

Article

Mental health in primary care for adolescent parents

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ABSTRACT

Mental health care is important for everyone, especially teenagers. However, seeking mental health services may be challenging for teenagers, particularly when they are also parents. Offering mental health care in a safe, attractive and easily accessible manner, such as primary care, increases the chances that teenage parents will receive help. Comprehensive care models need to be established to address the many needs that at-risk young mothers and their children face. There are a number of programmes available to teenage mothers that either address healthcare and psychosocial needs or focus primarily on improvements in parenting skills; yet an integrated model that delivers medical, psychiatric and psychosocial care and facilitates positive parenting skills seems to be missing. Through a university–community partnership we have recently developed a model curriculum – the Mom Power (MP) group programme – at the University of Michigan which

aims to close this gap in service delivery. We elaborate on core elements and key features of this 10-week group intervention programme for high-risk teenage mothers and their children, and present preliminary outcomes data. Analyses on the first 24 MP group graduates suggest that despite ongoing life trauma during the intervention period, teenage mothers show improvements in depression and post-traumatic stress disorder symptoms post intervention, and also self-rate as less guilty and shameful regarding their parenting skills after programme completion. Although preliminary, due to design and statistical limitations, these results show promise regarding feasibility and effectiveness of this integrated approach for teenage mothers with young children delivered through primary care.

Keywords: adolescent mental health, intervention, primary care, teenage mothers

Mental health in adolescents

Most mental disorders begin during adolescence and there is evidence that they are persistent into adulthood.^{1,2} However, quite frequently mental illness is undetected until later in life, causing complications for the individual, family and society as a whole. Mental illness during adolescence can result in functional impairment, exposure to stigmas and discrimination, an increased risk for premature death, and is associated with an increase in healthcare costs.² Adolescents with mental illness are at heightened risk for unplanned and repeat pregnancies which may further interfere with normative development as it often disrupts schooling, mating, access to support systems and personal psychological development.³ This risk is potentiated as many teenagers report that they did not have access to mental health care or were not aware of available services.⁴ In addition, at-risk teenagers report being more dissatisfied with the mental health care they receive compared with older counterparts.⁴ Successful delivery of mental health services to teenagers is imperative. Yet, it often falls short. Mental health care for this vulnerable group, particularly those who parent, must be widely advertised, easily accessible and contain comprehensive services delivered in familiar settings such as primary care.

Barriers for adolescent mothers with mental healthcare needs

There are many identified barriers, independent from childbearing, that impede access to mental health services for adolescents; however, being a teenage parent may heighten barriers even further. Adolescents identify lack of confidentiality as a major barrier for seeking health care. They are more willing to seek care from and communicate with physicians who assure confidentiality, and in contrast, may forgo health care to prevent their parents from discovering their help-seeking.⁵ Furthermore, the 'standard-practice' expectation of actual appointments versus a walk-in format may be a barrier, as teenagers appear to be more amiable to visits that are flexible and not rigidly formatted, including caregivers removing expectations of completing an intake in one visit and allowing the teenager to tell his or her story instead.⁶ Practitioners face barriers such as limited time for office visits; lack of training in adolescent issues; difficulties in keeping billing and medical records confidential; and private, public and political debates about confidential health care for adolescents.⁷ Beyond these barriers, problems related to

financing continue to limit many adolescents' access to mental health services in the USA. All of these issues prevent numerous teenagers from seeking care for their mental health problems during this crucial time in their lives. This is especially problematic for teenagers who are also challenged with parenting young children and are faced with the additional stressors that being a young parent entail.

Adolescent childbearing is more likely to occur among girls and young women with lower levels of income and education.⁸ Hence, these adolescent mothers often lack socio-economic resources and support. Additionally, adolescent mothers are dually challenged in such as they are asked to accomplish the developmental tasks of adolescence crucial for their own well-being, while at the same time navigating the challenges of parenting.⁹ Adolescent mothers are twice as likely as adult mothers to experience depression, which in turn places them at increased risk to engage in unsupportive and even abusive relationships, and enhances the likelihood that their children are exposed to abuse or neglect.¹⁰ Subsequently, children of adolescent mothers are more likely to present later on with problems in intellectual and psychosocial functioning.¹⁰ Given these risks, it is imperative to implement prevention and early intervention programmes supporting young mothers, and if possible the young family as a unit, during their pregnancy and their first years as new parents.

