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Pain in children with cerebral palsy – adolescent siblings’ awareness of pain and perceived influence on their family

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**Abbreviations:** CP: Cerebral Palsy; GMFCL: Gross Motor Function Classification Scale; PA: Personal Assistant

**ABSTRACT**

**Objective:** To elucidate the experiences of being an adolescent sibling in a family that includes a child with cerebral palsy (CP) and pain, from the perspectives of siblings and parents.

**Methods:** Seven siblings and 10 parents were individually interviewed to systematically analyse the experiences of siblings and parents with children with CP and pain. The interviews were analysed by using qualitative content analysis according to Graneheim and Lundman.

**Results:** The theme ‘Making pain common ground for support’ and three categories combined the non-disabled adolescent sibling and parental experiences of the child’s pain, and point to the need for support of the non-disabled siblings. Dysfunctional coping influences the siblings’ daily life and future health. Siblings wanted closer contact with the Development Centre in order to alleviate their negative emotions.

**Conclusions:** As Development Centre physiotherapists meet the families to the child with CP, they can be a link to the sibling. Physiotherapists can educate siblings on pain and how to better cope with stress and emotional discomfort caused by their sibling’s CP and pain.

**KEYWORDS**

Siblings; cerebral palsy; pain perception; psychological adaptation; family relations; physiotherapy modalities; qualitative study

**Introduction**

Cerebral palsy (CP) affects approximately two of 1000 live births [1] and is the most common physical disability in childhood [2]. This neurodevelopmental brain condition creates a range of symptoms. Characteristic dysfunctions differ from developmental disabilities to motor dysfunction, may include musculoskeletal pain, and are common in children with CP [3,4]. Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage [5]. Pain in children with CP can be accentuated by high muscular tonus [6] or a result of treatment methods [7] including needles, stretching or occurring after surgery [8–10]. Such pain can lead to absence from school and affect social life in a negative way [3,11,12]. Parents feel that their children with CP lack optimal care and pain treatment. Throughout their lives, the children depend on their parents to interpret and express their pain, and to mediate with health care personnel [3,11–13].

Being a parent of a child with CP affects the parent’s physical and social well-being, freedom and independence, family well-being, and financial stability [14]. According to parents, the entire family is affected when a child suffers from CP [13,15,16]. In particular, a mother’s health is poorer than health of the population in general [17]. Parents find that siblings of children with developmental disabilities are more likely to develop negative feelings and behaviours compared to siblings of non-disabled children. Parents assert that non-disabled siblings have to accept greater responsibilities, and are sometimes not able to attend social events outside of school [16]. Parents have also noticed positive outcomes of being a member of a family with a child with development disabilities. According to the parents, there is family closeness and the non-disabled sibling develops sensitivity to the family situation and increased care-giving [13,16].

**Aim**

In order to enable healthcare and development centres to better understand the needs of families with children with developmental disabilities (including CP) and the non-disabled siblings, further examination of the family perspective is important [18]. The aim of this study was to elucidate the experience of being a sibling in a family that includes a child with both CP and pain from both sibling and parental perspectives.
Methods

Study design and research setting

The study used a qualitative design with individual interviews [19] that were analysed by qualitative content analysis as applied in health sciences research [20]. Qualitative content analysis is a suitable method for analysing human communication and individual experiences in a systematic way [20].

Development Centres in Sweden

Swedish Development Centres for physically disabled children in Sweden, started in the 1960s and 1970s and is an activity within the county council or region. The purpose of the Development Centres is to help the children to the highest possible level of independence. The goal is to help the children to gain or maintain self-respect and self-confidence to live their lives as independently as possible. Development Centres for children and adults offer support from multi-professional teams, to positively influence all parts of the life of the child with physically disabled children, from physiotherapy, advice in nutrition, adaptation of housing and school environment, to support groups for the family of the disabled child. Activities are offered on an individual and group basis. In Sweden, Development Centres for children have contact with the majority of children and young adults up to 24 years of age who have neurological disabilities, and their families. Many of the children have CP. As adults there is a transfer from a Development Centre for children to a Development Centre for adults, to primary health care or other activities.

