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Manitoba's *BabyFirst* Program: A Way to Reduce Child Maltreatment?

MANITOBA CENTRE FOR HEALTH POLICY

Summary of the report:
Next Steps in the Provincial Evaluation of the BabyFirst *Program: Measuring Early Impacts on Outcomes Associated with Child Maltreatment*
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KEY POINTS

- The *BabyFirst* screen did a reasonable job of predicting kids at risk
- Not all babies received the screen—25% of the births did not get screened
- The evaluation of the *BabyFirst* home visiting program was hindered by small sample size
- The introduction of the *BabyFirst* program was associated with decreases in maltreatment injuries for young children

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As the saying goes, there is no instruction manual included when your child is born. Raising a child can be one of the most challenging, important and fulfilling roles anyone can experience.

At the same time, it can be full of uncertainty and frustration. In extreme cases, frustration and uncertainty can result in child maltreatment. The impact of child maltreatment is devastating, both at an individual level and to society at large.

It is well known that children who have suffered from maltreatment and abuse are at greater risk of displaying emotional and physical problems which can last into adulthood. In turn, adults who display emotional and physical problems are at greater risk of treating their children poorly. And reducing risk is what is at the core of a new report by the Manitoba Centre for Health Policy (MCHP).

For obvious reasons, it is hard to estimate just how widespread child maltreatment is, as often times, it occurs behind closed doors and therefore remains hidden. Estimates based on cases that come to our attention are bound to undercount just how many children are being maltreated.

We know that confirmed cases of child abuse are found for about 2% of Canadian children. However, surveys suggest that severe child maltreatment may affect many more children. In those cases that are actually reported, child maltreatment seems to occur most frequently in babies.

What if there was a way to identify, or predict from the thousands of births that occur in Manitoba each year, which children would be most at risk of being maltreated? Better yet, wouldn't it be ideal if something could be done to reduce the risk for these children? And the earlier, the better.

This is exactly what the Healthy Child Manitoba Office (HCMO) set out to do. Since 1999, it has funded and coordinated a provincial program called *BabyFirst* (now called Families First) that seeks to screen all newborns and their families in Manitoba, identify those babies at greatest risk of being maltreated, and help their families so the risk of maltreatment is reduced.

Because there are over 12,000 births every year in Manitoba, and fortunately, most children are not maltreated, it is a difficult task to try to identify those children that are most likely to be maltreated. Kind of like looking for a needle in a haystack, each and every year.

This task is made a little easier because research has shown that maltreatment is more likely to happen when families live in poverty or are isolated from close friends or relatives.

Now, it is important to note that we are not saying maltreatment is "caused by" these factors. Most families in these situations treat their children well. And maltreatment can and does happen in families that are not affected by these factors.

What does the BabyFirst *program do?*

At the heart of the *BabyFirst* initiative is the questionnaire used to screen new infants and their families. Under the *BabyFirst* program, Public Health Nurses in Manitoba are supposed to interview all families of newborns in Manitoba, using this screening form. If families score high

enough on this "screening" and on a second, more detailed form, they are then offered a home visitor. The goals of the home visitor are to work with families to teach them about keeping their children healthy and safe, building good relationships with their children, and connecting them with their community.

Does it work?

MCHP was asked to determine how well the *BabyFirst* program worked. But how do you answer such a complex question? Earlier we stated that it was very difficult to determine exactly how many children are being maltreated. An equally difficult task is measuring how well a program prevented something from happening.

To make our task more manageable, MCHP, with the help of a working group made of up of doctors, university professors, and representatives from Manitoba Health and from HCMO, asked three questions:

1) How well does the initial screening process identify children at risk of being maltreated?

2) Has child maltreatment been reduced for those families participating in the program?

3) Has there been a drop in provincial rates of maltreatment injuries to children since the *BabyFirst* program started?

To answer these questions, we used anonymized administrative data housed at MCHP. These data include records of physician billings and hospitalizations for people living in Manitoba.

How well does the screening form identify children at risk of maltreatment?

We linked the *BabyFirst* screening forms to information available in the administrative data. We looked at all newborns born in hospitals in Manitoba for each year from 2000 through 2002. We then calculated the percentage that received a *BabyFirst* screening.

Next, because of the difficulty in figuring out how many children are being maltreated, we used a "proxy measure" to give us an idea of maltreatment: children who ended up being taken from their families and placed in foster care. Keep in mind that this measure is by no means perfect, and again, is likely to undercount how many children are really being maltreated.

We looked at how well the form could predict if a baby born in 2000, 2001 or 2002 went into foster care or not. Using sophisticated statistical techniques, we also looked at which of the 23 items on the form best predicted those that went into care.

