Cognitive–behavioural therapy can prevent transition to psychosis in ultra-high-risk participants in the long term

Jean-Philippe Miron, Amal Abdel-Baki

Université de Montréal, Centre Hospitalier de l'Université de Montréal and Centre de Recherche du Centre Hospitalier de l'Université de Montréal, Montréal, Québec, Canada

Correspondence to Dr Amal Abdel-Baki, Universite de Montreal, Clinique (Jeunes Adultes Psychotiques), CHUM, 1560 rue Sherbrooke Est, Montréal, QC, Canada H2L 4M1; amal.abdel-baki@umontreal.ca

ABSTRACT FROM: Ising HK, Kraan TC, Rietdijk J, *et al.* Four-year follow-up of cognitive behavioral therapy in persons at ultra-high risk for developing psychosis: the Dutch Early Detection and Intervention Evaluation (EDIE-NL) trial. *Schizophr Bull* 2016;42:1243–52.

WHAT IS ALREADY KNOWN ON THIS TOPIC?

Major efforts have been made to prevent ultra-high-risk (UHR) participants from transitioning to psychosis. Previous studies have examined the efficacy of ω-3 fatty acid, antipsychotic medication and cognitive–behavioural therapy (CBT) as preventive interventions, without conclusive results.[1]

METHODS OF THE STUDY

In the original multicentre Dutch Early Detection and Intervention Evaluation Trial,[2] 196 UHR participants were randomised to either CBTuhr (cognitive–behavioural therapy for ultra-high risk—where patients were taught to be aware of their cognitive biases, to think of alternative hypothesis and to discuss them before acting on their suspicions) or treatment as usual (TAU—routine care provided for non-psychotic disorders, mainly depressive and anxiety disorders) for 6 months, with an additional 18-month follow-up. Significantly more people in the CBTuhr group remitted from the at-risk mental state, and their transition to psychosis was reduced by ∼50%. In the current study, 113 of the 196 original participants consented to a 4-year follow-up. Participants were contacted by telephone and most agreed to participate (54/56 in the CBTuhr group and 54/57 in the TAU group). For the 83 participants who were lost to follow-up from the original study, electronic health records were reviewed to evaluate if they had transitioned to psychosis.

WHAT DOES THIS PAPER ADD?

- The number of participants converting to psychosis in the CBTuhr group increased from 10 at 18 months to 12 at the 4-year follow-up (n=2), whereas it remained the same in the TAU group (n=22 at 18 months, no additional cases at 4 years), still representing a significant preventive clinical effect (incidence rate ratio of 0.55 and p=0.03). The few new transition cases in the CBTuhr group, even after treatment cessation, could be a sign that the intervention was efficacious to prevent psychosis not only during the intervention period, but in the longer term.
- Transition time to psychosis was significantly longer in the CBTuhr group (1322 days compared with 1189 days in the TAU group, p=0.04).
- Significantly more patients remitted from their UHR status in the CBTuhr group compared with the TAU group (76.3% vs 58.7%, OR=0.44, 95% CI 0.20 to 0.97, p=0.04).
- Transition to psychosis was associated with more severe psychopathology and lower social functioning on related scales at 4-year follow-up. On the Comprehensive Assessment of At-Risk Mental States, changes in standardised mean difference (ΔSMD) were −0.24 for positive and also for negative symptoms, −0.41 for distress and −0.14 for behavioural change. For Social Interaction Anxiety Scale and Social and Occupational Functioning Assessment Scale, ΔSMDs were −0.07 and 1.43, respectively.
- The number needed to treat was 8.25 (95% CI 4.37 to 72.72).

LIMITATIONS

- Treatment of non-psychotic disorders and distress is an important issue, since the use of antidepressants in UHR participants is thought to have a preventive effect on transition.[3] The authors did not elaborate on the treatments given and whether they were different between the two groups.
- The overall 16.3% transition rate at 18 months and 17.4% at 4 years in this study was lower than other studies on UHR (26.9% at 18 months and 36% at 3 years).[4] This may be due to methodological issues, such as a selection bias. For example, if the definition of UHR state is interpreted less strictly, the consequence could be the inclusion of participants not truly at UHR of psychosis (even if presenting with similar symptoms such as anxiety or emotional regulation disturbance). These individuals are less likely to transition to psychosis. While the low rate of later transition to psychosis in both groups replicates the findings of other studies showing that the largest proportion of patients usually transition the first or second year after they seek help, especially when not offered specific preventive intervention,[3] it may also suggest that new cases of psychosis transitioning between the 18 months and the 4-year time points were missed (previous studies showed that 9% were making transition to psychosis between 18 and 36 months or more).[4]
- A high proportion of patients were lost to follow-up (42.4%: 39 participants in the experimental condition and 44 in the control condition). Although efforts were made to collect data on transition to psychosis for these participants from electronic health records, it is possible that some milder cases of psychosis were missed because they never sought help, thus underestimating the 4-year transition rate in both groups.

WHAT NEXT IN RESEARCH?

Since antipsychotics have many side effects, other interventions in UHR participants are warranted and currently under investigation. For example, a recent study investigated the benefit of adding ω-3 polyunsaturated fatty acids in the treatment of UHR participants, also receiving cognitive–behavioural case management.[5] Furthermore, the high proportion of participants lost to follow-up and the low transition rates in this study demand replication with larger samples.

DO THESE RESULTS CHANGE YOUR PRACTICE AND WHY?

Yes. The results emphasise the preventive impact that high-quality psychosocial treatment can have on UHR patients without inducing the same side effects as would antipsychotic medication, such as weight gain, sedation and metabolic syndrome. The intervention seemed well tolerated, with a low drop-out rate during treatment (15%), which was similar to the TAU. Clinicians should be encouraged to use more of these interventions, especially in patients refusing to take medication.

Competing interests None declared.

Provenance and peer review Commissioned; internally peer reviewed.

doi:10.1136/eb-2016-102569

Received 22 December 2016; Accepted 28 March 2017

REFERENCES

1. **Van der gaag M**, Smit F, Bechdolf A, *et al*. Preventing a first episode of psychosis: meta-analysis of randomized controlled prevention trials of 12 month and longer-term follow-ups. *Schizophr Res* 2013;**149**:56–62.
2. **Van der gaag M**, Nieman DH, Rietdijk J, *et al*. Cognitive behavioral therapy for subjects at ultrahigh risk for developing psychosis: a randomized controlled clinical trial. *Schizophr Bull* 2012;**38**:1180–8.
3. **Marshall M**, Husain N, Bork N, *et al*. Impact of early intervention services on duration of untreated psychosis: data from The National EDEN prospective cohort study. *Schizophr Res* 2014;**159**:1–6.
4. **Fusar-poli P**, Bonoldi I, Yung AR, *et al*. Predicting psychosis: meta-analysis of transition outcomes in individuals at high clinical risk. *Arch Gen Psychiatry* 2012;**69**:220–9.
5. **Mcgorry PD**, Nelson B, Markulev C, *et al*. Effect of ω-3 polyunsaturated fatty acids in young people at ultrahigh risk for psychotic disorders: the NEURAPRO randomized clinical trial. *JAMA Psychiatry* 2016;**74**:19–27.