Adolescent parents and their children – The paediatrician's role

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Adolescent parents and their children have a number of health issues that require attention from the health care provider. Both the adolescent and their child have health needs, and the young parent often requires significant support in their parenting role. Paediatricians should be aware of the areas in which problems can develop, including maternal nutrition and emotional health, and infant growth and development. The literature addressing these areas of concern will be reviewed and general recommendations for the care of this patient population will be provided.

Key Words: *Adolescent; Advocacy; Health outcomes; Teen parents*

Les parents adolescents et leurs enfants : Le rôle du pédiatre

Les parents adolescents et leurs enfants affrontent plusieurs enjeux de santé qui méritent l'attention du dispensateur de soins. Tant l'adolescente que son enfant ont des besoins de santé, et le jeune parent a souvent besoin d'un soutien considérable dans son rôle de parent. Les pédiatres devraient connaître les secteurs dans lesquels des problèmes peuvent se manifester, tels que la nutrition et la santé affective de la mère et la croissance et le développement du nourrisson. La documentation scientifique portant sur ces sujets de préoccupation est analysée, et des recommandations générales pour les soins de cette population de patients sont proposées.

Adolescents and their children present a unique and rewarding challenge to health care providers. Both have their own health needs, and the adolescent requires additional education and support around his or her role as a parent.

In Canada, there were 328,802 births in 2002 (1). This number has been relatively stable over the past few years. Of the total number of births, 15,413 were to young women 15 to 19 years of age (1). Between 2000 and 2002, annual births to young women younger than 15 years of age were between 116 and 153 per year (1). Although the number of births to adolescents comprises a small proportion of total births per year, the numbers are such that many health care providers will be involved in the care of young parents and their children.

Many of the infants and children thrive, and large numbers of the adolescents themselves complete their education and secure employment. However, it is important to understand the potential problems for which young parents and their children are at risk.

The following article presents a summary of the issues of which the health care practitioner should be aware. The discussion of each issue will be accompanied by a review of the currently available literature. Of note, is that much of the available literature is from the United States; therefore, some of the research findings may not be generalizable to Canadian adolescents.

THE ADOLESCENT MOTHER

The nutritional status of young mothers is often poor. Adolescent females often have diets low in calcium and iron. Increased requirements during pregnancy further increase the risk for iron deficiency anemia which has been reported with a prevalence of between 11% and 16% (2). Pregnancy and breastfeeding may further deplete iron stores in those already at risk for iron deficiency anemia. Compliance with iron therapy is suboptimal (3). There are suggestions from the literature that even young women who are postmenarchal may still have long bone growth despite epiphyseal closure, and thus, there may be some 'competition' for nutrients between the fetus and the adolescent during pregnancy (4). Those mothers who are breastfeeding have greatly increased energy requirements postpartum. They may not meet these requirements due to lack of finances, nutritional knowledge and time, or due to other stressors. Even for those who are not breastfeeding, financial challenges may make it difficult for them to afford appropriate nutrition for themselves and their families. The practitioner should refer to resources that outline the potential areas of concern for adolescent nutrition and review these issues with their patients (5).

Contraception and family planning are important issues for these young women. There is a high incidence of a repeat pregnancy in this population, which may be as high as 50% in the two to three years following delivery. Many young mothers find that 'first line' contraceptives, such as condoms, foam and the birth control pill are not effective methods for them. Indeed, the first pregnancy may have been unplanned, with the young mothers having little or no contraceptive experience.

Contraceptive methods requiring less effort on the part of the adolescent, such as Depo-Provera (Pharmacia, Canada) (an injected method) have been helpful in preventing unwanted repeat pregnancies. Acceptance of this method has

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been variable, depending on the cultural background of the young woman and other factors (6,7). Information about the emergency contraceptive pill should be provided (8). Consideration may be given to providing these patients with emergency contraceptive kits for use at home, should they be required. Clear instructions on how and when to use these kits would be essential. However, it should be emphasized that the young woman should not rely on the emergency contraceptive pill as her sole method of contraception. The contraceptive patch Evra (Janssen-Ortho, Canada) is now available and provides an additional contraception option to women. To date, there is little evidence about the most effective interventions for prevention of unplanned pregnancy in adolescents. A recent systematic review of the literature (9) on interventions to reduce unintended pregnancies showed that these strategies had no significant effects on increasing use of birth control or on lowering the number of pregnancies. There is clearly much more work to be done in this area of clinical intervention.

