

# CONCEPTUAL PROBLEMS OF EARLY INTERVENTION IN SCHIZOPHRENIA

MLA Heinimaa

## ABSTRACT

An increasing interest in early detection and treatment of schizophrenic psychoses has been emerging. Extending treatment initiatives to earlier 'disease stages' creates both diagnostic and ethical problems with current nosological concepts. In this paper, philosophically-informed conceptual analysis is used to clarify the issue. The philosophical grammar of 'premorbid symptoms of schizophrenia' is examined. The basic conceptual problem concerning the early intervention approach is that the activity has to draw on locally acceptable criteria of morbidity, even though the rationale for this activity is dependent on a generally acceptable conception of psychiatric morbidity. Consequently, 'premorbid symptoms' is not an ordinary psychiatric concept and has only limited use in ordinary clinical transactions. Preventive work has to heed these limits to ensure its legitimacy. It has been shown that in the absence of valid diagnostic criteria for prodromal symptomatology, the justification of early intervention programmes in schizophrenic psychoses lies in the professional characteristics of psychiatric institutions.

**Keywords:** *Conceptual Analysis; Early Intervention; Prodromal Symptom; Schizophrenia*

## INTRODUCTION

There has been a significant upsurge in clinical research programmes focussing on early detection of and intervention in schizophrenic psychoses (McGlashan, 1996a). These programmes have been targeted towards both shortening the length of untreated psychosis and towards preventing psychotic episodes altogether (Vaglum, 1996). The following is a discussion of some of the conceptual problems relating to detection and treatment of schizophrenic patients in the 'prodromal phase', before the emergence of openly psychotic symptomatology.

### THE RATIONALE OF EARLY INTERVENTION

It has long been known that, in retrospect, acute schizophrenic psychoses are usually preceded by long-standing psychiatric symptom formation. According to Häfner *et al.* (1992, 1997), 75% of first episode schizophrenic patients manifested the so-called prodromal symptoms of schizophrenia for a period averaging four years before the onset of the psychotic symptoms. The existence of the long prodromal period has given impetus to establishing preventive treatment strategies (Falloon, 1992; Yung *et al.*, 1996a), with the hope of improving long-term prognosis, treatment compliance, and possibly preventing psychotic episodes altogether. Also, the demonstrated utility of prodromal symptoms in preventing psychotic relapses has created expectations for a similar development in primary prevention (Birchwood & Macmillan, 1993).

Nevertheless, there are serious problems with this endeavour, not only the clinical ones of utility or feasibility of such intervention programmes, but also theoretical ones, related to the disease concepts involved. Three conceptually distinct groups of problems emerge from current discussions on the topic in psychiatric journals:

- (1) recognising prodromal schizophrenic morbidity (Falloon, 1992; Birchwood *et al.*, 1997)
- (2) identifying a valid concept of schizophrenia (Häfner, 1989; Häfner *et al.*, 1992)
- (3) dealing ethically and appropriately with 'at-risk mental states' (Yung *et al.*, 1996a; Birchwood *et al.*, 1997).

### IS DIAGNOSING PRODROMES THE MAIN ISSUE?

When Falloon (1992) questions how to find reliable methods of distinguishing schizophrenic development, the problem of recognition is interpreted as an empirical difficulty. The same rationale is present in discussions about the risk of identifying 'false positives' (McGlashan & Johannessen, 1996b; Yung, 1996a) with the early intervention approach — thus implicitly assuming that the status of 'true positives' is not at issue.

The most widespread instrument for assessing prodromal symptoms has been the Diagnostic and Statistical Manual of Mental Disorders- (DSM-) III-R criteria (APA, 1987). The insufficient specificity of diagnostic items in distinguishing schizophrenic development from other psychotic disorders has been demonstrated by Jackson *et al.* (1995). The lack

of specificity of the prodromal symptoms is especially striking in the clinically relevant postadolescent population; according to work by McGorry *et al.* (1995a) up to 50% of high school students were syndrome-positive when interviewed according to the DSM-III-R prodromal symptom list. Not surprisingly, the prodromal symptoms were removed from the fourth version of the DSM criteria (APA, 1994; Birchwood *et al.*, 1997). The low incidence of schizophrenic psychoses also makes it difficult to study the clinical significance of prodromal symptomatology in a prospective setting (Häfner, 1992).

Nevertheless, there are major issues relating to the concept of schizophrenia that make it unlikely that reliable and valid diagnosing of prodromal syndromes would be the only problem or even the most significant problem confronting an early intervention approach in schizophrenia.

