THERAPEUTIC RELATIONSHIP IN PEDIATRIC PHYSIOTHERAPY

Perceptions, experiences and preferences of child, parent and therapist

Masterthesis

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SAMENVATTING

Rationale:
Binnen een therapie is een positieve therapeutische relatie tussen client en therapeut een belangrijke voorwaarde voor het bereiken van de gestelde therapiedoelen. Daarnaast blijkt het een hoofddeterminant voor progressie in de therapie te zijn. Binnen de psychotherapie is veelvuldig onderzoek gedaan naar de effecten van de therapeutische relatie. Binnen de kinderfysiotherapie zijn er alleen studies beschikbaar over het samenwerken met kind en ouder binnen de therapie in het model van Family Centred Care. Echter, binnen de kinderfysiotherapie is er geen onderzoek gedaan naar de werkwijze en de onderwerpen die de therapeutische relatie beinvloeden. Om inzicht te krijgen in de therapeutische relatie binnen de kinderfysiotherapie, is er meer kennis nodig over percepties, ervaringen en voorkeuren van de therapeutische relatie volgens kind, ouder en therapeut.
Doel: Het exploreren van de therapeutische relatie binnen de kinderfysiotherapie vanuit de percepties, ervaringen en voorkeuren van kind, ouder en therapeut.
Methode: Een kwalitatieve studie volgens de Grounded Theory. Vijf kinderen, hun ouders en therapeuten van de afdeling kinderrevalidatie van een plaatselijk ziekenhuis in Nederland waren respondenten tijdens de diepte-interviews. Na de interviews werd een behandeling van elk kind geobserveerd om aanvullende informatie te verzamelen. Kwalitatieve analyse werd uitgevoerd in een cyclisch proces.
Resultaten: Elkaar aanvullen en elkaar versterken in de therapeutische relatie bleek een centraal thema. Het centrale thema bestond uit vier gemeenschappelijke thema's:
(a) vertrouwen in de karaktereigenschappen en in de attitude van de therapeut, (b) vertrouwen in de kwaliteit van zorg, (c) samenwerken tussen kind, ouder en therapeut en (d) delen van informatie tussen kind, ouder en therapeut. Het vertrouwen in de karaktereigenschappen en in de attitude van de therapeut was het belangrijkste thema. De resultaten wijzen er op dat het belangrijk is dat de therapeut kennis heeft van de behoeften en de voorkeuren van kinderen en hun ouders zodat de therapeutische relatie versterkt kan worden.
Conclusie: Deze studie geeft een eerste inzicht in de therapeutische relatie binnen de kinderfysiotherapie door een beschrijving van een centraal thema, elkaar aanvullen en elkaar versterken in de therapeutische relatie. Inzicht in dit thema kan therapeuten die met kinderen en hun ouders werken helpen in het versterken van de therapeutische relatie. Meer onderzoek is nodig om een completer inzicht te krijgen van de therapeutische relatie binnen de kinderfysiotherapie.

ABSTRACT

Rationale: In therapy a positive patient-therapist relationship between client and therapist is an important prerequisite for reaching therapeutic goals. It is also known to be a key determinant for progress in therapy. In psychotherapy effects of this relationship have been studied extensively. Concerning pediatric physiotherapy, only studies are available how to collaborate in therapy with child and parent in a model of Family Centred Care. However, in pediatric physiotherapy no research has been conducted into the process and topics affecting the therapeutic relationship. To gain insight of the therapeutic relationship in pediatric physiotherapy, more knowledge is needed about perceptions, experiences and preferences of the therapeutic relationship according to child, parent and child therapist.
Purpose: To explore the therapeutic relationship in pediatric physiotherapy from the perceptions, experiences and preferences of child, parent and therapist.
Methods: In a qualitative study based on the Grounded Theory, five children, their parents and therapists from the department pediatric rehabilitation of a local hospital in The Netherlands, served as respondents during in-depth interviews. After the interviews, a treatment of each child was observed in order to collect additional data. Qualitative analysis was performed in a cyclic process.
Results: Complementary and mutual reinforcement in the therapeutic relationship emerged as a central theme. This theme consisted of four common themes: (a) trust in the characteristics and in the attitude of the therapist, (b) trust in the quality of care, (c) collaboration between child, parent and therapist, and (d) sharing of information between child, parent and therapist. Trust in the characteristics and in the attitude of the therapist was the most important theme. The results indicate that it is important for therapists to know the needs and preferences of the children and their parents to strenghten the therapeutic relationship.
Conclusion: This study provides a first insight in the therapeutic relationship in pediatric physiotherapy by a description of a central theme, complementary and mutual reinforcement in the therapeutic relationship. This information can assist therapists working with children and their parents to strenghten the therapeutic relationship. More research is needed to get a more complete insight in the therapeutic relationship in pediatric physiotherapy.

