Refugee Services
National Partnership for Community Training
Gulf Coast Jewish Family & Community Services

Improving Outcome Study Design: Association of Psychosocial Factors with Recovery of Survivors of Torture

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National Symposium:

Connecting Leaders, Impacting Communities & Sustaining Programs:

Strengthening the National Torture Treatment Network

OVERVIEW

- Introductions & Stats 101
- Report research findings | What can be done with the data you collect
- Strategize ways to measure data & enhance evaluation of impact (research projects not required)

INTRODUCTORY QUESTIONS

- What are you charged to do?
- How do you do it?
- How do you know it’s working?

INTRODUCTORY QUESTIONS

- Roll call: who is in attendance?
- Anyone using the Client Progress Monitoring Tool (CPMT)?
- What is your comfort level with statistics?

STATS 101

- “P value” = how likely our observations are really true. The lower the p value, the more likely what we’re observing is not just by chance.

- “Odds Ratio” = measures the association between an exposure and an outcome
  - OR = 1 | Exposure does not change the chance of the outcome
  - OR > 1 | Exposure brings a higher chance of the outcome
  - OR < 1 | Exposure brings a lower chance of the outcome

- “Control” = Group not receiving a certain treatment being studied or a measure captured before a treatment is given.

DEFINITIONS

- Torture – OHCHR 1984 definition
- Refugee – UNHCR Convention definition
- Asylee – Individual seeking protection and whose claims for refugee status have not yet been determined

BACKGROUND

- Survivors of torture come from all walks of life. It's difficult to measure how many people have survived torture, but the best indication we have is using studies with refugees.
  - Jaranson: Between 5-35% of refugees have experienced torture

2014 Figures

- International (UNHCR): 11.7 million refugees, 1.1 million asylum seekers
- United States: 69,986 refugees and 29,184 asylees resettled

- www.unhcr.org United Nations High Commission on Refugees. Web. January 2014.
- United Nations High Commission on Refugees (2010). *Convention and Protocol Relating to the Status of Refugees.* Geneva, Switzerland. Communication and Public Information Service.
- Office of Refugee Resettlement, Report to the Congress FY 2012
- Jaranson, J. et al. (2004). Somali and Oromo Refugees: Correlates of Torture and Trauma History. *American Journal of Public Health*.

BACKGROUND

- Estimated 11,000 survivors of torture live in San Diego
- Survivors of Torture, International (SOTI) provides holistic services focusing on medical, dental, psychiatric, psychological, and social service needs
- SOTI is a part of the National Consortium of Torture Treatment Programs (NCTTP)

SURVIVORS OF TORTURE INTERNATIONAL

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Building a community of healing for survivors of torture.

www.notorture.org. Survivors or Torture International. Web. October 2013.

STATEMENT OF THE PROBLEM

- Joyce et al: Triple trauma paradigm
- Kira et al: Negative effects go beyond individuals to families and communities
- Quiroga and Jaranson
  - One of the most urgent needs for this population is housing or shelter
  - Few outcome studies exist in the field of torture treatment, and all of them have limitations

- Kira, I. A., Ahmed, A., Wasim, F., Mahmoud, V., Colrain, J., & Rai, D. (2012). Group Therapy for Refugees and Torture Survivors: Treatment Model Innovations. *International Journal of Group Psychotherapy*, *62*(1), 69–88.
- Jaranson, J. M., & Quiroga, J. (2011). Evaluating the services of torture rehabilitation programmes. *Torture*, *21*, 98-140.
- Quiroga, J., & Jaranson, J. M. (2005). Politically-motivated torture and its survivors. *Torture*, *15*, 2-3.

LITERATURE: RECOVERY

- Quiroga and Jaranson: Depression and PTSD are the most common psychiatric diagnoses
- Kira et al: Dissociation and the great variability in the association between torture and PTSD
- McFarlane: Ecological factors that will likely influence improvement, such as physical insecurity, poverty, and lack of medical care are rarely included in research designs

- Kira, I. A., Ashby, J. S., Odenat, L., & Lewandowsky, L. (2013). The Mental Health Effects of Torture Trauma and Its Severity: A Replication and Extension. *Psychology*, *04*(05), 472–482.
- McFarlane, C. A., & Kaplan, I. (2012). Evidence-based psychological interventions for adult survivors of torture and trauma: A 30-year review. *Transcultural Psychiatry*, *49*(3-4), 539–567.
- Quiroga, J., & Jaranson, J. M. (2005). Politically-motivated torture and its survivors. *Torture*, *15*, 2-3.

PSYCHOSOCIAL FACTORS/ CASE MANAGEMENT

- Definition: Pertaining to the influence of social factors on an individual's mind or behavior, and to the interrelation of behavioral and social factors.

