Can brief antenatal psychoeducation prevent postnatal obsessive-compulsive symptoms?

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Background

- Increased vulnerability to OCD in the perinatal period (Russell et al., 2013):
  - Prevalence of >2% compared with ~1% in general female population
  - Peak during the postnatal period (2.43%; relative risk ratio 2.38)
- Often disabling and severe condition (American Psychiatric Association, 2013).
- Symptoms often relate to concerns about infant safety/wellbeing (e.g. harm intrusions).
- Need to develop effective approaches to perinatal OCD.
- Limited research to date.

Metacognition in OCD

- Intrusions are common amongst new parents, as in the general population.
- Individuals with OCD differ in the meaning they ascribe to intrusions (i.e. they appraise them as being significant and important to control).
- Two prospective studies have found that expecting parents' 'obsessive' beliefs, including importance/control of thoughts in general, predicted their level of OCS in the postnatal period (Abramowitz et al., 2006, 2007).
- Thought-fusion beliefs (i.e. thought-moral and thought-action fusion; Shafran et al., 1996; Wells, 2009), have also been implicated in postnatal OCS (Abramowitz et al., 2007).

Prevention

- One randomised-controlled trial (RCT) found that comprehensive psychoeducation focused on modifying 'obsessive beliefs' was associated with reduced postnatal OCS amongst parents at elevated risk of OCD (Timpano et al., 2011).
- Brief corrective information (psychoeducation) about intrusive thoughts has been shown to modify maladaptive metacognitive beliefs associated with OCD (Marino-Carper et al., 2010; Rees et al., 2014; Zucker et al., 2002).
- Suggests that brief psychoeducational information may be effective in preventing the onset of postnatal OCD.

Methodology

- Aim – to establish whether the provision brief psychoeducation intended to correct maladaptive MC beliefs ('metacognitive education'), to expecting parents in pregnancy, has a preventative effect on postnatal OCS.
- Participants – 127 women from AUS/NZ who were 20 to <33 weeks pregnant with their first child recruited via social media.
  - Exclusion criteria: current OCD, substance dependency disorder, borderline personality disorder (BPD), or anti-social personality disorder, and current or past psychotic disorder or bipolar disorder (based on a diagnostic screening interview), current suicidality or safety concerns, current psychotropic medication.

Methodology

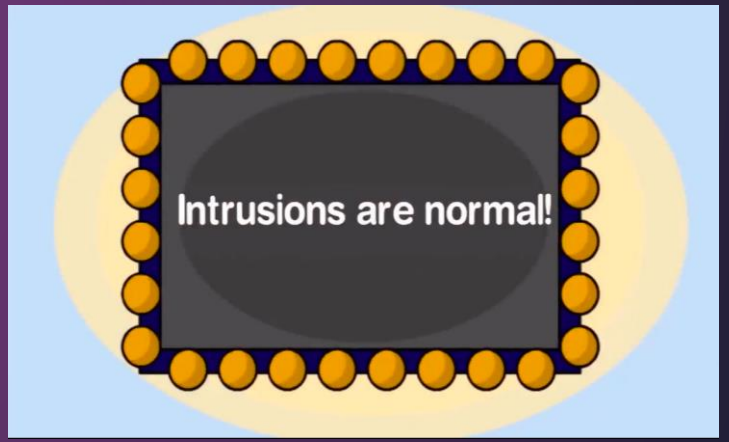
- Assessment points:
  - Prenatal (**Time 1**)
  - 2-4 months postnatal (**Time 2**)
- Measures:
  - **Diagnostic measures (telephone):**
    - *MINI Neuropsychiatric Interview*
    - *Structured Clinical Interview for DSM-IV Personality Disorders* (*SCID*; BPD module only)
  - **Descriptive measures:** *Sociodemographic Questionnaire.*
  - **Online measures:**
    - *Thought Action Fusion Scale (TAF)*
    - *Obsessive-Beliefs Questionnaire – Short Form (OBQ-20)*
    - *Obsessive-Compulsive Inventory – Revised (OCI-R)*
    - *Edinburgh Postnatal Depression Scale (EPDS)*
    - *Generalised Anxiety 7-item Scale (GAD-7).*

Methodology

- Conditions (with random allocation):
  - **Metacognitive (MC) education (*n* = 58, excl. 13 non-completers)** – video.
  - **Treatment-as-usual (TAU; *n* = 69)** – participants in AUS, NZ often receive information on perinatal mental health and receive screening (e.g. for depressive and anxiety symptoms) as part of standard antenatal care.

