



Topic Expert Group: Follow-up and continuing care

Parent mental health

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Target group

Infants born very preterm or those infants with risk factors (see preamble of TEG Follow-up & continuing care), parents and their families

User group

Healthcare professionals, neonatal units, hospitals, follow-up teams, and health services

Statement of standard

Targeted screening of parental mental health is undertaken six months after discharge and at two years, during regular follow-up visits for the child.

Rationale

The experience of very preterm birth is stressful for parents. Mothers of high-risk infants (1–3) often suffer role loss (4) and are at increased risk for psychological and parenting stress. (1,5–7) During and after hospitalisation, parents may show symptoms of depression (8), posttraumatic stress disorder (PTSD) (3,6,9–12), or a combination of both. (13–15) There is a lack of information on fathers' distress. (16) The impact of preterm birth on parents is most evident in early childhood (17), particularly during the first six months. (4)

Parental distress may be associated with their infant's illness severity during the neonatal period (1,18), and lack of maternal role fulfillment. (4) Rehospitalisation (4) and concerns about the child's development (19) may be a further source of distress. Parental distress appears to be lessened under conditions of high social support (18,20), a higher level of education/SES, and in the presence of effective coping strategies and a positive developmental outcome for the child. (2) Low social support in combination with developmental difficulties in the child are particular risk factors. (18) Parent mental health is related to infant development and health, mediating child outcome (1,21), and parent mental health indirectly affects child development via parent-child interaction. (19) Post-NICU developmental interventions such as maternal infant transaction programme (MITP) (22,23) and infant behavioural assessment and intervention programme (IBA-IP) (24,25) seem to improve child cognitive development through sensitive parenting and improved parent-child interactions. (26) Post-NICU interventions that pay attention to parent mental health (22,27,28) seem effective in improving parent mental health.

Benefits

Short-term benefits

N/A

Long-term benefits

- Prepares parents for their potential emotional reactions after birth (consensus)



- Early identification and prompt treatment of parent mental health problems (11)
- Improved mental health support for at-risk families (see TEG Follow-up & continuing care) (consensus)
- Improved parenting confidence (22,23)
- Facilitates parents capacity to support their child's development (9,22,23)
- Optimised neurodevelopmental outcomes (24,25,27,28)

Components of the standard

Component	Grading of evidence	Indicator of meeting the standard
For parents and family		
1. Parents are informed by healthcare professionals about potential emotional reactions to very preterm birth and the importance of assessment during regular follow-up visits in the first six months after discharge. (1–7,10,11,29)	A (High quality) B (High quality)	Clinical records, patient information sheet
2. Parents are supported by early intervention programmes if they are at risk for mental health problems. (27,28) (see TEG Follow-up & continuing care)	A (Moderate quality)	Guideline, parent feedback
For healthcare professionals		
3. A guideline on follow-up including parental mental health assessment is adhered to by all healthcare professionals.	B (High quality)	Guideline
4. Before each regular follow-up visit for the child at six months and at two years after discharge parents are screened for mental health problems, using locally available standardised screening tools such as Edinburgh Postnatal Depression Scale (EPDS), Hospital Anxiety and Depression Scale (HADS), or Distress Thermometer for Parents (DT-P). (30)	A (Moderate quality)	Guideline
5. Training on recognition of the clinical signs that are associated with mental health difficulties is attended by all responsible healthcare professionals.	B (High quality)	Training records



6. Parents with identified mental health problems after discharge are referred for locally available specialised mental health support.	B (High quality)	Clinical records
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For neonatal unit, hospital, and follow-up team

7. A guideline on follow-up including parental mental health assessment is available and regularly updated.	B (High quality)	Guideline
8. Training on recognition of the clinical signs that are associated with mental health difficulties is ensured.	B (High quality)	Training documentation
9. A follow-up team (nurse or pediatrician) is available and trained in addressing mental health issues in parents.	B (High quality)	Training documentation

For health service

10. A national guideline on follow-up including parental mental health assessment is available and regularly updated.	B (High quality)	Guideline
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Where to go – further development of care

Further development	Grading of evidence
For parents and family N/A	
For healthcare professionals	
<ul style="list-style-type: none"> • Create awareness about the father’s mental health. • Improve existing support programmes with extra modules for parent mental health specifically in at-risk/socioeconomically deprived populations. (25) 	<ul style="list-style-type: none"> B (High quality) A (Moderate quality) B (Moderate quality)
For neonatal unit, hospital, and follow-up team	
<ul style="list-style-type: none"> • Establish a continuous chain of psychological support before and after discharge. (17) • Facilitate home visits of targeted families, home visits after discharge for families at high medical and social risk. (22,27,28) 	<ul style="list-style-type: none"> A (Moderate quality) A (High quality)
For health service	
<ul style="list-style-type: none"> • Provide standardised information about parent mental health issues after very preterm birth (written, apps, E-health psychoeducational modules, instruction videos) in all European countries’ languages. (9) • Generate a greater understanding of the mental health needs of the father. (7,31) 	<ul style="list-style-type: none"> A (Moderate quality) A (High quality)



- Provide access to information about parent mental health in a child record. B (High quality)

Getting started

Initial steps

For parents and family

- Parents are informed by healthcare professionals about potential emotional reactions to very preterm birth.
- Parents are asked by their paediatrician or family doctor at each follow-up visit after discharge how they are feeling.

