

Research Protocol. A Qualitative Study Investigating Depressive Prodrome in Adolescents

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Abstract

Background: Depression is common, disabling and often has its onset in adolescents. Adolescents with depression are at high risk for persistence and recurrence of depression into adulthood. Subthreshold forms of depression in adolescents are also common. *Objective:* To retrospectively reconstruct the period leading up to the first episode of major depressive disorder (MDD) in a sample of adolescents. It is hypothesized that it is possible to analyse this period in detail and explore all possible symptoms, syndromes and possible risk factors associated with it. *Method:* To recruit a series of first episode MDD subjects from the Older Adolescent Service (OAS) of ORYGEN Youth Health. Subjects and informants are to be interviewed about the period leading up to the depressive episode using a combination of unstructured and semi-structured techniques. *Analysis:* Textual data will be explored and categories generated with the aid of the software package N-VIVO. *Discussion:* The findings could lay the groundwork for the development of quantitative methodologies for assessing and measuring first depressive phenomena. This has the potential to lead to the early recognition and more accurate prediction of subsequent depression.

Key words: Depression, adolescents, subthreshold depression.

Título: Protocolo de investigación: un estudio cualitativo que investiga los prodromos depresivos en adolescentes.

Resumen

Antecedentes: la depresión es común e incapacitante y con frecuencia inicia en la adolescencia. Los adolescentes con depresión presentan alto riesgo para la persistencia y recurrencia de depresión en la vida adulta. Formas subclínicas de depresión también son comunes en la adolescencia. *Objetivos:* reconstruir retrospectivamente el periodo que conduce al primer episodio de trastorno depresivo mayor (TDM) en un muestra de adolescentes. Se establece la hipótesis de que es posible analizar este periodo en detalle y explorar todos los posibles síntomas, síndromes y factores de riesgo asociados. *Método:* inscribir una serie de sujetos

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con primer episodio de TDM provenientes del Servicio del Adolescente Mayor (SAM) de ORYGEN. Los sujetos y los informantes son entrevistados acerca del periodo conducente al episodio depresivo, usando una combinación de técnicas estructuradas y semi-estructuradas. *Análisis:* se exploran los datos textuales y se generan categorías con la ayuda de un programa de software N-VIVO. *Discusión:* estos hallazgos podrían ser la base en el desarrollo de metodologías cuantitativas para evaluar y medir los primeros fenómenos depresivos. Tienen el potencial para llevar al reconocimiento temprano y a una predicción más acertada de depresión subsecuente.

Palabras clave: depresión, adolescentes, depresión subclínica.

Research Background

Depression is a common (1) and disabling condition (2). By the year 2020 it is estimated that depression will be the second most important determinant of the global burden of disease (3). In the National Survey of Mental Health and Wellbeing it was found that 14% of 4-17 year olds suffered from a mental disorder a substantial proportion of which was depression (4).

Depressive disorders often have their onset in adolescence. For example, the Epidemiologic Catchment area (ECA) study (5), which included only individuals aged 18 years and older, found that 20% of cases of major depression met criteria for diagnosis before the age of 25.3 years, with prodromal periods beginning at least several years before this (6). Data from the National

Comorbidity study (NCS) (1) conducted in the United States confirms this, with the finding of the lifetime prevalence rate of major depressive disorder (MDD) in adolescents an estimated 15-20%. In fact the lifetime risk of depression seems to be increasing, with individuals born after the mid 1960s exhibiting higher rates of mood disorders and younger age of onset (7).

Adolescents with depression are at high risk for persistence and recurrence of depression into adulthood. For example, one study found that adolescents with major depression were 3.2 times as likely to have depression in young adulthood compared with controls (8). Over half of the adolescents with depression in another study were found to meet criteria for major depression at some point over a 5 year follow up period (9).

Recent studies suggest that not only is adolescent depression disabling (10) but that subthreshold forms of depression in adolescents are also common—estimated prevalence of between 12 and 31% of the general adolescent population (11)—, interfere with normal functioning (12) and form in themselves risk factors for adolescent and adult depression (13). These subthreshold forms of depression are amenable to treatment and such treatment may prevent full blown depression even in the longer term, as demonstrated by a 12 month longitudinal follow up study (13). Hence the

possibility of targeted prevention arises if early and subthreshold forms of depression are detected.

Justification of Need for the Proposed Research

There is evidence that the prediction of depression in adolescents could lead to effective intervention to prevent full blown depression. This may even reduce the likelihood of adult depression. We cannot afford to assume that the depressive prodrome is merely a milder form of depression. There may be other syndromes that are a part of the depressive prodrome for depression such as anxiety or disruptive behaviour. Qualitative techniques are needed in order to explore this period in detail and increase knowledge of the early forms of adolescent depression and depressive prodrome.

Hypothesis

It is possible to retrospectively reconstruct the evolution of depressive symptoms and syndromes and identify possible risk factors leading up to the first episode of major depression in a sample of adolescents.

