Using Identification of Early Warning signs to prevent Relapse of Psychosis.

Sanja Martić Biočina 1,  
Mark Agius 2.

1. Psychiatric Hospital Vrapče, Bolnička cesta 32, Zagreb, Croatia.  
2. SEPT: South Essex Partnership University NHS Foundation Trust. Department of Psychiatry University of Cambridge.

Abstract.

The identification of early warning signs and the development of a relapse prevention plan is an important part of the treatment of schizophrenia. The use of a card-sort exercise is an effective way of developing an accurate description of the early warning signs. This paper describes our method of applying this technique to our patients. It also describes how the use of early warning signs in an early intervention service does enable some relapses to be treated at home before they become so serious as to lead to hospital admission.

Keywords: schizophrenia, bipolar disorder, relapse prevention, early intervention service, early warning signs

Introduction

Schizophrenia is a remitting relapsing condition. The identification of early warning signs in serious mental illness is a key factor in any attempting to prevent relapse. This is so because when a relapse occurs, there is often about 3 to 4 weeks between the onset of the early signs of relapse and the development of the full relapse, so that it is possible to institute measures to stop the development of the relapse before the patient is incapacitated by it.

Experience has also shown that patients usually develop the same signs of relapse on every occasion that they relapse, so that mapping early signs of relapse makes possible the prediction and treatment of further relapses as they develop. Here we describe how we identify early signs of relapse and help patients and their families to treat relapses before they become serious.

This work is based on that of Max Birchwood. Birchwood developed a psychological model of the transitional process to relapse. He clarified that early signs are identifiable in one half to two thirds of patients over a period of one to four weeks before relapse (1).

Birchwood, Spencer and McGovern have described a system of identification of Early Warning Signs (2), using a card-sort and a time-line exercise, and the use of CBT, psycho-education, temporary increase in medication and changes in patient behaviour as a complete package (3). This package has been adopted into the ‘IRIS’ early intervention guidelines (4), and is used by ourselves (5,6).

Falloon et al, in their Manual of Behavioural Family Therapy, put the identification of early warning signs of relapse in the context of psychoeducation of the family about the patient’s illness (7).

It is therefore not just the patient, but the whole family, who are asked about the early warning signs of relapse. This has the advantage that family members may notice signs of relapse which the patient might have missed and may notice them before the patient does. Therefore, the result of Falloon’s method is a list of early warning signs, which are agreed in writing by the patient and his family. This then leads to an agreed written plan of action, which is signed by all parties concerned, wherein the family agrees what is to be done should the identified signs be noted by the patient or his family. Birchwood et al republished in their IRIS early intervention guidelines a table of 58 signs of early
relapse in psychosis which they had published as a validated series of signs in an earlier paper (2,4).

Birchwood recommends a card-sort exercise in two stages. First the patient sorts through a series of cards with the 58 validated signs written on them and chooses the ones which he identifies as relapse signs which he experiences. Next the patients arranges the cards which he has sorted into a “time line”, with the earliest symptom placed earliest and the cards then arranged in order so that the symptoms are arranged chronologically, so that they are arranged from the earliest sign up to the ones which are closest to the day of relapse or “crisis”, which are put closest to the point of crisis. This gives an accurate picture of the progression of symptoms.

As well as the validated signs, there are specific “relapse signatures” which are signs or sets of signs very specific to a single patient and will not, therefore, be found in any standard published list of early warning signs.

The signs which Birchwood has described and used in the card-sort exercise are as follows:

