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CURRENT DELIVERY OF INFANT MENTAL HEALTH SERVICES: ARE INFANT MENTAL HEALTH NEEDS BEING MET?

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Abstract

Objective

To identify services supporting the wellbeing of infants and their families in an area of South Brisbane, highlight problems of accessing these services and recommend strategies to make them more readily available.

Method

Semi-structured interviews were conducted with staff from 18 service providers offering antenatal services, or programs primarily focused on children under the age of two years and/or their families. The interview aimed to identify the precise nature of the services offered, problems encountered in providing those services, perceived gaps in services and potential strategies for improvement.

Results

Services were diverse, provided by a range of different professionals, in varying locations (home, community, hospital) with funding from various sources. The major findings were (a) the fragmentation of services, lack of communication between them, and lack of continuity in services from one stage of family formation to another (b) the shortage of services working with the parents and infant together, and (c) the difficulty of providing services for some at-risk populations.

Conclusions

Recommendations included: (a) maintaining a range of different services networked through a centralized resource/referral centre, (b) expanding joint mother-infant services and providing training for such services, and (c) supporting outreach services for difficult to engage populations.

Key words

infancy, infant mental health, mother-infant services, service delivery, fragmented services

Background

Although the importance of infancy has been acknowledged for many years, until recently there was little perceived need to establish comprehensive infant mental health services. The past decade has witnessed growing concern that societal changes (e.g., rising numbers of single-parent families[1], and increasing identification of child abuse, family violence and drug abuse[2]) are exposing infants and young children to environments which may have harmful, long-term effects on their development. These concerns have been supported by research from a variety of different disciplines which have confirmed that poor socio-economic, psychosocial or health circumstances during infancy can have lasting negative effects[3]. Longitudinal studies have demonstrated that the risk for many prejudicial outcomes in later childhood or adulthood (e.g., heart disease and diabetes[4], depression[5] and school failure, delinquency and unemployment[6]) is linked to experiences in early life. Although much of this research has focused on the long term effects of extreme forms of deprivation and maltreatment even milder forms of disturbed parent-infant relationships can have detrimental consequences later in life[7,8].

Research in the neurosciences has revealed that experiences in the early years lay the foundations of the neuronal pathways in the brain. Some pathways, such as those in the sensory cortex, appear to be primed to receive stimulation at critical periods in the first year of life. If this does not occur the system will not be activated and will never function optimally. For example, strabismus causes inadequate stimulation of the visual cortex leading to a life long loss of stereoscopic depth perception. Other parts of the brain do not appear to be pre-prepared in this way rather there is an over-production of synaptic connections between cells and experience determines which of these connections will be fired to form neuronal pathways, and which will be “pruned” as the result of disuse. Hence, negative experiences early in life may have long-term consequences as the result

of the connections which they cause to be constructed in the brain[9]. For example, adults who experienced maltreatment as children have been found to have reduced hippocampal volume which is associated with poor memory[10]. Similarly, infants exposed to repeated distress in infancy, without the support of a responsive parent, have been found to later display impaired functioning of the right frontal area of the brain associated with the experience of positive emotions[11].

Intervention studies have demonstrated that the effects of unfavorable experiences in infancy can be mitigated by the provision of appropriate intervention programs[12,13]. These programs have targeted children at risk of adverse developmental outcomes due to disabilities[14], medical complications (e.g., preterm birth)[15-17], or socioeconomic disadvantage[18-21]. They have typically reported improved outcomes for children and frequently also for parents.

