Reviewer's report

Title: Predictors of Premature Mortality in Swedish Drug Abusers: A Prospective Longitudinal Study 1970 - 2006

Version: 4 Date: 21 March 2011

Reviewer: Heinrich Kufner

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The following comments are referring to the review 4:

The first two major points are not regarded in the discussion chapter or in any other part of the revised paper.

ad 1:
There is no remark that in predicting premature death during such a long time period it seems highly probable that life events and treatment episodes have been occurred which may have a direct or indirect impact on premature death. If the authors think that there is no influence on the prediction they should argue for their position, but not to mention is not a solution. In my view it is a limitation of the study.

Ad 2:
In the authors’ answer the type of the discharge of the patients is mentioned. Premature discharge could be a predictor for treatment outcome and for the long term course of addiction. The issue is not to predict the dropping out of treatment, but the effect of dropout on the long term course or on drug related death. Although the study is not conceptualized as a treatment evaluation study, discharge of treatment should be regarded in prediction analysis as a control variable, if there is no clear argument against the possible influence on the dependent variable of drug related death. I think it would be interesting to know whether dropout of treatment is a predictor or not or is modifying the predictive value of the other predictors.

The other points are completed.