Recruitment of participants

The study includes perceived experiences of adolescent siblings, and perceptions of parents about the sibling experiences of the pain in the child with CP and how it affects the family. The project involved three physiotherapists with experience in pain rehabilitation and mental healthcare (PVL), treatment of children with neurological disabilities (LSÖ) and occupational health and qualitative research (AFW). None of the physiotherapists had any previous treatment contact with the participants. Inclusion criteria for the project were being a parent or an adolescent sibling of a child with CP and pain between the ages of 4 and 20 years. The siblings needed to be between 15 and 25 years of age. The child with CP and pain needed to live in the same household as the parent and to have contact with a Development Centre in one of the four northernmost counties of Sweden.

One author (LSÖ) contacted parents through the Västerbotten County Development Centre. Another author (PVL) contacted siblings through Development Centres in the four northernmost counties in Sweden; Västerbotten County, Västernorrland County, Jämtland County and Norrbotten County. To reach the siblings of children with CP and pain, the Development Centres contacted them by letter or telephone and requested participation in the research project. The search for adolescent siblings of persons with CP and pain who were over the age of 15 required that an informational letter be sent to the person with CP and pain, which informed them of the project and asked permission to contact the sibling. When consent was given, the Development Centres contacted the siblings on behalf of the researchers. Only siblings who met the inclusion criteria were asked to be part of the study. Out of 30 potential adolescent siblings, seven chose to participate. The adolescent siblings were chosen strategically [21,22] in regard to gender, age and living in the same household as the rest of the family. The siblings were between 15 and 20 years old: three boys and four girls. Five had two other siblings, and two had one other sibling. All but one had parents who lived together. Thirteen parents of seven children were asked to participate. The parents all accepted and gave their informed consent. The seven mothers and six fathers were between 37 and 59 years of age. The seven children with CP and pain were aged 13–20 years. The functioning of the child with CP and pain varied from level 2 through level 5, assessed with Gross Motor Function Classification Levels (GMFCL). This means that some could walk a short distance after with walking aids, and some were dependent on a wheelchair, in several cases dependent on a caregiver for transportation, in accordance with GMFCL 5. There were also differences in how the children with CP and pain could communicate. Some were at a high level and some had no language at all. The children with CP and pain all lived in the same household with their parents and siblings, in the four most northern counties of Sweden.

The research project was approved by the Regional Ethical Review Board in Umeå, Sweden, Dnr 06-049M, 11-431-32M. Parents and siblings were informed of the study aim orally and in writing, that their participation was voluntary and confidential, and that they could withdraw at any time.

Data collection

Individual, semi-structured, qualitative interviews were performed [19]. To support the interviews, an interview guide based on open-ended questions was used. The sibling interview guide was organised and structured on four themes: the sibling’s interpretation of the pain of the child with CP, the sibling’s experience of himself/herself being affected by the pain, the sibling’s experience of how the pain affected everyday life for the family, and the sibling’s view of the family’s need for help. The parent interview guide included a theme concerning the parent’s experience of the effect of the pain in the child with CP, on the non-disabled sibling. New questions in unexpected areas of sibling experiences were added when needed, and this made it possible for the researchers to add suitable questions to describe the siblings’ lives in the family to a fuller extent. One author (PVL) conducted interviews with siblings, and another author (LSÖ) performed the parent interviews. All interviews took place somewhere chosen by the participants and were recorded and transcribed verbatim by a professional transcripter.

Data analysis

Qualitative content analysis, as described by Graneheim and Lundman [20,23] was used in this study. The authors read the transcribed interviews repeatedly in order to gain the
best possible understanding of participant experiences. Memos of thoughts and ideas of the emerging results were written down during the entire analysis process and used in the analysis. Preliminary aspects that met the research aim were thoroughly explored and discussed. The initial analysis stage was kept relatively close to the participants’ own accounts and the manifest content [20,23]. The analysis was followed by reading in detail, on a slightly higher level of abstraction. Coding was done using the qualitative software programme Open Code [21]. In the next stage, codes similar in content were grouped into sub-categories, and later into categories that corresponded to the research aim and the overall interpretation of the interviews. Finally, a main theme was formulated that captured the latent meaning throughout the codes and categories. The categories and theme are presented in a table. The validity of the coding process was strengthened through triangulation between the authors [24]. The final analysis was presented and discussed in peer check. The multi-professional teams in a Development Centre for children with disabilities meant that the results were consistent with their experience, but also brought new information about the wishes of the non-disabled siblings.