Key words: Therapeutic relationship, child, parent, physiotherapy, qualitative research.

INTRODUCTION

In paramedical settings such as pediatric physiotherapy, a therapeutic relationship exist between child, parent and therapist. A therapeutic relationship is defined as: the attitudes and feelings of client and therapist to each other and how they are expressed during treatment (1). Generally in therapy, a positive relationship between client and therapist is an important prerequisite for reaching therapeutic goals and it is a key determinant for progression of the therapy (1-3). Within pediatric physiotherapy, therapeutic relationships are important and unique because they include more frequent contacts than in preventive and acute pediatric care and the relationship lasts for weeks, months or sometimes years (4-6).

Within the psychotherapy (adult as well as child psychotherapy) several studies investigated the therapeutic relationship. The term alliance is frequently used in that domain. Already in 1979, Bordin wrote about the alliance as a positive patient-therapeutic interaction based on three parts: bond, task and goal (7). The alliance describes the closeness of fit between the demands on the patient to those on the therapist (8,9). In child psychotherapy, important qualities of therapists are giving confidence, collaborating, supporting, showing understanding to parents, child and parents being heard and listening to the child's preferences (10).

Concerning pediatric physiotherapy, no studies are available investigating the triangular relationship between child, parent and therapist. Only studies are available how to collaborate in therapy with child and parent in a model of Family Centred Care (FCC) (11-13) (appendix 1). This model is used within the setting of child health care and education for children with disabilities. The FCC-model contains guiding principles of sharing of information with the child's parents, collaboration with family and empower the family to make choices for reaching treatment goals. Thereby, the therapists must be able to know the family's needs and preferences. Although this model is very informative, it would be valuable to add it with information about the therapeutic relationship. In pediatric physiotherapy, the therapeutic relationship as well the contributing topics within this relationship are unexplored processes. To assist therapists in helping child and parent, a more detailled insight of the therapeutic relationship is necessary. Clinically, this insight would enable to assess and promote a positive triangular relationship.

The aim of this qualitative study is to explore the therapeutic relationship in pediatric physiotherapy and to describe the perceptions, experiences and preferences of the therapeutic relationship according to child, parent and therapist.

METHODS

Studydesign

In this qualitative study the methods were used originated from the Grounded Theory (14,15). This approach is used as this study intends to add a theory of the therapeutic relationship to the FCC-model (14). Thick data of interviews and observations were gathered to analyze commonalities across the different experiences of the therapeutic relationship. The study approach was deductive, as the topic lists were directed from a literature search (15). Then an inductive approach was used by coding the interviews, so the theory originated from the data (15).

The study protocol was approved by the management of the Leveste Hospital at Emmen (d.d. Decembre, 8th, 2013)

Trustworthiness of the study

Eight techniques were applied to establish trustworthiness in this study (14,15).

Regarding internal validity: (1) The interviews and observations were piloted in parents and therapists who were not recruited as participants. (2) Data collection was standardized by using a guide for the interviews and a topic list for the interviews and observations. (3) The interviews and observations were respectively audio-and video recorded. (4) The preliminary analysis was send to two parents and four therapists to provide feedback (eg membercheck).

Regarding reliability: (1) Bias of open and axial coding was discussed throughout the study by a colleague researcher (AW) and the coördinating researcher (PD). A rehabilitation physician (CM), who was not connected to the study, reviewed the methods and analysis by peer debriefing. (2) The iterative process of data collection and data analysis was used (eg constant comparison). (3) Bracketing (set aside) the own experience of the researcher (AO) was necessary. The researcher reflected on her own role as researcher, but also on the relationship between interviewer and interviewees. (4) Memo's and field notes were used to record ideas and impressions of the interviews and observations to help data-analysis.

Sampling strategy

Between February 2013 and April 2013, five children, their respective parents and therapists were recruited from the department pediatric rehabilitation of Leveste Hospital in Emmen, the Netherlands. When the child lived with a caregiver, the caregiver participated in the study. Inclusion in the study was carried out according to purposive sampling and was focused on children aged between 3 and 18 year with the most common diagnoses in pediatric physiotherapy (6,14). Children had to be treated at least three times by the therapist. After three treatments, then there is an actual therapeutic relationship (16,17). No inclusion criteria were formulated for parent or caregiver. The therapists were general physiotherapists or specialized pediatric physiotherapists. Potential children or parents were excluded when they did not understand Dutch and when they had significant auditory impairment.

