

# **TORONTO** STAFF REPORT

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April 28, 2003

To: Board of Health  
From: Dr. Sheela V. Basrur, Medical Officer of Health  
Subject: Children's Mental Health

## Purpose:

The purpose of this report is to present the results of a needs assessment and literature review regarding the mental health of young children in Toronto, initiated by the Children and Youth Action Committee and Toronto Public Health.

## Financial Implications:

There are no financial implications arising from this report.

## Recommendations:

It is recommended that:

- (1) the Board of Health commend the Children and Youth Action Committee for identifying children's mental health as a significant issue requiring further attention and for providing the funding to complete the report entitled "Improving the Mental Health of Young Children in Toronto: Needs Assessment and Literature Review";
- (2) this report be forwarded to the Children and Youth Action Committee for its consideration;
- (3) Toronto Public Health collaborate with Children's Services Division, Community & Neighbourhoods Services Department, and other relevant City services to prepare a joint follow-up report on an implementation plan and implications of the "Improving the Mental Health of Young Children in Toronto: Needs Assessment and Literature Review" report; and

- (4) the appropriate City officials be authorized and directed to take the necessary action to give effect thereto.

Background:

The Children and Youth Action Committee's Children's Report Card Action Plan (1999) proposed "the initiation of a needs assessment and review of best practices to determine the appropriate program changes for integrating mental health programs into the delivery of Family Health". This was approved and funded in the Toronto Public Health 2000 Operating Budget.

Toronto Public Health subsequently retained the services of Dr. Michael Boyle and Professor Helen Thomas to conduct the needs assessment and literature review. They have prepared a report entitled "Improving the Mental Health of Young Children in Toronto: Needs Assessment and Literature Review". The Executive Summary, including Recommendations and Conclusions is attached in Appendix A. The full report is on file in the Clerks Department.

Comments:

The burden of illness (i.e., years of life lost due to premature death as well as years of life lived with disability) associated with mental disorders is comparable to cardiovascular diseases and respiratory diseases and surpasses all types of cancer and HIV. Mental disorders are projected to increase to 15.0 % of the global burden of disease by 2020.

Mental health problems may begin early in life and tend to spill over into other areas of children's health and functioning, such as their social relationships, academic performance and physical health. In the absence of early intervention, children's mental health problems may lead to long term consequences such as academic underachievement, depression, and alienation from societal goals and values. The "Improving the Mental Health of Young Children in Toronto" report provides insight into this issue through a comprehensive needs assessment and a review of effective child mental health promotion interventions.

Needs Assessment:

The purpose of the needs assessment was to provide information about children's mental health needs in order to facilitate the setting of priorities related to improving children's mental health. The report compared levels of mental health between different groups of children and identified that in order to improve children's mental health overall, it is necessary to reduce the type and number of mental health problems among specific groups of children. The needs assessment focused attention on children who exhibit above average levels of emotional-behavioural problems since these children have greater needs. The needs assessment identified that children's mental health needs are substantial, that levels of emotional-behavioural problems among children are increasing and that young boys are particularly at risk.

Factors that place children at risk for mental health problems include: (a) child-related factors, such as temperament, ability to get along with family members and friends, academic performance, and physical health, (b) parental/family-related factors such as coercive parenting

practices, parental depressed mood, and poor family functioning, and (c) neighbourhood factors such as higher concentrations of poverty, lone parent families, and rental housing. Child related factors, such as age, gender, intelligence and interpersonal skills, account for 49% of the variability in children's mental health outcomes, followed by parental/family factors (24%), and neighbourhood factors (7%).

The needs assessment concluded that resources should be directed to the 20-25% of children whose family and neighbourhood circumstances are associated with higher levels of emotional-behavioural problems. Compensatory programs designed to improve the health and functioning of these children can help to offset the growing inequities between children living and not living in difficult circumstances. Moreover, the data suggests that programs attempting to promote children's mental health can maximize their impact by working directly with children and that families and neighbourhoods may serve as an essential platform for delivering these programs.