We found that between 2000 and 2002, an average of 75% of all children born in a hospital in Manitoba had an initial *BabyFirst* screening form filled out (Figure 1). This means that 1 in 4 of the babies born in this period did not get screened. We also found that those families that lived in the lowest income areas were less likely to be screened. But where there was a screen given, the form was reasonably successful in picking out children who would eventually end up in care.

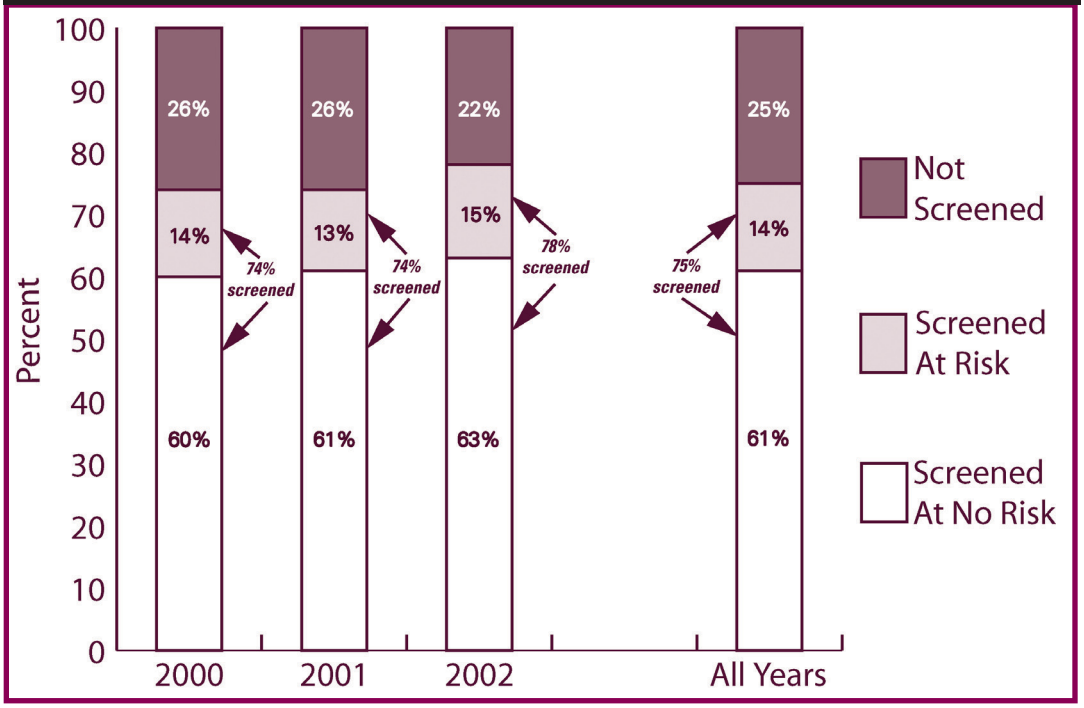
We found that 77% of those children that ended up being taken into care by 2004 had screened "at-risk." Importantly, 83% of children that did not end up in care had scored "not at-risk" on the form. So the screening form was fairly good at telling the difference between those that ended up in care, and those that did not.

Looking at the individual questions, the strongest predictors of a child ending up in care were: receiving income assistance, having a file with local child protection services, mothers who did not finish high school, and living in a one-parent family with no social support. Again, not entirely unexpected, but having information like this is important if you want to fund programs for families most in need of help.

Has child maltreatment been reduced for families in the program?

For this second question, we compared 187 families that received the *BabyFirst* home visiting program to 63 families that did not receive home visitors. We wanted to see if home visiting made a difference, so we were going to measure things like the number of child deaths, number of times children were hospitalized for maltreatment, number of children that went into care, and the number of families receiving services from Child and Family Services (CFS).

Figure 1. Percent of Manitoba Infants Given the *BabyFirst* Screen Each Year



Our task was complicated by the small number of cases in the study. Fortunately, none of these children ended up in a hospital for maltreatment, nor were there any child deaths during the study period. Although some of the children were taken into care, the numbers were not high enough to make a statistical comparison between the groups. We were only able to compare the two groups on the services they received. Compared to families that did not receive home visits, families that received home visits were more likely to use services from CFS. It's hard to say whether this was a good thing or not. On the one hand, it seems a little odd that families receiving home visits ended up having more contact with CFS. On the other hand, more contact with CFS could mean that these families are receiving the support they need.

More research is needed to figure out whether more contact with CFS means better outcomes for children or not. Perhaps interviewing families could shed some light on this.

