Predictors of long term post-traumatic stress in mothers and fathers after a child’s admission to PICU

PICU, Southampton General Hospital
Relevant Literature
Post Traumatic Stress Disorder

DSM IV criteria

- Traumatic event involving threat to life or integrity of self or loved one
  - Avoidance (avoiding reminders)
  - Intrusions (nightmares, thoughts)
  - Hyperarousal (sleep problems, irritability)
<table>
<thead>
<tr>
<th>Study</th>
<th>%</th>
<th>mths</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baluffi et al (2004)</td>
<td>21%</td>
<td>4</td>
<td>161</td>
</tr>
<tr>
<td>Rees et al (2002)</td>
<td>27%</td>
<td>8</td>
<td>33</td>
</tr>
<tr>
<td>Colville et al (2006)</td>
<td>18%</td>
<td>8</td>
<td>34</td>
</tr>
</tbody>
</table>
PTSD: Predictors

- Female gender
- Lower IQ
- Previous Mental Health problems
- Previous Trauma

After PICU
- fear of death; acute stress during admission; emergency admission; subsequent trauma
  - (Balluffi et al, 2004)
- stress during admission; not talking
  - (Colville & Gracey, 2006)
- perceived illness severity; LOS; fear of death; child stress
  - (Rees et al, 2002)
PTSD: Gender Differences

Generally
Women > Men

After PICU
- mothers > fathers stress during admission, n=510 children
  (Riddle et al, 1989)

- mothers > fathers @ 8 months, n=17 couples
  (Colville et al, 2003)
Fathers’ experiences?

Paediatric Literature:
- Data from fathers usually absent
- If present, rarely analysed separately from mothers’ data
  \[(Phares\ et\ al\ 2005)\]

- PICU:
- More distress reported during admission by 15 PICU fathers than 10 Gen Ward fathers
  \[(Board,\ 2004)\]
First COMPASS Study
Compass questionnaire

- Coping (24 items)
- Needs (15 items)
- Stresses (19 items)

Ross et al, Southampton PICU
n=87 mother-father pairs @48hrs

- Mothers higher stress related to separation from child and child’s appearance

- Strikingly similar patterns of response from mothers and fathers

(Boyles et al, WCPCC 2007, Geneva)
COMPASS Coping subscale
Follow up COMPASS Study
COMPASS Follow up Study

Follow up (11-29 mths)

- Impact of Events Scale (PTSD)
- Needs met (adapted from original scale)
Research Questions

- Do particular stresses or coping strategies during admission, predict long term psychological stress?
- Does the failure to meet certain needs give rise to greater distress in the long run?
- Are there systematic differences between mothers and fathers at follow up?
Recruitment

87 original couples
8 children died
8 untraceable
1 GP refusal

70 couples

- 46/70 at least one parent replied (67%)
- 34 fathers; 38 mothers; 26 couples
Sample Characteristics

- Child age 0-14y (median 5 mths)
- Child sex 63% male
- LOS 1-34 days (median 3 days)
- 59% emergency
- 41% cardiac
- 24% respiratory

- 69% parents aged 31-40y
Descriptive Data
Views on how well needs were met

- 21/24 needs met rated over 85%
- Bottom 3 were talking to other parents; having same nurse; help with financial concerns
Needs met: differences between mothers and fathers

- help with financial concerns

<table>
<thead>
<tr>
<th>need not met at all</th>
<th>median mother score</th>
<th>median father score</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>80%</td>
<td>52%</td>
</tr>
</tbody>
</table>

p = 0.016*
Needs met: differences between mothers and fathers

- talk to other parents

<table>
<thead>
<tr>
<th>Need not met at all</th>
<th>Median mother score</th>
<th>Median father score</th>
<th>Need completely met</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>70%</td>
<td>86%</td>
<td>100%</td>
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\[ p = 0.026^* \]
Proportion over PTSD cut off
(25/26 couples)
Couples’ PTSD scores

The diagram shows a scatter plot with PTSD scores on the y-axis and a horizontal line indicating a certain threshold. The x-axis is labeled 'mother' and 'father', suggesting the scores are for both partners. The scores range from 0 to 70, with the majority of points falling below the threshold line.
Associations with PTSD
Associations with PTSD

- Emergency admission? NS
- LOS? NS
- Time since discharge? NS
- Age of child? NS
Associations between Stress at admission and PTSD status

Mothers:
- Talking with doctors (p=0.002**)

Fathers:
- Lack of understanding (p=0.038*)
- Distance from home (p=0.045*)
Associations between Coping at admission and PTSD status

NS
Associations between Needs met and PTSD status

Mothers:
- NS

Fathers:
- Need for support with financial matters (p=0.02*)
Conclusions
1) Do particular stresses or coping strategies during admission predict long term psychological stress?

- No association with preferred coping strategies at 48 hours
- Some stresses associated with PTSD status at follow up
2) Does the failure to meet certain needs give rise to greater distress in the long run?

- In the main, needs overwhelmingly met
- For some fathers lack of help with finances associated with poorer outcome
3) Are there systematic differences between mothers and fathers at follow up?

- Some differences in a small number of stresses and perceptions re needs met

- No differences in PTSD rates – 1 in 5 parents report persistent symptoms