Bachelorthese:
Psychological preparation for the first medical treatment of sexually abused children.

Marsina Bothe
S1135597

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University of Twente
Faculty of PGT
Degree Program Psychology

1st tutor: dr. C.H.C. Drossaert
2nd tutor: dr. C. Bode
Content

1 ABSTRACT .................................................................................................................................................... 4

2 INTRODUCTION ........................................................................................................................................ 5
  2.1 FORMS OF ABUSE ........................................................................................................................................ 5
  2.2 CHARACTERISTICS OF OFFENDERS ..................................................................................................... 6
  2.3 PHYSICAL AND PSYCHOLOGICAL INJURIES OF SEXUAL CHILD ABUSE ............................................ 7
  2.4 IMPORTANCE OF IMMEDIATE EXAMINATION .................................................................................... 7
  2.5 PREPARING CHILDREN FOR MEDICAL PROCEDURES ..................................................................... 8
  2.6 PARTICIPATORY DESIGN ....................................................................................................................... 11
  2.7 RESEARCH GOALS ............................................................................................................................... 11

3 METHOD .................................................................................................................................................. 12
  3.1 STEP 1: NEEDS ASSESSMENT .............................................................................................................. 12
  3.2 STEP 2: CONSTRUCTING MOCK-UP .................................................................................................. 13
  3.3 STEP 3: COLLECTING FEEDBACK .................................................................................................... 13
  3.4 STEP 4: REVISION AND BOOK PRODUCTION ................................................................................... 14

4 RESULTS ................................................................................................................................................... 15
  4.1 STEP 1 – NEEDS ASSESSMENT .............................................................................................................. 15
  4.2 STEP 2: CONSTRUCTION MOCK-UP .................................................................................................. 18
  4.3 STEP 3: COLLECTING FEEDBACK .................................................................................................... 24
  4.4 STEP 4: REVISION AND BOOK PRODUCTION ................................................................................... 28

5 DISCUSSION ............................................................................................................................................ 34

6 INDEX .......................................................................................................................................................... 38

7 ATTACHEMENTS ..................................................................................................................................... 40
  7.1 ATTACHMENT 1 – PHYSICAL INJURIES OF SEXUAL ABUSE ............................................................... 40
  7.2 ATTACHMENT 2 – PSYCHOLOGICAL SHORT TIME INJURIES OF SEXUAL ABUSE ...................... 40
  7.3 ATTACHMENT 3 – PSYCHOLOGICAL LONG TERM INJURIES OF SEXUAL ABUSE .................... 41
  7.4 ATTACHMENT 4 – QUESTIONNAIRE ONE: BOOK CONTENT ........................................................... 41
  7.5 ATTACHMENT 5 EXAMINATION PLANNING ..................................................................................... 41
  7.6 ATTACHMENT 6 ABERRATION OF THE EXAMINATION PLAN ....................................................... 50
  7.7 ATTACHMENT 7 QUESTIONNAIRE TWO: FEEDBACK ................................................................... 51
  7.8 ATTACHMENT 8 FEEDBACK ON THE MOCK-UP INTERVIEW (DOCTOR) ....................................... 51
  7.9 ATTACHMENT 9 FEEDBACK ON THE MOCK-UP INTERVIEW (SOCIAL WORKER) ................. 53
  7.10 ATTACHMENT 10 THE BOOK – SCHMETTERLING UND POPOTANZ. ............................................. 55
Table: 1 - Overview Main Steps and Subcategories of examination........................................ 17
Table: 2 - Main Steps per Mock-up Picture ............................................................................. 22
Table: 3 – Answers Feedback Questionnaire (2)....................................................................... 25
Table: 4 – Main Steps with Book Pictures and Notes.............................................................. 32

Figure: 1 – Procedural quantities of forms of sexual child abuse according to the numbers of the German Police department (Zietlow, 2010)..................................................................6
1 Abstract

This thesis is about the development of a picture book. This book is developed in order to reduce anxiety for examination of children who are under suspicion of being victim of sexual abuse.

According to literature, immediate and accurate examination of children who are under suspicion of being victims of sexual abuse is necessary for several reasons, like examination being the only way to secure evidence of sexual abuse. Irrespective of the importance of examination, a medical examination can seem very scary to children. Although anxieties differ per child there are a few general facts children seem to be afraid of: (1) the unknown hospital’s environment (surroundings, equipment and smell), (2) the fear of being ill (children see that they are damageable), (3) the foreign “language” which is spoken in the hospital (children often do not understand what happens and what the doctor says) and (4) the feeling of being other-directed (children have to take their clothes off when the doctor says so, which gives them an impression of powerlessness). They are also afraid of (5) being or feeling alone as a result of a lack of social support during examination.