The researcher selected the candidates by making a list of children who met the inclusion criteria. Selected children and parents were informed by their treating therapists about the study and asked to participate. When the answer was positive, the researcher contacted these families via phone to give further information. The decision time to participate in this study was two weeks. If the child and parent were willing to participate, written information was sent and an appointment was made. Written informed consent was obtained from the parent, child and therapist respectively. A pseudonym was given to each child to ensure confidentiality. The parent and therapist were given the child's pseudonym followed by P and T (example: Evan's parent is named "EvanP").

Datacollection

Before starting the study, a literature study was performed to acquire knowledge of the therapeutic relationship in pediatric physiotherapy and to develop two topic lists, one for the interviews and one for the observations (appendix 2 and 3). The principal researcher was trained in data collection through four pilot-interviews with two children, one parent and one therapist. Besides training, the purpose was also to explore suitability of the topic list and the interview guide. It allowed the principal researcher to reflect on the course of the interviews, duration of the interviews and the quality of the interviewing technique . To that purpose, a reflection list was used (appendix 4). Adjustments of the interview guide were made and two open-ended questions were added.

The principal researcher was also trained in scoring observations of the topic list through using existing video recorded treatments of the two interviewed children. The training in

observations was also used to determine the suitability of the topic list. Specially, the objectivity of the topic list was studied and adjustments were made.

(1) *Interviews.*

During the interviews an interview guide with a topic list was used (appendix 2). Interviews were audio recorded. Questions asked of the participants were "What do you think about a positive therapeutic relationship in the treatment of a child?" and "Why do you think that?". The interviewer varied with these questions, depending on age and level of thinking of child, parent and therapist. During the period of interviews, memos were made regarding reflections about interpretations of the researcher and regarding methodology (14,15).

(2) *Observations.*

The topic list for the observations during the treatment of the child was used (appendix 3). Observations were video recorded. The focus of the observations was: watching interactions, verbal and non-verbal communication (between child and therapist and between child, parent and therapist). Furthermore, the structure eg time sequence of the treatment was observed to look how the therapeutic relationship during a treatment was developed. The question during the analysis of the observations was: "Is this what is happening or am I interpreting it" (18). During the observations, observational and methodological memo's were used (15).

ANALYSIS

Qualitative analysis of the data took place in a cyclic process. Memo's of the interviews and observations supported the analysis (14,15).

(1) *Interviews*

The researcher carried out the interviews and were transcribed verbatim. After (re)reading each interview, the researcher wrote an overall impression of the respondent's experience in relation to the research question and a brief abstract of the interviews.

Then, the process of coding started. For explanation of the coding, see appendix 5 and 6. All meaningful text fragments were open coded. After open coding the first three interviews of the therapists, a theoretical memo of the sensitizing concept of the alliance was used for two next interviews of the therapists (15). Axial coding was performed after the first three interviews of the children, parents and therapists. This list of axial coding was also used in the

two following interviews. After finishing the interviews, the researcher went back to all interviews judging the appropriateness of the axial codes and adjustment of the axial codes was made.

After this, three code trees of the axial coding (one for the child, one for the parent and therapist) were developed and compared (15) (appendix 5, code tree of child) (appendix 6, code tree of parent and therapist). At this point, the researcher analyzed common themes between the three code trees. Furthermore relations between the codes were established by selective coding. A preliminary theory with a description of the essential findings was made. Reflection was given by the coördinating researcher (PD) and by another researcher (AW). Two parents and four therapists provided a member check on the preliminary theory. All confirmed this theory was an accurate reflection of the content of their interviews.

(2) *Observations*

The researcher observed one treatment per child. After this treatment, the researcher made notes of the impressions of the therapy, in relation to the research question. Before starting analysis the video-observation, open codes of the interviews of a child, parent and their associated therapist were studied. During the observation, the topic list was used and scores were given (appendix 3). So, possible discrepancies between what people state (during the interviews) and what people do, was analyzed (18).

RESULTS

Five children with their respective parents and therapists were included. For an overview of the characteristics of the participants, see Table 1.

(1) *Interviews*

The interviews with the child lasted 38 minutes on average, interviews with the parent and therapist all lasted 60 minutes. The location of the interviews was at the hospital for four children, two parents and all therapists. One child and three parents preferred interviewing at their home. The interviews covered a broad range of codes. They were clustered into four common themes: (a) trust in the characteristics and in the attitude of the therapist, (b) trust in the quality of care, (c) collaboration between child, parent and therapist, (d) sharing of information between child, parent and therapist. Trust in the characteristics and attitude of the therapist was the most important theme. These four themes referred to the combination

“complementary and mutual reinforcement in the therapeutic relationship”, which is the central theme of the results.

