Bipolar Disorder
Postpartum Psychosis
Media Conference
Facilitator's Guide

Contributors
Caitlin Hasser, MD, University of California, San Francisco
Sarah Nagle-Yang, MD, University of Colorado School of Medicine

Updated in 2022 by
Taber Lightbourne, MD, Perelman School of Medicine, University of Pennsylvania
Sarah Nagle-Yang, MD, University of Colorado School of Medicine

Pre-Assessment Learning

- Friedman, S.H., Prakash, C., and Nagle-Yang, S. *Postpartum Psychosis: Protecting Mother and Infant*. Current Psychiatry**,** 2019; 18(4): 12-21.
- Wesseloo R, Kamperman AM, Munk-Olsen T, Pop VJ, Kushner SA, Bergink V. Risk of Postpartum Relapse in Bipolar Disorder and Postpartum Psychosis: A Systematic Review and Meta-Analysis. Am J Psychiatry. 2016 Feb 1;173(2):117-27.
- Emotionally disturbed ex-teacher who poisoned, drowned her two kids convicted of manslaughter - New York Daily News, April 8, 2016
  --link: https://www.nydailynews.com/new-york/ex-teacher-poisoned-drowned-kids-guilty-manslaughter-article-1.2593449
  Please note that this article can be read ahead of time or as a group during the review of other media materials

Optional Supplemental Reading

- Bergink, V., Bouvy, P. F., Vervoort, J. S., Koorengevel, K. M., Steegers, E. A., & Kushner, S. A. (2012). Prevention of postpartum psychosis and mania in women at high risk. *American Journal of Psychiatry*, *169*(6), 609-615.

Overview

Popular media frequently touches on issues germane to reproductive psychiatry, such as postpartum depression, stress in pregnancy, and breastfeeding. Well-known celebrities such as Gwyneth Paltrow and Chrissy Teigen have voiced their experiences with maternal mental health to millions of people worldwide. However, the tone of the messages arising from the media can be tinged with stigma. The ability to field patient questions arising from popular culture is an important professional skill for trainees to develop. In particular, trainees should be able to explain data and statistics cited in the lay media in an accurate, reassuring, and clinically relevant manner. Thus, the goal of this module is to have residents build communication skills that enable them to serve as knowledgeable and thoughtful representatives of reproductive psychiatry to a lay audience.
Each session consists of three parts: 1) reviewing and critiquing a piece from the popular media (such as from newspaper articles or social media); 2) appraising the comparable medical literature; and 3) role-playing a psychiatrist/patient interaction about how to communicate this topic to a lay audience.

The aim of reviewing the medical literature is to compare its findings with the information portrayed in the media. For the purposes of this exercise, the most relevant parts of medical literature are the abstract, the introduction, and the discussion. The aim is not to have an in-depth, "journal-club" analysis of the article (which is an important skill for residents to master elsewhere in their training), but rather to delineate in broad strokes the gaps between the information presented by the media portrayal and by the medical literature. Sessions usually last 50 minutes but can be modified, depending on the number of media items and articles selected. The media conference is tailored for PGY-4 psychiatry residents but can be modified for any resident trainee group. A small group setting with time and space to work within break-out groups is recommended. After review of the media items and the medical literature, the group will divide into small groups of 2-3 residents to role-play the clinical interaction.

Selection of Content
Content can either be selected in advance or selected at the time of the session. The faculty and resident group may pre-select a topic that is of particular interest to the group and distribute the media item and the article one to two weeks prior to the session. Alternatively, if there is a media item of particular interest to one or more of the trainees, they can bring the item to the session and the relevant literature can be appraised in the session in real time by the faculty and trainees, using a laptop and projector.

Session
- **Presentation of media items (10 minutes): Faculty and residents together will review the media item(s)**
- **Review of medical literature (10 minutes): Faculty and residents together will briefly assess the comparable medical literature. *3 choices of articles are provided and facilitators may select any or all of these depending on available time.***
- **Role-play with case example (15 minutes): Small groups of residents will role-play a psychiatrist/patient discussion**
- **Large group discussion**
- **Wrap-up and Q+A (5 minutes)**

It should be noted that the media items are both focused on an actual case. In this context, the goal of presenting these media items is to utilize them as a springboard for discussion rather than to dissect the specifics of the case. However, if there is further interest about the case, a news article providing more specific context and details is included in pre-session reading.

