

# PTSD, depression, and acculturation

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*In this pilot study we tested whether Post Traumatic Stress Disorder (PTSD) and/or major depression inhibits psychosocial adaptation in refugees. We tested a group of sixty-three refugees from the former Yugoslavia prior to and following attendance at a group family in cultural transition (FICT) program<sup>1</sup>. The tests studied were for the presence PTSD, depression, and psychosocial functioning. Almost half of the pilot group dropped out before completion of the program, an outcome not predicted by psychiatric status. Those with no psychiatric disorder made gains in psychosocial functioning during the course of the program. People with PTSD or depression, did not. Completion of the program did not alter rates of psychiatric disturbance. In a multivariate analysis, depression emerged as the main factor that accounted for poor outcomes. When present, clinical depression may require treatment before refugees attend resettlement programs of this type.*

**Keywords:** depression, PTSD, refugees, resettlement programs

## Introduction

The mental health needs of refugees remains a controversial subject (Summerfield, 1999). This is particularly true in issues relating to PTSD, which is often diagnosed in these populations. In general populations, persons with PTSD appear to suffer disability (Kessler, 2000). Refugees with the disorder

seem to have more problems with acculturation and resettlement (Silove, Tarn, Bowles & Reid, 1991). Many refugees also suffer from depression. Depression has been an important factor cited in causing disability in those with PTSD (Mollica et al., 2001; Momartin, Silove, Manicavasagar, & Steel, 2003).

We explored the impact of PTSD and depression by studying refugees from the former Yugoslavia attending a group family in cultural transition (FICT) program<sup>2</sup>. Each group included eight participants attending 9 x 3 hour sessions. The groups involved didactic elements as well as role-play, games, discussion, and homework.

The modules covered included: cultural variations in social interactions, accessing support services, dealing with finances, knowledge about treatment services, cultural adjustments in family life, gender and social justice issues, challenges in child-rearing, and leisure activities. Homework was set for each skill. For example, participants were set the tasks of practicing their skills in approaching a bank clerk or inquiry desk, in using public transport and in attending a leisure centre of their choice.

The research had two aims. The first was to investigate whether attending the FICT group program led to recovery from depression and/or PTSD; the second was to dis-

cover whether having a psychiatric disorder influenced psychosocial gains during the course of the program.

Since the research was conducted within a regular assistance program, we could not assign participants to either control or wait-list groups. As such, the study was based on a naturalistic design in an unmodified service setting. Participants received no other psychosocial interventions during the course of the study.

## Method

*Participants.* The group program included consecutive refugees from the former Yugoslavia referred by a wide range of resettlement services in Sydney, Australia. Recruitment explicitly encouraged referral of all refugees, not only those with overt emotional disturbances. All consecutive refugees from the former Yugoslavia referred to the program during the period of the study agreed to participate.

*Measures & Procedure.* We used the following measures:

1. The Prime-MD for depression (Spitzer, Williams, Kroenke, Linzer, deGruy, Hahn, Brody, & Johnson, 1994): a brief, standardized interview used to assign a diagnosis of major depressive disorder according to the DSM-IV algorithm<sup>3</sup>.
2. The Harvard Trauma Questionnaire (HTQ) (Mollica, Caspi-Yavin, Bollini, Truong, Tor, & Lavelle, 1992): a self-report instrument specifically designed for use with trauma-affected refugees from a diversity of cultures. The measure was previously applied to populations from the former Yugoslavia (Mollica, Sarajlic, Chernoff, Lavelle, Vukovic, & Massagli, 2001)<sup>4</sup>.
3. The 4-item Lifestyle Questionnaire (Marks, 1986)<sup>5</sup>: for assessing psychosocial functioning.

Measures were translated and back-translated using a standard approach (Bontempo,

1993). Adjustments were made to the final versions by an expert committee of bilingual counsellors to ensure that translations in the relevant three dialects (Serbian, Croatian and Bosnian) were semantically and linguistically appropriate.

Participants were assessed by an independent research assistant prior to, and again, on completion of the program. Group facilitators were blind to the results of these assessments.

## Results

*Demographic characteristics.* Sixty-three consecutive participants from the former Yugoslavia were referred and all agreed to join the FICT program. Forty-seven (75%) were female, and the mean age of the sample was 39 (SD = 8.6) years. Fifty eight percent had resided in Australia for less than 6 months, 33% for 7 - 12 months, and 8% for 19 - 24 months.

Eighty three percent were married, 12% were single, and 5% were widowed. Forty two participants (67%) had completed 12 years of education and 30 (48%) had been employed in professional, administrative, or skilled occupations in their country of origin. In Australia, only one participant had found employment, with 57 (91%) receiving income support from the government.

