeutic interventions have focused on the impact of group interpersonal therapy on post-traumatic stress symptoms in highly selective samples of children in post-conflict settings (Bolton et al., 2007; Verdeli et al., 2008) and adults in non-conflict settings respectively (Bolton et al., 2003; Bass et al., 2006). While there is growing evidence that group psychosocial interventions are helpful, the effectiveness of these interventions for adults with depression and post-traumatic stress symptoms in post-conflict setting is less clear especially in sub-Saharan Africa.

In this paper, we describe the evaluation of a group counseling intervention on depression, post-traumatic stress and function outcomes among adults attending the Peter C. Alderman trauma clinics in northern Uganda. Further, we investigated the feasibility of the intervention by assessing participant attendance and adherence to the intervention.

2. Methods

2.1. Setting and participant recruitment

Between August and December 2011, a cohort of 631 adult men and women with a history of war traumatic experiences was enrolled into four Peter C. Alderman Foundation (PCAF) trauma clinics situated in four districts (Arua, Kitgum, Gulu and Soroti) in northern Uganda. These four districts comprise different ethnic populations (Alur in Arua; Itesots in Soroti; and Luo in Gulu and Kitgim). They form part of a post-conflict northern region of Uganda that has endured more than two decades of brutal civil wars.

Individuals enrolled in PCAF trauma clinics receive a baseline assessment which includes obtaining demographic information and exposure to traumatic events, conducting a full clinical assessment including a structured psychiatric interview based on DSM-IV criteria, mental state examination and a general medical examination. Depending on need, social and psychological assessments are made by the social worker and trauma counselor respectively. The PCAF team reviews the entire evaluation and determines therapy. Individuals are invited to participate in various forms of counseling (individual, family and group) and psychotropic medications are prescribed if needed. In addition, home visits are made by the social workers where appropriate.

Use of patient data from this prospective evaluation of patients for research was approved by the Makerere University College of Health Sciences Research Ethics Committee and the Uganda National Council of Science and Technology. Given that it was impracticable to obtain informed consent for all service users receiving routine mental health care, that the research posed minimal risk, that the rights or interests of the patients would not be violated, and that their privacy and confidentiality or anonymity would be assured, both institutions waived the requirement of a signed consent form.

2.2. The group counseling intervention

The structure of the group counseling intervention has been evolving over the past 6 years as the PCAF staff gained more skills in psychological management of war traumatized individuals through annual training workshops organized by PCAF. It is yet to be manualized and standardized across the four trauma clinics. Currently, the domains of the group counseling intervention are based on common problems observed in the clinic population including high trauma load, lack of knowledge about the precipitants, presentation and consequences of untreated common mental disorders, lack of coping skills and high prevalence rates of sexual risk behavior and HIV infection.

Generally, group counseling sessions are held monthly and may comprise five sessions. In the first session participants share trauma stories, and in the next two sessions, participants are taught relaxation techniques, positive coping skills and negative coping is discussed. In the fourth session the participants receive psycho-education on the common mental health problems in the community so as to encourage medication compliance and promote relapse prevention. Also, pre-test and post-test voluntary counseling and testing for HIV/AIDS is done. In the last session participants share stories of beneficial outcomes resulting from group counseling.

The order in which sessions are conducted and duration of sessions vary from clinic to clinic. The sessions are facilitated by the trauma counselor and/or the social worker. Both facilitators have received training in basic principles and practices of group counseling. The group composition may be homogeneous—for example, a group of women who have suffered sexual violence or heterogeneous—a group of adult men and women with various mental health problems.

3. Study measures

3.1. Exposure variable

The main exposure variable was participation in at least one session of group counseling. The variable was dichotomized as “participation in group counseling versus non-participation in group counseling”.

3.2. Covariates

A standardized structured questionnaire administered in the local language of each clinic population was used to collect data on a number of covariates in one-on-one, face-to face interviews.

3.2.1. Socio-demographic variables

Socio-demographic variables were assessed using a standardized demographic questionnaire. The questionnaire asked about