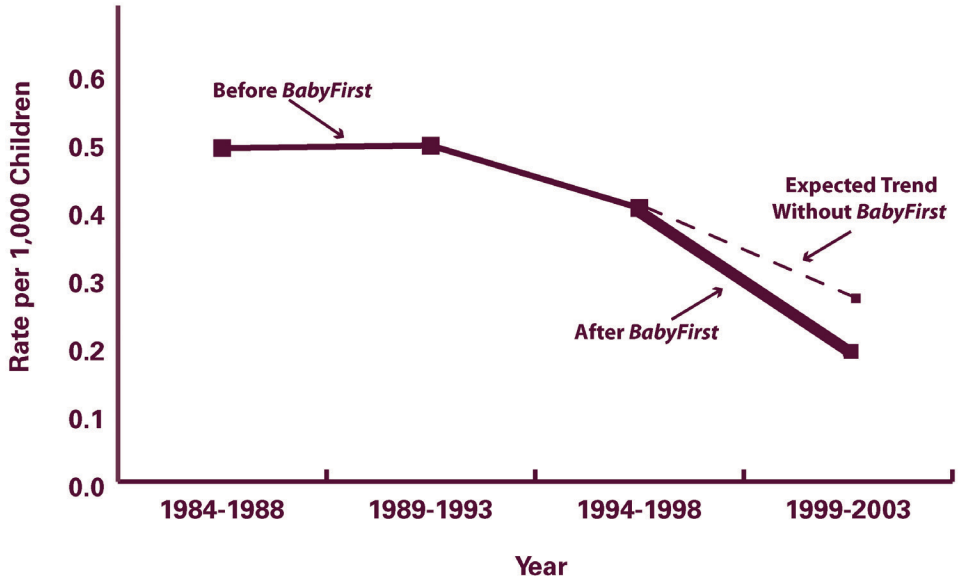
Has there been a change in provincial rates of maltreatment injuries since the BabyFirst *program started?*

For the last question, we looked at the impact of the *BabyFirst* program from a broader perspective. So, we looked at all injury-related hospitalizations and deaths in Manitoba, particularly assault and maltreatment injuries, from 1985 to 2004. Because there is a lot of year-to-year change in rates, we looked at 5-year groupings, and compared the average rates between each 5-year grouping.

Looking at the past 20 years, injury rates declined for Manitoba children. Did the *BabyFirst* program have any impact on provincial injury rates? Well, it depends on which age group you look at. For all children up to 18 years old there was no difference when we compared injury rates before (that is, before 1999) with injury rates after the *BabyFirst* program began. However, when we looked only at children up to age 3 years, there was a lower rate of maltreatment and assault injuries after the *BabyFirst* program began, even after we took into account the declining rates over time (Figure 2).

This is an interesting finding, because the youngest children would be the group most affected by the *BabyFirst* program. Again, we need to be very careful when interpreting this finding. We are not saying that the *BabyFirst* program caused these declines; we merely found a strong association – that means, one thing happened alongside the other. There

Figure 2. Maltreatment Injury Rates in Children Aged 3 or less, Before and After *BabyFirst* Program



were several programs focussing on early childhood development that were introduced around the same time as *BabyFirst*. More than likely, the effects of all these programs together (including *BabyFirst*), and growing public awareness of the importance of the early childhood period, all added to the drop in maltreatment injury rates in this age group.

What can we recommend?

Given that the screening form helped identify children who could end up in foster care, but that many families got "missed" in the screening (so were not even considered for the *BabyFirst* home visiting program), we need to track screening rates. HCMO reports that screening rates are now around 90% for the province. This is a positive step. Another step would be to talk to those involved in First Nations community health programs to see if there are ways to increase screening rates for those children.

As well, we found that the screening form could be further improved by asking questions about additional factors that predicted whether a child ended up in care, such as the age of the mother at the birth of her first child, the number of siblings, and whether or not the child was breastfed. Some of these have now been added to the form.

We also recommend trying to understand why more CFS services are being used by families that receive home visitors and evaluate how programs such as *BabyFirst* could increase the demand for these services. And to help look at the impact of the home visiting program on maltreatment injuries and use of foster care, more families should be included in any future studies.

Although this report did provide some answers, like most good research, it generated more questions. Clearly though, a complex question such as whether or not the program "worked" will require more study. Maltreatment injury rates in children have decreased and that's encouraging. But more work needs to be done to figure out the role that *BabyFirst* played in this decline.

As we stated at the beginning, there is no instruction manual included when your child is born. However, this report shows some encouraging signs. Perhaps with a little help from programs such as *BabyFirst*, families can overcome some of the challenges and difficulties of parenting. That way, they can concentrate on doing the best they can to raise their child in a healthy and secure environment.

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