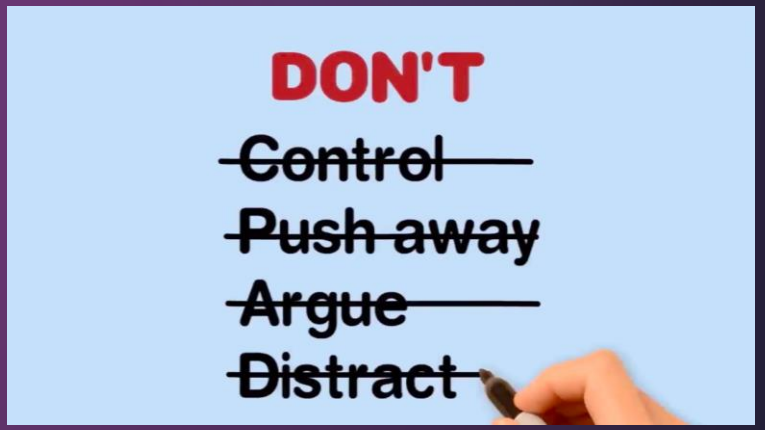
Metacognitive intervention video

- Psychoeducation about the nature of intrusions/normalisation – e.g. prevalence, examples of common types of postnatal intrusions.



Metacognitive intervention video

- How to respond to intrusions using helpful metacognitive appraisals, things you can do to manage intrusions
- When to get help/where to go for additional support.



Methodology

- Hypotheses:
  - MC education will have a preventative effect on postnatal OCS:
    - **H1:** MC education will be associated with lower self-reported OCI-R scores, and lower rates of OCD diagnosis (assessed via the MINI), than TAU at 2-4 months postpartum (i.e., post expected delivery date).
    - **H2:** MC education will have a ***specific*** effect on OCS, after controlling for postnatal depression and generalised anxiety symptoms
- Analyses:
  - Hierarchical multiple regression (OCI-R scale scores)
  - Binominal logistic regression (OCD diagnostic measure - *MINI*)

Results

- No pre-intervention differences between groups (Time 1) in terms of past OCD (MINI), OCS (OCI-R), beliefs (TAF, OBQ-44), or depressive (EPDS) and generalised anxiety symptoms (GAD-7).
- MC education was not significantly associated with postnatal OCD rates assessed at 2-4 months postpartum after baseline OCS:

  Wald $\chi^2(1) = 1.27$, $p = 0.26$.

- MC education was significantly associated with ***higher*** postnatal OCS after controlling for baseline OCI-R scores:

  $F\ (2, 91) = 35.1$, $p < .001$, adj. $R^2 = 0.66$.

  - Intervention group – ($M = 3.33$, $SD = 4.07$).
  - TAU group – ($M = 2.07$, $SD = 2.75$).
  - **Not significant** after controlling for TAF & OBQ-44 (T1), EPDS & GAD-7 (T2).

Discussion

- Contrary to our hypotheses, MC education was not significantly associated with:
  - Rates of postnatal-onset OCD;
  - Postnatal OCS after controlling for antenatal metacognitive beliefs (TAF, OBQ-44).
- Brief psychoeducation may not be sufficient to reduce MC beliefs linked to appraisals of infant-related intrusions and postnatal obsessions & compulsions.
- Limitations of the study include an absence of empirically supported measures that specifically assess infant-related OCS; use of a non-clinical community sample.
- Future research should examine alternative or additional intervention components needed to address unhelpful MC beliefs.

Selected References

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Thank you for your attention!

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