Title:

Treatment of parental Post Traumatic Stress Disorder after PICU admission - who, what, where, when?

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It is now rare for a child to die during admission to a pediatric intensive care unit (PICU). (1) While survival is clearly the desired outcome, it is becoming increasingly evident that there are far-reaching psychological after-effects on the child and their family following PICU discharge, including post-traumatic stress disorder (PTSD), anxiety and depression. A recent review reported PTSD prevalence rates of 10%-21% in parents and 5%-28% in children following acute critical illness. (2) Furthermore, up to 84% of parents may suffer sub-clinical symptoms of PTSD which may persist up to 12 months following discharge. (2)

Poor parental mental wellbeing has further implications, including inability to work, loss of earnings, dependence on benefits and chronic ill-health. There are also well-described links between child and parental mental health, suggesting that successful interventions aimed at parental symptoms are likely to have additional beneficial effects on child psychological symptoms. (3) Early effective intervention could minimize development of psychological sequelae in PICU survivors and their parents, but the nature of the appropriate intervention and who should be targeted is not clear.

The study by Dr Samuel and colleagues published in this month’s PCCM (4) aimed to establish whether use of a screening instrument to define those parents at highest risk for PTSD, and providing parents with an appointment at a specific follow-up clinic, was associated with lower rates of psychological symptoms in these parents in the longer term.
Families containing a parent scoring ‘at risk’ were randomized to receive either an appointment in a follow-up clinic at 2 months post-discharge or treatment as usual (no follow-up). The decision to offer the intervention was informed by previous research on parental preferences, suggesting that the majority would appreciate such an intervention. It was anticipated that attendance rates at the clinic would be improved by targeting those parents at highest risk.

The follow-up clinic was led by a clinical psychologist along with a PICU consultant and nurse. In this clinic, parents were given the opportunity to ask questions about their child’s PICU admission and to raise any concerns about their child’s current health. Clinic staff advised families regarding accessing further support services if specific psychological issues were identified. All parents, including controls and those who had screened at low risk of PTSD, were sent questionnaires which measured psychological symptoms six months after discharge.

This study included 209 parents, but only 37% of these were screened as at high-risk for PTSD. 38 parents were randomized to the intervention, but only 14 opted to attend the clinic. No significant improvement was found in PTSD symptoms in the intervention group, although there was evidence of a small beneficial effect on both anxiety and depression scores.

We are aware of only two other published studies reporting on follow-up clinics designed to recognize and attend to parental and/or child
psychological problems. In the only other study which used a randomized controlled design, there was no impact from the clinic on parental distress overall, but a sub-group of parents who had been more acutely distressed at the time of their child’s admission were significantly more likely both to attend the clinic, and to benefit from it in terms of self-report measures of post-traumatic stress and depression. (5) In the other study, all parents choosing to attend similarly reported psychological difficulties in parents and children. (6) However clinic attendance rates in both studies were low (25-33%).

There are few published studies of interventions to reduce the risk of psychological sequelae after PICU admission. A recently published Cochrane Review of the effects of writing diaries as a means of reducing the risk of future PTSD in patients and their families, found no clear evidence to support their effectiveness in improving psychological recovery after critical illness. (7) The currently available data, along with UK national guidance on PTSD in adults (8), suggests that interventions should be directed only at those most likely to benefit. Screening parents to establish who are most at risk of poorer outcomes might be beneficial, both in terms of maximizing the effectiveness of any intervention, and making the best use of available resources.

Samuel et al’s study (4) has highlighted several important factors:
1: A screening tool which accurately predicts which parents are at highest risk of significant psychological sequelae including PTSD, anxiety and depression after their child’s PICU discharge, might be useful to identify which parents are most in need of support.
2: In line with previous reports, very few parents choose to attend such a clinic.

3: The intervention did not appear to benefit those parents who attended the follow-up clinic.

This study may have been underpowered, but it is also possible that parents at high risk for PTSD require more intensive and specific interventions than the screening meetings provided in this study for their symptoms to abate. Alternatively, given that over 80% of parents of children with critical illness will develop PTSD symptoms, a universal (i.e. given to all parents) psycho-educational intervention addressing possible psychological sequelae, together with management advice, followed by telephone support may achieve better participation rates and offer more benefit to more families. (9)

There is increasing evidence that a significant number of parents and family members will experience often disabling psychological sequelae after their child’s discharge from PICU. However, there is no clear evidence that interventions to reduce these sequelae is either effective or efficiently delivered to those who require it.

It therefore remains to be determined what is an effective intervention; to whom it should be delivered; and how it should be implemented. These are not easy questions to answer, as affected individuals are difficult to access,
fail to attend clinics and avoid stress-provoking stimuli such as health care institutions and health professionals.

Psycholgical sequelae in children and their parents after PICU admission is an important problem. We need further studies of how to effectively recognize and manage these sequelae. While increasing survival of critically ill children is a major achievement, survival is not enough!
References


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