#### Review of Effective Interventions:

Research on four types of community-based interventions was reviewed for this report: home visiting programs, parenting group programs, early childhood education and care (ECCE) programs, and two-generation programs.

Home visiting programs included strategies, such as providing parents with information about infant/child health and development, social support, modelling parent-child interactions, infant stimulation, and referral to community services. Although some home visiting programs had a positive impact on parent-child interactions and children's development, the impact was not consistent. Maternal benefits included reduced frequency of depression, improved sense of well-being and fewer repeat pregnancies in young single mothers. Families at highest risk appeared to benefit the most from home visiting programs. More intensive programs tended to have more positive results. Programs in which nurses were the intervenors, compared to lay/peer visitors, demonstrated more consistent results in positively effecting child cognitive and social/emotional development and maternal-infant/child interactions and in reducing child abuse and neglect.

Parenting group programs utilized combinations of strategies such as teaching, role modelling through discussion or videotapes, discussion alone and techniques to empower parents. Most parents who attended these programs were experiencing challenges with their children's behaviour. Parenting group programs had positive effects on maternal and child outcomes such as parental attitudes, parental behaviour, parent-child interaction, and child behaviour. Programs in which parents were taught a range of skills to recognize, describe, observe, and respond to problem behaviour in new and better ways were more effective.

Early Childhood Care and Education (ECCE) programs provided high quality educational child care as well as a range of family supports. Most programs were provided to children from low income and otherwise disadvantaged families. ECCE programs had a positive impact on these children's cognitive outcomes and a mixed impact on social-emotional outcomes. Exemplary ECCE programs were intensive (i.e.daily programs for two to four years) and used curricula that emphasized age-appropriate problem solving, acquisition of reading-language and other cognitive skills, and social skills. As well, these programs had low teacher/student ratios and

well qualified, well paid teachers, who received on-going support and supervision. Parents were also involved in the ECCE programs through participation in the classroom and attendance at parenting programs offered at the centre. Moreover, ECCE programs offered health and social services to families as well as a comprehensive range of instrumental supports, such as free transportation and meals.

Two-generation programs provide a variety of early child educational interventions similar to ECCE programs as well as activities that promote parental self-sufficiency (e.g. education, literacy, parenting skills, job training). Preliminary research indicates that intensive programs with longer duration demonstrate the most consistent impact on children's cognitive and social development. The modest impact of these programs to date may be related to problems associated with program implementation.

In addition to the child and family focussed interventions described above, the literature review identified the need to implement strategies to alter the broader social context of children's lives. Improving children's mental health requires multiple strategies directed towards children, families, neighbourhoods and children's social environments.

#### Next Steps:

Toronto Public Health has a mandate to promote the growth and development of young children, including their mental health. As such, many of Public Health's Family Health and Healthy Lifestyle programs have a direct impact on the mental health of children. In addition, the healthy growth and development of children is not only a Public Health issue. Children's Services Division and other city departments provide programs and services that also have a significant impact on children's mental health. Many of the interventions discussed in this report are already in place in the city. Programs such as Healthy Babies Healthy Children, parenting groups, Child Care, Family Resource Centres, and the First Duty Pilot projects can be considered within the context of promoting children's mental health. This report provides a catalyst for Toronto Public Health to further collaborate with Children's Services Division and other key stakeholders to re-examine priorities and programming in relation to their impact on the mental health of children in Toronto.

#### Conclusion:

The needs assessment and literature review has confirmed that child mental health problems are increasing, that boys are at increased risk, and that these problems have negative consequences for children, families, and society. The evidence indicates that children's exposure to stressful living circumstances brought on by family dissolution, poverty and inadequate housing have been increasing. These factors substantially increase children's risk of mental health problems.

Universal programs directed towards children and families in at risk areas (higher concentrations of poverty, lone parent families, and rental accommodation) could reduce the variation in child mental health across the city. Reducing inequities in the distribution of mental health problems in children will result in improved mental health for the entire population.