In summary, interest in the well-being of infants has increased as the importance of protecting infants from adversity has been recognized, and the powerful effects of intervention in alleviating the effects of such exposure have been demonstrated. Infant mental health programs aim to ensure that for the first years after birth the child is able to "to experience, regulate and express emotions; form close and secure interpersonal relationships; and explore the environment and learn" (p.1)[22]. The priorities of the Mental Health Promotion and Prevention National Action Plan[23] include the provision of effective early interventions for infants and their families, the benefits of which are likely to accrue throughout the life of the child and into the next generation[24]. In order to deliver such services in a cost-effective manner it is essential to identify existing services, reduce the gaps and overlaps in their programs, and formulate strategies to make them more accessible and comprehensive. Fragmentation and discontinuity appear to be

common features of infant mental health services in many parts of the world[25-28]. However, most of the evidence is based upon opinion and clinical experience rather than research data. In this paper we use data from a review of infant services in an area of metropolitan Brisbane to identify current service provision and make recommendations for enhancing infant mental health services.

Method

We contacted a comprehensive sample of all known services offering clinical and support programs for infants (0-2 years), their families, or pregnant women living within the Mater catchment area of metropolitan Brisbane, Australia. The services were classified using an adapted version of Meisel and colleagues' categories of early childhood interventions[29] and only those falling into the following categories were included in the study (a) *infant-focused* with interventions primarily targeting the infant with minimal focus on parents; (b) *parent-focused* with interventions primarily catering for parents although the infant may be present; (c) *jointly parent-infant focused* with interventions targeting both parents and infants but not necessarily together (see Table 1).

Services were excluded if they were only minimally infant focused (i.e., screening programs), or their core business did not relate specifically to infants and their families (i.e., general practitioners and childcare providers). Adult mental health and substance use programs were also excluded as they primarily focused on parental health rather than parenting capacity. At the time of the review there were no public-sector, residential psychiatric units for mothers and babies in the district. One such program existed outside the Mater district catchment area and was included in the review as it could be accessed by families from this area.

INSERT TABLE 1

Eighteen services that met the criteria were included in the study. Five were government services (child protection, maternal and child health, and developmental services), two non-government or consumer organizations, five Mater Mothers' Hospital or Mater Children's Hospital clinics, four specialist family support programs under the auspices of the Mater Hospital, and two Mater Child and Youth Mental Health Services.

Semi-structured interviews were conducted with professionals from these 18 services with the aim of identify the precise nature of the services offered, problems encountered in providing those services, perceived gaps in service provision, and potential strategies for improving service delivery. The interviews were conducted with individuals/groups from each service (henceforth referred to as *service providers*) and discussions were tape recorded and transcribed. The data were coded thematically to provide a comprehensive overview of the pattern of service providers' responses (limitations in services, concerns of service providers, suggestions for improving services). The development of themes was crosschecked against the views of an experienced child development clinician and researcher (second author, HM) and an infant mental health specialist (third author, NA). The following sections of this paper are based on responses from the 18 service provider individuals/groups.

Results

Table 1 summarizes the category of service, the type of problems addressed and the mode of service delivery for each of the services included in the study.

Services provided

The services addressed a range of infant and parent concerns including infant developmental problems, disabilities, or screening (*n*=5); neonatal health (*n*=2); infant

protection and safety (*n*=3); maternal health (*n*=2); substance using parenting issues (*n*=2); parenting support (*n*=4); and parent-infant mental health (*n*=2). Interventions provided focused on either infant concerns (such as neonatal care, child developmental assessment and intervention, child-protection monitoring) or parent concerns (such as antenatal care, guidance on developmental problems, provision of parenting information/education, concrete assistance or practical support, parenting support/counseling, or advocacy).

Programs were provided for infants who were regarded as being at-risk of adverse outcomes because of factors such as poor health, developmental disabilities, infant abuse and neglect, family violence, maternal substance abuse, maternal mental health problems (including postnatal depression), and poverty. In addition, programs were provided for families of Aboriginal and Torres Strait Islander origin and those from culturally and linguistically diverse backgrounds where the levels of risk for adverse outcomes are also elevated.