*Dropouts.* Thirty participants failed to complete the FICT program. Twenty-nine dropped out and one returned to Bosnia. There were no significant differences between those that completed the program and those that did not, on demographic variables, baseline PTSD, or depression. Resources did not allow direct follow-up of dropouts to determine their reasons for discontinuing.

*Completers.* There was no statistical change in rates of PTSD (baseline = 17, 53%; follow-up 15, 47%) or depression (baseline: 14, 42%; follow-up: 11, 33%), with diagnoses remain-

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ing largely consistent over the course of the program.

The psychosocial functioning score at baseline was 14.0 (SD = 7.0) reducing to 11.5 at follow-up (SD = 8.2) ( $t = 2.4$ ,  $df = 29$ ,  $p < .05$ ). Table 1. Indicates that depression, PTSD and co-morbidity (both diagnoses) each significantly influenced changes in psychosocial functioning over the course of the program. In each instance, those with a psychiatric diagnosis at baseline showed no change in functioning, whereas those who were free of a diagnosis showed significant improvement. Because of co-morbidity (both diagnoses being present in several persons), we applied a multiple regression analysis that assesses the contribution of depression and PTSD to psychosocial functioning at the same time. Depression was the most powerful predictor ( $F = 4.5$ , adjusted  $B = -.37$ ,  $p < 0.01$ ), with PTSD not adding to the prediction once depression was taken into account. The analysis suggested

therefore that having depression at baseline was the most relevant factor preventing psychosocial gains during the FICT program.

## Discussion

The sample was small and unlikely to be representative of the broader population of refugees from the former Yugoslavia. The high rates of psychiatric disorder suggest that resettlement agencies tended to refer the most distressed refugees. The naturalistic design meant that no definite conclusions could be reached about the results of the program. A random controlled trial would be needed to examine that question.

Nevertheless, the strong representation of those with PTSD and depression allowed us to compare psychosocial outcomes for those with and without a disorder.

Psychiatric status did not predict dropout, a surprising finding. In future investigations, dropouts will need assessment to find out the

**Table 1: Impact of psychiatric diagnosis on Lifestyle Questionnaire (LQ) scores at baseline and follow-up**

	LQ (baseline)	LQ (follow-up)	Significance
Major Depression cases (n = 14)	16.6 (4.4)	16.4 (6.1)	NS
Major Depression non-cases (n = 18)	12.0 (8.1)	7.4 (7.7)	$t = 4.3$ , $df = 16$ , $p < .001$
PTSD cases (n = 17)	17.0 (5.5)	15.6 (7.6)	NS
PTSD non-cases (n = 15)	10.6 (7.1)	6.4 (6.2)	$t = 4.7$ , $df = 13$ , $p < .001$
Co-morbidity cases (n = 12)	17.7 (3.7)	17.7 (5.6)	NS
Co-morbidity non-cases (n = 20)	11.8 (7.7)	7.6 (7.3)	$t = 4.4$ , $df = 18$ , $p < .001$

reasons for the high rate of attrition in the present study.

For those that completed the program, attendance appeared to make little impact on the course of any psychiatric disorder present, suggesting that interventions that address resettlement skills alone cannot be expected to resolve symptoms of clinical depression or PTSD in the short-term.

In addition, those with depression, PTSD, or co-morbidity showed no change in psychosocial functioning unlike those without a psychiatric disorder who made good progress. The regression analysis suggested that depression might be the most important factor impeding refugees in their psychosocial adjustment when attending programs such as the FICT.

The study does suggest that depression is a particularly disabling form of psychiatric disturbance in refugees as it is in other populations (Murray & Lopez, 1996). For refugees, clinical depression may be a major impediment to psychosocial adaptation in the short-term. Other studies (Steel, Silove, Phan, & Bauman, 2002) suggest that symptoms of PTSD, depression, and anxiety may improve over longer periods when refugees live in stable social environments. Nevertheless, the findings of the present study do caution against including recently arrived, clinically depressed, refugees in intensive resettlement and acculturation programs without first treating their psychiatric symptoms.

## Conclusions

This pilot study suggests that PTSD and clinical depression do not improve when recently arrived refugees attend short resettlement and acculturation courses as the sole intervention. Those with psychiatric problems appear not to improve in terms of their psychosocial functioning during the course of such programs. Which aspects of depression (poor concentration and memory, reduced interest, low levels

of confidence or motivation, etc.) account for this difficulty, remains to be evaluated in further studies. Research that is more extensive will be needed to confirm these findings, but preliminary evidence suggests that targeted interventions for clinical depression may be needed to allow refugees to benefit from attending resettlement skills programs.