Firstly, take into consideration the longitudinality of the neokraepelinian concept of schizophrenia; here deteriorating course is definitional for the concept, but it is just this phenomenon we are to prevent. Consequently, those cases in which preventive intervention is successful will not fulfil diagnostic criteria and circularity of reasoning is a real problem here (Falloon, 1992; Böker & Brenner, 1984; Rund, 1990).

Secondly, 'the prodromal symptom of schizophrenia' is a retrospective concept (Birchwood *et al.*, 1997), and this makes it questionable whether the concept can have valid clinical applications — its appropriateness for preventive purposes is an open question.

The basic problem here is the tacit assumption that 'schizophrenia' is a nonproblematic medical concept. But as there is no independent criterion for recognising schizophrenia apart from clinical symptomatology and course (Kringlen, 1994), reliable and valid recognition of prodromal symptomatology cannot really be dealt with until the concept of schizophrenia has become sufficiently clear (Kendler, 1990).

## VALIDITY OF THE SCHIZOPHRENIA CONCEPT

Scientific psychiatry considers the meaningfulness of the concept of schizophrenia as a question of the validity of the proposed disease concept (Radden, 1994). The validity and coherence of schizophrenia as a nosological primitive is one of the major questions in psychiatry and widely divergent conclusions have been made (Flack *et al.*, 1991). Concrete recommendations for coping with validity problems in research have been suggested as acknowledgement of the preliminary and syndromal character of the concept (Maier & Propping, 1991) and acceptance of the possibility of different diseases giving the same clinical picture (heterogeneity), thus, using the concept as the best possible option available (Zubin *et al.*, 1991; Weinberger, 1987).

The heterogeneity assumption severely undermines the legitimacy of the prodrome concept, as descriptions of premorbid symptomatology remain unspecific by virtue of logical necessity. This means that the nonspecificity of prodromal symptoms demonstrated by Jackson *et al.* (1995)

might be a necessary feature of prodromal symptomatology. Moreover, for clinical purposes the usefulness of a concept that is a derivative of a research hypothesis [the latter referring to prevailing conceptualisations of 'schizophrenia' (Coulter, 1991)] is severely limited and potentially counterproductive (Yung & McGorry, 1996b).

## ETHICAL PROBLEMS

A third group of problems with 'pre-onset schizophrenia' concerns the ethics of intervention and the legitimisation of preventive activities.

The questions proposed here are: (1) should we be active in the early stages of 'schizophrenia'?; and (2) how should we be active in the early stages of schizophrenia — what are the ethical constraints of this activity?

In its ordinary formulation, the concept of 'prodrome' is a necessary prerequisite for the ethical imperative to search actively for possible schizophrenic decompensation; in the medical model, the prodrome of a serious illness legitimises active interventions (Falloon, 1992; Edwards *et al.*, 1994; Huber, 1995; Yung *et al.*, 1996a). However, if 'schizophrenia' does not provide us with a sufficiently coherent disease concept to legitimise early intervention (Falloon, 1992; McGorry *et al.*, 1995b), how can this be provided for?

In concrete clinical encounters with putative prepsychotic patients, these conceptual problems emerge in questions on how to speak about the phenomena our activities are directed towards (Yung *et al.*, 1996a).

In discussing early intervention strategies, McGorry proposed that we should speak either about 'acute psychosis' (1991) or use a conceptually weaker term such as 'at-risk mental state' (Yung *et al.*, 1996a; Birchwood *et al.*, 1997). An obvious problem of this non-committed way of addressing mental illness is that its reference is fairly unclear, and its force remains dependent on the authoritative position of the institution using it (Kendler, 1990).

The ethical guidelines of the Personal Assistance and Crisis Evaluation (PACE) clinic documented by Yung *et al.* (1996a) state that: "*PACE clinician did not emphasize the risk of transition to psychosis or schizophrenia .... The need for intervention was explained in relation to patients' presenting problems. For example, the focus might be on helping a young person with social skills and coping at school.*" The guidelines manifest a similar tendency to draw on local criteria of significance to legitimise interventions and to ensure adequate motivation from the side of 'potential patients'. Thus, the basic incongruity with early prevention of schizophrenia seems to be that the endeavour has to draw on locally acceptable criteria of morbidity. On the other hand the rationale for such an enterprise draws on a generally valid concept of psychiatric morbidity; only a general concept of schizophrenia as a devastating psychosocial morbus can legitimise large scale prevention programmes. In practice, the current programmes have to dispense with such conceptualisations and the interesting question is, why do the concepts of major psychiatric illness work in such an incongruous fashion?

