Valuing Perinatal Mental Health

The consequences of not treating perinatal depression and anxiety

A report of the latest cost estimates for Australian births in 2013.

The projected costs for not treating perinatal depression and anxiety in 2013 are estimated at $538M during the perinatal period (that is, from conception to the end of the first year of a child's life).

Detection and early intervention or assistance to help a mother with perinatal depression can bring significant cost savings.

If the prevalence of women affected by perinatal depression was reduced by just 5% (15,500 women) in 2013, total costs in the first two years could be reduced by $147M.

PricewaterhouseCoopers (PwC, 2014)

Background

Based on materials provided to COPE: Centre of Perinatal Excellence by beyondblue, these economic figures have been compiled by PricewaterhouseCoopers (PwC) to provide a cost estimate to demonstrate the potential scale and scope of perinatal depression and anxiety in Australia, and the cost benefits that can be derived from early detection, intervention and treatment.

At a time when the future of the National Perinatal Depression Initiative is being reviewed, it is important that government, policy makers and the community alike, are aware of the financial repercussions of not investing into prevention and early intervention initiatives.

This research directly addresses this issue.
The potential cost of perinatal depression and anxiety

Approach

Since 2009, the Commonwealth, state and territory governments have invested in prevention, detection and early intervention initiatives (for example, routine screening and education). As initiatives such as the National Perinatal Depression initiative (NPDI) have been in place in 2013, this scenario is hypothetical only, and represents the potential cost to society if this support as well as that provided by other individuals and organisations were not available.

Following on from initial cost-estimates conducted for births in 2012, this study sought to update these figures provided by beyondblue to derive the potential impact of perinatal depression and anxiety if the conditions were not treated for those births that took place in 2013.

In calculating these figures no additional analyses from the 2012 report has been completed. Only those variables where updated information was available have been revised and this information has been used to provide a guide to the costs associated with perinatal mental health (depression and anxiety specifically) in 2013/14. As a result these estimates should be interpreted in this context.

Implications

Most obviously, perinatal depression and anxiety can affect mothers and fathers. Estimates predict that up to 10% of women experience depression during pregnancy, while 15.7% of mothers (i.e. 48,604 women) and 3.6% of fathers (i.e. 11,145 men) will experience postnatal depression in Australia this year. Rates of anxiety remain unknown, but are estimated to be even higher.

Additionally, perinatal depression and anxiety produce impacts that are broad reaching and long lasting. It is not just the mother or father experiencing perinatal depression or anxiety that is affected.

Impacts extend to:

- Their offspring; as a baby, child and potentially as an adult
- Other family members including siblings and spouses not experiencing the condition itself.

Table 1 (below) depicts a number of impacts that can be experienced by those affected in some way by perinatal depression and anxiety if it is not addressed and treated.

<table>
<thead>
<tr>
<th>Table 1: Potential Impacts of untreated perinatal depression and/or anxiety</th>
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<td><strong>Impacts</strong></td>
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<td>Other</td>
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<tr>
<td>Health</td>
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<tr>
<td>Health and economic</td>
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**Nature of Impacts**

Impacts include health-related costs, as well as lower productivity and social costs. Not all of them can be quantified, but all need to be acknowledged.

A particular feature of perinatal depression and anxiety is that, if not treated, the impacts are lasting. This can be to the extent that they affect a child far into their adult years.

Figure 1 shows how PwC conceptualised cost incurred by individuals affected over time.

Parents with untreated perinatal depression and anxiety use more health services and are less productive in the work place over a number of years.

**Figure 1:** Cost incurred by individuals affected by perinatal depression and anxiety over time

<table>
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<th>At risk of Perinatal Depression / Anxiety</th>
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<tr>
<td><strong>Mother</strong></td>
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<tr>
<td>Depression/anxiety</td>
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<tr>
<td>Mild to moderate depression</td>
</tr>
<tr>
<td>Major Depression</td>
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<tr>
<td>Anxiety</td>
</tr>
<tr>
<td>Suicide</td>
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<td>Pregnancy denial</td>
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</table>

**Child**
- Low birth weight/premature birth
- Increased likelihood of childhood injury
- Reduced immune system response
- Asthma/respiratory conditions
- Conduct disorder
- Increased likelihood of mental health and neurodevelopment issues
- Lost school days/reduced earnings potential

**Other children**
- Carer role
- Depression/anxiety
- Family breakdown

**Extended family**
- Family breakdown

Their children could experience health impacts during infancy, childhood and reduced earnings potential in adulthood.

Others impacted by untreated perinatal depression or anxiety may face depression themselves.

There are limits to the extent that the impacts of perinatal depression and anxiety can be quantified due to research gaps. As such, this is a conservative estimate because known impacts such as anxiety, marital breakdown and reduced productivity of carers have not been valued.
Summary of the costs areas:

**Impacts to parents**

If affected parents in 2013 are not treated for perinatal depression and anxiety, these conditions are likely to extend beyond the first 12 months following birth. In turn, the associated health costs to mothers could be up to $74M in one year ($108M over 20 years). This cost is driven by hospital and primary service usage, and other medical costs such as pharmaceuticals. When calculating these same costs for fathers in 2013, incurred health costs could be up to $17M in one year ($20M over 20 years).

**Impacts on workplaces**

In addition, women and men experiencing depression and anxiety are likely to miss more days at work compared to their non-depressed counterparts.

The cost of this lost productivity is $158M for mothers in one year if postnatal depression is not addressed ($233M over 20 years) and $68M for fathers ($80M over 20 years).

**Impacts to children**

The child of a parent with untreated perinatal depression and anxiety is significant - with an increased likelihood of low birth weight or preterm birth. The cost of these impacts is $214M.

As they grow, other health costs due to increased likelihood of emergency department presentations, asthma, depression and conduct disorder amount to $6.6M in one year ($54.8M in 20 years).

The cost associated with conduct disorder on its own is $24M, which represents the cost of intervening in early childhood. It does not include the potential costs of undetected or untreated conduct disorder, which can escalate to substance abuse and crime.

The impacts to children can continue into adulthood, where reduced education attainment and long term health impacts are realised in terms of reduced earnings potential. This cost amounts to $7M each year ($68M over 20 years).

**Key conclusions:**

- The impacts to children of parents whose perinatal depression is not treated are substantial.
- The projected costs for not treating perinatal depression and anxiety have increased and are now estimated to be $538M in 2013.
- Untreated perinatal depression and anxiety can also have effects that are long lasting. Affected children can experience health costs at the beginning of their lives through to being more likely to experience depression themselves and adverse impacts to their productivity in adulthood.
- When calculating ongoing impacts on the mother, child and family this cost increases to $710M over a 20-year period.
- Detection and early intervention or assistance to help a mother with perinatal depression can bring significant cost savings.

If the prevalence of women affected by perinatal depression was reduced by just 5% (15,500 women) in 2013, total costs in the first two years could be reduced by $147M.

COPE would like to acknowledge the expertise and generous support of PwC in preparing the economic analyses for this report.

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