Learning Objectives
1. Demonstrate the ability to analyze reproductive psychiatry issues as portrayed in the lay media
2. Locate and analyze relevant scientific literature as it relates to the issues raised in the media
3. Communicate thoughtfully and accurately with a lay audience (e.g. a patient in a reproductive psychiatry consultation)

Presentation of Media Items
1. NY Times "Bronx woman convicted of poisoning and drowning her children"
   --link: https://www.nytimes.com/2016/04/09/nyregion/bronx-woman-convicted-of-poisoning-and-drowning-her-children.html
2. Youtube "Outrage over sentence for killer mom, postpartum defense"
   --link: https://www.youtube.com/watch?v=SWMMnaZYxxk
   option to read pre-assessment article from the Daily News during this section for more background:
   Emotionally disturbed ex-teacher who poisoned, drowned her two kids convicted of manslaughter - New York Daily News, April 8, 2016
   --link: https://www.nydailynews.com/new-york/ex-teacher-poisoned-drowned-kids-guilty-manslaughter-article-1.2593449

Critique of Media Coverage
1. What is the central claim of these media pieces?
Facilitator elicits the following:
- The accused may be making a plea about mental illness in order to avoid punishment
- Maternal instinct will override psychosis
- Psychosis is associated with people being wild, impulsive and disorganized. There is also the incorrect assumption that any forethought or planning of an action rules out mental illness, which is one of the implied arguments by the gentlemen in the youtube clip.
- It is dangerous for mentally ill women to have children

2. Does the woman described have postpartum psychosis?
Facilitator elicits the following:

- Based on the information presented, we do not have enough information to determine whether she has postpartum psychosis
- We do not know the individual's prior history or whether the following were present: delusions of altruistic homicide, cognitive symptoms such as disorientation and confusion, disorganized behavior, obsessive thoughts
- Much of the information presented is related to postpartum depression and suicidal ideation
- Host argues that given premeditation this could not have been a psychotic process

3. Does the pre-assessment reading provide any key information about the differential?
Facilitator elicits the following:

- An expert clinician testified that the defendant experienced delusions in the context of depression during this incident.
- It also reported that two expert witnesses agreed that the woman on trial suffered from untreated bipolar illness.
- Although we are still missing other key pieces of the history and symptoms listed above, untreated bipolar is a major risk factor and symptomatology of delusions in context of depression is a common presentation of PPP. A prospective cohort on study conducted by Kamperman et al found the depressive subtype to be the most common presentation of PPP.

4. What questions do you imagine a patient who is considering pregnancy might ask after viewing these media pieces?
Facilitator elicits the following:

- Is this going to happen to me?
- How do I keep this from happening to me?
- Can I be a good mother and have mental illness?

5. How might you respond to the concerns elicited above?
Facilitator elicits the following:

- PPP is rare but some risk factors include family history of PPP and/or bipolar illness, individual history of bipolar disorder, prior individual episode of PPP, primiparity
- In terms of prevention, there is strong evidence that prophylactic treatment with lithium is helpful in preventing acute mood episodes, including PPP
- With proper monitoring and adequate treatment, persons with mental illness can be good parents

Appraisal of Scientific Literature

Article 1: Friedman, S.H., Prakash, C., and Nagle-Yang, S. *Postpartum Psychosis: Protecting Mother and Infant*. Current Psychiatry**,** 2019; 18(4): 12-21. Link: https://www.mdedge.com/psychiatry/article/197703/schizophrenia-other-psychotic-disorders/postpartum-psychosis-protecting.

1. What are some expected clinical features of Postpartum psychosis (PPP)?
Facilitator elicits the following:

- Rapid onset of delirium like appearance, likely includes confusion and disorientation
- Psychosis
- Disorganized behavior
- Dysphoric mania
- Mood lability
- Mood incongruent delusions and obsessive thoughts
- Symptoms often wax and wane

2. What are some prodromal symptoms of PPP?
Facilitator elicits the following:
- Insomnia
- Mood fluctuation
- Irritability
- Anxiety* (not in article)

3. What tests/imaging should be included in a workup of PPP?
Facilitator elicits the following:
- CBC
- UA
- CMP
- CMP
- UDS
- TSH, free T4, TPO antibodies
- If there are neuro symptoms or EPS to low dose antipsychotics, consider following workup: CSF, limbic encephalitis and Anti-body screening, serum ammonia, EEG and MRI