According to literature it is possible to reduce those anxieties by informing children adequately by offering them procedural information, sensorial information and coping instructions. Furthermore, this information should be handed to the children adequately. Literature states that for example short sentences, every-day language and visual support are essential towards an adequate layout for children. Therefore this thesis tried to create a picture book as an educational instrument to reduce anxieties by giving detailed information in a way adequately for children. Towards this end, the book was designed in cooperation with the “Vestische Kinder und Jugendklinik Datteln” (Germany). This participatory design cycles was divided into four steps:

Step 1: The book’s professional content, the target group and the book’s goals were developed in cooperation with the chief physician of the “Kinderschutzambulanz” in Datteln (Germany). She gave detailed procedural information, sensorial information and information of possible coping instructions during examination.

Step 2: The information that was given by the main physician of the "Kinderschutzambulanz", was worked out in a mock-up of the picture book with regard of designing the picture book’s content, pictures and texts adequately for children.

Step 3: The designed mock-up was shown to the social worker of the “Kinderschutzambulanz” and the main physician who gave feedback on it.

Step 4: In the last step the feedback was worked out on the mock-up and book was created.

The whole developing team expects the created picture book to be an educational instrument that successfully reduces anxieties in children for examination, by preparing the children adequately for the examination.
2 Introduction
Sexual abuse is not unusual (Wetzels, 1997). Unfortunately, there are not many representative surveys researching the quantity of child abuse (Zietlow, 2010). One survey by Wetzels (1997) states that 25.4% (7.3% males; 18.1% females) of the German-speaking population, between the age of 16 and 60, who were asked about their sexual abuse experiences, confirmed having had such experiences in their youth (Wetzels, 1997). Finkelhor (2005) states that, depending on the definition of child abuse, the amount varies between 10% (7% females, 3% males) and 65% (36% females and 29% males). In general, girls are more often attacked than boys (Herzig, 2010). Despite these facts, neither sex, nor religion nor ethnicity, nor social status (Trube-Becker, 1992) are clear indicators for becoming a victim of sexual abuse. Nevertheless, a correlation has been established between sexual abuse and little child care and/or emotional support by the mother (Herzig, 2010), difficult, unstable social circumstances and a lack of temporal or material support (Briken & Richter-Appelt, 2010). The dark figure is exorbitantly large (Deegener, 2005). Trube-Becker (1992) mentions that more than half of the abused children are babies or young children. She assumes that the mistreatment in most cases begins at a very young age and goes on to the end of puberty or young adulthood. The understanding of mistreatment differs per definition from sexual abuse.

2.1 forms of abuse
Wolff (1999) offers the following definition of sexual abuse: “Sexual abuse is an exploration by a powerful person of authority in form of (forced) sexual activity [...] which affects the child’s development, his welfare and rights.”

Sexual activities can be divided into two main groups: pre-forms (such as sex talk, exhibitionism and voyeurism) and accomplished forms of sexual mistreatment (such as touching, oral-genital sexual abuse, inter-femoral sexual acts, sexual penetration and sexual exploration) (Woll, 1999). Deegener (2000) distinguishes between the pre- and accomplished forms of abuse and classifies them into four categories of severity: The first describes the form without physical contact. All these pre-forms make up 15% of the sexual child abuse (excluding masturbation). More severe forms are counted among the accomplished forms. These are the less intensive forms of sexual abuse including touching (35% of sexual mistreatment), intensive sexual abuse such as masturbation (35%), and finally very intensive sexual abuse like oral-genital abuse, inter-femoral sexual act, any form of sexual penetration as well as sexual exploration (15% of sexual abuse). The distribution of those forms is shown in the graph below (Deegener, 2000).
2.2 Characteristics of Offenders

The police criminal statistic states that men dominate as the offenders in cases of sexual abuse (Zietlow, 2010). The rate of the suspected criminal sex offenders was 96.1% male in Germany in 2010 (Zietlow, 2010). Nevertheless, women are also offenders in cases of sexual abuse (Zietlow, 2010). Police expect the rate to be higher (by approximately 10%) (Zietlow, 2010). They are less brutal and therefore it is less easy to record sexual abuse (Zietlow, 2010). Very often, women cooperate with their dominant partner (Trube-Becker, 1992). Due to the partner's dominance the women accepts and supports sexual abuse of their children without making any official charges (Trube-Becker, 1992).

