

THE EFFECT OF RECENT ADVERSE EVENTS AND PSYCHOTIC SYMPTOMATOLOGY AMONG
PEOPLE WITH SCHIZOPHRENIA.

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ABSTRACT.

There have been considerable investigations in recent years of the correlation of early life event interactions, with psychotic symptomatology, with suggestions of causal links.. However, most of these investigations do not consider more recent life events at the same time. Outpatients with schizophrenia were surveyed using the CIS-R and PANNS. Questions from the life events module were weighted by the frequency of events and correlated with PANSS positive, negative and total scores and suicidality questions

An association was found between lifetime sexual abuse, and positive symptoms a victim of a crime and home violence with positive symptoms, and between being in difficulties with the police and suicidality.

Lifetime bullying was associated with a decrease in negative symptoms. Further investigations of life events need to consider both early and recent events.

KEY WORDS

Schizophrenia, Life Events, PANSS, Suicidality, CIS-R

BACKGROUND

There is an association between social stresses and adverse life events and psychotic symptomatology(1) . Some have argued that particular life events, (particularly sexual abuse), may be directly causal, or that psychosis is in fact traumatic symptomatology(2),(3). In a recent meta-analysis the odds ratio for psychosis among people who had childhood trauma of all types was estimated at around 2.7 (4)

However, with the exception of child development surveys, which are prospective but often use older tools (given that the studies are conducted over decades) we are relying on retrospective recall. These studies discount more recent events.

As a method of initial re exploration as to the nature of recent and past events, we chose to analyze life event data among people with schizophrenia who were in a stable state and cared for by a community team.

METHODS

Population

We interviewed patients attending a community mental health service in Dunedin (population 120 000), New Zealand. All patients with a clinical diagnosis of schizophrenia or schizo affective disorder were eligible. We excluded those without a working knowledge of English.

Measurement

We used a modified version of the Revised Clinical Interview Schedule (CIS-R) (5) to measure life events and suicidality. The CIS-R is a structured interview, with screening questions for each module, having similar properties to other fully structured community surveys. Schizophrenia symptoms were assessed with the Positive and Negative Symptom Scale (PANSS) (6) .

Statistical approach.

We initially assessed each life event separately looking at suicide plans in the last year and in the last week as well as the PANSS positive, negative and total scores. All results were reported as odds ratios, and exact

logistic regression was used where the number of events was small (<10).

We then estimated the life events burden by counting the number of events. As there was not clear evidence as to the significance of events, and it is reasonable to see more rare events as somewhat more significant, we weighted each event by the inverse of the frequency of reporting to produce a total life events score. We then estimated the association between this life events score and the same five outcomes. Finally, we tested if previous events (more than six months ago) were associated with these outcomes.

This study was approved by the The Lower South Regional Ethics Committee, Dunedin, New Zealand

RESULTS

Demographics

We identified 141 potential participants, of which 86 agreed to the interview, but a further 12 refused to complete parts of the life events section, giving 74 to 79 responders depending on question. The demographic breakdown of this population is shown in has been published elsewhere(7) .

Life events.

Over their lifetime, 59 (70%) were bullied, 23 (27%) experienced home violence, 19 (23%) ran away from home, 16 (19%) were homeless, 16 (19%) were sexually abused, 13 (15%) experienced work violence and six (7%) were expelled from school. Over the last six months, 17 (21%) reported losing items or having them stolen, 15 (18%) were the victim of a crime, 14 (17%) had conflict with others. 14 (17%) reported the death of a close relative, 17 (20%) reported the death of someone else, 11 (14%) experienced money difficulties, eight (10%) had police difficulties, seven (8%) had been separated from their partner, six (7%) experienced illness or injury, five (6%) had been out of work and five (6%) reported being assaulted.

We then examined the associations of these events with symptoms as measured by PANSS (positive, negative and total), suicidal ideation in the past week, and suicidal ideation in the past year. Table two presents the statistically significant associations ($p < 0.05$), without adjustment for multiple comparisons.

DISCUSSION

Among people with schizophrenia and related psychosis, sexual abuse is common, but is the fourth most common life event. We confirm that there is a moderate increased risk in symptomatology among those who experienced sexual abuse and/or violence at home. Our model suggests that (at least in Dunedin) being bullied was associated with decreased PANSS negative and total scores although we were not able to adjust for potential confounders here. Suicidal ideation, was be associated only with financial difficulties

This a survey and all data is self-report and retrospective and so subject to potential biases. The numbers are small. Only people deemed stable by their clinicians were (for ethical reasons) allowed to participate. We had a moderate response rate, which led to the study being under-powered. Given these limitations, we have treated the study as exploratory and not attempted any multivariate analysis, instead presenting descriptive data and unadjusted results only.

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We therefore suggest that to all adverse events have the same effect or direction of effect. The paradoxical decrease in negative symptomatology with the most common early event (bullying) needs further exploration. It appears that concentrating exclusively on events in early life may be missing recent factors that are increasing risk or symptoms of psychosis.

Until there has been further analysis of the timing of events and the inter-relationship of risk types, with time, among people with schizophrenia, any causal statement about such events should be made very cautiously.

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Table 1: Correlation life events scale item score with symptom scores and suicidality.

Life event	Measure	Mean difference (MD) or Odds Ratio (OR), 95% CI.	P value.
Victim of crime, last six months	PANSS +ve	MD +4.0, (1.3 – 6.7)	0.004
Home violence (ever)	PANSS +ve	MD +2.6, (0.3 – 4.8)	0.024
Sexual abuse (ever)	PANSS +ve	MD +2.9 (0.4 – 5.5)	0.025
Bullied (ever)	PANSS total	MD -8.1 (-16.0 – -0.2)	0.044
	PANSS negative	MD -4.2 (-7.4 – -1.0)	0.010
Money crisis, last six months	Suicidal ideation last year	OR 4.7 (1.2 – 19.2)	0.030