Teen Mothers and Socioeconomic Status

The Chicken-Egg Debate

It is well established that the prognosis for teen mothers is bad. They experience lower levels of educational attainment, lower income potential, and poverty. What remains unknown is the extent to which these poor outcomes stem from the teen birth or from the disadvantage faced by these young mothers prior to childbearing. This is termed the chicken-egg controversy and evidence pertinent to sorting out this controversy is reviewed. Should programs focus on efforts to delay child birth or should they target the more substantive socioeconomic issues that surround those who become teen mothers? Effective strategies for addressing both tactics are summarized. Findings suggest the need to broaden teen pregnancy prevention approaches to include efforts to engage students academically. We conclude that the chicken-egg controversy is unresolved, and importantly, that determining which came first is not imperative for public policy efforts. Teen pregnancy and parenting must be accorded a firm position on any Canadian policy agenda focused on improving outcomes for Canada's youth.

Key sequence-related controversies evidenced in the current literature focus on the outcomes of early childbearing: Do teen mothers' lower levels of educational attainment stem from dropping out of school before or after becoming pregnant? Do poverty and its related consequences precede or follow teen motherhood? These controversies are important and make the literature in this area somewhat confusing as the optimal time and the most advantageous strategies for intervention are unclear.

The purpose of this review is to summarize the literature as it pertains to these two controversies, to provide a review of the precursors to young motherhood, and describe effective strategies for improving outcomes for teenage mothers. Background information is included to frame the problem of teenage pregnancy in Canada and describe common consequences. The outcome-oriented strategies that are presented encompass preventing teen pregnancy and teen mothers' further pregnancies, welfare reform and raising socioeconomic status (SES) levels. This paper seeks to bring the above controversies to the forefront for further consideration by academics, government, policy makers, and program planners. To anticipate our conclusion: the resolution of these controversies is not necessarily essential to the development of targeted policies and programs to benefit this subpopulation of at-risk youth.

Methods

Multiple databases were searched using identical search terms including: Biological Abstracts, the Cochrane Database of Systematic Reviews, CINAHL (nursing and allied health), EMBASE Pediatrics, EMBASE Rehab and Physical Medicine, ERIC (Education), General Sciences Full Text, PsycInfo, PubMed, Social Sciences Full Text, Social Work Abstracts, and Web of Science. Search restrictions included a publication year of 1985 or later and restricting keyword searches to the title or abstract. Sample key words include "age at first birth", "teen* mother", "adolescen* mother", behavio*, "socioeconomic status", and income. Use of an asterisks permits all possible endings after the last letter. Searches were also conducted using medical subject headings [MeSH], Google and Google Scholar, and targeted websites were visited.

Background

National statistics

Statistics Canada data report (1992-2002) a stable decline in pregnancy rates for younger (15-17) and older (18-19) teens (Dryburgh, 2002). The teenage birth rate has also fallen over the past decade and the proportion of children born to teenagers has never been very high. Although one-fifth of First Nations births are to teens, the national proportion of teen births is much less (Health Canada, 2003). While trends are moving in the desired direction it is clear that teenage parenting often has very negative impacts on both the mother and child.

General outcomes for teen mothers

In general, young mothers relative to older mothers (i.e., in their 20s) have been found to have less favourable outcomes in terms of education, economics, family and personal variables. Compared with girls from similar backgrounds, teen mothers who had one child reported lower levels of educational attainment and employment (Bradley, Cupples and Irvine, 2002). Teen mothers are less likely to complete high school (Chase-Lansdale and Brooks-Gunn, 1994; Hotz, McElroy and Sanders, 1997), have less formal education (Hardy *et al.*, 1997; Hotz, McElroy and Sanders, 1997; Nanchahal *et al.*, 2005), and are less likely to enrol in post-secondary education (Furstenberg, Brooks-Gunn and Morgan, 1987; Luster and Mittelstaedt, 1993). They are less likely to be employed, to have stable employment, or have high earnings; and more likely to be living in poverty or receiving welfare, and to experience welfare over long periods (Attico and Hartner, 1993; Chase-Lansdale and Brooks-Gunn, 1994; Furstenberg, Brooks-Gunn and Morgan, 1987; Hardy et al., 1997; Hayes, 1987; Luster and Mittelstaedt, 1993). Adolescent mothers are more likely to have subsequent children, and larger family size contributes to the scarcity of resources within the family (Downey, 1995; Maynard, 1997). Teen mothers are also less likely to be happily married/in a stable marriage and spend more time as a lone parent (Attico and Hartner, 1993; Coley and Chase-Lansdale, 1998; Hardy et al., 1997; Hotz, McElroy and Sanders, 1997; Maughan and Lindelow, 1997). In Canada, lone parents were identified as a subgroup vulnerable to persistent poverty (Hatfield, 2004). Psychological factors for teenage mothers include an increased likelihood of mental or general health problems relative to older mothers, and higher rates of depression and psychiatric symptoms (Leadbeater, Bishop and Raver, 1996; Maughan and Lindelow, 1997; Williams et al., 1997).