Getting teenage mothers involved with parenting programmes is challenging, especially as other competing needs such as access to housing, transportation, work or school schedule and childcare needs may be in the forefront.³ The stigma of seeking services may be another barrier that inhibits young mothers from seeking services for parenting or mental health care. Teenagers name stigmatisation such as equating mental illness to weakness and fears of how peers and family members would perceive them as obstacles to seek mental health services.¹¹ Providing mental health services in addition to parenting support in a primary care setting may reduce the stigma of seeking access to psychological and psychiatric care, thus allowing more teenage parents to seek the treatment they need.

General models of mental health programmes for adolescent parents

In 1966, the Basic Behavioral Science Task Force of the National Advisory Health Council concluded

that 'social support protects people from negative mental health consequences of stressful life events' and that offering intensive family support for teenage mothers produces positive results '10 years after intervention'.¹² The Teen Tot programme is a comprehensive model that has been developed to provide 'one-stop shopping' for high-risk teenage mothers providing health care, family planning, counselling, encouragement for continued education, assistance with obtaining services and social support.⁵ The Teen Tot model is a curriculum that reaches out to new mothers addressing many of their needs during the postpartum period. Mothers are provided with prenatal care, education, health care, counselling, psychosocial assessments, nutritional assessments and support to enrol back into school.⁵ The programme, implemented and evaluated at several sites over past decade, yielded promising outcomes including increased compliance with perinatal visits, reduced repeat pregnancies, increased return to school, stronger growth percentiles for the babies and increased contraceptive use.⁵ However, the Teen Tot model programmes did not specifically address the mental healthcare needs of the participants, nor did it specifically address parenting difficulties. Thus, while the Teen Tot curriculum may serve as model programme for obstetric and medical healthcare delivery to pregnant and postpartum teenagers, it neglects the specific needs of young mothers with serious mental illness and prior or current trauma exposure. The Teen Tot model, while providing suitable groundwork for a comprehensive curriculum, lacks specific attention to infant and maternal mental health needs.⁵

By contrast, the Steps Towards Effective Enjoyable Parenting (STEEP) model, a year-long intervention for low-income teenage mothers and their infants, primarily focuses on the enhancement of parenting skills and improvement of attachment bonds between mothers and their infants. This programme is designed to enhance sensitive caregiving interactions in the teenage mothers with particular focus on teaching them to 'read their infants' cues' appropriately and respond contingently and sensitively.¹³ Some other aims of this programme include nurturing healthy and positive, yet realistic, ideas about pregnancy, childbirth, child development, child behaviours and the parent-child relationship; helping mothers to create a safe and predictable home setting for their child's development and identifying strengths in themselves as mothers, as well as through support systems and community resources.¹³ STEEP works to meet these goals by focusing on relationship building, not only between mothers and their children, but also between mothers and their facilitators and as peer support among the young mothers in the programme. Integrating this type of

relationship building is based on previous research showing that an increase in social support is the one of the strongest predictors of positive change for the parent-child relationship.¹³ Despite the comprehensive support for mothers and the mother-child relationship, this programme does not include a medical or mental health component nor is it integrated within another healthcare setting such as a primary care.

High-school-based parenting programmes represent an additional approach to supporting teenage parents. These types of programmes have demonstrated the potential to enhance positive outcomes for young mothers and their children, with prior studies indicating more positive mother-child interactions, lower rates of subsequent births, and improved child health and development.¹³ However, while certain advantages exist for housing programmes within the educational context, school-based programmes often lack the access to services available at a healthcare clinic.