Trust in the characteristics and in the attitude of the therapist

Within this theme, all participants made a distinction in two types of skills of the therapist: communication skills and social skills. The importance of an adequate communication was to reach a mutual dialogue between child, parent and therapist. Common subjects were: giving each other time, observing and interpretation of non-verbal behavior of the child and parent, making contact at the level and interest of the child and giving the child positive feedback. The two eldest children preferred also giving clear explanations about the treatment, giving structure during the treatment and making boundaries to the child as well.

Three parents found social skills more important than professional knowledge of the therapist: an empathic attitude was a requisite of the therapist. The therapist must also be sensitive and understand emotions of child and parent. Additional, all children and parents gave a nice and gentle nature of the therapist as important characteristic. This characteristic was not mentioned by the therapists. Parents and therapists both referred to other important social skills of the therapist: an open and welcoming attitude, creating a safe and positive atmosphere with respectful interaction and time for jokes.

> NoahP: “ In general I think it is important that the therapist makes you feel welcome and comfortable. She can say something as: “hello, nice to see you and we're going to do something nice”. Positively confirming the child as who he is and that he’s allowed to be there. The wellbeing of the child and feeling comfortable with the therapist applies to all children, but perhaps especially to children with disabilities such as Noah*”.*

Time for jokes was confirmed by all children. They also preferred a joyful and smiling therapist.

> Leo: “ I like her. On the one hand she is serious and understands me well, but on the other hand she has a good sense of humor. But if you have a serious conversation, she should not suddenly start doing weird or something like that. That does not work. So making jokes is funny but at a right time. I also like that she smiles when she talks ".

Trust in the quality of care

From the data, two subjects of importance about the quality of care emerged. First, the

professional knowledge of the therapist, combined with adequate training and experience. Children and their parents wanted to be absolutely sure that the therapist has adequate professional knowledge.

> Evan: "She should know exactly which disease I have. Otherwise, she can't treat me. I also trust her because I think she is very skilled and well educated... yeah, if I would not trust her ... which other people should I trust?".

The second subject was the pedagogical knowledge of the therapist whereby knowledge of the level of development of the child was considered as most important.

> FaithP: "In the case of Faith, she stated very clearly that she is ready for it. The therapist must be able to anticipate. All is clear in the books, but disabled children don't always behave according to the books .... For example the prone position was very important for Faith to exercise.... but Faith did not want to do it and she became very stressed".

It was mentioned by four children that they liked their therapist because of her knowledge of game preferences. In addition, three parents gave thinking beyond the boundaries of the profession of the therapist as important characteristic. Hereby, they mentioned that focus on wellbeing and happiness as most important for their child. This was not mentioned by the therapists.

Collaboration between child, parent and therapist

Parents and therapists distinguished collaboration in treatment goals and collaboration in tasks for home. For both, central was making joint decisions and agreeing on an equal basis. Both considered the role of therapist (with the professional knowledge about the treatment) as another one as the role of parent (with the parental knowledge of the child). Taking both roles together they expected an agreement in reaching optimal treatment goals by the therapist and tasks for home by the child or parent.

> LeoP: "In the first place, I want to be a mother and not a therapist. So the way I practice is to make it look like a game. In that way, things stay funny for Leo and for me. Of course, I encourage him..... and when I tell him, the therapist told me that you can do it, can you show this to mom too? Leo often begins to chuckle and you notice that he wants to show it to me".

Furthermore, the therapist must give structure in treatment goals-and tasks and must give an honest opinion about the process of the treatment. Two children thought the therapist must make decisions about the treatment goals by herself, however they preferred collaborating about tasks for home.

> Dylan: "The physio suggests some exercises and I say how much I can handle that week. She says you must do it three times a week and I say.... well, if I do it two times a week…. she says: well, I think that's okay, but then so many times….and then I say okay".

Sharing of information between child, parent and therapist

Parents and therapists distuingished the role of the therapist and the role of the parent in exchange of information about the child.

> FaithP: "At home she showed standing, she wanted to go up to the bars of the bed. The therapist told me that Faith also wanted to stand with other children. I think both this information is important. Furthermore, everything should be according to a certain structure with Faith. Knowing this information here gives her a sense of security and then she will show more".

The role of the therapist was to give professional information. Therapists considered two aspects: controlling the understanding of information given to child and parent and the importance of fine tuning of information. What they meant was information at the level of emotions and cognition of child and parent and respectively at the right time.

> EvanT: " And if there are things child and parent dislike, such things that don't fit their ideas .... that is important to know to go to the same way. Because I believe that if we do not share this, because it may be that I want one direction with the child that they did not want.....that's a situation I do not find desirable".

Children mentioned the importance of giving professional information by the therapist as well. Four parents considered their knowledge of the child as most important in exchanging information. They mentioned the importance of the final parental responsibility in relation to the treatment of the child. This was not mentioned by the therapists.

