Maternal distress in the context of their child’s type 1 diabetes: impact upon child outcomes and moderating role of adaptive maternal emotion regulation

Van Gampelaere C¹, MSc; Vervoort T¹, PhD; Luyckx K², PhD; De Paepe A¹, PhD; Goubert L¹, PhD
1. Department of Experimental, Clinical and Health Psychology, Ghent University, Belgium
2. Department of School Psychology and Child and Adolescent Development, University of Leuven, Belgium
*Corresponding author: Cynthia.Vangampelaere@UGent.be

Background

Childhood Type 1 diabetes (T1D) is often referred to as a family disease, affecting also the parents of the child. In childhood T1D parents often bear major responsibility for disease management, which can be taxing. Evidence shows that parents of children with T1D experience high levels of stress, anxiety and depression

1. Parental distress is not only related to worse parental health
2. but is also shown to be associated with maladaptive child outcomes (e.g., depressive symptoms
3. and problematic behavior).

Understanding factors that may counteract parental distress exerting its negative effect upon the child is critically important. A candidate buffer may be the extent to which parents use adaptive cognitive emotion regulation strategies (CERS).

Hypotheses

• Maternal distress will be associated with more maladaptive child outcomes.
• Maternal adaptive CERS will buffer the negative associations between maternal distress and child outcomes.

Method

Participants

43 mother-child dyads recruited from Ghent University hospital

• Mothers (M̅_age = 41, SD = 4.98, range 29-56)
• Children 8-15 years with T1D (18 boys, 25 girls, M̅_age = 12, SD = 2.07)

Procedure & Measures

Cross-sectional design
Questionnaire administration in the hospital, under supervision of research assistant

• Mother: general distress (HADS), illness-related parenting stress (PIP frequency and difficulty) & cognitive emotion regulation (CERQ)
• Child: anxiety (STAI-C-trait), depressive symptoms (CDI) & functional disability (FDI)

Analysis

• Main effects: Backward stepwise multiple regression analysis, three models
• Moderation effects: six multiple regression models

Results

• Higher levels of maternal illness-related stress (PIP) are related to more maladaptive child outcomes.
• No main effects of general maternal distress (HADS).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIP mother</td>
<td>β = .33*</td>
<td></td>
</tr>
<tr>
<td>HADS mother</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>PIP mother</td>
<td>β = .35*</td>
<td></td>
</tr>
<tr>
<td>HADS mother</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>PIP mother</td>
<td>β = .47**</td>
<td></td>
</tr>
<tr>
<td>HADS mother</td>
<td>ns</td>
<td></td>
</tr>
</tbody>
</table>

• No moderation effects of maternal adaptive CERS on the associations between maternal distress and maladaptive child outcomes

Maternal distress

ns

Conclusions

In line with previous research, the results indicate that maternal distress contributes to more maladaptive child outcomes in the context of childhood T1D. More specifically, mothers experiencing more illness-related parenting stress, have children with higher anxiety, depressive symptoms and functional disabilities. Future longitudinal research is necessary to determine the direction of those associations.

In contrast to expectation, the findings showed no moderation effects of maternal adaptive CERS. It might be that the effects remained undetected due to the small sample size. Alternatively, results might be explained by the use of a composite scale of adaptive CERS, instead of examining the single adaptive strategies. Another explanation is that maladaptive strategies might have a stronger effect on distress than adaptive strategies, whereby the absence of maladaptive CERS might serve as a buffer. It is also possible that adaptive CERS stimulate positive outcomes instead of buffering negative ones. Additional research is needed to clarify these questions.

References