In summary, while there are several existing programmes in support of teenage mothers and their infants, each of the currently established programmes focuses on a particular aspect of the overall challenge and the delivery is not integrated with routine medical care, thus limiting its comprehensiveness and access. Currently available programmes focus either on the physical health needs of the perinatal teenager and her infant or on enhancing her parenting skills and improving the maternal-child interaction, but do not deliver integrated obstetric peripartum health care and multimodal mental health service. We believe that pairing mental health and parenting services for at-risk teenage mothers and their children with health services within a primary care setting would be an optimal entry point for comprehensive quality care. Such a comprehensive array of services would include primary health and obstetrical care, mental health care, counselling and psychotherapy including parenting counselling, couples or group intervention programmes, and referrals to complimentary services and social support programmes.

Addressing the needs and gaps: a comprehensive model of care integrating physical and mental health needs to teenage parents and their children

More recently, we have developed and implemented an integrated medical and mental health inter-

vention programme that also includes a strong parenting support component that is delivered at a community primary care site, the Corner Health Center (CHC) in Ypsilanti, Michigan, USA. The CHC is an integrated primary care clinic that offers a broad range of services including medical/obstetric care, mental health care, health education and support services to low-income young people, aged 12–21, and their children. It is Michigan's first, largest and most comprehensive teenage health centre. A major aspect of clinical delivery is medical and mental health care during pregnancy and postpartum for the mothers and her child(ren). Two thirds of the young women served during the postpartum period are either Medicaid or uninsured. All the children during their first year of life are insured by Medicaid. A majority of the patients at the CHC are childhood trauma survivors. Additionally, many suffer mental health problems including depression and post-traumatic stress disorder (PTSD), both of which negatively affect the mothers' abilities to parent and care for their children. A commonly observed consequence of these early traumas is a disturbance in the attachment bond between the mother and her child with subsequently heightened risk for child neglect, abuse or court-ordered termination of parental rights. In general, parental psychopathology, even in less severe cases than reportable neglect or abuse, interferes with effective, stimulating parenting. This leads to relational poverty, which in turn, may exacerbate or contribute to developmental delays in the affected children. Children's cognitive or socio-emotional delays in many cases go unrecognised and untreated until school age, at which time children tend to fall behind academically and disrupt the classroom behaviourally.

The Corner Clinic Teen Parent Programme serves teenage parents, predominantly teenage mothers, medically, socially and psychologically, who come to primary care for perinatal health visits during pregnancy and after the birth of their baby. Using standard screening tools and clinical interviews tapping into problems and psychosocial risk, we aim for the early detection of teenage mothers' mental illness with the goal of initiating early multimodal intervention. It seems crucial to reconstitute mental well-being in the teenage mother and to decrease the psychosocial risk, while at the same time educating about safe and sensitive parenting. All these measures, in turn, reduce the likelihood of dysfunctional parenting and promote that children are raised in safe, nurturing and stimulating environments, leading to securely attached, healthy and adapted children. To achieve this goal, we provide, in addition to comprehensive screening of the teenage parent for mental, physical and social healthcare needs, a sophisticated set of screenings

for the child to detect early socio-emotional and developmental challenges needing attention. The Corner Clinic Teen Parent Programme is a multimodal, multicollaborative effort and incorporates individualised care (primary care/obstetric/midwifery care, psychiatric care, individual counselling or therapy, paediatric care) and group support (a psycho-educational parenting and self-care skills curriculum delivered in group-format, the Mom Power parenting group). The Mom Power (MP) group is delivered either at the primary care site or a community based location (e.g. a church). In the context of the MP group setting, children have the opportunity to undergo a developmental screen assessing developmental delays in speech/language, and in psychosocial, motor and emotional regulation.

The MP group programme for teenage mothers: concepts and preliminary data

The MP group is a 10-week 'class' for mothers aged 15–21 and their children aged 0–6, that focuses on the following:

- strengthening the mother–child interaction
- improving parenting skills
- teaching self-care practices
- strengthening or establishing connections with the healthcare system and with social support networks.