The emotional health of young mothers requires particular attention. Postpartum depression is not uncommon, especially if prepregnancy depression or other mental health disorders have been present (10,11). Stress, low income and lack of social supports are also potential contributors to depression in this population. Therefore, it is important to screen for depression at each visit and to indicate to the adolescent that this is an important issue that warrants assessment and treatment. The Edinburgh Postnatal Depression Scale (12) is the most frequently used screening tool (although it is not specific for adolescents). This is a 10-item self-report for which a score of 12 or greater should raise concern and the need for further evaluation. In a cross-sectional study of 875 women four weeks postpartum (which included mothers 17 and over) (13), some of the significant predictors with a score of 12 or more on the Edinburgh Postnatal Depression Scale included lack of support and low income, both of which are commonly present in young mothers. It is unclear whether adolescent mothers have higher rates of depression than older mothers. One study (14) that compared psychosocial outcomes, including depression, in women who became mothers before age 18 with those who became mothers after 19 years and after 23 years of age found no significant differences among the groups.

Teen parenting may affect completion of the developmental tasks of adolescence. Younger adolescents are concrete thinkers and egocentric, and as a consequence, may place their own needs in front of those of their infants. As the baby receives more attention than the adolescent, negative feelings may develop toward the infant. Young mothers are often socially isolated and relationships with peers may be negatively affected. Sexuality and body image issues require discussion and support.

Substance use may become a way for adolescents to cope with the additional stresses of being a parent. A comorbid diagnosis of conduct disorder has also been reported as being associated with both adolescent pregnancy and substance abuse (15). Studies that have examined the prevalence of substance use in young mothers suggest that prepregnancy substance abuse is one of the strongest predictors of substance abuse problems after delivery (16,17). However, it appears that during pregnancy, the majority of adolescents significantly reduce their substance use and are, in fact, most likely to increase their use again in the six months postpartum (18). Risk factors for continued use during pregnancy include partner substance use and use of alcohol during sexual activities (19). Any substance use has implications for those mothers who are breastfeeding because nicotine, alcohol and illicit drugs all pass into breast milk and can affect the infant (20). Depending on the substance, use may affect the adolescent's ability to care for her infant and provide a safe environment for him or her.

Level of education is an important predictor of outcome for both the adolescent mother and her infant/child. Attainment of secondary school certification is positively linked with attaining financial security. One of the best predictors of a young mother completing her education is her grade level when she became pregnant (21). There is some evidence that those young women who choose to continue with a pregnancy are less likely to be at their expected grade level than those who choose to terminate.

Early studies were quite negative about the chances of a young woman completing her education after giving birth. However, Furstenberg et al (22,23) followed young women longitudinally for 15 years after delivery and found that 67% of young women who became mothers as teenagers had completed secondary education, 30% had taken at least some postsecondary courses and 5% had graduated from college.

There are many choices for young women to complete their education. Correspondence, 'alternative' or 'virtual' schools and schools with daycare facilities are all options for young mothers, and should be encouraged and supported. Access to affordable childcare influences a young woman's ability to return to school. Possible options include her family, the infant's father or his family, friends, subsidized daycare or daycare associated with a school or other special programs.

Financial difficulty is a frequent problem for young parents. Lack of education prevents young parents from securing well-paying jobs. Government support varies from province to province. Most programs are inadequate and ensure that the young family remains below the poverty line. Rent, food and daycare costs consume the majority of a young mother's income. Some young women may receive financial support from their child's father or from family, but this tends to be the exception rather than the rule. Community kitchens or food banks can help 'stretch the dollars', provide hands-on budgeting assistance and provide a support network.

Living situations have an important influence on maternal and infant outcomes. There are a number of possible living situations for young mothers other than with their extended families. Some live-in housing geared to adolescent parents. Some may cohabitate with the infant's father or his family. Other young women live alone or with friends. Those young women that live alone, or with family who are not supportive tend not to do as well as those living with at least one supportive adult (24). One study (25) demonstrated that

living with the infant's grandmother, if she is supportive and models strong parenting behaviour, resulted in improved outcomes for the infant with respect to growth and development.