Aims

To reconstruct, rather than explain, the prodromal period leading up to the first episode of depression in a group of adolescents with first episode depression. The develop-

ment of a clear picture of the evolution of depressive symptoms may aid us in developing quantitative strategies to recognize depression earlier. Exploration of patterns of and barriers to help seeking would also enhance our understanding of how best to provide services for young people with mood disorders.

Methods

Setting. ORYGEN Youth Health (formerly the Mental Health Service for Kids and Youth (MHSKY), is a mental health service based in the Western region of metropolitan Melbourne. It incorporates the Older Adolescent Service (OAS), a clinical service for young people aged 15-18 years presenting with non-psychotic mental health problems.

Subjects. About 450 new patients are accepted into the OAS each year, approximately 120 to 140 of whom have first episode (FE) major depressive disorder (MDD).

Sampling. All case managers will be approached for potentially eligible patients currently under their care. RJS will then be introduced to the patient as a researcher and explain the study. This will be explained both verbally and by providing the peer reviewed Plain Language Statement. After which the patient will be recruited into the study if informed consent is given. Thereafter new patients will be recruited in a similar way once full or partial recovery from the depressive episode had been achieved.

In a proportion of subjects consent for corroborative information from a parent or guardian will be sought both from the subject and informant.

This sampling strategy has been elected in order to improve the quality of the data collected i.e. inclusion of subjects who have recently experienced the period of interest but are not currently severely unwell. Severely depressed patients may be too unwell to give an unbiased account of this period. Those who have been depressed on several occasions or a long time previously may be unable to remember their experiences prior to the onset of the first episode of depression. Although these subjects are from a particular service, the catchment area is sufficiently wide to encompass those from a variety of socio economic and cultural backgrounds. The sample should therefore be qualitatively representative of an adolescent population with first episode depression.

Exclusion Criteria: Patients with a clear organic cause for the depressive episode were excluded. Also, patients who did not agree to be audio-taped and those with inadequate English language were excluded.

Investigative Team: This team consists of two doctors. ARY is an associate professor of psychiatry who has conducted a similar study investigating psychotic prodrome (14). ARY does not work clinically within the service. She will take a supervisory role in the study and will not

be involved in data collection but will supervise in all methodological aspects and analysis. The other is a registrar in psychiatry currently posted in research on a part time basis RJS. She had previously worked clinically within the service. She is to recruit eligible candidates, conduct all research interviews and analyze data collected with supervision from ARY. Both members of the team think that there is an identifiable period prior to the commencement of MDD which it may be possible to characterise. This may bias the research process. The identification and exploration of this period in an in depth interview may allow it to gain more significance than it had already for the subject. It may become more demarcated and exaggerated due to the nature of the research and interview. In order to reduce this as far as possible the first part of the interview will be entirely unstructured and lead by the interviewee.

Method: Retrospective assessment of period leading up to index first episode MDD. The time elapsed both in days and in number of sessions between the clients having their initial appointment and having the interview for the study will be recorded. The interviews will occur at a time convenient to the client, who may or may not be partially recovered by this time, we will seek to conduct them when most convenient to the clients.

We will endeavour to measure the subjects' symptomatology, via

clinician-rated CESD-R, at the initial interview, then again at the research interview to measure change in symptoms during this time.

Instruments: Subjects will then be assessed with the Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental disorders (SCID IV) (15), conducted by RS, to confirm the diagnosis of major depression for the index episode and to assess for the presence of other antecedent Axis I disorders which may have operated as risk factors for the development of depression (7).

As stated previously the first part of the interview will involve an in depth unstructured interview about the time leading up to the index episode of depression. The second part of the interview will be semi structured. This is to allow a full exploration of this period to take place. This is based on a framework conceptualized on thoughts, feelings and behaviors and upon the constructs of mood, attenuated psychotic, anxiety, somatic sensations and speech. This will also include an exploration of help seeking leading up to the first episode of depression.

This will allow description of subthreshold symptoms and syndromes to occur and patterns of onset explored. With subjects' consent, these interviews will be tape recorded and tapes transcribed for data analysis, as was done in a previous study (14) using computer software to streamline qualitative analysis (11).

Results

Statistical Analysis: Both qualitative and quantitative data analysis will be performed. Descriptive statistics will be reported on sociodemographic and diagnostic variables for the sample. This is to investigate the representativeness of the sample.

The tape transcripts will be coded with the aid of a computer program for qualitative data analysis called NVIVO (Nonnumerical Unstructured Data –Indexing, Searching and Theorising). This is essentially a data handling aid. Categories describing the data will be generated before and during data collection. These will be assigned numerical values, and units of text will be labeled with the appropriate numerals if they can be allocated to a given category. Categories will first be generated and then refined. This will occur until saturation is reached. Syndromes, symptoms and possible risk factors will be explored for possible associations and patterns. Throughout the analysis negative cases will be sought for. Corroborative interviews will be analyzed in a similar way. Internal validity will be assessed by triangulation between these and the subject interviews.

Discussion

The findings could lay the groundwork for the development of quantitative methodologies for assessing and measuring first depressive

phenomena. This has the potential to lead to the early recognition and more accurate prediction of subsequent depression.

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