## JASPERS REVISITED

The important historical and conceptual point is that incomprehensibility of a person's thinking and behaviour rule not only some former accounts of schizophrenia (Jaspers, 1962), but also modern conceptualisations of the illness (Margolis, 1991; Mundt, 1990).

According to Jaspers, 'un-understandability' is the most fundamental feature of the psychopathology of schizophrenia. Although Jaspers' contributions in this respect have been severely criticised for having disastrous clinical consequences (Roberts, 1992), there is a case for the kind of philosophical distinction that lies dormant in his account of schizophrenia. That is to say, Jaspers' description of schizophrenia can be clinically misleading but conceptually illuminating. The fact that 'un-understandability' is a relevant concept not only historically (Janzarik, 1986) but also for the present day is manifested in the way descriptions of the main psychotic symptoms (bizarre delusions, disorganised speech, behavioural incoherence) of schizophrenia in the DSM-IV draw on their being 'incomprehensible' — these concepts cannot be used without mastering the grammar of incomprehensibility.

The lesson to draw from this is that whatever the concrete forms of scientific psychiatry are, the ground on which relevant conceptual distinctions stand is comprehensibility and the limits of comprehensibility (Mundt, 1990). The importance of this observation stems from the peculiarities of the grammar of 'understanding'; understanding and its collapse is primarily a local affair. That is, there are no general criteria for understanding to take place, the explicit criteria of understanding only manifest themselves in the ways we ascribe understanding in concrete instances (Wittgenstein, 1953). Although psychiatry as an institution can provide the schizophrenia concept a reasonable amount of generality (the course criteria is significant for this), difficult decisions on how to understand a person's expressions and behaviour have to be made in diagnosing individual patients. Thus, local ascription of incomprehensibility is an inherent part of the diagnosis.

Concerning the prodromal symptomatology, the significance of incomprehensibility in assessing many of the DSM-III-R prodromal symptoms (markedly peculiar behaviour, blunted or inappropriate affect, digressive, vague or circumstantial speech, odd beliefs or magical thinking, unusual perceptual experiences) is obvious. Likewise, in describing the evolution of prodromal symptomatology, Huber (1995) draws a distinction between normal variations in psychological functioning and basic symptoms (Huber's conceptualisation of subjectively experienced prodromal symptoms supposedly specific for schizophrenia) by pointing out the alien and incomprehensible experiential quality of the latter.

### THE PRODROME CONCEPT DELIMITED

In what way do these observations relate to the conceptual problems that have been voiced so far? The point is that the

local criteria of morbidity can be accepted as the basis for conceptualising prodromal symptomatology, provided the conceptual delimitations implied are heeded.

Thus, the necessity of using an indefinitely referential description such as 'at-risk mental state' in clinical context is not only informed by the need to eliminate unnecessary stigmatisation or to ensure clinical compliance (McGlashan & Johannessen, 1996b; Yung *et al.*, 1996a). As it is the local criteria of comprehensibility that primarily informs the kind of concern that is constitutive of a psychiatric encounter — namely an indefinite breakdown of a comprehensible human being (Fabrega, 1991) — the question of whether the limits of ordinary human comprehensibility have been transcended does not have any straightforward psychiatric implications. That is, until full blown psychiatric illness has been diagnosed, this so called 'prodromal' symptomatology cannot be legitimately called 'psychiatric' in the strict sense of the word. In other words, psychiatric discourse has no precedence over other possible ways of conceptualising the phenomenon in question.

This leads us to the ethical constraints of this activity; clinical early intervention activity cannot rely merely on overt psychiatric conceptualisations, but needs to be sensitive to radically different ways of conceptualising human suffering.

Despite the fact that an indefinite breakdown of a comprehensible human being does not have any straightforward psychiatric implications, it nevertheless manifests a strong ethical imperative to act; the distress in question is of the most fundamental kind, setting our whole being as understandable human beings at stake and is thus a strong obligation for others to participate and to help. Thus, whether the distress in question will in the long run, be framed as 'existential' or manifesting a normal psychological reaction, thus excluding medically-oriented interventions, or whether a psychiatric disease is diagnosed, the ethical imperative to attend to the distress of the person in question remains similar.

This leads us to the legitimacy of early intervention; it is ultimately an ethical obligation to participate in the distress and suffering of our fellow human beings, rather than an obligation of the secondary prevention of schizophrenia. But the question arises, what is the legitimisation of professional intervention here? — the proposed ethical principle obviously applying to all human beings and not only to members of the psychiatric profession.

### ACCEPTABILITY OF EARLY INTERVENTION

In a discussion of the ethical feasibility of early prevention of schizophrenic episodes, a recent review article (Birchwood *et al.*, 1997) suggests that "a research case can be made for cautious monitoring of individuals who may be considered 'at risk'," provided that this takes place in a low-stigma setting, specific criteria will be used to define the risk and interventions applied are not medically-oriented but 'problem-focussed'.