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List of Attachments:

Appendix A: Improving the Mental Health of Young Children in Toronto: Needs Assessment and Literature Review. Executive Summary. Prepared for the City of Toronto, August 2002 by Professor Helen Thomas and Dr. Michael Boyle, MacMaster University.

# Appendix 1

## Improving the Mental Health of Young Children in Toronto: Needs Assessment and Literature Review

Funded by the City of Toronto, August 2002

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## **Executive Summary**

### ***Objectives of the Report***

The objectives of this report are to:

- ◆ Clarify the nature of child mental health and the challenges to its improvement;
- ◆ Describe the distribution of child mental health needs in the Ontario and Canadian population;
- ◆ Review the evidence of the effectiveness of community-based programs to improve mental health of children ages newborn to six years; and
- ◆ Provide recommendations for Toronto Public Health and the Toronto Child and Youth Action Committee related to improving the mental health of children, based on the evidence above.

### ***Summary of Findings***

The first component of the report defines child mental health and the challenges to its improvement. It also addresses the distribution of child mental health needs in the population. Child health is measured not only by the absence of illness or disease but also by a composite of normal physical, cognitive, emotional, social and behavioural attributes particularly during the preschool years. Emotional and behavioural regulation are the aspects of child health that define child mental health. In preschool, child mental health is largely measured by child behaviour. As children become older and more verbal, feelings and thoughts as well as behaviour are used to identify mental health problems.

A number of factors influence the development of emotional and behavioural problems in children. Current evidence indicates that child mental health (social/emotional/behavioural problems) is a result of the interplay among the child, the family, the immediate environment (e.g., school, neighbourhood) and societal, cultural and economic factors in society at large. For many children, development of mental health problems is a process that begins early in life and continues to be reinforced later in life. This trajectory is the rationale for intervening early to prevent future difficulties.

The variety of actions to improve child mental health fall along a continuum including specialized clinical services, services aimed at high-risk children, services implemented in high-risk areas and universal services for all children. These programs have different objectives and intended beneficiaries. Policy decisions related to which segment(s) of the population one wishes to impact upon will be made based on the objectives of the decision-making group. Trade-offs between the magnitude of program effects, the number of children to be covered by a program and the costs required to achieve effects along with other considerations must be included in the decision-making process.

The distribution of child mental health needs in the population was identified using data from the Ontario Child Health Study (OCHS) and the Canadian National Longitudinal Survey of Children and Youth (NLSCY). Both of these studies include representative community samples.

Child mental health needs are high. Based on the OCHS, among Ontario children 4-11 years of age 13.5% of girls and 19.5% of boys have a psychiatric disorder. Only a small minority of children with disorders receive specialized help and about one-third of them have persistent conditions. Rates appear to be increasing over time.

Several factors have been repeatedly associated with poor mental health outcomes among groups of children.

- ◆ Child factors: temperament, social relationships (i.e., getting along with family members, peers and classmates), academic performance, and physical functioning.
- ◆ Family factors: coercive parenting, poverty, maternal depression and poor family functioning.
- ◆ Neighbourhood factors: economically poor, lone-parent families and housing rental as opposed to ownership.

Large numbers of children (25.2% in Canada) are exposed to some economic disadvantage in the families and neighbourhoods in which they live. This is particularly worrisome because the economic circumstances of families in Toronto are getting worse. In 1986, 16.4% lived in poverty as opposed to 27.6% in 1996.

The variability in rates of child emotional/behavioural problems was calculated to be accounted for by 43-49% child attributes, 24-29% parent/family characteristics and 7-8% place of residence (neighbourhood). Effective interventions in all three areas could reduce the rates of child emotional/behavioural disorders.