Precursors to adolescent pregnancy and childbearing

Negative circumstances may result from teen pregnancy or drive teens to become pregnant (Coley and Chase-Lansdale, 1998). Background factors that can predispose adolescents to become pregnant include socioeconomic status (Abrahamse, Morrison and Waite, 1988; Brewster, Billy and Grady, 1993; Hobcraft and Kiernan, 2001; Quinlivan et al., 2004). For instance, young women who live in poverty, deprived conditions or come from less privileged upbringings are more likely to become pregnant while a teenager (Botting, Rosato and Wood, 1998; Hobcraft and Kiernan, 2001). Many family and individual factors can contribute to teen pregnancy likelihood including having a parent with low levels of education, having lower expectations for the future, and having less confidence in the likelihood of high school graduation (Young et al., 2004). In addition, a teen's behaviour (e.g., low educational performance, conduct problems, sexual risk-taking, behavioural problems) can play a role in her teenage parenting likelihood (Woodward, Horwood and Fergusson, 2001). Other individual variables contributing to teen pregnancy and parenting in girls include being in foster care, idealizing pregnancy, illicit drug or alcohol use, and mental health problems (Quinlivan et al., 2004; Wellings et al., 1999).

Additional family factors can impact non-marital childbearing among girls including a history of parental separation or divorce (Cherlin, Kiernan and Chase-Lansdale, 1995; Quinlivan *et al.*, 2004). Being raised in a lone parent family, being exposed to family violence in early childhood, and having a teen mother (Maynard, 1997; Quinlivan *et al.*, 2004; Wellings *et al.*, 1999) also increases the risk of adolescent pregnancy and childbearing for young women.

Current Controversies

Controversy 1: Teen Childbearing and Educational Achievement

Adolescent mothers are more likely to have an interrupted education, and some drop out of school permanently. Less than a third of teen moms in the U.S. complete high school and only 1.5 percent receive a college degree prior to 30 years of age (Hotz, McElroy and Sanders, 1996). A key issue with teen mothers' truncated education is sequence. It remains unclear whether teenage mothers are more likely to have been performing poorly, dropped out and then become pregnant or whether becoming pregnant is a catalyst for quitting school.

In one study, a third of teen mothers were reported to have guit school prior to becoming pregnant (Maynard, 1995). A study that controlled for lack of expectation of education or training, expectation of parenting, sexual knowledge and confidence, found dislike of school to be associated with an increased risk of teen pregnancy (Bonell et al., 2005). In the United States, teens who dropped out of school had a greater likelihood of early sexual initiation, not using contraception, becoming pregnant, and having a child (Brewster, Billy and Grady, 1993; Manlove, 1998; Mauldon and Luker, 1996). Young women who become teenage parents tend to have lower grade point averages, more school absences, and more trouble with school work-prior to pregnancies, than their peers, which is indicative of school disengagement (Manlove, 1998; Moore and Manlove, 1998). Many later obtain their General Education Diploma (GED) yet this does not completely close the gap (Henshaw, 1998). A 20-year follow-up of school-aged mothers found factors important to long-term success (education and employment/spousal support) included completing more school prior to the pregnancy, remaining in school at 26 months post-partum without further pregnancy, more active participation in an intervention program, and only having one to two more children overall (Horwitz et al., 1991). Furthering their own education enables teenage mothers to provide a better learning environment for their children (Kinard and Reinherz, 1987).

Controversy 2: Teen Childbearing and Poverty

Poverty stems in part from the fact that teen mothers are less likely to graduate from high school and have fewer employment options (Campaign for Our Children Inc; The Alan Guttmacher Institute, 1999). If employed, teen mothers work more hours at lower wages than older mothers (Hoffman and Foster, 1997; Hotz, McElroy and Sanders, 1997). Teenage mothers have been shown to be twice as likely to be dependent on welfare (Maynard, 1997; Olausson *et al.*, 2001), relative to older mothers, even when comparing those of the same SES level.