(2) *Observations*

The observations of the treatment of the child lasted 38 minutes on average. During two of the five treatments the parent of the child was present.

The therapists structured the treatment according an introduction part with welcoming words with the child respective parent. Then all therapists started telling about the therapeutic part and the closure of the treatment. The two oldest children of 13 years old were told about the purpose of the treatment and what they had to do at home.

With regard to the verbal and non-verbal communication, therapist made eye contact between child and therapist because the therapist adapted to the same eye level (for example: by sitting on the haunches). The therapist gave the child time to speak and listened to the child. On the other hand, during four treatments some times the therapist did not observe the child, while the child looked like to want to say something. Furthermore, the therapist showed with words or physical contact that they understood and sympathized with the child. All therapists stimulated the verbal communication and behavior of the child, resulting in increase of verbal information and frequency or duration of the behavior. The therapists adapted communication to the level of the development of the child during the treatment: there seemed to be a mutual dialogue and the child appeared to like the offered game. During all treatments there were frequent moments of laughter.

The triangular relationship was observed during two treatments in which two parents were present. During the introduction of the treatment, professional and parental information was shared beween child, parent and therapist. The two therapists showed with words that they understood the parent. During the closure of the treatment there were also agreements made about tasks at home.

DISCUSSION

The purpose of this study was to explore the therapeutic relationship in pediatric physiotherapy from the perceptions, experiences and preferences of child, parent and therapist. Complementary and mutual reinforcement in the therapeutic relationship was the central theme in the narratives. It consisted of four common themes: (a) trust in the characteristics and attitude of the therapist, (b) trust in the quality of care, (c) collaboration between child, parent and therapist, (d) sharing of information between child, parent and therapist. Trust in the characteristics and attitude of the therapist was found as the most important theme. The

interview statements of child, parent and therapist were confirmed by the topics of the observations. There was one exception: during four treatments some times the therapist did not observe the child, while the child looked like to want to say something.
The therapists varied in work experience from three till 34 years. Two therapists were specialized pediatric physiotherapists, three therapists were general physiotherapists. The parents talked about their children with a range of three till 13 years. However, within these diverse groups there seemed to be a great similarity in perceptions, experiences and preferences of the therapeutic relationship.
The therapeutic relationship of this study design resembles with the literature about the alliance, found in adult-and childpsychotherapy. All topics of alliance, bond and task and goal, were mentioned during the interviews of parents and therapists.

Clinical implications

Therapists need to be aware of the family's needs and preferences to strenghten the therapeutic relationship. When a therapist experiences that the relationship does not work, it appears valuable to evaluate this with child and parent to agree with each other. The topic of therapeutic relationship needs to be taken into account in the education of pediatric physiotherapy. During the interviews with the therapists, when was discussed about characteristics as empathy and being sensitive, therapists were not able to express in words.

Strenghts of the study

To the knowledge of the researcher, this was the first study in which children were interviewed about their perceptions of their treatment in pediatric physiotherapy. Interviews with children give valuable information that offers complementary insights within the treatment of a therapist (19). In this qualitative study eight techniques to establish reliability and validity were applied.
Finally, the findings provide additional information for the model of Family Centred Care (FCC) (11-13) (appendix 1). This model may guide pediatric physiotherapists to achieve treatment goals. This study complements FCC with detailed knowledge of the therapeutic relationship. All important subjects of FCC (eg making joint decisions, respect, honest, knowing the family's needs and preferences, trust) were mentioned during the interviews and were used in axial coding of this study. When the therapist wants to deliver what works in therapy, this requires adjusting of the needs and preferences of child and parent to gain a positive therapeutic relationship.

Limitations of the study

Due to a small sample, datasaturation was not reached, thus the result of this study is a description of themes rather than a theory that migaht underlie the therapeutic relationship in pediatric physiotherapy.

Due to age, the topic of therapeutic relationship was too abstract for the two younger children of three and seven years old. So information of these younger children was not thick and not very helpful in the description of the themes. The study of Borgers e.a. confirmed that interviews about abstract topics are suitable from 12 years and older (20).

Generally, interviews were planned too close. Ideas from the interviews could not be taken into account in following interviews.

Finally, the researcher decided not to score on social skills during observations because of the subjectivity of these skills. So, the focus of topics during the observations was less than the topics of the interviews. In addition, a Hawthorne effect of video recording was possible which could have influenced the observations (21).

Conclusion

This study provides a first insight in the therapeutic relationship in pediatric physiotherapy by a description of a central theme, complementary and mutual reinforcement in the therapeutic relationship. The results indicate that it is important for therapists to know the family's needs and preferences to strenghten the therapeutic relationship. More research with children of 12 years or older is needed to get a complete insight in the therapeutic relationship in pediatric physiotherapy.