The needs assessment focuses on the subgroup of children whose family and neighbourhood circumstances are associated with higher rates of emotional/behavioural problems (20-25% of children). Although problems exist for all children, focussing interventions on this group provides an opportunity to decrease the variability in child mental health problems across the city. Since increasing numbers of families face disadvantaged social and economic circumstances, it is expected that increasing numbers of children will have emotional/behavioural disorders in the future. Given that the characteristics of children themselves have a large impact on mental health outcomes, effective interventions should be directed at children. Strengthening social skills and improving academic competence among this group may be an important place to start. As well, coercive parenting, maternal depression and family dysfunction all need to be effectively addressed through strategies targeted to parents. Interventions by various levels of government to strengthen neighbourhoods is also important.

The second component of this report includes a systematic review of literature reviews designed to answer the following question: what are effective community-based interventions to enhance cognitive and social-emotional development among children zero to six years of age? Because of the numerous primary studies available, a review of reviews rather than a review of primary studies was undertaken. The results from nine moderate and 12 strong reviews are included.

Four types of interventions were addressed in the 21 reviews.

- ◆ Home visiting by professionals and/or paraprofessionals had some positive outcomes (n=8 reviews), but its impact on promoting positive parent-child interactions or positive child development was inconsistent. Families at highest risk benefited most from the interventions.

- ◆ Early childhood care and education (ECCE) with and without home visiting was addressed in 10 reviews. Only one review did not focus exclusively on programs for children from poor and otherwise disadvantaged families. Overall, ECCE programs that were intensive (i.e., daily), long-term (two to four years), employed skilled teachers and low student teacher ratios had the most positive long-term effects on child cognitive and social-emotional development into elementary and secondary school.
- ◆ Two reviews focussed on the impact of time limited (eight to 12 weekly sessions) parenting group programs on child social/emotional/behavioural outcomes. Behavioural programs that trained parents to use reinforcement effectively and that empowered parents were most effective. In these programs parents were taught a range of skills to recognize, describe, observe and respond to problem behaviour in new and more effective ways. Elements of effective parenting group programs included: a curriculum which focussed on improving parent-child interaction and child behaviour through changing parental behaviour, provision of handouts that reinforced concepts, and role playing and/or discussion of videotaped vignettes. These reviews did not identify which programs are most effective for which groups of parents and children.
- ◆ Two generation programs that provide services similar to the ECCE programs for children as well as a variety of services for parents, including linking them with job training, educational and literacy institutions to enable parents to become economically independent had mixed effects on child outcomes and no effect on parental outcomes (n=1 review). The authors suggest that these mixed outcomes may be related to program quality and integrity rather than the potential benefits of these types of programs.

The third component of this report outlines examples of current Toronto, provincial and national policies related to maximizing child development and mental health. Generally, these policies are consistent with the evidence in the other sections of the report. They stress the need for public discussion and decisions related to the value of children in our society and the responsibility of a civil society in relation to its children. As identified throughout this report, these policy documents noted the importance of not only individual and family interventions, but the crucial need to address the inequities in the lives of disadvantaged children and their families. Most questioned the ability of more individual strategies to effect long-term change without this societal level of intervention.

## ***Overall Conclusions and Recommendations***

The burden of illness associated with mental disorders is comparable to cardiovascular and respiratory diseases and surpasses all types of cancer and HIV (Ustun, 1999). Child mental health problems are common and have negative consequences for children, families and society. There is some evidence to suggest that levels of emotional-behavioural problems among children have increased between 1993-1998. Because these difficulties arise from the interplay of the child, the family, the school, the neighbourhood and society at large, successful interventions will require multiple strategies. Most of the interventions described in this report targeted at-risk families. No evidence of the effectiveness of programs for children at low risk was found. This is not to say that such programs would not be valuable. To date, they have not been evaluated for this group of children/families. Targeting children and families in at-risk

areas (e.g., poor, lone-parent, or living in rental accommodation) could reduce the variation in child mental health across the city. Offering programs to families in identified geographic areas could target at-risk children and by providing universal access in the area, reduce stigmatization.

The implications of this work for policy, practice and research are listed below.