All these activities are in the service of building secure attachment bonds between the mother and her young child. The programme is designed to teach participants to safely cope with their current stressful life circumstances and mental health symptoms – all of which may pose a risk to their parenting abilities and child's safety. The programme is also designed to teach how to parent responsively and sensitively, despite the aversive context. Each MP group session has a specific focus related to the topics described above. As mothers progress through the programme, they learn how to regulate their emotions well enough to feel safe and adequate in parenting. They learn to think clearly when under stress so that they can prevent, manage and recover from problems with anxiety, depression, addiction, anger, social isolation and dissociation when engaged in parenting.

MP also serves as a treatment engagement tool. The group aims to provide an environment for teenage mothers that is nurturing, supportive, en-

couraging and respectful. It teaches mothers about child development, provides psycho-educational information, parental guidance and ultimately gets mothers connected within the community. Moreover, the programme serves to build trust between mothers and health professionals, and is often the first stepping stone for the teenager to also accept psychiatric care or psychological counselling for their mental health or parenting condition. The goal of the MP group is often to connect the teenage mother with satisfactory resources within her community to allow for a comprehensive and holistic treatment setting for her and her infant.

MP recruits group participants either self-referred through the community or as referrals by local paediatricians, primary care doctors, social workers or other services providers. Many of the referrals come from healthcare providers who are concerned about the mother's parenting behaviours or the child's developing attachment bond and behavioural regulation.

In addition to 10 group sessions, each participant receives one individual counselling session midway through the programme to discuss subjective group experiences and satisfaction with the group process, and during this session an individualised follow-up treatment plan is formulated. Upon completion of the group, the individualised treatment plan is put in place through 'warm hand-off' community referrals. These community referrals, be it for medical, social or psychological care, or for developmental or behavioural child services, are facilitated by the MP group leaders who through the group process have familiarity with the teenage mothers' needs, as well as buy-in as a trusted resource for the teenager. Finally, the MP group participation also enhances the teenagers' circle of social support through befriending with other group members, which in turn furthers the teenage mothers' well-being.^{14,15}

Conceptually, the MP group curriculum identifies five areas as important therapeutic targets, and these are illustrated in Figure 1. These areas are:

- psycho-education about attachment-based parenting
- support for positive parenting by practising sensitive mother-child interaction during supported separations and reunions
- education about and practice of healthy self-care and coping skills
- enhancement of the mothers' social support networks
- development and implementation of individualised follow-up care based on a careful individualised needs assessment.

The MP groups were implemented in 2008, yet systematic data collection on teenage participants