According to the above definition, also children can abuse children (Wolff, 1999). In such cases, the sexual abuse can often be interpreted as an aggravation of aggressive acts (Trube-Becker, 1992).

In many cases the offender is not unknown to the child and he is frequently a member of the family or belongs to the close social environment (Zietlow, 2010). Zietlow (2010) states that, according to the German police criminal statistics, the relation of offender and victim in 2008, 19% of the offenders and victims seem to be related, 30% acquainted, 9% had loose contact, 35% had no contact and 7% are not detectable. Wolff (1999) states that within the family, the father of stepfather or new friend of the mother (46%) are often detected as the offenders. In cases of sexual abuse that end in death, 7 of 14 times the father and stepfather were the offender (Trube-Becker, 1992). These statistical data give rise to the assumption that there is a more violent component in the mistreatment of children by men. Those kinds of mistreatment can cause several forms of mental and physical injuries.
2.3 Physical and Psychological Injuries of Sexual Child Abuse

Sexual child abuse can lead to medical and psychological injuries (Deegener, 2005). These injuries are proof of sexual abuse and can be an important indicator when selecting the appropriate form of therapy, which includes both psychological care and medical treatment (Deegener, 2005 & Hermann, 2010).

Psychological injuries

There are several kinds of psychological symptoms and consequences that may signal the presence of child maltreatment (Deegener, 2005). It is important to mention that there are many different kinds of symptoms that can indicate abuse, but there are no clear indicators for it (Deegener, 2005). The AGKM (1992) differentiates between the short-term symptoms, such as a lack of emotional reaction, sleeping disorders or aggressive behavior and the long-term symptoms such as post-traumatic stress disorder. The later symptoms first come up after a while or in adulthood (Reddemann, 2004).

Physical injuries

There are typical physical injuries of sexual abuse, such as vaginal and anal injuries or sexual diseases (Hermann et al, 2010). Nevertheless, there are a few medical symptoms that are difficult to differentiate from injuries caused by non-sexual activities, such as black and blue marks (Hermann et al, 2010). A summary of possible physical symptoms has been attached. Furthermore, Hermann et al (2010) state that 90% of the abused children have no visual indications. On the one hand, the reason can be that the offenders did not use physical violence, but on the other hand children’s bodies and mucosa heal very easily. After 2-3 days abrasions are no longer detectable. Bleeding of the mucosa is verifiable 48-72 hours, hematomas 10-15 days and blood blisters of the mucosa can be detected 34 days. The gravity depends on the intensity and quality of the sexual abuse. To detect those injuries a fast and careful medical examination is necessary (Hermann et al, 2010).

2.4 Importance of Immediate Examination

Immediate medical examination for victims of sexual abuse is important for various reasons (Hermann et al, 2010). Firstly, the forensic factors need to be determined to secure the evidence of sexual abuse (Hermann et al, 2010). Nevertheless, a lack of diagnostic findings does not mean that there has been no sexual abuse (Hermann, 2010). Secondly, it is proven that the testimony in court can re-traumatize the child, endangering its well-being and reduces the effects of therapy (Däubler-Gmelin & Speck, 1997). Therefore, when all the relevant evidence has been secured, the children do not have to go to court (Däubler-Gmelin & Speck, 1997). Thirdly, in the case of handicapped people who are not able to articulate themselves, such evidence is essential and it is often the only chance to prove sexual abuse at all (Hermann et al, 2010). Moreover, it is necessary to detect and treat physical injuries (Hermann et al, 2010). Finally, children who were sexually abused often have a disturbed body image (Hermann et al, 2010). Therefore, the doctor can help them to see that their body is still intact or healable although they were abused (Hermann et al, 2010). Although, the importance of medical care, it can be displeasing or scary for the children (Hermann et al, 2010). Therefore, it is necessary to prepare the children for examination, to make
it comfortable and less scary and improve the quality and effectiveness of medical treatment (Hermann et al, 2010).

2.5 Preparing Children for Medical Procedures

To prepare children adequately for examination, it must be kept in mind that children differ from adults in development in several ways (Gofferje & Stenker, 2007) and that they have special needs concerning preparation (Hermann et al, 2010). If the children's age-specific needs are not met, the examination can be a scary experience (Hermann et al, 2010). To prevent the child from being threatened and to improve willingness to support the doctor during the examination, they need to be addressed adequately. That means that the way of information distribution, for example a book or an information text, must be adequate for children (Ewers, 2009). Therefore, it is necessary to understand what typically causes fear to meet the children's anxieties, to find out how anxieties can be minimized and how this information can be handed to the children.