For healthcare professionals

- Attend training on recognition of the clinical signs that are associated with mental health difficulties.
- Include inquiries about parent mental health and parental support during regular follow-up visits with doctors or nurses.
- Record whether parent mental health difficulties are suspected or detected and need to be monitored or treated.
- Inform the parents' family doctor if mental health screen positive.

For neonatal unit, hospital, and follow-up team

- Make a telephone call in the first weeks after discharge to check parental wellbeing, in the absence of a physical follow-up appointment.
- Develop and implement a unit guideline on follow-up including parental mental health.
- Develop information material about potential emotional reactions to very preterm birth.
- Organise information sharing about the family with follow-up team.
- Support healthcare professionals to participate in training on recognition of the clinical signs that are associated with mental health difficulties.
- Exchange/share information with agreement from parents.

For health service

- Develop and implement a national guideline on follow-up including parental mental health.

Source

1. Singer LT, Salvator A, Guo S, Collin M, Lilien L, Baley J. Maternal psychological distress and parenting stress after the birth of a very low-birth-weight infant. *JAMA*. 1999 Mar 3;281(9):799–805.
2. Saigal S, Pinelli J, Streiner DL, Boyle M, Stoskopf B. Impact of extreme prematurity on family functioning and maternal health 20 years later. *Pediatrics*. 2010 Jul;126(1):e81–88.
3. Pierrehumbert B, Nicole A, Muller-Nix C, Forcada-Guex M, Ansermet F. Parental post-traumatic reactions after premature birth: implications for sleeping and eating problems in the infant. *Arch Dis Child Fetal Neonatal Ed*. 2003 Sep;88(5):F400–4.
4. Miles MS, Holditch-Davis D, Schwartz TA, Scher M. Depressive symptoms in mothers of prematurely born infants. *J Dev Behav Pediatr JDBP*. 2007 Feb;28(1):36–44.



5. Meijssen D, Wolf M-J, Koldewijn K, Baar A van, Kok J. Maternal psychological distress in the first two years after very preterm birth and early intervention. *Early Child Dev Care*. 2011 Jan 1;181(1):1–11.
6. Ahlund S, Clarke P, Hill J, Thalange NKS. Post-traumatic stress symptoms in mothers of very low birth weight infants 2-3 years post-partum. *Arch Womens Ment Health*. 2009 Aug;12(4):261–4.
7. Ionio C, Colombo C, Brazzoduro V, Mascheroni E, Confalonieri E, Castoldi F, et al. Mothers and fathers in NICU: The impact of preterm birth on parental distress. *Eur J Psychol*. 2016 Nov 18;12(4):604–21.
8. Vigod SN, Villegas L, Dennis C-L, Ross LE. Prevalence and risk factors for postpartum depression among women with preterm and low-birth-weight infants: a systematic review. *BJOG Int J Obstet Gynaecol*. 2010 Apr;117(5):540–50.
9. Melnyk BM, Crean HF, Feinstein NF, Fairbanks E. Maternal anxiety and depression after a premature infant's discharge from the neonatal intensive care unit: explanatory effects of the creating opportunities for parent empowerment program. *Nurs Res*. 2008 Dec;57(6):383–94.
10. Elklit A, Hartvig T, Christiansen M. Psychological Sequelae in Parents of Extreme Low and Very Low Birth Weight Infants. *J Clin Psychol Med Settings*. 2007 Sep 1;14(3):238–47.
11. Jotzo M, Poets CF. Helping parents cope with the trauma of premature birth: an evaluation of a trauma-preventive psychological intervention. *Pediatrics*. 2005 Apr;115(4):915–9.
12. Suttora C, Spinelli M, Monzani D. From prematurity to parenting stress: The mediating role of perinatal post-traumatic stress disorder. *Eur J Dev Psychol*. 2014 Jul 4;11(4):478–93.
13. Kersting A, Dorsch M, Wesselmann U, Lüdorff K, Witthaut J, Ohrmann P, et al. Maternal posttraumatic stress response after the birth of a very low-birth-weight infant. *J Psychosom Res*. 2004 Nov;57(5):473–6.
14. Petit A-C, Eutrope J, Thierry A, Bednarek N, Aupetit L, Saad S, et al. Mother's Emotional and Posttraumatic Reactions after a Preterm Birth: The Mother-Infant Interaction Is at Stake 12 Months after Birth. *PLoS One*. 2016;11(3):e0151091.
15. Garfield L, Holditch-Davis D, Carter CS, McFarlin BL, Schwertz D, Seng JS, et al. Risk factors for postpartum depressive symptoms in low-income women with very low-birth-weight infants. *Adv Neonatal Care Off J Natl Assoc Neonatal Nurses*. 2015 Feb;15(1):E3-8.
16. Wong O, Nguyen T, Thomas N, Thomson-Salo F, Handrinis D, Judd F. Perinatal mental health: Fathers - the (mostly) forgotten parent. *Asia-Pac Psychiatry Off J Pac Rim Coll Psychiatr*. 2016 Dec;8(4):247–55.
17. Treyvaud K. Parent and family outcomes following very preterm or very low birth weight birth: a review. *Semin Fetal Neonatal Med*. 2014 Apr;19(2):131–5.
18. Singer LT, Fulton S, Kirchner HL, Eisengart S, Lewis B, Short E, et al. Longitudinal predictors of maternal stress and coping after very low-birth-weight birth. *Arch Pediatr Adolesc Med*. 2010 Jun;164(6):518–24.
19. Korja R, Maunu J, Kirjavainen J, Savonlahti E, Haataja L, Lapinleimu H, et al. Mother-infant interaction is influenced by the amount of holding in preterm infants. *Early Hum Dev*. 2008 Apr;84(4):257–67.
20. Pohlmann J, Schwichtenberg AJM, Bolt D, Dilworth-Bart J. Predictors of depressive symptom trajectories in mothers of preterm or low birth weight infants. *J Fam Psychol JFP J Div Fam Psychol Am Psychol Assoc Div 43*. 2009 Oct;23(5):690–704.