- S1 Thoughts are Racing
- S2 Senses seem sharper
- S3 Thinking that one has special powers
- S4 Thinking that one can read the minds of other people
- S5 Thinking that other people can read your mind
- S6 Receiving personal messages from the TV or radio
- S7 Experiencing difficulty in making decisions
- S8 Experiencing strange sensations
- S9 Preoccupied about one or two things
- S10 Thinking one might be someone else
- S11 Seeing visions or things other people cannot see
- S12 Thinking people are talking about you
- S13 Thinking people are against you
- S14 Having more nightmares
- S15 Having difficulty concentrating
- S16 Thinking bizarre things
- S17 Thinking your thoughts are controlled
- S18 Hearing voices
- S19 Thinking that a part of you has changed shape
- S20 Feeling helpless or useless
- S21 Fear of going crazy
- S22 Feeling sad or low
- S23 Feeling anxious or restless
- S24 Feeling increasingly religious
- S25 Feeling as if one is being watched
- S26 Feeling isolated
- S27 Feeling tired or lacking energy
- S28 Feeling confused or puzzled
- S29 Feeling forgetful or far away
- S30 Feeling in another world
- S31 Feeling strong or powerful
- S32 Feeling unable to cope with everyday tasks
- S33 Feeling as if one is being punished
- S34 Feeling like other people cannot be trusted
- S36 Feeling that one does not need sleep
- S37 Feeling guilty
- S38 Difficulty in sleeping
- S39 Speech is jumbled and filled with odd words
- S40 Talking or smiling to oneself
- S41 Acting suspiciously as if under surveillance
If early signs of relapse are identified in this way, it is then possible to put into place an identified plan of action, agreed with the patient and his family, so that professionals are called, medication is increased, and steps, including CBT and relaxation techniques among others, are carried out. This is because the temporary increasing in the dosage of oral medication early enough in the process of relapse is very effective in preventing the relapse progressing further and aborting the process.

There are implications here for both primary care and for crisis intervention teams.

Both the general practitioner and the Crisis Team should be aware of and hold in their case notes the list of early signs of relapse and the agreed crisis plan, so that they can ensure that such a relapse plan is instituted effectively when it is necessary to do so.

The use of early warning signs was illustrated by our group in our early intervention in psychosis study (8).

We studied the outcomes of 62 patients who were treated in an early intervention (EI) team compared to 62 patients who had treatment as usual in a community mental health team. Significantly more patients in the EI group had their early warning signs of relapse formally identified. However, a small minority of patients in the EI group did not have early signs formally identified, because of difficulties in engaging with them or their understanding the process. More relapses were identified in the Early Intervention Group, but more were treated outside hospital, while in the treatment as usual group, relapse usually led to admission to hospital. The effective identification of early signs of relapse in the EI group accounted for the large number of relapses identified in the EI group, and for these relapses having been amenable to treatment outside hospital, as described above. (2).

Prevention of psychotic relapse includes other techniques besides the identification of early warning signs. These other important interventions include the following.

1. The prescription of long-term antipsychotic medication as a preventive measure.
2. Psycho-education about the necessary measures for staying well, including taking medication in the long term and avoiding the use of illicit drugs, including cannabis, cocaine, amphetamines and ecstasy.
3. The identification and avoidance of stressful situations or stressors which are known to have led to relapse in the past.
4. The addressing of High Expressed Emotion in Families. [The key interventions here are Family Interventions]
5. The teaching of stress management techniques to the client, so that he uses these regularly, but actually spends more time relaxing and using stress management measures when he notices the early warning signs.
6. The teaching of CBT techniques to the patient to enable him to challenge negative automatic thoughts which often occur during an incipient relapse. [Sometimes, in a manic relapse, positive automatic thoughts, such as ones of grandiosity might occur, and these could be challenged in the same way.]
However, the identification of early warning signs and the integration of all the above techniques into a complete relapse prevention plan, which is known to both primary and secondary care is key to the prevention of relapse in schizophrenia.

**GP comment**

**What have I learned from this paper?**

1. It is possible, using established techniques, to determine a "relapse signature" of symptoms that is individual to the patient and can indicate when additional management strategies are required to prevent a full-blown relapse.

2. Establishing the "relapse signature" of an individual patient, recording the characteristic pattern of symptoms and ensuring that both carers and professionals are aware of this, can be valuable in preventing crises.

3. If the characteristic pattern of symptoms that characterises relapse in an individual patient is recognised, the appropriate management may be a combination of psychosocial intervention and medication review. General Practitioners would need to have facilitated training to help pick up early subtle changes. The Key Mental Health Worker may know the patient better than the GP and hence may be able to notice the subtle changes earlier than the GP. Improved communication and better pathways for referral, which vary between PCT areas, need to be more robust. Clearly, early detection of symptoms, whilst the patients are still compliant to using drugs/psychological intervention, would be preferable to having to use the Mental Health Act.

**Dr P.A.H. Cliffe,**
General Practitioner, Surrey.

**References**


7. Falloon I et al: Behavioural Family Therapy A Workbook, 37-42. Buckingham Mental Health Service 1996