With poverty, it is again difficult to isolate sequence: did disadvantage lead to pregnancy or does teen motherhood result in impoverished life chances? Teens living in poverty and deprivation are more likely to become pregnant and

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teen parents often have lower lifetime earnings (Botting, Rosato and Wood, 1998; Combs-orme, 1993; Singh and Darroch, 2000). Clearly, early pregnancy and poverty are closely correlated (Canadian Institute of Child Health, 2000). Some studies attribute poverty to early childbearing (Attico and Hartner, 1993; Hayes, 1987) and others conclude that teen mothers are more likely to come from economically or socioeconomic disadvantaged families (Abrahamse, Morrison and Waite, 1988; Geronimus and Korenman, 1992; Young *et al.*, 2004). For the latter, a selection bias may be operating with poorly functioning youth more prone to view parenthood as a viable option (Fessler, 2003). UK Census data illustrate that teen motherhood is ten times more likely for girls from the lowest compared to the highest social class (Botting, Rosato and Wood, 1998).

Improving outcomes

Strategies to improve the outcomes for teen mothers have been suggested in many jurisdictions.

Teen pregnancy prevention

In Canada, reducing the rate of teenage pregnancy, particularly for unintended pregnancies, would benefit families, society, and the economy. Some teens view early childbearing as a logical solution to their current predicament of disadvantage and narrow perceived options for the future (Furstenberg, 2003; Quinlivan, 2004; SmithBattle, 2005, 2000; Stevens-Simon and Lowy, 1995). Here, countering teens' perceptions of the benefits of early motherhood and helping them find meaning in their current lives is important, as is targeting academic underachievers early on (Stevens-Simon and Lowy, 1995). Prevention programs promote academic success by enhancing perceptions of future options, focusing on empowerment, and providing a realistic alternative to teen childbearing (Bissell, 2000; Young et al., 2004). Programs that engage high school students in activities such as volunteering have proven beneficial in reducing teen pregnancy relative to teen controls (Allen et al., 1997). Strategies that target abstinence, safe sex practices and condom use are relevant for teen girls who do not wish to become pregnant (Rogers and Dilworth, 2002). Abstinence is strongly encouraged by the US federal government yet a systematic review of randomized controlled trials showed that it is not sufficient as a single method; it can be beneficial when paired with providing information on contraception (Bennett and Assefi, 2005; National Campaign to Prevent Teen Pregnancy, 2002). Efforts to identify and engage at-risk youth in their education while providing them with hope for a successful future show promise. A framework proposed by Health Canada focuses on "pro-action" (building resilience for the disenfranchised), "postponement" (delaying sexual initiation, promoting safe sex, access to condoms for those not wanting to get pregnant), and "preparation/support" (for teenage mothers to postpone further pregnancies and maximize healthy child development) (Rogers and Dilworth, 2002). Relevant

to the latter, providing parental support and school-based child care showed promise for keeping parenting teenage girls in school, academically engaged, and discouraging further pregnancies soon after (Sadler *et al.*, 2007).

Effective programs included those targeting education, youth development initiatives, school and community clinics, and providing contraceptive education with broad sexuality education and skills training (Elfenbein and Felice, 2003; Franklin and Corcoran, 2000; National Campaign to Prevent Teen Pregnancy, 2002). Other beneficial teenage pregnancy prevention programs are providing information, advice and skill building, providing access to effective contraception, community coalition programs and collaborative efforts (As-Sanie, Gantt and Rosenthal, 2004; Ayoola, Brewer and Nettleman, 2006; Card, 1999; U.S. Department of Health and Human Services, 2002).

Welfare-based solutions

In the past, income assistance has been viewed by welfare opponents as promoting subsequent pregnancies (Stewart, 2003). The 1996 U.S. welfare policy act, Temporary Assistance for Needy Families (www.acf.hhs.gov/programs/ofa) restricts benefits to unmarried teen parents and provides state bonuses for decreases in non-married births. After two years of receiving assistance, individuals must work 20 or more hours per week, often in low wage jobs given their educational level and lack of work experience, and young teen mothers must reside with their parents in order to continue receiving welfare. The rationale behind forced co-residency is that teen mothers living at home are more likely to return to school, graduate high school, be employed and not be on welfare (Cooley and Unger, 1991). This living arrangement has been shown to be beneficial in the child's early years; yet it can increase conflict in the home and result in poorer parenting (Chase-Lansdale, Brooks-Gunn and Zamsky, 1994; Coley and Chase-Lansdale, 1998; Horwitz et al., 1991), likely more so when cohabitation is mandated for welfare receipt as opposed to desired by both parties. The forced employment provision may be detrimental to teen mothers furthering their education and finding decent employment. Early interruption or termination of a teen mother's education begets a lower earning potential and poverty (Canadian Institute of Child Health, 2000). Canada recently introduced a Universal Child Care Benefit which provides \$100 per month for each child less than six years of age, and is intended to support family child care choices via direct financial support. However, families are not held accountable for how the money is spent.