Limitations in services

Despite the apparent abundance of programs serving infants and their parents, there were many shortcomings. The needs of parents and infants were normally addressed by different services with only four of the 18 service providers indicating that their services focused jointly on the needs of parents and infants. While some other service providers claimed to address both infant and parent concerns, these were typically dealt with separately rather than in jointly-focused programs, and infants were usually excluded from parent-focused concerns such as domestic violence. Issues of mother-child attachment or infant social-emotional development were rarely the focus of referral or intervention. Half the service providers expressed concern about mothers and children

being treated separately rather than together, especially in relation to maternal substance use or mental health issues; one-third regarded their capacity to deliver interventions as compromised by a shortage of funding and resources and lack of necessary training and skills. As a result there was relatively little emphasis on provision of infant mental health services, such as early relationship assessment/support or infant-parent psychotherapy, and more emphasis on parenting knowledge and skills and the infant's physical health development and safety.

Not only were mothers and babies treated separately but services were also split into those dealing with physical well-being and those dealing with psychological and psychosocial issues with little interface between the two. Furthermore, services which addressed antenatal or neonatal problems did not address problems that arose later. Services were therefore fragmented with little collaboration between them and little continuity of service over time. Although many of the service providers talked about "parents" implying that they served both mothers and fathers, in reality the majority worked predominantly with mothers and there were no services that specifically addressed the needs of fathers.

Modes of service delivery

The primary modes of service delivery across the 18 services were hospital-based (*n*=8), community-based (*n*=6), home visiting (*n*=3), assertive community outreach (*n*=1), residential (*n*=1), and telephone support (*n*=1) (see Table 1). Nearly all service providers were aware of the limitation in the services available and attributed gaps in service delivery to poorly coordinated and integrated services and a lack of interagency links and collaboration. A number of service providers reported being unaware of other services and of referral options and processes.

Concerns of service providers

Service providers expressed concern about lengthy waiting lists, the lack of comprehensive services for multi-need families, and the discontinuity of antenatal/postnatal care prohibiting effective monitoring of parents and infants. They attributed these problems to shortfalls in funding, resources and training.

All service providers reported finding it difficult to engage with, or to provide services for, at least one high risk populations. Two-thirds of the service providers reported problems connecting with parents who were referred because of others' concerns about their parenting ability (e.g., referrals related to child protection, maternal substance use, parental intellectual disabilities, or adolescent motherhood), possibly because these parents were ambivalent about or in disagreement with the reason for referral, disinterested in accessing support for themselves or their infant/s, or concerned about the stigma of receiving services. Lack of capacity to provide appropriate programs for families of Aboriginal and Torres Strait Islander origin or from culturally and linguistically diverse backgrounds was raised by 61% of service providers. Problems maintaining ongoing programs for clients because of difficulties experienced accessing centalized or hospital-based services due to costs, lack of transport or child care, or because of family transience or the complexity of their multiple problems were highlighted by half of the service providers.

Service providers attributed success in engaging clients from at-risk groups to being able to offer culturally-sensitive specialized services designed to meet their specific needs, such as community-based services, home visiting, peer support groups, or assertive community outreach.

Suggestions for improving services

Participants' recommendations for improved services focused on three main issues.

1. Timing and duration of services. Fifty-six percent the service providers stressed the need for prevention, early identification and early intervention within infant services. In addition, provision of antenatal care and post-natal follow-up was considered critical. In order to achieve maximum benefits it was considered necessary to ensure a sufficient duration of intervention.

2. Access to services and mode of service delivery. Seventy-two percent of service providers stressed the need for improved access to services and suggested that this might be achieved by ensuring that services were situated in easily reached locations in the community and that the range of service delivery options be increased (e.g., home-visiting, residential programs, intensive-day programs, assertive community outreach, drop-in centres, and peer and volunteer support). Service providers stressed the need for programs to be culturally sensitive in order to make them accessible to at-risk and vulnerable groups.