**Results**

The final result is presented in the theme ‘Making pain common ground for support’. The theme combines the non-disabled adolescent sibling and parents experience of the pain in the child with CP, how it moulded the sibling, family closeness, sibling strategies for coping with negative emotions, and the need for support (Table 1). The theme was built on three categories: ‘Personal moulding by pain awareness’, ‘Caring together creates bonds’, ‘The need for support in coping’, and six sub-categories: ‘attention to pain’, ‘the moulding experience’ ‘common caring’, ‘a strong sense of “we”’, ‘the strategy for coping’, and ‘the need for the Development Centre’ (Table 1). ‘Personal moulding by pain awareness’ describes the sibling’s attention to pain and how the experience of pain in another person influenced the non-disabled siblings. ‘Caring together creating bonds’ points out that the shared responsibility of caring for the child with CP and pain strengthens the feeling of belonging together. ‘The need for support in coping’ brings together the non-disabled sibling’s coping strategies and desire for support from the Development Centre. The results of the six sub-categories, including quotes from siblings and parents, are described below.

**Attention to pain**

The sub-category ‘attention to pain’ shows that adolescent non-disabled siblings were aware of several ways that the child with CP showed pain, for instance facial expressions, body language or sounds. Siblings interpreted the reasons for the pain, interpreted emotional pain in the child with CP, and drew conclusions about the consequences. The siblings’ understanding of the pain was revealed in different ways. For example, accepting the pain as a natural part of the family life, relating the child’s pain to their own experience, or simply guessing about the problem, location, and amount of pain experienced. Siblings reacted to the child’s pain in different ways. For example, they might try soothing the child, distracting the child from the pain or leaving it for the parents to deal with. The pain made them sensitive to other family members’ needs, but also made them feel guilty for not being able to do more for the family. Parental perceptions varied of the sibling’s ability to detect and interpret the pain. Some parents found the sibling to be very competent and wanted to include the sibling’s view in a ‘pain analysis’.

He gets sort of stiff and one can tell it hurts.

Sibling interview 5, 15-year-old sister

… sometimes, if he is just a bit in pain or gets sad or something, he will stick out his lower lip a little.

Sibling interview 1, 15-year-old brother

I think the best pain analysis is to listen and consult … [have] everyone involved. Parents, children, and not forget the siblings because they may have interpreted [the child] in a totally different way. Perhaps a much simpler way than what we adults do. … they are simple, straightforward. That is why one should never forget to listen to them, regardless of their age.

Parent interview 4, father

<table>
<thead>
<tr>
<th>Examples of codes</th>
<th>Sub-category</th>
<th>Category</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noticing the pain</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>The pain makes sense</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Offering pain relieve</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>I am mature</td>
<td>The attention to pain</td>
<td>Personal moulding by pain awareness</td>
<td>Making pain common ground for support</td>
</tr>
<tr>
<td>I am used to responsibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I play different roles</td>
<td></td>
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<td></td>
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<tr>
<td>Family for the child</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>We need assistance</td>
<td></td>
<td>Common caring</td>
<td>The caring together creating bonds</td>
</tr>
<tr>
<td>The relationship is with the person</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wider range of feelings</td>
<td></td>
<td>A strong sense of “we”</td>
<td></td>
</tr>
<tr>
<td>Proud to be part of the family</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>More negative feelings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keeping a distance</td>
<td></td>
<td>The strategy for coping</td>
<td>The need for support in coping</td>
</tr>
<tr>
<td>I am OK by myself</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>They should ask over and over</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>They should be aware of the family’s needs</td>
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</tr>
</tbody>
</table>

**Table 1.** Illustration of the analysis, from codes to theme: adolescent non-dysfunctional siblings’ and parents’ views on how siblings perceive pain in children with CP and pain, and how the pain affects the siblings.
The moulding experience

In comparison to friends, siblings thought they had a larger perspective on life and being able to manage on their own. They did not need as much attention and were used to putting the child with CP and pain first. The siblings described feelings of assertiveness, maturity and pride. They felt that growing up in a family with a child with CP and pain made them used to taking others into consideration and taking on responsibility from early childhood. What the siblings described was supported by the parental impressions of the ways siblings were affected, that they had to stand back and learn to wait, becoming empathetic and responsible individuals.