- Examples:
  Social networks/support
  Work
  Financial security

Martikainen, P., Bartley, M., & Lahelma, E. (2002). Psychosocial determinants of health in social epidemiology. *International Journal of Epidemiology, 31,* 1091-1093.

STUDY OBJECTIVES

- Evaluate if and how much spending time with friends and family is associated with recovery among SOTI clients
- Evaluate if and how much the receipt of a housing or shelter referral is associated with recovery among SOTI clients
- Identify methods to improve monitoring and evaluation of torture treatment

HYPOTHESES

Hypothesis I

- There is a positive association between spending time with family and friends and an improvement in symptoms, among SOTI clients
- There is a positive association between receiving a shelter or housing referral and an improvement in symptoms, among SOTI clients

Hypothesis II

- There is a positive association between spending time with family and friends and the ability to deal with daily problems more effectively, among SOTI clients
- There is a positive association between receiving a shelter or housing referral and the ability to deal with daily problems more effectively, among SOTI clients

METHODS: RESEARCH DESIGN & DATA COLLECTION

- Historical prospective/retrospective cohort study
- Study sample – 58 registered SOTI clients with intake and follow up data from the Client Progress Monitoring Tool
- CPMT
  - Non-validated questionnaire, not designed for academic research
  - Follow up questions answered six months after intake
  - Self report, administered by SOTI staff
  - Data received were de-identified
- Follow up data collected until October 10, 2013
- SDSU IRB verified exempt in December 2013

METHODS: ANALYSIS

- Bivariate/Unadjusted
  - Fisher's exact
  - Firth logistic regression
  - Variables were included in multivariate analysis if $p < 0.3$
- Multivariate
  - Firth logistic regression
  - Remained in model if:
    a. $p < 0.2$
    b. Variable of interest
    c. Changed parameter estimate by more than 15%

METHODS: MEASURES

Outcomes

- Symptoms | My symptoms are bothering me less since starting services here
- Deal | I deal more effectively with daily problems since starting services here
  - ✓ Likert-scale
    - ➢ Control: Strongly disagree, disagree, or neutral
    - ➢ Improvement: Agree or strongly agree

Variables of Interest

- Housing/Shelter Referral | Yes or no; dichotomous
- Friends & Family | Spending time with both or only one; dichotomous

METHODS: MEASURES

Control Variables

- Legal | Asylum seeker or permanent status; dichotomous
- Age | Age at torture treatment onset; categorical
  - 5-13 years
  - 14-24 years
  - 25+ years
- Gender | Male or female; dichotomous
- Arrival Time | Time between arrival to U.S. and start of services at SOTI; categorical
  - 0-6 months
  - 7-24 months
  - 25+ months

DESCRIPTIVE RESULTS

Frequencies of selected variables from CPMT. SOTI, San Diego, 2013.

Variable		N	%
Symptoms	No improvement	16	27.6
	Improvement	42	72.4
Deal	No improvement	17	29.3
	Improvement	41	70.7
Friends/Family	One	24	66.7
	Both	12	33.3
Housing	No	37	71.2
	Yes	15	28.9
Gender	Male	23	42.6
	Female	31	57.4
Legal	Asylum Seeker	30	55.6
	More permanent status	24	44.4
Age (years)	5-13	10	18.5
	14-24	13	24.1
	25-64	31	57.4
Arrival (months)	0-6	21	38.9
	7-2	15	27.8
	25+	18	33.3

Note: All variables had missing data

ADJUSTED RESULTS

Final logistic model - symptoms bothering a client less since starting services, SOTI, San Diego, 2013.

Variable		OR (95% CI)
Friends/Family	One	1
	Both	0.6 (0.1, 3.9)
Housing	No	1
	Yes	0.5 (0.1, 3.4)
Age (years)	5-13	1
	14-24	0.7 (0.03, 15.6)
	25-64	0.7 (0.1, 7.7)
Arrival (months)	0-6	1
	7-24	11.6 (0.6, 232.3)
	25+	2.6 (0.3, 19.7)

Key: ~p<0.2 *p<0.05 ** p<0.01 ***p<0.005

Final logistic model - clients dealing with daily problems more effectively, SOTI, San Diego, 2013.

Variable		OR (95% CI)
Friends/Family	One	1
	Both	0.9 (0.2, 5.4)
Housing	No	1
	Yes	0.5 (0.1, 3.2)
Arrival (months)~	0-6	1
	7-24	10.4 (1.1, 101.7)
	25+	4.3 (0.6, 28.7)

Key: ~p<0.2 *p<0.05 ** p<0.01 ***p<0.005

KEY FINDINGS

- **Findings do not support the hypotheses**
  - Family/friends – contradicts literature

    Related to data measurement?
  - Housing/shelter referral – receipt of referral could indicate more of a need
- **Attenuated recovery in arrival time**
  - Those who arrived 7-24 months before starting services were 10.4 times more likely to deal with daily problems more effectively than those who arrived 0-6 months before.
  - Those who arrived 25+ months before starting services were 4.3 times more likely to deal with daily problems more effectively than those who arrived 0-6 months before.

