Coleman, P.K. (Sept, 2011). Abortion and Mental Health: A Quantitative Synthesis and Analysis of Research Published from 1995-2009. British Journal of Psychiatry

This review offers the largest estimate of mental health risks associated with abortion available in the world literature. The results revealed moderate to high increased risk of mental health problems after abortion. Consistent with evidencebased medicine, this information should be used by health care professionals.

What are the basic results? What should women know?

1) Overall, women with an abortion history experience an 81% increased risk for mental health problems. The results showed that the level of increased risk associated with abortion varies from 34% to 230% depending on the nature of the outcome. Separate effects were calculated based on the type of mental health outcome with the results revealing the following: the increased risk for anxiety disorders was 34%; for depression it was 37%; for alcohol use/abuse it was 110%, for marijuana use/abuse it was 220%, and for suicide behaviors it was 155%.

2) When compared to unintended pregnancy delivered women had a 55% increased risk of experiencing any mental health problem.

3) Finally, nearly 10% of the incidence of all mental health problems was shown to be directly attributable to abortion.

Why was this meta-analysis conducted?

1) Recently published, less systematic reviews of the scientific literature on abortion and mental health, including the American Psychological Association report and one by Johns Hopkins researchers among others, are prone to bias, and as a result actively mislead the public.

2) Practitioners need an accurate synopsis of the best available evidence in order to provide women with valid information in order to make informed health care decisions.

How is a meta-analysis different from the many other papers and reviews published in recent years? Why should we believe the information from a metaanalysis is any more accurate and reliable or less biased?

1) A meta-analysis is a quantitative or numerical synthesis of data from many previously published studies.

- 2) In a meta-analysis all studies are not treated equally. Contributions of individual study effects to the overall results are weighted statistically based on sample size.
- 3) Only studies that meet very stringent methodologically-based criteria are entered into the analysis; whereas in other types of reviews authors may not reveal the criteria employed or the criteria may be too restrictive (missing valuable studies) or too general (including weak studies in conclusions).
- 4) The bottom line is the results are far more reliable than the results of a single study or a qualitative review, because of the wealth of data incorporated and the objective methods for combining effects.

Isn't it possible for meta-analyses to differ in strength and reliability? What distinguishes this one?

- In order to avoid any allegations of bias, very stringent inclusion criteria were employed. This means every strong study was included and weaker studies were excluded. Specifically, among the rules for inclusion were sample size of 100 or more participants, use of a comparison group, and employment of controls for variables that may confound the effects such as demographics, exposure to violence, prior history of mental health problems, etc.
- 2) This meta-analysis is based on 22 published studies, 36 effects, and it brings together data on 877,181 participants 163,831 of whom experienced an abortion.
- 3) The paper is being published in a very prestigious journal, the *British Journal of Psychiatry*, which is considered one of the top psychiatry journals in the world. This means the paper has been extensively scrutinized by well-respected scientists and the results of studies are trusted by practitioners throughout the world.