I think they [the parents] feel pretty closed up. They have no life of their own, outside that. They have lost, like, all their friends and stuff. It’s just the two of them because they are at home so often.

Sibling interview 7, 20-year-old sister

…. I was so young when he was born … but I guess I’ve always been a bit more … [able] to take care of people… since I took care of him.’

Sibling interview 5, 15-year-old sister

One has to put what’s normal aside and instead concentrate on X…. Sometimes it can feel like the other children get caught in between…

Parent interview 8, mother

Both siblings and parents observed each other’s behaviour, interpreted daily events, and made assumptions about their consequences. Siblings interpreted emotional distress in their parents. They sympathised with their parents, seeing them struggle daily with being available for the child with CP and pain and also finding the time for daily chores. Parents were of the opinion that the siblings paid a high price for being aware of and having to accept the demands placed on them. They expressed that the family situation and the sibling’s life situation could be perceived as very unfair.

Common caring

The adolescent non-disabled siblings’ experienced that the family was dependent on each other, and all pulling together towards the optimal health of the child with CP and pain. Each family member did what was possible to help the child in everyday life situations and to improve the quality of life for the child with CP and pain. They remarked that the bonds between parents and children were strengthened because of the demands of having a child with CP and pain in the family.

Family members involved the child’s personal assistant (PA) in their daily lives and depended on the well-functioning connection between the PA and child with CP and pain. Siblings and parents were often involved in teaching the PA how to best work with the child. Family home lives adapted to the presence of the PAs. The family members’ relationships with the PAs needed to be good, and the family sometimes depended on the PA to enable the siblings to spend time alone with their parents. Several of the siblings were, or planned to become, a part-time PA for the family’s child with CP and pain.

If I think … just about the relationships in our family, I think it has affected us positively. One gets so close and everyone must help out …

Sibling interview 7, 20-year-old sister

I can say that the family is like a unit, but also like separates.

Parent interview 7, father

…. Mom and Dad also work and [the child] needs attention all the time, one cannot leave her alone. So, they are always with her – or some assistant is with her, so someone is always there.

Sibling interview 6, 18-year-old brother

A strong sense of ‘we’

From the siblings’ perspective, the sense of the family as a unit was strong overall. There was a strong sense of ‘we’. Siblings put up boundaries in relation to other families and friends. They were afraid that others would have a hard time understanding the situation and communication within the family. Rather than possibly hurting the family, siblings kept a distance from others. Towards the child with CP and pain, siblings mostly described feelings of warmth and happiness, and they were proud of the child with CP. The siblings reported hardly ever fighting or arguing with the child with CP. Some siblings did not treat the child with CP and pain differently than their non-disabled siblings, and this included teasing them or sometimes ignoring them. Being obligated to listen to the child with CP and pain could cause an internal conflict for the sibling and burden the sibling. Sibling feelings towards another healthy sibling in the family were more varied and included caring for the healthy sibling and at the same time being angry and annoyed with the sibling (as well as having open conflicts). Parents felt that the family was close, and often shared the same feelings, depending on the behaviours of the child with CP and pain.

When Mom and Dad think it is tough it … it becomes like a circle that gets tough for me too, and it gets tough for [the child with CP], and it becomes tough for my other brother … and it is also all the hardships that … make us … a closed unit.

Sibling interview 2, 20-year-old sister

We have chosen, on the other hand, on Fridays, not to have a personal assistant, since we want to be just the family.

Sibling interview 1, 15-year-old brother

We used to say in the family that when [the child with CP] feels well, happiness is spread in the family, and when [the child] feels sad, we all get a little sad.