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Table 1: Characteristics of the participants

Child Pseudonym	Diagnoses	Age at Time of Interview (y)	Therapist interviewed, GP or SPP, Experience (y)	Parent interviewed, age parent (y), primary language	Educational level of the parent
Evan	Neuromuscular disorder	13	GP (5)	Mother (38), Albanian	Primary school
Noah	Cerebral Palsy	12	SPP (3)	Mother (37), Dutch	Higher professional education
Leo	Cerebral Palsy	7	GP (34)	Mother (33), Dutch	Higher professional education
Faith	Congenital disorder	3	GP (31)	Mother (37), Dutch	Higher professional education
Dylan	Orthopaedic problems	13	SPP (32)	Father (53), Dutch	School of higher general secondary education

Abbreviations:
GP: general physiotherapist
SPP: specialized pediatric physiotherapist

Appendix 1: Model of Family Centred Care

Explanation of the FCC-model: in the middle, the family (child and parent) is central. The caregiver collaborate with the family with the guiding principles of: communication, information-sharing, choices, respect, partnership, strengths-based.

Source: King G, King S, Rosenbaum P, Goffin R. Family-centered caregiving and well-being of parents of children with disabilities: Linking process with outcome. J Pediatr Psychol 1999 Feb;24(1):41-53.

Appendix 2: Interview guide with topic list

Purpose of the research:

The purpose is to explore the therapeutic relationship in pediatric physiotherapy, according the perceptions, experiences and preferences of child, parent and therapist.

Methods:

The technique of open interviewing will be applied, the interviewer will minimal intervene the conversation. The interviews will be audiorecorded and transcribed verbatim.

The length of the interview is 60 minutes maximum. During the interview all distractions are avoided (as much as possible). If the interviewee indicates to want to end the interview, this will be immediately accepted without further questions.

Instruction:

1. The interview begins with building a relationship, a general introduction and an introduction of the interview. After this, the interviewee will tell his or her story.
2. The interviewer has a topic list which subjects should be addressed during the interview. When the interviewee him or herself does not cite these three topics, they are cited by the interviewer.
3. If something in the story of the interviewee is not clear and no additional examples can be given or if the interviewer feels information is held back, the interviewer will ask additional questions.
4. If the interviewee seems to be ready with his or her story, the interviewer will summarize. The interviewer always checks whether the interviewee agrees with the summary.

5. With all subjects a therapist calls by asking the following ways:
- Can you describe why [...] is important " or " Why do you think this issue is important? "
- "How do you see this issue within the therapeutic relationship?"
- "Can you tell me more about this issue?"

General introduction to this interview

As described in the letter you received, we want to explore the therapeutic relationship within pediatric physiotherapy.

I also want to tell that all gathered information will be treated confidentially. This information will never be passed on to your doctor or others.

As you may have read in the information, I said you the whole conversation will be recorded with audio. In that way, I can concentrate better on what you're saying, and I can read it later undisturbed and than work it out.
If you wish, I also like to offer you the opportunity to read the results of the research. Would you like that?

When you want to stop the interview, please tell me and this will be immediately accepted without further questions.

Before we begin, I would like to ask you to sign this informed consent.
Do you have any questions before we start?

Introduction to the interview (written to the interview with the pediatric physiotherapist. As children and parents are interviewed, this story is adapted, also to the general and specific question)

I will explain you the purpose and subject of the study:
You are a pediatric physiotherapist working in Leveste hospital. While treating the child a relationship exist during the treatment, called the therapeutic relationship between child, parent (caregiver) and pediatric physiotherapist. Within psychology it has been found that a positive therapeutic relationship has a positive influence on reaching treatment goals.
It also has been found that it is a key determinant for progession of the therapy. Within the pediatric physiotherapy, no research has been performed. With this study I want to explore the opinions about the therapeutic relationship of child, parent (caregiver) and pediatric physiotherapist. With this understanding of what is perceived as important, we may consciously and positively influence the therapeutic relationship with possible consequences for progress and final results.
I have two questions: a general question and an optional specific question.

GENERAL

1. What are your ideas / thoughts about the therapeutic relationship between child, parent and therapist? What can you tell about this?

Possibly mentioning by the interviewer:

- What is your opinion about the therapeutic relationship within pediatric physiotherapy?
- What is important within this therapeutic relationship?
- What are your thoughts about this?
- How do you experience this relationship?
- Can you describe how to build up the therapeutic relationship?
- Why is the therapeutic relationship important to you?

SPECIFIC (when time is given)

2. What do you think about important subjects in the treatment of the child you are treating?

Completion: Thank you for your coöperation!

Topic list interview

Three main topics are to be discussed always during the interview:
(1) general issues and (2) characteristics of the therapist and (3) triangular relationship.