4. What diagnoses are on the differential of a woman with PPP?
Facilitator elicits the following:
- Depression
- OCD
- Baby blues
- Medical etiologies:
  -Infection
  -Endocrine, e.g. primary hyperparathyroidism, thyroid disease
  -Substance intoxication/withdrawal
  -Peripartum blood loss and anemia
  -Tumor (primary or metastatic)
  -Autoimmune disease (e.g. anti-NMDAR encephalitis)
  -Inborn errors of metabolism (urea cycle disorder)
  =Head injury
  -Embolism
  -Eclampsia
  -Medication induced, e.g. corticosteroids
  -Electrolyte abnormalities
  -Anoxia (Sheehan's syndrome)
  -Vitamin B12 deficiency

5. What distinguishes PPP from other potential diagnoses?
Facilitator elicits the following
- In contrast to baby blues, PPP will impair functioning and will not resolve within 2 weeks
- In contrast to PPD, PPP will include psychotic symptoms such as delusions, hallucinations.
  --Of note, suicidal thoughts and/or thoughts of harming infant may be present in either PPD or PPP. One study found that up to 41% mother with depression endorsed thoughts of wanting to harm their infants
- In contrast to PPP, persons with OCD experience intrusive thoughts of harm to infant as distressing and ego-dystonic (as a result, clients may be more reluctant to share such thoughts with a provider)

6. What are the major motives of maternal infanticide?
Facilitator elicits the following
- Altruistic- often related to PPD or PPP- mother kills infant "out of love" believing that she is preventing earthly suffering or suicidal mother kills infant to prevent their child from being motherless
- Psychotic/disorganized- often related to PPP- mother kills infant for no comprehensible reason, e.g. in response to command AH or confusion in delirium

- Partner revenge, this is often not related PPP
- Fatal maltreatment, this is often not related PPP
- Unwanted child, this is often not related to PPP

7. What are the major risks for women with PPP?
Facilitator elicits the following:
- Suicide is elevated, some studies have estimated up to 5% of women with PPP commit suicide
- Risk of infanticide is elevated and it has been estimated that up to 4% women with PPP will commit infanticide
- Altruistic motive is most common in these cases
- Careful safety assessment with attention to suicide risk and risk of harm to infant is paramount in assessment of women with PPP

8. What is a mother-baby psychiatric unit (MBU)?
Facilitator elicits the following:
- A mother-baby psychiatric unit, is a model of care where mother and baby are admitted together and dyadic therapy is provided to promote bonding and provide parenting and breastfeeding support if desired
- Model of care developed in the UK
- Has been adopted in several European countries as well as New Zealand and Australia

9. What are important elements of standard of care for PPP?
Facilitator elicits the following:
- Hospitalization
- Pharmacologic treatment with mood stabilizer and/or second-generation antipsychotic

Article 2: Wesseloo R, Kamperman AM, Munk-Olsen T, Pop VJ, Kushner SA, Bergink V. Risk of Postpartum Relapse in Bipolar Disorder and Postpartum Psychosis: A Systematic Review and Meta-Analysis. Am J Psychiatry. 2016 Feb 1;173(2):117-27. Link: **https://www.ncbi.nlm .nih.gov/pubmed/26514657**

1. What is the study design? What are the strengths and limitations of the study?
Facilitator elicits the following:
- Meta-analysis
- Strength: Able to pool larger numbers of patients and look at many variables
- Limitations: heterogeneity in study design with biases in retrospective, birth registry and prospective designs

2. What are the major findings of the study?
Facilitator elicits the following:
- Overall postpartum relapse risk was 37% in women with a history of bipolar disorder and 31% in women with a history of postpartum psychosis
- 17% of women with bipolar disorder experience a severe episode (in the study, this is defined as psychosis, mania, mixed or relapse requiring hospitalization), whereas 29% of women with a history of postpartum psychosis experience a severe episode
- Postpartum relapse rate is 23% for those with bipolar disorder who used prophylactic medication during pregnancy
- Postpartum relapse rate is 66% for those with bipolar disorder who were medication free during pregnancy
- Women with a history of psychosis limited to postpartum period may initiate prophylaxis in the postpartum period
- Lithium has the most data for prophylaxis

Supplemental article: Bergink, V., Bouvy, P. F., Vervoort, J. S., Koorengevel, K. M., Steegers, E. A., & Kushner, S. A. (2012). Prevention of postpartum psychosis and mania in women at high risk. *American Journal of Psychiatry*, *169*(6), 609-615. Link: https://www.ncbi.nlm.nih.gov/ pubmed/27609245