Falloon *et al.* (1992, 1996), on the other hand, makes a somewhat stronger claim for early intervention when this author asserts that preventing the emergence of psychotic episodes altogether might be such a strong incentive for early intervention that one can dispense with setting any exclusively rigorous requirements for diagnosis.

The difference between these suggestions can be described as stemming from divergent ideas on how to legitimise early prevention. Birchwood *et al.*'s proposal derives its legitimacy from the idea of providing scientifically valid information for further consideration on the issue and from its exclusion of specific medical forms of intervention; this exclusion reflects the status of prodromal symptomatology outside psychiatric symptomatology proper. Falloon, on the other hand, implies a 'middle' level of justification for early intervention based on professional expertise, as against a 'high' level justification provided by scientifically valid criteria of prodromal symptomatology (that we do not have) or a 'low' level justification by exclusively local criteria (which is medically irrelevant).

Birchwood *et al.*'s conceptually weaker suggestion seems fairly easy to accept, and its exclusion of specifically medical forms of intervention is consistent with the proposed status of prodromal symptomatology. But could a case be made for Falloon's proposal, too? What does the 'middle' level of justification for early intervention concretely mean?

Falloon's proposal implies that clinicians are warranted to suspect schizophrenic development on the basis of an unspecific symptomatological picture and knowledge about risk factors, assuming that they have the necessary clinical skills and institutional facilities for dealing appropriately with persons not acutely ill but manifesting symptoms of putative psychotic illness. This suspicion *per se*, without conclusive scientific knowledge on the relationship of prodromal symptomatology and schizophrenia, may provide justification for certain forms of intervention (informing the patient, suggesting further medical or psychological investigations, arranging follow-up, recommending treatment). That is, it is the institutional characteristics of psychiatry and other health care professions (specifically primary care physicians) that legitimises early intervention; because the respective clinicians are already in a clinical relationship with vulnerable people, this enables them to deal with a suspected psychotic development without causing unnecessary harm to their clients.

## CONCLUSIONS

In conclusion, we can answer affirmatively to the first question on the acceptability of an active interventionist approach to putative early manifestations of schizophrenia. Concerning the second question on the possible forms of this activity, we have pointed out that legitimate forms of intervention depend on the institutional settings and purposes of the activity. With our current state of knowledge, the limited conceptual strength of prodromal syndrome delimits the possibilities of overt medical intervention programmes.

However, the expertise and circumstances of the psychiatric profession, and possibly other strategically placed professional groups such as health care personnel and teachers (Olin *et al.*, 1996) nevertheless legitimises an interventionist attitude, provided this takes place within appropriate institutional settings. The legitimisation here is institutional by character, rather than dependent on the existing scientific evidence of connections between pre-onset symptomatology and schizophrenia.

## REFERENCES

- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 3rd Ed. Rev. Washington, DC: American Psychiatric Association, 1987.
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders: DSM-IV. 4th Ed. Washington, DC: American Psychiatric Association, 1997.
- Birchwood M, Macmillan F. Early intervention in schizophrenia. *Aust NZ J Psychiatry* 1993;27:374-378.
- Birchwood M, McGorry P, Jackson H. Early intervention in schizophrenia. *Br J Psychiatry* 1997;170:2-5.
- Böker W, Brenner H. Über selbstheilungsversuche schizophrener. *Schweitz Arch Neurol Neurochir Psychiatr* 1984;135:123-133.
- Coulter J. The grammar of schizophrenia. In Flack WF Jr, Miller DR, Wiener M, Eds. *What is schizophrenia?* New York: Springer-Verlag, 1991;161-172.
- Edwards J, Francey SM, McGorry PD, *et al.* Early psychosis prevention and intervention: evolution of comprehensive community-based specialised service. *Behav Change* 1994;11:223-233.
- Fabrega H. Conceptualizations of human behavioral breakdowns: an analysis using the doctrine of cultural relativism. In Flack WF Jr, Miller DR, Wiener M, Eds. *What is schizophrenia?* New York: Springer-Verlag, 1991;110-143.
- Falloon IRH. Early intervention for first episodes of schizophrenia: a preliminary exploration. *Psychiatry* 1992;44:4-15.
- Falloon IRH, Kydd RR, Coverdale JH, *et al.* Early detection and intervention for initial episodes of schizophrenia. *Schizophr Bull* 1996;22:271-282.
- Flack WF Jr, Miller DR, Wiener M, Eds. *What is schizophrenia?* New York: Springer-Verlag, 1991.
- Häfner H. 1st schizophrenie eine krankheit? *Nervenartz* 1989;60:191-199.
- Häfner H, Riecher-Rössler A, Maurer K, *et al.* First onset and early symptomatology of schizophrenia. *Eur Arch Psychiatry Neurol Sci* 1992;242:109-118.
- Häfner H, an der Heiden W. Epidemiology of schizophrenia. *Can J Psychiatr* 1997;42:139-151.
- Huber G. Prodrome der schizophrenie. *Fortschr Neurol Psychiatr* 1995;63:131-138.
- Jackson HJ, McGorry PD, Dudgeon P. Prodromal symptoms of schizophrenia in first-episode psychosis: prevalence and specificity. *Compr Psychiatr* 1995;36:241-250.
- Janzarik W. Geschichte und problematik des schizophreniebegriffes. *Nervenartz* 1986;57:681-685.
- Jaspers K. *General psychopathology*. Hoening J, Hamilton MW (trans). Manchester: Manchester University Press, 1962.
- Kendler KS. Toward a scientific psychiatric nosology. *Arch Gen Psychiatr* 1990;47:969-973.
- Kringlen E. Is the concept of schizophrenia useful from an aetiological point of view? A selective review of findings and paradoxes. *Acta Psychiatr Scand* 1994;90 (Suppl. 384):17-25.
- Maier W, Propping P. Familiäre häufung psychischer störungen. *Nervenartz* 1991;62:398-407.
- Margolis J. The trouble with schizophrenia. In Flack WF Jr, Miller DR, Wiener M, Eds. *What is schizophrenia?* New York: Springer-Verlag,

