Available online at www.sciencedirect.com
ScienceDirect
Psychiatry Research 150 (2007) 255–263
PSYCHIATRY RESEARCH
www.elsevier.com/locate/psychres

Physical ill health and risk of psychosis

Jyrki A. Korkeila [a,b,*], Tanja Svirkis [c], Markus Heinimaa [a], Terja Ristkari [a], Jukka Huttunen [a], Tuula Ilonen [a], Thomas H. McGlashan [d], Raimo K.R. Salokangas [a,c]

[a] *Department of Psychiatry, University of Turku, 20700 Turku, Finland*
[b] *Turku City Hospital, Turku, Finland*
[c] *Psychiatric Clinic, Turku University Central Hospital, Turku, Finland*
[d] *Department of Psychiatry, Yale University, New Haven, CT, USA*

Received 15 September 2005; received in revised form 16 January 2006; accepted 1 March 2006

Abstract

Patients with psychosis have been found to suffer from physical illnesses more commonly than the general population. In this report, self-reported physical ill health and its correlates among subjects with and without vulnerability to psychosis in a sample of first-degree relatives, help-seekers and controls were investigated. Perceived physical health was statistically significantly poorer among subjects with minor symptoms on the Structured Interview for Prodromal Symptoms and those vulnerable to psychosis than among those without symptoms measured by 13 somatoform symptom sum scores of the Symptom Checklist-90. Those at current risk of psychosis had a significantly higher mean sum score on the 13 somatic items (mean=21.1) than others (mean=9.6). Having physical symptoms or a self-reported physician-diagnosed illness was significantly associated with vulnerability to psychosis (odds ratio=3.05). The subjects with a mood disorder (odds ratio=4.33) had significantly more commonly physician-diagnosed illnesses than those who had no diagnosis or any other diagnosis. Physical ill health seems to be common among those vulnerable to psychosis.

Keywords: Physical ill health; Perceived health; Vulnerability; Psychosis

1. Introduction

Three out of four patients with schizophrenia present prodromal symptoms before the onset of psychosis (Häfner et al., 1992). Recently, prodromal states have been described also for mood disorders (Jackson et al., 2003). It has been argued that vulnerability and the psychotic episode have a trait/state relation, while a psychotic symptom as such would be provoked by stressful life events (Zubin and Spring, 1977). The presence of these symptoms can be considered a sign of increased vulnerability to psychosis.

Previous studies have reported, for example, deficits in attention, memory, and motor skills as childhood predictors of schizophrenia (Isohanni et al., 2001; Erlenmeyer-Kimling et al., 1993). None of the studies on schizophrenia prodromes has described perceived physical health or reported prevalence figures for physical illness. A study of offspring of patients with schizophrenia and patients with affective psychoses

* Corresponding author. Piritankuja 4, 20880 Turku, Finland. Tel.: +358 40 5514249; fax: +358 2 269 2528.
E-mail address: jyrki.korkeila@postikaista.net (J.A. Korkeila).

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doi:10.1016/j.psychres.2006.03.016

found no significant differences compared to controls in receiving medical treatment within the first four years of life (Henriksson and McNeil, 2004). The level of somatic complaints was found to be elevated among the offspring of bipolar patients compared to the offspring of controls in a study of bipolar prodromal patterns (Shaw et al., 2005). Klosterkötter et al. (2001) observed that circa 16% of their prodromal sample satisfied the criteria for hypochondriasis or somatization disorder, but they found no significant difference in this respect compared to the other help-seeking psychiatric non-psychotic patients.

Patients with medically unexplained symptoms account for 15% to 30% of all primary care visits (Kirmayer et al., 2004; Wilhelmsen, 2005). Back and joint pain, pain in extremities, and headache as well as abdominal and cardiovascular symptoms have been found to be the most frequent somatoform symptoms (Rief et al., 2001). Medically unexplained symptoms have been linked to mood and anxiety disorders (Barsky, 2001; Henningsen et al., 2003), although there are also conflicting findings (Jackson and Passamonti, 2005). Subjects with prodromal symptoms have been found to have a high level of anxiety and mood disorders (Klosterkötter et al., 2001; Svirskis et al., 2005), while subjects with anxiety or mood disorder have been found to obtain elevated scores on positive psychosis items (Hanssen et al., 2003). If mood and anxiety are linked to physical symptoms and/or illnesses, one could expect an elevated level of physical symptoms and illnesses among those with a vulnerability to psychosis.

The physical health of patients suffering from mental disorders is a topic of major public health interest because research findings indicate a high rate of physical health problems in persons with long-term psychiatric disorders. In health survey studies, general health is often investigated by inquiring about physician-diagnosed illnesses or perceived health using a one-item question ("what is your state of health like?" with five alternative answers) or symptom scales. Self-perceived health is a reliable and valid way of assessing health (Mackenbach et al., 1994) and an independent predictor of mortality (Idler and Angel, 1990). This paper seeks to investigate (1) physical ill health, defined as perceived physical health and self-reported physician-diagnosed illnesses, and its correlates; (2) physical ill health according to the vulnerability to psychosis status and various covariates; and (3) physical ill health among subjects with a current risk of psychosis, in a sample of first-degree relatives, help-seekers and controls.

2. Methods

2.1. Study subjects

Subjects were collected from the city of Turku and the Health Care District of Southwest Finland with a total population of 430,000. The subjects originated from various settings. All study subjects gave their written informed consent concerning the study. In the case of minors, their guardians also gave their informed consent. The ethical committee of Turku University and Turku University Central Hospital approved the study protocol. The sampling procedure and study protocol have been described elsewhere (Salokangas et al., 2004). The subjects of the present study are grouped here into three categories according to the study setting and their help-seeking behavior: (1) first-degree relatives, (2) help-seekers, and (3) control subjects.

We used the PROD screen as a screening instrument for first-degree relatives and help-seekers. The screen comprises 21 items inquiring about current performance level and changes in performance during the previous year that are rated using a 4-point Likert scale (a cut-off point of two specific symptoms generates a sensitivity of 80%). The items probe intermittent and attenuated psychotic symptoms and functional deterioration. The screen is amenable to both telephone interview and self-rating. The PROD screen proved to be a reliable and valid measure of risk of psychosis when the SIPS/SOPS was used as a gold standard (Heinimaa et al., 2003). "Screened positive" signifies either current or lifetime positive finding.

Initially, the first-degree relatives (FDRs) were the target group for finding cases vulnerable to psychosis due to their increased genetic risk of psychosis. (1) First-degree relative group ($n=70$): at the beginning, 138 (age 14–50) first-degree relatives of patients with schizophrenia were screened by the PROD and 44 FDRs were recruited for the study (see Fig. 1). Additionally, one patient with other non-affective psychosis with three FDRs and seven first-degree relatives of five adolescent patients with severe mental illness were screened, and five of these FDRs scored positive on the PROD. Thus, of the first-degree relatives, 54 subjects were investigated. Additionally, 20 voluntary first-degree relatives (age 14–50) of psychiatric patients from the local organization for relatives of severely ill psychiatric patients were screened, and 16 screen-positive subjects were investigated.

(2) Help-seekers ($n=35$): patients (aged 18–50, $n=60$) making their first-ever contact during the year 1999 with two of the offices of the Turku Community