THE INFANT/CHILD

The growth and development of infants and children of adolescent parents requires careful monitoring. Infants of adolescent parents have a higher chance of being of low birth weight (26). This is most likely due to factors such as poor nutrition, less than optimal prenatal care and behaviours such as tobacco smoking, rather than age itself. Regardless of the underlying factors, low birth weight is a risk factor for later growth problems. Feeding difficulties are not uncommon in this population. Data on breastfeeding practices in adolescent mothers is limited, but data on prevalence of breastfeeding from the National Longitudinal Survey of Children and Youth (27) showed that 72.5% of mothers less than 20 years initiate breastfeeding (compared with 76.7% of all mothers). However, only 31.6% breastfed for at least three months (compared with 53.6% of all mothers). In general, breastfeeding duration increases with maternal age. There is evidence to suggest that the quality of breast milk produced by adolescents is comparable to that of adult mothers (28). Health care practitioners can play a positive role in adolescent mothers' decisions to breastfeed (29). Formula with iron should be used if not breastfeeding. Cow's milk is often introduced earlier than recommended due to reasons of cost. Adolescent mothers also tend to introduce solid foods early and choose foods for their toddler which reflect an adolescent diet, rather than one that is recommended for toddlers (30,31). These feeding behaviours may result in poor growth and nutritional deficiencies, such as iron deficiency anemia. All of these practices should be anticipated and guidance provided with frequent review and reinforcement of recommendations (32).

Adolescent mothers have been shown to provide less verbal stimulation for their infants and children than older mothers. They have also demonstrated less understanding about knowledge of child development (33). To prevent the possible consequences of delayed language skills and poor school performance, young mothers should be given anticipatory guidance about infant development and encouraged to talk to their babies and to read to them from an early age. Connecting them with a local reading or library program (eg, "Mother Goose" and "Rhymes that Bind") and infant stimulation programs would encourage these behaviours. Numerous parenting programs have been developed to assist and educate young parents about their roles as parents. Programs reported on and evaluated in the literature are quite heterogeneous in the format in which their services are offered. A systematic review of parenting interventions by Coren et al (34) revealed some trends toward positive outcomes for adolescent mothers and their children, but these trends were not statistically significant. In general, group- and peer-based interventions were found to be the most effective approaches.

There is some debate in the literature as to whether the infants and children of adolescents have a higher incidence of child abuse (35,36). However, neglect and unintentional injury may occur more frequently. Abuse and neglect are, however, more common in conditions of poverty and isolation, both of which are commonly present in these young families. Accidents, infectious diseases, burns, poisoning and superficial injuries are the most common diagnoses which bring these infants to medical attention.

One study (37) examined adolescent mothers' perceptions of dangerous situations for their children compared with older mothers. This study demonstrated that, compared with older mothers, adolescent mothers perceived less danger in situations and, therefore, may place their infants at greater risk for injury. Injury prevention and safety proofing of the living space is an important issue for discussion at each visit. This is particularly important as the child becomes more mobile.

Those providing health care to high-risk teens and their children are often challenged with the task of supporting and advocating for young parents in their roles as parents, while also recognizing that the safety of the infants and children clearly takes priority (ie, there may be a need to involve child protection services if there are concerns about the care the infant or child is receiving).

THE ADOLESCENT FATHER

Although young fathers accompany their infants and children on visits with health care professionals less often than young mothers, it is important to understand the issues affecting these young men (38). Up to one-third of these fathers are actually men in their 20s or 30s (39,40). Of those adolescent fathers who are aware of their status as a father, up to 50% maintain some form of connection with the mother and/or child (41).

It is important to acknowledge those fathers who are involved and to encourage them to attend visits. They can benefit from the anticipatory guidance, support and education provided at each visit.

SUMMARY

Young parents and their infants and children have complex needs within the health care, educational and social services systems. The provision of health care for young parents and their children that is both comprehensive and developmentally appropriate is extremely important and can improve the outcomes for both parent and child (42-44). Consistency in those individuals providing health care may assist in the development of trusting relationships. In addition, remaining optimistic and supportive, and commending young parents for the positive decisions they make and the steps they take, is vital in helping young parents overcome the many obstacles in their path.

RECOMMENDATIONS FOR THE CARE OF YOUNG FAMILIES

- Provide routine monthly prescheduled visits (at least for the first 12 to 18 months) rather than visits timed only with the immunization schedule. There are often frequent changes in these young parents' lives and it is important to have regular, consistent contact with them to reinforce health messages and to provide

anticipatory guidance. Each visit should include time for parental health issues including contraception, and physical and emotional health.

- Encouraging the involvement of the adolescent father, and/or extended family (eg, grandparents) at health visits may be appropriate if they are identified as having a role in the primary care of the child.
- Health care practitioners should be knowledgeable about the types of social supports and community resources that are available for young parents in their community (eg, parenting centres, young parent support groups through public health, early year centres and schools with on-site daycares).
- Provide the young parent(s) with education at each visit. Topics could include: infant development, appropriate nutrition for the mother and the infant, recognition and management of common illnesses (fever, diarrhea, etc), and injury prevention. Much of the currently available printed material is aimed at adults. Any printed materials should be brief and in plain language.
- Advocate locally for school programs, and the provision of affordable child care and other resources for these young families.

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