- 1991;97-110.
- McGlashan TH. Early detection and intervention in schizophrenia. *Schizophr Bull* 1996a;22:197-199.
- McGlashan TH, Johannessen JO. Early detection and intervention in schizophrenia: rationale. *Schizophr Bull* 1996b;22:201-222.
- McGorry PD. Paradigm failure in functional psychosis: review and implications. *Aust NZ J Psychiatry* 1991;25:43-55.
- McGorry PD, McFarlane C, Patton CG, *et al*. The prevalence of prodromal features of schizophrenia in adolescence: a preliminary survey. *Acta Psychiatr Scand* 1995a;92:241-249.
- McGorry PD, Mihalopoulos C, Henry L, *et al*. Spurious precision: procedural validity of diagnostic assessment in psychotic disorder. *Am J Psychiatr* 1995b;152:220-223.
- Mundt C. Concepts of intentionality and their application to the psychopathology of schizophrenia — a critique of the vulnerability model. In Spitzer M and Maher BA, Eds. *Philosophy and psychopathology*. New York: Springer-Verlag, 1990.
- Olin SS, John RS, Mednick SA. Assessing the predictive value of teacher reports in a high risk sample for schizophrenia: a ROC analysis. *Schizophr Res* 1996;16:53-66.
- Radden J. Recent criticism of psychiatry nosology: a review. *Philos Psychiatr Psychol* 1994;1:193-200.
- Roberts G. The origin of delusions. *Br J Psychiatr* 1992;161:298-308.
- Rund BR. Fully recovered schizophrenics: a retrospective study of some premorbid and treatment factors. *Psychiatry* 1990;53:127-139.
- Vaglum P. Earlier detection and intervention in schizophrenia: unsolved questions. *Schizophr Bull* 1996;22:347-351.
- Weinberger DR. Implications of normal brain development for the pathogenesis of schizophrenia. *Arch Gen Psychiatr* 1987;44:660-669.
- Wittgenstein L. *Philosophical investigations*. Oxford: Basil Blackwell, 1953.
- Yung AR, McGorry PD, McFarlane CA, *et al*. Monitoring and care of young people at incipient risk of psychosis. *Schizophr Bull* 1996a;22:283-303.
- Yung AR, McGorry PD. The prodromal phase of first-episode psychosis: past and current conceptualizations. *Schizophr Bull* 1996b;22:353-370.
- Zubin J, Steinhauer SR, Condray R. Schizophrenia from an American perspective. In Flack WF Jr, Miller DR, Wiener M, Eds. *What is schizophrenia?* New York: Springer-Verlag, 1991;17-31.

Dr MLA Heinimaa, LL (MD), FK (MA), University of Turku, Department of Psychiatry, and Åbo Akademi University, Department of Philosophy, Turku, Finland.

Address for correspondence: Dr MLA Heinimaa  
University of Turku  
Department of Psychiatry  
Kunnallissairaalantie 20  
Finland  
SF-20700 Turku