3. Coordinated and integrated service delivery. The need to foster interagency links and collaboration and provide coordinated and integrated service delivery was recognized by 78% of service providers. Suggestions to improve this included networking and information sharing by service providers through interagency forums and joint training, clear referral pathways and feedback mechanisms, and continuity of treatment for clients over time. Half the service providers identified the need for services to (a) focus on issues related to both parent and child, such as the impact of parent mental health or psychosocial difficulties on child well-being, or (b) address a broad range of parent-child and family problems such as family conflict or parenting skills, or (c) effectively

target parent-child attachment issues by treating the parent and child together rather than separately.

Conclusions

This survey of local services identified a variety of programs for infants and their parents. Overall there appeared to be a patchwork of infant, parent, and parent-infant services, with infant mental health issues largely addressed on an *ad hoc* basis. These findings highlight the current lack of a cohesive and comprehensive system of service delivery to meet the diverse needs of infants and their families. The findings reported in this paper are consistent with Austin's[25] concern about fragmented services and discontinuity of infant mental health care in Australia. Similar concerns have also been expressed in numerous international reports[26-28], suggesting that these problems are common through the world. All of these reports are however founded on impressions and opinions. The current paper is unique in presenting data to support these contentions.

It is critically important to increase recognition of the fact that social and emotional wellbeing is an essential component of healthy infant development. To achieve this it is crucial not only to have comprehensive specialist infant mental health services but to also integrate infant mental health practices into all systems serving infants[30] and their families (e.g., obstetrics, primary care, adult mental health). In order to optimize development of secure parent-infant attachment, it is necessary to facilitate better recognition of socio-emotional needs and interventions focused on parent-infant interactions and relationship building.

Based on our consultations, recommendations for providing more effective prevention and early interventions for infants and their families include: (a) raising community

awareness about the importance of infant mental health and providing a minimum, generalist training in this area for all personnel working with infants and their families; (b) networking existing programs working with parents and infants to provide avenues for cross referral, sharing of expertise and support; (c) expanding joint mother (parent)-infant services and providing specialist training for such enterprises; and (d) delivering services that are more “user friendly” by making them easily accessible and culturally appropriate. Attending to these matters should reduce the number of families who fall into service gaps and minimize the overlaps of already under-resourced services thus enabling more families to have access to comprehensive infant-related services. However, in order to achieve this, it is essential for governments to allocate sufficient dedicated recurrent funding to support the implementation of these services.

Acknowledgements

The authors thank service providers for participating in interviews and providing their perspectives. We also thank Yvonne Connolly for her assistance.

Table 1

Description of the 18 Services for Infants, Their Families, or Pregnant Women

Service Provider	Category of service	Primary focus of service	Primary mode of service delivery
1[a]	parent focused	maternal health	hospital-based; community-based; assertive-community outreach
2[a]	parent focused	maternal substance use	hospital-based
3[a]	parent focused	maternal health	community-based
4[a]	infant focused	neonatal health	hospital-based
5[a]	infant focused	neonatal health	hospital-based
6[ab]	infant focused	infant developmental problems	hospital-based
7[a]	infant focused	infant developmental disabilities	hospital-based
8[a]	infant focused	infant protection/safety	hospital-based
9[a]	jointly parent-infant focused	parent-infant mental health	hospital-based
10[a]	jointly parent-infant focused	parent-infant mental health	community-based
11[a]	parent focused	parent support	home visiting
12[c]	jointly parent-infant focused	parent support; infant screening	home visiting
13[c]	infant focused	infant developmental disabilities	community-based
14[cd]	jointly parent-infant focused	parent support; infant developmental problems	residential
15[e]	infant focused	infant protection/safety	community-based
16[e]	infant focused	infant protection/safety	community-based
17[f]	parent focused	maternal substance use	home visiting
18[f]	parent focused	parent support	telephone

[a]Mater Health Services. [b]Feeding Clinic. [c]Queensland Health. [d]Located outside of the Mater catchment area, but services available for families living within the Mater catchment area. [e]Department of Families. [f]Non-government organization.

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