## References

- Bontempo, R. (1993). Translation fidelity of psychological scales: an item response theory analysis of an individualism-collectivism scale. *Journal of Cross-Cultural Psychology*, 24, 1449 - 1166.
- Kessler, R.C. (2000). Posttraumatic stress disorder: the burden to the individual and to society. *Journal of Clinical Psychiatry*, 61, Suppl 5, 4-12; discussion 13 - 14.
- Marks, I.M. (1986). *Behavioural psychotherapy: Maudsley pocket book of clinical management*. Bristol: Wright.
- Mollica, R.F., Caspi-Yavin, Y., Bollini, P., Truong, T., Tor, S., & Lavelle, J. (1992). The Harvard Trauma Questionnaire: Validating a cross-cultural instrument for measuring torture, trauma, and post traumatic stress disorder in Indochinese refugees. *Journal of Nervous & Mental Disease*. Feb, 180 (2), 111 - 116.
- Mollica, R.F., Sarajlic, N., Chernoff, M., Lavelle, J., Vukovic, I.S., & Massagli, M.P. (2001). Longitudinal study of psychiatric symptoms, disability, mortality, and emigration among Bosnian refugees. *JAMA*. Aug 1, 286 (5), 546 - 554.
- Momartin, S., Silove, D., Manicavasagar, V., & Steel, Z. (2003). Co morbidity of PTSD and depression: associations with trauma exposure, symptom severity, and functional impairment in Bosnian refugees resettled in Australia. *Journal of Affective Disorders*, 80, 231 - 238.

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Mundt, J.C., Marks, I.M., Shear, M., & Greist, J.M. (2002). The Work and Social Adjustment Scale: A simple measure of impairment in functioning. *British Journal of Psychiatry*, 180 (5), 461 - 464.

Murray, C.J. & Lopez, A.D. (1997) Alternative projections of mortality and disability by cause 1990-2020: Global Burden of Disease Study, *Lancet* 349: 1498-504.

Silove, D., Tarn, R., Bowles, R. & Reid, J. (1991) Psychosocial needs of torture survivors. *Australian and New Zealand Journal of Psychiatry* 25, 481 - 490.

Smith Fawzi, M.C., Murphy, E., Pham, T., Lin, L., Poole, C., & Mollica, R.F. (1997). The validity of screening for post-traumatic stress disorder and major depression among Vietnamese former political prisoners. *Acta Psychiatrica Scandinavica*. Feb, 95(2), 87-93.

Spitzer, R.L., Williams, J.B., Kroenke, K., Linzer, M., deGruy, F.V., 3rd, Hahn, S.R., Brody, D. & Johnson, J.G. (1994). Utility of a new procedure for diagnosing mental disorders in primary care. The PRIME-MD 1000 study. *JAMA*. 272 (22), 1749 - 1756.

Steel, Z., Silove, D., Phan, T. & Bauman, A. (2002) Long-term effect of trauma on the mental health of Vietnamese refugees resettled in Australia: a population-based study. *Lancet* 360, 1056 - 1062.

Summerfield, D. (1999). A critique of seven assumptions behind psychological trauma programmes in war-affected areas. *Social Science & Medicine*. May, 48 (10), 1449 - 1462.

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<sup>2</sup> Sound agreement amongst Anglophone populations has been achieved between PRIME-MD and clinical assessments made by independent mental health professionals ( $\kappa=0.71$ ; overall accuracy rate=88%) (Spitzer et al., 1994).

<sup>3</sup> The PTSD symptom scale used in the present study has shown sound inter-rater (.98), test-retest (1 week: .92) and internal reliability (.96) in previous transcultural studies and the measure corresponds closely with a structured interview diagnosis of PTSD based on DSM-IV criteria (Smith Fawzi et al., 1997). A predetermined threshold of 2.5 (16 items divided by sum of scores for each item) can be applied to determine 'caseness' (Smith-Fawzi et al., 1997).

<sup>4</sup> The measure includes one item each for the domains of work, home management (e.g. cleaning, shopping), social activities and private leisure activities (e.g. reading, gardening). Respondents rate their functioning on a nine-point Likert scale ranging from 0 ("not at all impaired") to 8 ("very severely, I cannot do this"). The four scales can be aggregated to derive a global measure of psychosocial functioning, the index used in the present study. The psychometric properties of the scale have been well established (Mundt et al, 2002).

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