1. What is the study design? What are the pros and cons of the study design?
Facilitator elicits the following:

- Prospective naturalistic cohort
- More representative of the scenarios patients and their providers encounter
- Outcomes may be influenced by patient preferences

2. Describe the eligible participants and treatment intervention
Facilitator elicits the following:

- Women with a history of bipolar disorder or postpartum psychosis
- These risk factors are the strongest predictors for postpartum psychosis
- Women on maintenance lithium advised to continue
- Women clinically stable and medication free were advised to start lithium prophylaxis immediately postpartum
- Individualized treatment discussion based on patient's prior medication response with final decision resting with the patient with some women declining prophylaxis or utilizing other beneficial medications such as antipsychotics
- One-week postpartum support in hospital with nursing care and 1mg lorazepam at bedtime

3. Describe the major results
Facilitator elicits the following:

- Women with a history of postpartum psychosis only (i.e. no history of bipolar disorder outside of the peripartum period) remained medication free throughout pregnancy and had 0% relapse during pregnancy.
- Of all the women with a history of postpartum psychosis, only those who used prophylaxis remained symptom free
- For postpartum psychosis only, there was a relapse rate of 44.4% among those who did not use prophylaxis
- Women with history of bipolar disorder had 24.4% relapse rate during pregnancy and 22% relapse rate during the postpartum period. Relapse during pregnancy was a significant risk factor for relapse postpartum with OR 14.0, 95% CI 2.5 - 80
- For women with bipolar disorder, history of puerperal in comparison to nonpuerperal only episodes were a greater risk factor for relapse (50% vs 27.3%)
- Relapse rate in pregnancy for women with bipolar disorder was 19.4% for women who used prophylaxis versus 40% without prophylaxis
- Women with bipolar disorder who were stable during pregnancy and used prophylaxis post-partum had 7.7% relapse rate postpartum in comparison with a 20% relapse rate for those who declined prophylaxis

Legal issue which may be of interest:
http://thehill.com/opinion/healthcare/372545-making-postpartum-depression-a-mitigating-factor-sentencing-crimes-is

Sample Reproductive Psychiatry Script
"A major goal of peripartum psychiatric care is the development of an effective prophylaxis algorithm that optimally balances the risks and benefits for the mother and fetus"

Patient then asks a series of questions:
1. What is my risk of developing postpartum psychosis with another birth?
Facilitator elicits the following:

- Women with a prior history of postpartum psychosis have a 31% chance of developing postpartum psychosis with a future pregnancy, with a higher likelihood of severe symptoms
- It is not clear at this time if you have a diagnosis of bipolar disorder, although you are at higher risk for this

2. How likely am I to kill my children?
Facilitator elicits the following:

- 4% of women with untreated postpartum psychosis will harm their children
- There are strategies to prevent developing postpartum psychosis that we can work on together
- Early treatment and engaging your family and treating providers in understanding warning signs will help reduce risk if you develop symptoms

3. What can I do to prevent developing postpartum psychosis?
Facilitator elicits the following:

- We can work with you to develop an individualized postpartum prevention plan in collaboration with your family, OB and pediatric teams
- We recommend strategies to assist you in maintaining sleep and a regular circadian rhythm postpartum, including medication and support from others for nighttime feeds
- Prophylactic treatment with lithium in the postpartum period can reduce your risk of developing psychosis
- If you develop symptoms during pregnancy, it would be important to treat those symptoms during pregnancy to minimize your risks both during the pregnancy and of postpartum relapse. If that occurs, we will work with you to develop an individualized treatment plan discussing the risks at each stage of pregnancy and based on the medications that you responded to before

Wrap-up and Q+A
1. For the learner role-playing the reproductive psychiatrist: what was challenging about this interaction?
Sample answers might include: putting complex information into understandable terms; giving the patient information about risks without further increasing her anxiety; giving information that is not necessarily black and white; trying to reassure patient without dismissing information; acknowledging the limitations of our current data

2. For the learner role-playing the patient: what was it like to be on the "patient" side of this discussion? Was there anything in particular that your partner did that helped you feel more comfortable in your decision-making?
Sample answers might include: psychiatrists seemed confident and/or knowledgeable; she seemed to be neutral/ not "pushing medicine on me;" he explained things to me in easy-to-understand language

Additional Resources:
1. Reprotox: https://reprotox.org
2. MGH website: https://womensmentalhealth.org
3. Lact Med: https://toxnet.nlm.nih.gov/newtoxnet/lactmed.htm
4. PubMed: https://www.ncbi.nlm.nih.gov/pubmed