DISCUSSION

Strengths

- Availability of data/outcome variables
- Created by experts
- Short, easy to understand questionnaire

<u>Selected</u> Limitations

- Sample size & power
- Selection bias - no true control group, or random assignment
- Mental health and natural history of disease
- Interview bias
- Recall bias

SOTI IMPLICATIONS

- Research staff and resources
  - Graduate students/interns
  - Faculty liaison

- Closely monitor survivors who arrived over two years prior to starting services; explore in future research

IMPLICATIONS | MEASURES AND DESIGN

Modify research development, measures, or design

1. Start SMART – set specific, measureable, attainable, realistic, timely goals/objectives prior to development of questionnaire
2. Measure intensity and frequency of key variables, i.e. importance of relationships and/or time spent
3. Enhance research design – capture control measures

Figure 4. One Group Pretest-Posttest Design

Pretest	Treatment	Posttest 1	Posttest 2
O1	X	O2	O3

Figure 5. Quasi-experimental Wait-List Design

Random Selection	Pretest	Treatment 1	Posttest 1	Treatment 1 (Delay)	Posttest 2
Immediate	O1	X	O2		
Wait-list	O1		O2	X	O3

IMPLICATIONS | MEASURES AND DESIGN

4. Establish comparison groups among partners
    A. CBT only
    B. CBT and Psychosocial program
    C. Psychosocial program only

IMPLICATIONS | CAPTURING QUANTIFIABLE DATA

Use Established Tools:

- Current Adaptive Functioning Index (CAFI)
- Global Assessment of Functioning (GAF)
- Distress thermometer
- What scales/tools do you use?

IMPLICATIONS | CAPTURING QUANTIFIABLE DATA

1. My symptoms are bothering me less since starting services here.
2. I deal more effectively with daily problems since starting services here.

1 - Strongly agree
2 - Agree
3 - Neutral
4 - Disagree
5 - Strongly disagree

ALTERNATIVES

1. My symptoms are bothering me this week.
2. This week it has been difficult to deal with my daily problems.

1 - Strongly agree
2 - Agree
3 - Neutral
4 - Disagree
5 - Strongly disagree

IMPLICATIONS | CAPTURING QUANTIFIABLE DATA

1. Are you currently involved in community or social activities (mark all that apply)?

1 - Any
2 - Spend time with family
3 - Spend time with friends
4 - Activities led or organized by health professionals/doctor/social service

ALTERNATIVES
1. How much time do you spend socializing per week?

1 - 1 day/week
2 - 2-3 days/week
3 - Every day

2. Are you happy with your social network?

1 - Strongly agree
2 - Agree
3 - Neutral
4 - Disagree
5 - Strongly disagree

IMPLICATIONS | CAPTURING QUANTIFIABLE DATA

1. Current housing status

1 - Stable (living in own room, apartment, house for six months or more)
2 - Unstable (moves frequently, more than twice per year – or lives in common area, like a living room)
3 - Homeless
4 - Detention
5 - Other

2. Current employment status

1 - No work authorization
2 - Unemployed, work authorized, and not seeking employment
3 - Unemployed, work authorized, and seeking employment
4 - Employed (FT/PT) with work authorization
5 - Unable to work due to current physical or mental disability of condition
6 - Student
7 - Primary caregiver not employed outside the house
8 - Other

IMPLICATIONS | CAPTURING QUANTIFIABLE DATA

Examples from Washington State Refugee Health Promotion Project

	1	2	3	4	5
How well do you speak English?	I do not speak English at all	I can say a few words in English	I can ask for basic things in English	I can carry on a simple conversation in English	I speak English Fluently

How safe do you feel in your neighborhood?	1	2	3	4	5
	I do not feel safe	A little unsafe	Sometimes I feel safe and sometimes I feel unsafe	I usually feel safe	I feel safe all the time

Are you behind in rent (missed or late on a payment)?	☐ **Yes**	☐ **No**	☐ **I don't know**

WHY QUANTIFY?

1. Improve program evaluation
   - Identify strengths
   - Reduce gaps in services

2. If data is contributed to research, analysis will be enhanced
   - Categorical
   - Continuous
   - Standardized metrics

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DISCUSSION/ACTIVITY

- Break into regional groups
- Prioritize two psychosocial factors you want included in a research design, based on your population(s)
- Develop at least two sample data points
  - Measure frequency or intensity
  - Not burdensome to collect – quick, easy to understand/translate, etc.
- Report out
  - Which psychosocial factors and why?
  - What data points & how would you measure?

FINAL THOUGHTS/Q&A

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