Parent interview 6, mother

Strategy for coping

Adolescent non-disabled siblings shared happiness and joy with the child with CP and pain, but at the same time often
had negative feelings. They felt worry for the child’s future, involving health, social bonding, prospects for an active life style, or up-coming surgeries. Feelings of guilt could be a consequence of not listening to the child with CP and pain or their parents. Siblings felt irritable and helpless about their situation, and directed their frustration towards healthcare. The siblings had different coping strategies when dealing with their own negative feelings. Examples of coping included talking to other family members, taking walks, and making friends with older and more mature people (as opposed to people of their same age). Other ways of coping were keeping to themselves, not asking for time from their parents, blaming themselves, and self-demands that they perform well and be a good student.

I have so many feelings inside, and I am a very dramatic person. Sometimes it just gets too much and I need to... or I’ll explode. But it’s not like I do it at home, because I think it is... well, it just feels unnecessary.

Sibling interview 2, 20-year-old sister

Well, if I get really sad because of... something he’s done and stuff... I just shut myself up.

Sibling interview 4, 16-year-old sister

They get worried and try to comfort [the child], but it does not help at all. Parent interview 10, father.

Need for the Development Centre

The siblings worried for the future, and sympathy for both the child with CP and pain and their parents was apparent. However, the siblings said that it was hard to verbalise their worry and described not finding relief from a constant feeling of sadness. Resistance to lay an extra burden on their parents, and loyalty to their family caused them to carry their feelings of sadness instead of speaking about them. Siblings described the Development Centre as a good place for the child with CP. The siblings had good memories of being with the child at the Development Centre, being able to spend time and play together with the family. They remembered that they had no contact of their own with the Development Centre. Having grown older, they expressed a lack of desired contact with the Development Centre. They felt that the family still needed the Development Centre, wished for organised groups for siblings, and wanted the Development Centre to offer support for family members individually if needed. The siblings thought that the Development Centre should be aware of the family’s psychosocial condition and repeatedly offer support to families.

I used to come when I was younger. I think I played with lots of different things because they had lots of fun stuff here. But...well...no, I haven’t really talked to them or anything.

Sibling interview 3, 20-year-old brother

I still think there could have been more dialog...for the whole family, and maybe... just for me and my parents. It should exist – and then let people choose...'I want to go or not', but there should still be a chance. It should be: ‘This is what you need – you can go if you like!’ Or else it will be: ‘Well, I may not need it’ - if it doesn’t exist.

Sibling interview 7, 20-year-old sister

Discussion

Our study has focussed on how adolescent siblings perceive pain in children with CP and how parents perceive the adolescent siblings’ detection and coping with the pain. The theme describes how the pain in the child with CP makes siblings aware of, attend to, and adapt to the pain in the child with CP from sibling and parental points of view. The theme elucidates the bonds of support within the family and with the Developmental Centre. Our findings that the siblings are a support to the child with CP and pain is confirmed by previous findings [25]. The families in our study shared care-taking of the child with CP, and this created strong family bonds. Family members described a sense of unity that made them strong together and created thankfulness and pride. This can be linked to research that point out that family closeness and sense of ability to manage the care of the child, positively influences the well-being of the caregivers [26].