Typical Children's anxieties during examination

The cause of fear is very individual and can differ very much per child (Gofferje & Stenker, 2007). Children often develop irrational anxieties or understand fear and pain as punishment. For example, a child that has got a broken arm could think that it is because he lied to his parents (Busch & Noller, 2007). Children can also fear situations that, from an adult point of view, are not dangerous at all (Busch & Noller, 2007). Therefore, adults are often unable to understand such irrational fears (Busch & Noller, 2007).

Nevertheless, there are a few factors of fear that are typical for children (Busch & Noller, 2007; Gofferje & Stenker, 2007). Those might be:

1. The unknown hospital's environment (surroundings, equipment and smell).
2. The fear of being ill (children see that they are vulnerable).
3. The foreign "language" that is spoken in the hospital (children often do not understand what happens and what the doctors say).
4. The feeling of being other-directed (children have to take their clothes off when the doctor says so, which gives them an impression of powerlessness).
5. The fear of being or feeling alone as a result of a lack of social support during examination (Busch & Noller, 2007; Gofferje & Stenker, 2007).

Fear can lead to a kind of alarm status that can include palpitation, breakout of sweat, increased muscle tension and accelerated breathing (Däubler-Gmelin & Speck, 1997). Signals of fear could already be detected in a six to eight-month-old child (thumping noise or stimulus satiation) (Däubler-Gmelin & Speck, 1997). Fear is extremely stressful to children, and they respond either with attack, escape or irritation (Däubler-Gmelin & Speck, 1997). That does not only mean that the feeling of fear might affect the feeling of comfort during examination, but it reduces the children's willingness to succumb to treatment as well (Hermann et al, 2010). However, the feeling of comfort should be increased to make the experience as positive as possible and therefore prevent traumatic experiences during examination. Besides, if children are willing to be treated, examination will be
less work for the doctor and its quality will improve (Hermann et al., 2010). Therefore, fear should be minimized as much as possible.

**Minimizing fear of examination**

Fear differs per individual and therefore the method of minimizing anxiety should also differ per individual (Däubler-Gmelin & Speck, 1997). In a clinical setting, the doctors or hospital staff often do not know the child or its preferences, and have no time to get to know its preferences. Therefore, Busch & Noller (2007) and Gofferje & Stenker (2007) mention, it is useful to focus on minimizing the general fears among children and to find a general method to reduce the fears stated above.

With the goal to find a way to reduce anxiety in an examination setting, Bush & Noller (2007) found that, in general, children who are well-informed about their treatment, are less afraid during examination.

Railey (1985) describes his research about preparing people for cancer treatment. In this research, he divided patients in a low-information group and a high-information group. The high-information group received detailed information about their examination. He found that those who are better informed are less stressed during treatment.

Aranda et al. (2012) researched the best method to prepare people for chemotherapy and to help them cope with the situation. They found that people required detailed information that addresses their specific needs to reduce anxiety.

In sum, it seems that information is an important aspect to reduce anxiety. Nevertheless, it remains a question what this information should include and what should be explained to the children.

In this regard Cohen (2008) wanted to know what kind of information decreases children's anxiety and increase pain management for pediatric venous access. He discovered what kind of information children need. He describes that it is important to prepare patients before examination or operation by giving them information about the procedure and sensory impression during treatment and giving them advices on how to improve handling the situation. That information calms children down and gives them a feeling of security and control.

It seems that information about examination can be divided into procedural and sensory information (Cohen, 2008 & Morrison & Bennett, 2010). Procedural information should be given before, during, and after treatment (Cohen, 2008). It should explain what (operation) will be performed where (operation room), why (cancer), when (tomorrow morning) and how (to open the stomach and cut the cancer out). Furthermore, sensory information should be provided that informs the children about what they are going to feel (cold/warm) or what everything looks like (room or instruments). Besides, coping skills seems to help reduce anxiety (Cohen, 2008). Coping instructions are skills or tips that make it easier for the patient to handle the situation (count till ten until the narcosis works or take a stuffed animal as security base). It seems that, if patients receive detailed procedural and sensory information as well as coping instructions, anxiety can be decreased and the feeling of control and social support can be increased. Nevertheless, it is not
only important what kind of information the children need (procedural information etc.) but also what the information is about.

