

Synopsis for EU-GEI publication

Synopsis no.: S2.54 / S6.8

Preliminary title: Suicidality among first episode psychosis compared to control subjects: findings from the international multisite incidence EU-GEI study.

Contact info for the person(s) proposing the synopsis

Name: CBBCM Heuschen

Partner no: 8 (University of Amsterdam)

e-mail address: c.b.heuschen@amsterdamumc.nl

Publication category:

?

Work Packages involved: WP2 (FEP) and WP6 (healthy controls)

Working and writing group:

Caroline Heuschen, Koen Bolhuis, Frederike Schirmbeck, Jasper Zantvoord, Damiaan Denys, Claudi Bockting, Anja Lok, Lieuwe de Haan, WP2 and WP6 author groups.

Partners involved from whom candidate co-authors (*additional to working and writing group*) should be nominated:

?

Objectives

Scientific background

Many studies have confirmed that the risk of suicide in patients with first-episode psychosis (FEP) is high, especially at illness onset. Recent studies even showed a 60% risk elevation for suicide within the first year of treatment as compared to later stages of illness.^{1,2} If we could identify FEP individuals at illness onset the risk elevation for suicide might be prevented. However, FEP individuals often avoid healthcare and thus diagnosis and treatment are often delayed for years.

Previous studies tried to identify high-risk populations that make a transition into FEP. However, only small percentages of individuals identified as high risk make this transition. This might indicate that current screening methods are not sensitive enough to predict the transition into FEP.

To this end we compared FEP individuals with non-psychotic healthy controls. Next, we looked at the associations between sociodemographic characteristics, substance abuse, symptoms of depression, psychosis and suicidal ideation within the FEP population.

If we could identify the clinical and sociodemographic characteristics of FEP individuals more accurately at the beginning stages of treatment, a screening and prevention program might be designed. Consequently, this program could contribute to decreasing lives lost to suicide within the FEP population.

Research questions

1. Do suicidal thoughts and behaviour differ between FEP individuals and control subjects? Adjusted for sociodemographic characteristics such as **substance abuse**, gender, level of IQ, level of education, socioeconomic status, history of suicide attempt and/or a family history of suicide attempt, family history for psychiatric illness.
2. Are age at onset, gender, IQ, social and economic status, substance abuse, symptoms of depression and psychosis associated with the prevalence of suicidal ideation and suicide attempts within the FEP population?

Methods

We plan to compare the sociodemographic characteristics of FEP individuals and controls using t-tests for normally distributed continuous variables, Mann-Whitney U tests for non-normally distributed continuous variables and χ^2 tests for categorical variables. Additionally, differences in sociodemographic characteristics at baseline will be explored between FEP individuals who did and did not experience suicidal ideation throughout the entire study using Chi-Square tests.

We will use logistic and linear regression to test if age at onset, gender, socioeconomic status, symptoms of depression and/or psychosis are associated with the prevalence of suicidal ideation and suicide attempts within the FEP population

Expected results

- 1) We expect to find significant differences between sociodemographic characteristics of FEP individuals and control subjects.
- 2) We expect to find that baseline suicidal ideation and suicide attempts are associated with more severe depressive and psychotic symptoms/psychopathology.

Data needed for the study: WP2, WP6, GROUP

Baseline FEP and healthy control data are needed for the study:

- data on psychotic experiences (CAPE, SCID, SIS-R,)
- data on suicidal thoughts and history of suicide attempt(s) (CAPE, OPCRIT, the life events and difficulties classification list)
- data on depressive symptoms (OPCRIT, CAPE)

Baseline characteristics: age, gender, ethnicity, IQ, economic status, level of education, social status, urbanicity, country of residence, substance (ab)use, premorbid adjustment, insight and a family history of suicide.

Other analyses/methods: N/A

Involvement of external Parties (non-EU-GEI): None

IPR check:

Timeframe

Month 3: Literature search; obtaining, merging of data

Month 6: Completion of statistical analysis and first draft of manuscript

Month 8: Manuscript submission

Additional comments: N/A

References

1. Yates, K. *et al.* Association of Psychotic Experiences with Subsequent Risk of Suicidal Ideation, Suicide Attempts, and Suicide Deaths: A Systematic Review and Meta-analysis of Longitudinal Population Studies. *JAMA Psychiatry* **76**, 180–189 (2019).
2. DeVlyder, J. E., Lukens, E. P., Link, B. G. & Lieberman, J. A. Suicidal ideation and suicide attempts among adults with psychotic experiences: Data from the collaborative psychiatric epidemiology surveys. *JAMA Psychiatry* **72**, 219–225 (2015).
3. Kelleher, I. *et al.* Psychotic symptoms and population risk for suicide attempt a prospective cohort study. *JAMA Psychiatry* (2013). doi:10.1001/jamapsychiatry.2013.140
4. Ventriglio, A. *et al.* Suicide in the early stage of schizophrenia. *Frontiers in Psychiatry* (2016). doi:10.3389/fpsy.2016.00116
5. Simon, G. E. *et al.* Mortality rates after the first diagnosis of psychotic disorder in adolescents and young adults. *JAMA Psychiatry* **75**, 254–260 (2018).
6. Coentre, R., Talina, M. C., Góis, C. & Figueira, M. L. Depressive symptoms and suicidal behavior after first-episode psychosis: A comprehensive systematic review. *Psychiatry Research* (2017). doi:10.1016/j.psychres.2017.04.010
7. Dutta, R. *et al.* Reassessing the long-term risk of suicide after a first episode of psychosis. *Arch. Gen. Psychiatry* (2010). doi:10.1001/archgenpsychiatry.2010.157
8. Nordentoft, M., Madsen, T. & Fedyszyn, I. Suicidal behavior and mortality in first-episode psychosis. *Journal of Nervous and Mental Disease* (2015). doi:10.1097/NMD.0000000000000296
9. Suvisaari, J. *et al.* Is It Possible to Predict the Future in First-Episode Psychosis? *Front. Psychiatry* **9**, 1–15 (2018).
10. Pompili, M. *et al.* Suicide risk in first episode psychosis: A selective review of the current literature. *Schizophrenia Research* (2011). doi:10.1016/j.schres.2011.03.008
11. Robinson, J. *et al.* Suicide attempt in first-episode psychosis: A 7.4 year follow-up study. *Schizophr. Res.* (2010). doi:10.1016/j.schres.2009.10.009
12. Szöke, A. *et al.* Treated Incidence of Psychotic Disorders in the Multinational EU-GEI Study. (2017). doi:10.1001/jamapsychiatry.2017.3554
13. Quattrone, D. *et al.* Transdiagnostic dimensions of psychopathology at first episode psychosis: Findings from the multinational EU-GEI study. *Psychol. Med.* (2019). doi:10.1017/S0033291718002131