Siblings of children with developmental disorders are more concerned about family conflict than children in general [27]. Adult siblings of people with developmental disabilities have confessed to adolescent forbidden wishes, such as wanting the child with CP and pain to disappear or even die [28], which cause strong feelings of shame and guilt. In our study, the adolescent non-disabled siblings did not express these taboo wishes. However, they admitted to feeling guilt, anger, resentment, sadness, worry and anxiety, in accordance to earlier findings [16]. They thought of themselves as non-rebellious, kind, making efforts in their studies, and not putting their parents through hardships, and described adaptability to the family’s life. Previous research of families with a member with long-lasting pain asserts that family members can be perceived as thinking alike, always being in agreement, and the family viewed as problem-free. It was suggested that under the surface, the family members could be unconsciously tied by dysfunctional emotional attachment patterns [29], putting adolescents at risk of not being able to create a functional way to start their own, independent adult lives. The siblings we interviewed used adaptive strategies such as talking to family members, taking walks, and making friends with more mature people to help carry the burden of their negative emotions. The use of dysfunctional coping strategies could be detected, as the siblings demanded of themselves that they perform well in school, not ask for time from their parents, blaming themselves, and withdrawing from family and friends. If left unattended, the emotional stress and lack of successful coping with negative life events could lead to stress-related mental health conditions [30]. Mental and subjective health complaints are prevalent in adolescents regionally and globally [31,32], and the issue needs to also be addressed in the context of siblings of children with CP and pain.
The adolescent siblings in our study admitted to needing professional care, and they were hesitant to express their need for support inside or outside of the family. This may be typical of the sibling’s age, but could also be the result of dysfunctional coping strategies. The interventions directed towards family well-being, provided by the Development Centres and known to the adolescent siblings, were perceived as inadequate or not what the siblings wanted. Although siblings were not clear about what support they needed, they wanted to feel that the Development Centre was interested in the family’s health. This desire for the opportunity to share important things with healthcare has been expressed by adolescents world-wide [33]. An important task for Development Centres is to strengthen the relationship between disabled and non-disabled siblings, as the depth of their contact can influence the support that the person with CP and pain is given by the non-disabled siblings when they are adults [34]. For the siblings, treatment based on biopsychosocial interventions, could be helpful in reducing adolescent sibling stress and helping them cope better. Cognitive behavioural therapy-based strategies integrated with physiotherapy may be helpful [35]. Basic psycho-education on sleeping and eating habits to promote health, and increased knowledge of pain and pain symptoms, can be combined with interventions to reduce stress. Such interventions could include physical activity, adequate rest and mindfulness techniques [36–38]. Physiotherapeutic interventions such as body-based interventions show promising results in reducing poor mental health such as internalisation of anxiety and depression symptoms, reducing somatic symptoms such as headaches and sleeping problems, and increasing body perception, and self-image [39,40]. Examples of body-based interventions are Basic Body Awareness Therapy and Progressive Muscular Relaxation in combination with reflective discussions.

At the Development Centre, interventions to prevent mental and subjective complaints among siblings could be led by collaborative efforts of all the professions in the rehabilitation team. The team physiotherapist who meets with the sibling has contact with the family, knowledge of the pain and stress, and thus could teach the sibling practical tools to prevent and reduce stress.

**Strength and weakness of the study**

Individual interviews proved to be a good way to collect rich information from adolescent siblings and parents of children with CP and pain. Interviewing another person creates a bond that will enrich the analysis, but involves the risk that the interviewed person will tell the interviewer ‘the right thing to say’. Therefore, it is fruitful to combine the ‘close-up’ interviewer and the more distant interpreters of data when analysing the data. To further increase credibility, triangulation between the researchers was used [21,24]. The results have been presented in a peer debriefing with multi-professional teams in a Development Centre for children with disabilities, with the purpose to check for incoherence or consistency for the results. The peer group discussed and recognised the result as credible.

Different aspects of the information were more likely to be seen because of the differences in professional background, and the authors’ experience with qualitative research. Experience in handling answers to questions about emotional health could have allowed the siblings to consider sharing their feelings with the interviewer. The interviewed siblings were girls and boys, living in a large geographical area in the northern Sweden, and this allowed collection of stories from different Development Centres. The sibling age was limited to adolescence, and thus missed younger children and their points of view. Had the study included information from siblings of a wider age range, the data could have been richer. We consider that the results can be applied to adolescent siblings of children with CP and pain in Sweden, and in other settings similar to those in the study.

**Conclusions**

Adolescent non-disabled siblings of children with CP and pain and their parents, report that the non-disabled siblings are affected by the pain of a child with CP in the family. Sibling attention to the child’s pain, combined with feeling of not being able to help the sibling or the parents enough, weighed heavily on the siblings. The siblings were of the opinion that the Development Centre was good but did not meet the needs of the entire family. Siblings may want and need more information on pain and support from Development Centres and healthcare to improve coping strategies. Repeated investigation into the need of help for the families, and repeated offer of support to siblings seems important.

Healthcare has an overall responsibility to detect and treat poor mental health in children, adolescents and adults. Physiotherapists at Development Centres meet families of children with CP, and have the opportunity to detect distress in families in relation to the pain of children with CP. Physiotherapists can be a natural link between the siblings and the healthcare team, in order to mediate the distress of siblings. We propose that physiotherapists can play an active role in teaching siblings about pain, its effects on the child with CP and the family, as well as presenting the siblings to methods for education on methods for coping with stress and emotional discomfort.

**Disclosure statement**

The authors report no declarations of interest.

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