21. Feldman R, Granat A, Pariente C, Kanety H, Kuint J, Gilboa-Schechtman E. Maternal depression and anxiety across the postpartum year and infant social engagement, fear regulation, and stress reactivity. *J Am Acad Child Adolesc Psychiatry*. 2009 Sep;48(9):919–27.
22. Kaaresen PI, Rønning JA, Ulvund SE, Dahl LB. A randomized, controlled trial of the effectiveness of an early-intervention program in reducing parenting stress after preterm birth. *Pediatrics*. 2006 Jul;118(1):e9-19.
23. Kaaresen PI, Rønning JA, Tunby J, Nordhov SM, Ulvund SE, Dahl LB. A randomized controlled trial of an early intervention program in low birth weight children: outcome at 2 years. *Early Hum Dev*. 2008 Mar;84(3):201–9.
24. Koldewijn K, van Wassenaer A, Wolf M-J, Meijssen D, Houtzager B, Beelen A, et al. A neurobehavioral intervention and assessment program in very low birth weight infants: outcome at 24 months. *J Pediatr*. 2010 Mar;156(3):359–65.
25. Koldewijn K, Wolf M-J, van Wassenaer A, Beelen A, de Groot IJM, Hedlund R. The Infant Behavioral Assessment and Intervention Program to support preterm infants after hospital discharge: a pilot study. *Dev Med Child Neurol*. 2005 Feb;47(2):105–12.
26. van Wassenaer-Leemhuis AG, Jeukens-Visser M, van Hus JWP, Meijssen D, Wolf M-J, Kok JH, et al. Rethinking preventive post-discharge intervention programmes for very preterm infants and their parents. *Dev Med Child Neurol*. 2016 Mar;58 Suppl 4:67–73.
27. Nordhov SM, Rønning JA, Ulvund SE, Dahl LB, Kaaresen PI. Early intervention improves behavioral outcomes for preterm infants: randomized controlled trial. *Pediatrics*. 2012 Jan;129(1):e9–16.
28. Spittle AJ, Anderson PJ, Lee KJ, Ferretti C, Eeles A, Orton J, et al. Preventive care at home for very preterm infants improves infant and caregiver outcomes at 2 years. *Pediatrics*. 2010 Jul;126(1):e171-178.
29. Holditch-Davis D, Santos H, Levy J, White-Traut R, O’Shea TM, Geraldo V, et al. Patterns of psychological distress in mothers of preterm infants. *Infant Behav Dev*. 2015 Nov;41:154–63.
30. van Oers HA, Schepers SA, Grootenhuis MA, Haverman L. Dutch normative data and psychometric properties for the Distress Thermometer for Parents. *Qual Life Res Int J Qual Life Asp Treat Care Rehabil*. 2017;26(1):177–82.
31. Ramchandani P, Psychogiou L. Paternal psychiatric disorders and children’s psychosocial development. *Lancet Lond Engl*. 2009 Aug 22;374(9690):646–53.

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Lifecycle

5 years/next revision: 2023

Recommended citations

EFCNI, Houtzager BA, van Wassenaer-Leemhuis A et al., European Standards of Care for Newborn Health: Parental mental health. 2018.