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)

PTSD in PICU Parents

<table>
<thead>
<tr>
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<th>% mths</th>
<th>n</th>
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<tbody>
<tr>
<td>Rees et al (2002)</td>
<td>27</td>
<td>33</td>
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<td>Colville et al (2006)</td>
<td>18</td>
<td>34</td>
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PTSD: Predictors

Generally (Ozer et al, 2003)
- Female gender
- Lower IQ
- Previous Mental Health problems
- Previous Trauma

After PICU
- Fear of death; acute stress during admission; emergency admission; subsequent trauma (Baluffi 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
  - need not met at all: 0%
  - need completely met: 100%
  - median father score: 80%
  - median mother score: 52%
  - p-value: 0.016*

- talk to other parents
  - need not met at all: 0%
  - need completely met: 100%
  - median father score: 86%
  - median mother score: 70%
  - p-value: 0.026*

Proportion over PTSD cut off (25/26 couples)

Couples' PTSD scores

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