General issues

1. Therapeutic skills
2. Experience of the therapist
3. Organisation of care
4. Location of the pediatric rehabilitation
5. Family-centred care

Characteristics of the therapist

1. Giving trust
2. Empathic
3. Unconditional / honest / open
4. Being interested / active listening
5. Sensitive
6. Respectful
7. Humor
8. Inspirating/motivating/stimulating
9. Giving an opinion
10. Showing understanding
11. Adjusting of communication
12. Making decisions on goals and tasks
13. Being involved
14. Giving structure to the treatment

Triangular relationship

1. Giving trust
2. Collaboration, making joint decisions
3. Agreement (child, parent and therapist) about goals and tasks
4. Supporting and understanding the child and parent
5. Child and parent are being heard
6. Giving child and parent information
7. Giving child and parent feedback

Appendix 3: Topic list observations

General issues	Explanation	Scores
1. Adequate organized care	**- adequate established treatment rooms and materials**	
	- making appointments for the next treatment	
2. Structure of the treatment	**- introduction and evaluation of the past period**	
	- working with treatment goals	
	- closing the treatment	
	- agreement of goals and tasks for the next period	
Characteristics of the therapist		
1. Stimulating the communication of the child and parent	**- stimulation by the therapist of a *verbal* communication**	
	- mentioning by the therapist of a *non verbal* communication, for example facial expressions or body tension	
2. Giving an opinion	**The therapist gives an opinion about the treatment or the future course of the treatment**	
3. Giving compliments	**Parents gave from the interviews, compliments are an important characteristic of the therapist**	

4. Stimulating	**The behavior of the child or parent is verbal or non-verbal stimulated resulting in an increase in the frequency, duration or intensity of the behavior**	
5. Shows understanding	**-the therapist makes notice that he or she understands and sympathizes with the child or parent (with words or through physical contact)**	**words**
		physical contact
	- the therapist asks how it is going with the child or parent or how he/ she is feeling	
6. Laughing/ humor/ fun	**The (possibly) tension of the child or parent discharges so that the child or parent feel better at ease**	
7. Adjusting communication to the level of cognition/ age of the child and the parent	**- having or making eye contact**	
	- being on the same eye level	
	- asking the child if he / she understands	
	- there seems to be a mutual dialogue	
	- child seems to find the game offered funny	
	- giving each other time to hear or understand (take turns) the other	
Triangular relationship		

1. Sharing of information	**Parents indicated from the interviews that obtaining adequate information was very important to achieve collaboration with the treatment goals** **- this information is shared by the therapist with child and / or parent**	
	- this information is shared by the child and / or parent with the therapist	
2. Making joint decisions	**Child, parent and therapist make joint decisions about treatment goals and tasks for home**	**goals**
		tasks
3. Giving feedback	**The child or parent is told what type of behavior is observed and the therapist tells his/her opinion**	

Appendix 4: Reflection checklist after the interview

Reflection on the introduction of the interview:

Was the introduction clearly?	
Could the respondent easy understand the purpose of the study?	
In what way did I respond to doubts and questions of the respondent? - with enough empathy? - with enough space? - enlightening? - with use of correct language and active listening?	
Was it clear that I have studied his or her social world?	
Did I emphasize the importance of the respondent in this investigation?	

Reflection on the technique of interviewing:

Summaries:	
Was the summary correct? - in the language of the interviewee? - was the non-verbal behavior added in the summary?	
Was the summary open? - so, that the respondent felt he could correct the interviewer? (starting with: if I understand well, inviting tone) - did I invite the respondent for giving comment?	
Are the summaries sufficient? - as giving structure during the interview - as a check whether you correctly understood the respondent	
Questions and probes:	
Were follow-up questions (by asking questions) or probes used?	
What kind of follow up questions did you use and what technique for probes? - repeating the answer - questions for clarification of a word or statement - asking the respondent to elaborate a statement - checking of non-verbal behavior - inviting silences and non- verbal behavior (nodding) - summarizing your question and the answer - making confronting or contrasting statements	
Did you vary with your follow up questions?	
Did you use all types of probes?	
Was the topic enough explored? (you knew everything by probing or checking ?)	
Were follow up questions and probes neutrally phrased?	
Did you include non-verbal behavior in your questions?	