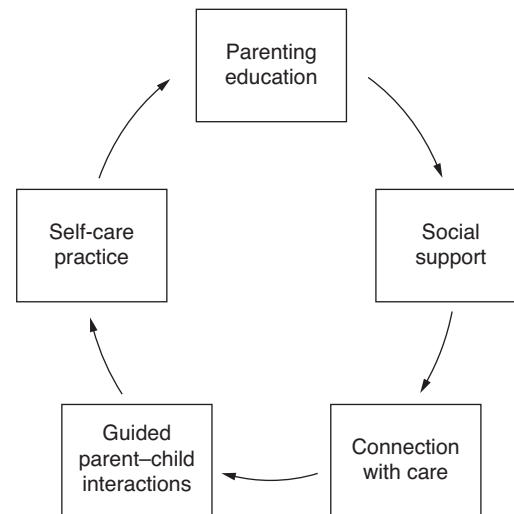


Figure 1 The Mom Power curriculum

started from 2009. We have now gathered some preliminary data on the teenagers who have 'graduated' from the MP group programme in 2009/2010. We have demographic data on 23 teenage mothers with an average age of 19.6 years ($SD = 1.36$), ranging from 16 to 21 years. The teenage mothers had on average one or two children ($M = 1.17$, $SD = 0.39$), and the average age of their child was around 16 months, ranging from newborns to 3-year olds. Graduates were ethnically diverse yet predominantly minority teenage mothers (25% Caucasian, 65% African American, 10% biracial), had little education (39% less than high school, 33% high school completion, 28% some college), mostly single (5% married, 14% living with the birth father, 81% single) and of low income (42% under \$5000, 32% \$5000–10 000; and 26% above \$10 000). The participating teenage mothers had experienced on average around five traumatic events at the beginning of the group ($M = 5.48$, $SD = 2.81$), ranging from 1 to 11, and these events were predominantly serious money problems (72%), having someone close die (72%), themselves or a family member being sent to jail (50%), having someone close die suddenly (48%), being physically attacked by a boyfriend (40%) or being neglected (43%) or emotionally abused (40%) by a parent. Not surprisingly, almost half of the teenagers (10/24) met the criteria for PTSD, and half (13/24) met criteria for major depressive disorder (MDD) at the beginning of the group. Although the exposure to trauma was ongoing even during the MP intervention, and teenage mothers experienced on average more than two traumatic events ($M = 2.68$; $SD = 2.14$) during group participation, the experience of being connected to the MP programme decreased rates of psychiatric diagnoses when reassessed after the 10-week curriculum. Post-group only one teenager

met still criteria for PTSD (down from 10), and only seven met criteria for MDD (down from 13) after the group. This decrease in diagnostic classifications is also reflected in symptom reductions from pre- to post-MP group assessment; both PTSD and MDD symptoms decreased significantly across the intervention (PTSD: pre MP mean = 6.96, SD = 4.35 to post MP mean = 4.87, SD = 2.97, $t(23) = 2.406$, $P < 0.05$, see Figure 2; MDD: pre MP mean = 82.24, SD = 30.31 to post MP mean = 68.08, SD = 20.93, $t(24) = 2.923$, $P < 0.01$; see Figure 3). In addition to mental health improvements in the face of ongoing trauma, the teenage mothers also self-rated as less guilty and ashamed regarding their own parenting skill after the MP group (pre MP mean = 9.12, SD = 4.85 to post MP mean = 7.48, SD = 3.07, $t(24) = 2.056$, $P = 0.05$).

These results are promising, yet limited by design and statistical issues. First, the sample size is small and a control condition is lacking. Thus, we cannot exclude that the teenage mothers improved in psychopathology across the 10-weeks just because of unspecific factors, such as attention by research staff or by chance alone. However, this first round of MP groups aimed primarily to test feasibility and acceptance among the target population, and both were confirmed. In the next iterations of this model, we will implement a more stringent research design, and use randomisation and a control condition.

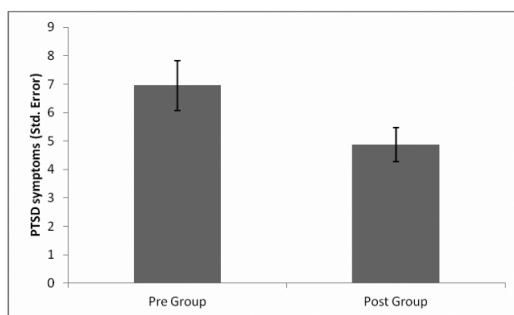


Figure 2 PTSD symptoms from pre to post MP group

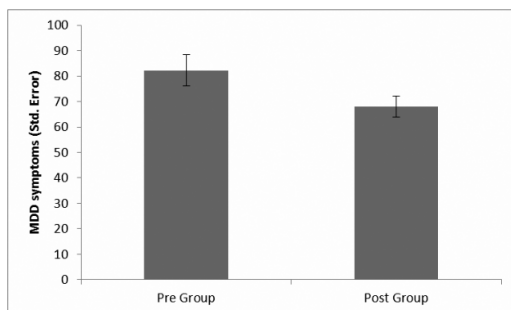


Figure 3 MDD symptoms from pre to post MP Group

Second, the outcome measures are primarily self-rating scales, which gives room for reporting biases. For example, because the parenting skills improvement is assessed by self-report alone, the results may be due to the teenage parent's enhanced self-esteem regarding parenting as opposed to true improvements in sensitivity during observable mother-child interactions. Subsequent data analyses will rely more on objectively coded parent-child interactions and clinician-derived changes in psychiatric symptomatology. However, despite the limitations in sample size, lack of randomisation and of control group design, we believe, that these results show promise regarding the feasibility and effectiveness of this integrated, primary-care-based approach for teenage mothers with young children.