Raising socioeconomic status

Others argue that effective policies and programs must focus on the socioeconomic adversity faced by young women to reduce adolescent pregnancy rates and improve the outcomes experienced by these mothers and their children (Bissell, 2000). Reducing poverty would represent a significant undertaking. However, given the potential of this strategy to not only lower the number of adolescent pregnancies (World Health Organization, 2004) but to enhance well-being for the population (Hertzman and Power, 2006), it should not be discounted.

Limitations of the Literature

Measurement issues, including selection bias and uncontrolled heterogeneity (e.g. family factors), have plagued both cross-sectional and controlled studies relevant to teenage childbearing (e.g. Grogger, 1997; Hotz, McElroy and Sanders, 1997; Maynard, 1995), making the findings less potent (Fessler, 2003). More recent studies that control for family factors have been questioned in terms of whether the controls applied are adequate. Also, the use of multiple methods for defining young mothers is a limitation of the literature as it clouds the ability to draw concrete conclusions across studies. Many researchers favour the use of mother's age at first birth (Hoffman, Foster and Furstenberg, 1993; Jaffee, 2002; Maynard, 1996) yet others calculate mother's age at the birth of the study child.

Conclusions

Early childbearing typically jeopardizes the trajectory to adulthood by either interrupting the mother's education, or by making it difficult for a high school dropout to return to school, thereby limiting her income earning potential and necessitating welfare use or low-level employment. In addition, a young mother living in poverty is likely to experience difficulties in trying to provide her child(ren) with a good start in life, particularly if she is also undereducated and has few resources available to her. Some researchers have concluded that the link between teen mothers' poor outcomes and early childbearing has been overstated (Fessler, 2003; Hotz, McElroy and Sanders, 1996). While recent research attributes less of the disparity to being a teen parent per se and more to background and SES factors, teen mothers have a poor prognosis, and early childbearing remains a significant policy issue.

The strategy that seems to have the most merit is to prevent young girls from becoming pregnant in the first place. Similarly, The American Academy of Pediatrics (2005) stresses primary prevention of initial pregnancy and secondary prevention of subsequent pregnancies for adolescents. Although, would strategies aimed at delaying childbirth have a significant impact on outcomes for young mothers? Some researchers state that increasing the average age at first birth is not likely to significantly enhance the SES of disadvantaged mothers and their children (Bailey, 2005; Geronimus and Korenman, 1992). However, there is not enough solid evidence to justify abandoning this policy avenue, and delaying births may help narrow the poverty gap (Hoffman, 1998).

This review clearly shows that teen motherhood is a multi-faceted issue that extends beyond sexual matters to include the need for educational qualifications and educational goals to curtail early childbearing (Wellings *et al.*, 2001; Nanchahal *et al.* 2005). The significant proportion of teens that becomes pregnant before school leaving and the research supporting family background as a precursor highlight the need to move beyond sexual education. One strategy would be to address levels of educational attainment and academic engagement. Providing teen mothers with the resources and assistance to succeed academically makes sense (SmithBattle, 2006). Youth development programs are proving to be an effective means to prevent teen pregnancy (Brindis,, 2006). These programs seek to foster in youth a positive future outlook within a supportive environment. Policy makers should also direct attention to current teenaged parents and their need for further education and subsequent pregnancy prevention.

It is evident that background and socioeconomic factors play a role in both teenage pregnancy and adolescent childbearing. Further research is needed to clarify the relative contribution of teen motherhood to a teen's long term economic outcomes compared with the contribution of her own family background (often of poverty and low educational expectations). However, the development of effective policy directed at at-risk adolescents, teenage mothers, and preventing teenage pregnancies is not contingent on the resolution of the chicken-egg debate. Multiple strategies—delaying parenting, increasing and improving educational opportunities, targeting the disenfranchised, and tackling poverty—all hold potential for improving outcomes for Canada's young women choosing to parent.

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