### **Policy**

- ◆ High quality ECCE programs (i.e., intensive programs over at least two years, well educated, well paid staff, on-going staff support and supervision, low teacher : child ratios, curriculum that emphasized age appropriate problem solving, acquisition of reading-language skills, other cognitive skills, and social skills, opportunities for parental involvement in the classroom and a comprehensive range of other programs including parent programs, free breakfast and lunch, on-going health and social services, transportation and practical assistance with meeting urgent family needs) should be accessible to all at-risk children.
- ◆ Based on the exemplary programs reviewed, guidelines for quality ECCE programs need to be developed and instituted.
- ◆ Integration and coordination of services for families and children at the system level requires collaboration among a number of agencies representing a variety of provincial ministries (e.g., community services, education, health, housing, welfare benefits).
- ◆ Local, provincial and national governments need to be encouraged to lead an informed community-based discussion about the value placed on early child development including mental health and then develop a relevant policy framework for programming and guidelines for program quality.
- ◆ Given the association between low-income and parent and teacher reported problem behaviours in children, social and economic policies that address the contributing factors to child and family poverty, such as lack of affordable housing, unemployment and low wage work, need to be developed by all three levels of government.

### **Practice**

- ◆ In view of evaluated exemplary ECCE programs, child development experts and others such as mental health professionals and public health nurses should review current programs and modify them to assure that they meet the criteria for high quality programs.
- ◆ New programs modeled on programs with demonstrated effectiveness should be instituted.
- ◆ Home visiting should be accessible to all high-risk families. The purpose of visiting must be clearly identified and a system put in place to assess how well the objectives are being met. Goals, objectives and interventions should be clearly articulated. Interventions with demonstrated effectiveness should be incorporated into home visiting programs.
- ◆ There needs to be a careful review of the role of paraprofessionals and public health nurses (PHNs) providing home visiting. It is important to identify the most appropriate intervenor to meet family needs and program goals.

- ◆ There needs to be a greater emphasis on coordinating and integrating home visiting service with other services required of high-risk families. To be successful, this will need to occur at both the family level and the system level.
- ◆ There are many different parenting group programs available to parents of young children. Many of these programs have not been rigorously evaluated. An inventory of parenting group programs should be developed to determine the most frequently occurring programs. Based on this information, evidence regarding the effective components of parenting group programs, and the expertise of service providers in the field, prototypes or model programs should be developed and rigorously evaluated.
- ◆ Parent group programs that have been shown to be effective in improving child behaviour should be instituted. In these programs parents were taught a range of skills and to recognize, describe, observe and respond to problem behaviour in new and more effective ways. Programs included a curriculum which focussed on improving parent-child interaction and child behaviour through changing parental behaviour, provision of handouts that reinforced concepts, and role playing and/or discussion of videotaped vignettes.
- ◆ Parent group programs that have not been shown to be effective in improving child behaviour should be discontinued.
- ◆ There needs to be a clearly defined advocacy role directed at the systemic causes of poverty and family disadvantage (e.g., adequate housing, policies that reduce the high-low income gap, lack of high quality early intervention programs). Initiatives beyond child, family, and local environments to ensure that equitable policies to reduce child and family poverty, unemployment, homelessness, and to promote access to affordable housing must be undertaken by all levels of government.

### **Research**

- ◆ Because the ECCE programs with positive outcomes for child mental health were instituted in the US in the 1970's and early 1980's, new programs that are implemented following these designs should be rigorously evaluated using experimental methods.
- ◆ Additional research is required to determine the duration and intensity of home visiting that leads to positive results and is acceptable to parents.
- ◆ The evidence about the effectiveness of two generation programs is inconsistent and many shortcomings of the evaluated programs exist. The evidence in primary studies needs to be evaluated further and any programming needs to be rigorously evaluated.
- ◆ There is a need to determine whether certain parenting programs are more effective for specific groups of parents as well as the importance of group leader qualities on program outcomes.