Summary and conclusions

Mental health needs among adolescents are common, yet commonly unmet, and service delivery complex due to the developmental stage of the target population. Knowledge about and availability of services for adolescents remain too often unrecognised. Such services need to be comprehensive, integrated, flexible, easily accessible and informal, in order to be utilised by teenagers. The complexity of needs and difficulty in service utilisation is even more pronounced among teenagers who are also parents.⁴ Several programmes deliver services for teenage parents and their children. Yet, few programmes are embedded into primary care settings, are able to provide comprehensive and integrated care for medical, social and psychiatric needs of teenage mothers and their young children, also supporting parenting and the quality of the mother-child relationship. The MP group intervention, developed in a community-university partnership effort over the past 2 years, aims to provide a comprehensive, primary-care-based service for teenage mothers and their children which integrates medical, mental health and psychosocial care with parenting guidance. Preliminary results, while limited in scope, confirm feasibility, acceptance and effectiveness.

REFERENCES

- 1 Costello EF, Foley DL and Angold A. 10 year research update review: the epidemiology of child and adolescent psychiatric disorders: II. Developmental epidemiology. *Journal of the American Academy of Child Adolescent Psychiatry* 2006;45(1):8-25.

- 2 Patel VFA, Hetrick S and McGorry P. Mental health of young people: a global public-health challenge. *The Lancet* 2007;369(9569):1302–13.
- 3 Danielson S. *Assessment of Services and Proposed Interventions for Pregnant Women in Keene, New Hampshire* (PhD dissertation). Antioch University. Unpublished, 2008.
- 4 Sarri R. Health and social services for pregnant and parenting high risk teens. *Children and Youth Services Review* 2004;26:537–60.
- 5 Akinambi LJ, Cheng TL and Kornfeld D. A review of teen-tot programs: comprehensive clinical care for young parents and their children. *Adolescence* 2001; 36(142):381–93.
- 6 Callaly T, Von Treuer K, Dodd S and Berk M. Mental health services for young people – the challenge of integrating services. *Acta Neuropsychiatrica* 2010; 22(3):158–60.
- 7 Sigman G, Silber TJ, English A and Gans Epner JE. Confidential health care for adolescents: position paper for the Society of Adolescent Medicine. *Journal of Adolescent Health* 1997;21(6):408–15.
- 8 Singh S, Darroch JE, Frost JJ and the Study Team. Socioeconomic disadvantage and adolescent women's sexual and reproductive behavior: the case of five developed countries. *Family Planning Perspectives* 2001;33(6):251–8, 9.
- 9 Koniak-Griffin D, Logsdon MC, Hines-Martin V and Turner CC. Contemporary mothering in a diverse society. *Journal of Obstetric, Gynecologic, & Neonatal Nursing* 2006;35(5):671–8.
- 10 Barnet BL, Jiexin and DeVoe M. Double jeopardy depressive symptoms and rapid subsequent pregnancy. *Archives of Pediatric and Adolescent Medicine* 2008;162(3):246–52.
- 11 Chandra A and Minkovitz CM. Factors that influence mental health stigma among 8th grade adolescents. *Journal of Youth and Adolescence* 2005; 36(6):763–74.
- 12 Basic Behavioral Science Task Force of the National Advisory Mental Health Council. Basic behavioral science research for mental health. Family processes and social networks. *The American Psychologist* 1996;51(6):622–30.
- 13 Sroufe A, Egeland B, Carlson E and Collins W. *The Development of the Person: The Minnesota Study of Risk and Adaptation from Birth to Adulthood*. New York: Guilford, 2005.
- 14 Barth RP, Schinke SP and Maxwell JS. Psychological correlates of teenage motherhood. *Journal of Youth and Adolescence* 1983;12(6):471–87.
- 15 Lucksted A, McNulty K, Brayboy L and Forbes C. Initial evaluation of the peer-to-peer program. *Psychiatric Services* 2006;60(2):250–3.

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