Reflection on your own attitude:

Was your attitude truly interested, open and accepting?	
If you did not understand an answer, did you show this with your non-verbal behavior? Could you empathize with your respondent? Did you use your looks of 'I do not understand you'?	
Was your verbal and non-verbal behavior adapted to the respondent?	
You discussed the following situations with the respondent if they occur: - you were irritated toward your respondent or feel strong antipathy or attractions so you do not behave normally - you believed or did not agree with the story of the respondent - interference, noise, or other people influenced the interview in a negative way - some private problems were bothering you and had a negative impact on the interview	

Appendix 5: Codetree of the child

1. Trust in characteristics and attitude of the therapist
    - -communication skills
        - -to be capable of having a dialogue with the child
            - -listening to the child
            - -hearing of the child
        - -seeing and interpreting of non-verbal behavior
        - -giving compliments
        - -motivating of the child
        - -being honest
        - -making boundaries to the child
    - -social skills
        - -empathic attitude
            - -adapting to the mood of the child
            - -understanding of the child
            - -caring for the child
        - -sensitive: being serious at the right time
        - -open attitude
        - -enthusiastic
        - -creating a pleasant atmosphere, feeling at ease, being yourself
        - -humor, a lot of jokes and laughter
        - -sweet, gentle, cheerful
        - -knowing each other
        - -being interested in the child

2. Trust in the quality of care
    - -professional knowledge
        - -good treatment by the therapist

-pedagogical knowledge

-knowing the gamepreferences of the child

-connecting to the interest of the child ("doing nice things")

3.Collaboration between child and parent and therapist

-treatment goals

-decision of the therapist about treatment goals

-giving clear treatment goals by the therapist

-giving structure to the treatment by the therapist

-giving a opinion and feedback about treatment goals by the therapist

-evaluating together of the treatment goals

-tasks for home

-making joint decisions / agreement about tasks for home

4. Sharing of information between child, parent and therapist

-role of the therapist

-information about professional knowledge to child and parent

-checking understanding information

-giving clear explanation of professional knowledge

Explanation of the code tree (open and axial coding):

Open coding is the process of identifying, naming and categorizing of transcriptions found in the text. These codes are mentioned with '-' in the text.

Axial coding is the process of relating open codes to each other. The four axial codes are: (1) trust in the characteristics and attitude of the therapist, (2) trust in the quality of care, (3) collaboration between child, parent and therapist, (4) sharing of information between child, parent and therapist.

Source: Boeije H. Analyseren in kwalitatief onderzoek, denken en doen. Third ed. Den Haag, the Netherlands: Boom onderwijs; 2008. 179 p.

Appendix 6: **Code tree of the parent and therapist**

1. Trust in the characteristics and attitude of the therapist
    - communication skills
        - being capable of a dialogue with child and parent
            - giving each other time and space (being patient)
            - hearing of child and parent
            - active listening
        - seeing and interpreting non verbal behavior
        - connecting to age / level / interest of the child and parent
        - giving of (positive) feedback
        - inviting child and parent
        - motivating of child and parent
        - being honest
        - making boundaries to the child
    - social skills
        - empathic attitude
            - seeing the interests and preferences of child and parent
            - understanding child and parent
            - supporting the child and parent
        - intuitive
        - sensitive
        - open and approachable attitude
        - enthusiastic
        - creating of a safe and pleasant atmosphere
        - humor
        - showing respect
        - sweet, gentle, cheerful
        - showing something of the therapist themselves

-being interested in the child

-looking without judgment

2. Trust in the quality of care

-professional knowledge

-experience of the therapist

-training of the therapist

-cross-border thinking, central is wellbeing and happiness of the child

-knowing of the boundaries of the profession

-pedagogical knowledge

3. Collaboration between child and parent and therapist

-treatment goals

-making joint decisions/ agreement about treatment goals

-offering structure by the therapist

-providing vision

-looking at the limits of the child

-giving feedback about treatment goals by the therapist of child and parent

-evaluating treatment goals together

-tasks for home

-making joint decisions / agreement about tasks for home

-sense of ultimate responsibility parents

-capable to assess the family system

4. Sharing of information between child, parent and therapist

Role therapist -information about professional knowledge to child and parent

-good timing of giving information

-checking understanding of information

	-adapting of information to the emotions and/or cognition of child and parent
Role parent	-central knowledge of the parent about the child
	-sharing information with the therapist
	-equality of information of parent and therapist

Explanation:

Underlined subjects are shared between parent and therapist.

The shaded subjects are only indicated by the parents.

Other subjects are indicated by the therapist.

Explanation of the code tree (open and axial coding):

Open coding is the process of identifying, naming and categorizing of transcriptions found in the text. These codes are mentioned with '-' in the text.

Axial coding is the process of relating open codes to each other. The four axial codes are: (1) trust in the characteristics and attitude of the therapist, (2) trust in the quality of care, (3) collaboration between child, parent and therapist, (4) sharing of information between child, parent and therapist.

Source: Boeije H. Analyseren in kwalitatief onderzoek, denken en doen. Third ed. Den Haag, the Netherlands: Boom onderwijs; 2008. 179 p.