Latest Flawed Study Minimizing the Mental Health Risks of Abortion: A Close Look at a Danish Study on Psychiatric Hospital Readmission, Before and After Abortion

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On Monday Feb 6th Danish researchers led by Trine Munk-Olsen will publish a paper in the Archives of General Psychiatry with several problematic design issues. Focusing exclusively on women with prior hospitalizations for mental disorders, the primary purpose of the study was to evaluate differences in rates of readmission to psychiatric facilities between 9 months before and 12 months after first time, first-term abortions. The authors also compared the patterns of readmission to a psychiatric facility among women having a first time, first trimester abortion with women having a first birth.

Reported main results:

- 1) Risk of readmission was similar before and after first time, first trimester abortion; however risk of readmission was higher after giving birth compared to before.
- 2) Women with prior hospital admissions for mental health disorders, who had abortions, had higher levels of readmission before and after their abortions compared to women who gave birth. Specifically, when the authors restricted the sample to those having a first abortion or birth between 1994 and 2007, the abortion group included 2838 women with 321 experiencing a readmission before or after the abortion (11%). The birth group included 5293 women, with 273 experiencing a readmission before or after the birth (5.15%).

The study has numerous problematic elements and the results cannot be trusted for the reasons described below.

- 1) The sample is limited to women who had a first abortion or birth between 1994 and 2007. The oldest women in the population for whom the investigators had data were born in 1962, and many of the oldest women surely experienced their first abortion or birth well before 1994 (since they would have been 32 at the time), yet they are not included in the analyses and no explanation is provided for their exclusion.
- 2) There is a serious problem with the structuring of the birth and abortion groups that the authors openly acknowledge: out of the total sample of 8131 women, 952 (nearly 12%) were in both groups! In order to conduct clean comparisons, these women should absolutely have been removed prior to conducting the analyses.



- 3) The authors only analyzed a very small fraction of all women with histories of mental illness, the most extreme forms requiring in-patient hospitalization. For every woman hospitalized for a mental illness after abortion, there are potentially 1000s of women suffering from disorders who received out-patient services, were never treated, of self-medicated with substances. The sample is very narrowly constructed.
- 4) The only control variables employed are age, calendar period, time since previous admission, reproductive history, and parental history of mental disorders. There were no controls for variables demonstrated in previous studies to be associated with the choice to abort and with post-abortion mental illness including marital status, education level, religion, income, relationship history variables including abuse, planning of the pregnancy, reasons women chose to undergo abortion, and pressure to abort, among other variables.
- 5) The authors conducted correlational analyses and inappropriately made inferences of causality, For example, in the first sentence in the conclusion section of the article they state: "In the present study, we found that first-time first-trimester induced abortion does not influence the risk of readmission to psychiatric facilities." Such a statement is not permitted with the use of variables that cannot be controlled (like abortion status), particularly when so few control variables are incorporated.
- 6) Follow-up was limited to 12 months after the pregnancies were resolved. Prospective studies have shown that many women experience mental health problems associated with an abortion years after the procedure. By only measuring readmission for one year, women who have delayed responses, sometimes triggered by a later pregnancy, are not included in the analyses. The data are available in the Danish registries and there is no valid reason for cutting off the follow-up period so early.

Munk-Olsen, T, Laursen, TM, Pedersen, CB, Lidegaard, O, Mortensen, PB. (2012) First-Time First-Trimester Induced Abortion and Risk of Readmission toy a Psychiatric Hospital in Women with a History of Treated Mental Disorder. *Archives of General Psychiatry*.