Emerging symptoms on the pathway to psychosis

Klaassen, M.C.

Citation for published version (APA):
Chapter 4

Letter to the editor:
Positive symptoms in At Risk Mental State: 
the importance of differentiating within the scope

Rianne M.C.Klaassen, Sven van Amstel, Mark van der Gaag

Early intervention in Psychiatry 2013;7:100-101
Letter to the editor: Positive symptoms in At Risk Mental State: the importance of differentiating within the scope

Visual impression of chapter 4
Introduction

The consideration of adding a ‘risk’ syndrome has become the subject of much debate. In research, the ‘At Risk Mental State’ (ARMS) is defined as (i) familial history of psychosis in first-degree relatives, (ii) psychosis shorter than a week with spontaneous remission, or (iii) subclinical psychotic symptoms. The three subgroups are also characterized by functional decline. Most research is focused on the attenuated symptom group which contains the majority of the ARMS population. Whereas the first ARMS studies found transition rates of 40%, a lower transition rate of 7-10% has been reported recently. Hence, most people with an ARMS will not make a transition to psychosis. This large proportion of false positives reported earlier needs attention. Rurhmann and colleagues proposed a model for improving the predictability of the transition to psychosis, by adding positive symptoms, bizarre thinking, sleep disturbances, a schizotypal disorder, the level of functioning in the past year, and years of education.

We were interested in considering the existing positive symptoms described in the ARMS themselves in the context of the specific developmental phase, as most of the ARMS patients are adolescents (14-30 years). In this adolescent phase subclinical psychotic symptoms are highly prevalent; sometimes in up to 30% of the patients. Furthermore, subclinical symptoms are transient in 75-90% of the cases. A better understanding of the symptoms and their individual risk themselves might help to differentiate between the true heightened risk for psychosis and false positives: normal transitory phenomena. Instead of adding symptoms to the criteria, diminishing the significance of symptoms like transitory perceptual abnormalities (PA), grandiosity (GR) and magical thinking (MT) could also help lower the false-positive ratio among certain subgroups like adolescents.

All symptoms found in the ARMS group (bizarre ideas (BI), non-bizarre ideas (NBI), perceptual abnormalities (PA) and disorganization) have also been found in the general population, particularly in the adolescent phase. If, however, they are accompanied by distress, help-seeking behavior and functional decline, then they are considered to imply a heightened risk for psychosis. Potentially dividing the different symptom (groups) in relation to these decisive factors might lead to more or less risk symptoms.


**Bizarre and Non-bizarre Ideations**

BIs are strongly associated with distress, depression and poor functioning.\textsuperscript{13,14} NBIs are more divided in terms of causing stress: Persecutory Ideas (PI; part of NBI) are strongly associated with distress, depression and poor functioning.\textsuperscript{13,14} Conversely, GR and MT, which are overvalued ideas and are both, depending on content, part of BI or NBI) have weak associations with distress, depression and poor functioning.\textsuperscript{13,14} Cannon .\textsuperscript{15} found higher levels of BI and/or PI to be predictive for transition to frank psychosis. The combination of these two symptoms (also related to distress) with the genetic risk for schizophrenia and functional decline raises the positive predictive power to 74%. Thompson and colleagues\textsuperscript{16} found BIs, low functioning and genetic risk for schizophrenia with functional decline to be associated with a transition to psychosis. A combination of two out of three of these features had a positive predictive power of 65.4%.

**Perceptual Abnormalities**

The findings concerning PAs are inconclusive. Armando et al.\textsuperscript{13} found minor associations with distress, depression and poor functioning, while Yung et al.\textsuperscript{17} found strong associations with these same factors. De Loore et al.\textsuperscript{18} found that hallucinations are common and mainly transitory in adolescents. Two influencing factors concerning hallucinations have been put forward: firstly, persistence of hallucinations is associated with clinical deterioration. Secondly, Simon et al.\textsuperscript{19} found that fully developed hallucinations (hearing voices speak) are more predictive for later psychotic outcome than subclinical hallucinations (e.g. hearing someone calling your name or unrecognizable murmuring voices). Subclinical hallucinations tend to remit fully in half of the sample within a year. Hanssen et al.\textsuperscript{20} found that when perceptual intrusions are accompanied by distress this increases the risk of delusion formation by a factor of 5. The same study suggested that delusion formation increases the risk for transition to full blown psychosis.

**Disorganization**

Although disorganization is thought to be strongly correlated with the diagnosis of schizophrenia, and associated with a poor prognosis, we were unable to find any research on this topic in people at risk for psychosis.
Conclusions

BI, PI (part of NBI) are more indicative for a heightened risk for psychosis due to perceived distress they cause. Persistent PAs as well as PAs accompanied by distress increases the risk of delusion formation, which increases the risk of transition.

On the other hand, part of NBI, GR, MT are not related to increased risk, and might be part of normal adolescent development, because they do not cause distress. PAs, if not accompanied by distress are common, not related to transition and mainly transitory in adolescents.

BIs seem to be associated with a higher risk for transition than both NBI and PAs; NBI and PAs seem to contain higher risk items (PI and fully developed or stressing hallucinations) and low risk items (GR and subclinical hallucinations or hallucinations without distress). This suggests the subfactors NBI and PA need further sub-dividends to determine their risk status.
References


11. Van Os J, Hanssen M, Bijl RV, Vollebergh W. Prevalence of psychotic disorder and community level of psychotic symptoms: an urban-rural comparison. *Arch Gen Psychiatry* 2001; 58: 663-668.