It can be concluded that good information about procedural information and sensory information as well as coping instructions about examination can solve those typical children anxieties. It can help to make the (1) surroundings more familiar, the (2) fear of being ill can be solved directly by explaining children that it is not bad to have a cold, and the exaggerated fear of grave consequences can be alleviated by explaining that pain in the arm does not mean that the arm falls off, it can support the feeling of (4) control and their (5) feeling of social support. Nevertheless, a solution for the children’s problem with understanding the foreign ”language” spoken in hospitals, hasn’t been found. This anxiety depends not on the information content but more on the way of information distribution. Therefore, a good method must be found to hand children this information (procedural information, sensory information and coping instructions) adequately.

**Information distribution for children**

For giving children information, it is important to know how it can be laid out adequately for their needs (Ewers, 2009). In general, information should be visually supported because especially for children, it makes it easier to develop a clearer idea of procedures or illness (Buch & Noller, 2007). For example a broken arm is easier to understand than an abstract illness as diabetes (Gofferje & Stenker, 2007). In general, written information should be given, in everyday language and stylistic, adequate for children for example in short sentences (Ewers, 2009). The most popular way of informing children is in form of a story with a plot and characters (Ewers, 2009). For creating the stories characters, the assumptions of Jean Piaget can be helpful. Jean Piaget, the Swiss psychologist, assumes that pre-school children live in a magical world. That means that children do have a special idea of the relation of mind and external world. They believe that words or thoughts can affect the physical world. These ideas can be divided into three categories. Firstly magic between thoughts and things (spells), secondly between actions and things (knocking on wood brings luck) or thirdly between objects (active relation to mascots) (Mähler, 2005). Therefore, characters such as a stuffed animal, can also be in possession of human skills like having emotions or being able to talk.

A picture book for example could be a good method to hand information to children. Its pictures help to support the information. The text in form of a story, everyday language and short sentence make the information adequate for children and characters with “magical” attributes help to address them.

Although there is a lot of theoretical knowledge about preparation for medical treatment, the treatment of children and the way of giving them information, it seems that an education tool specially designed to prepare children for examination, is still lacking. This is what sparked off the idea for this thesis: to develop an education book which helps to prepare sexually abused children for the first medical examination. This book shows the different steps of an examination and it gives procedural and sensory information as well as coping instructions for each step. The goal of the book is to inform children through images and language that are appropriate for children, to minimize their general fears. Following, a design towards this end.
2.6 Participatory Design
To develop this book, a user-centered design was chosen: the participatory design. This design centers the process around the user (Norman & Draper, 1986). After identifying a participatory design team, designers work together with the potential users who are directly affected by the product (Wickens et al, 2004). According to Hall (2005) participatory design can be seen as a community experience; users are involved to assure that the product and product design meet their needs (Wickens et al, 2004). The focus is shifted from a purely theoretical point of view towards the needs of the users themselves; the product is more aimed at solving a problem rather than expanding knowledge (Grønbæk et al, 1993). It is a dialog over time and should involve the user during the whole working cycles (Wickens et al, 2004). Therefore, they may firstly decide with the developer about goals, about the target group and about the product's content or skills and secondly a possible mock-ups must be created and thirdly they may try and give feedback on the mock-up (Wickens et al, 2004). Finally after correction of the mock-up they may test and evaluate the final product (Wickens et al, 2004). This is a simplified description about the product in cycles. All steps could be extended or repeated. For example it is possible that there is more than one mock-up before the final product is developed. Therefore the step of using a mock-up and give feedback on it could be repeated (Wickens et al, 2004).

2.7 Research Goals
To develop this book the following goals should be defined in conjunction with the participatory design team:

Step 1 Needs assessment:
- Define the goals of this book.
- Define the target group of this book.
- Define the different procedural steps the children have to follow during examination.
  - Define the procedural information per step.
  - Define the sensory information per step.
  - Define possible coping instructions per step.

Step 2 Construct a mock-up
- Construct a draft picture book on the basis of the needs assessment.

Step 3 Collecting feedback
- Get feedback on the draft version

Step 4 Revision and book production
- Create the book
3 Method

The following paragraphs describe the method of the book production. For this book production, a simplified production cycle of Wickens et al. (2004) was chosen. This cycle consists of four steps: The first step is “needs assessment” including the analysis of the potential user, goals, target group and the book’s content. The second step “constructing mock-up” includes the mock-up production and the third step “collecting feedback” is about the mock-up evaluation. The last step “revision and book production” includes the book production and evaluation (Wickens et al., 2004).

3.1 Step 1: Needs Assessment

In step one a participatory design team was chosen. After defining the team, an attempt was made to work out the goals, the target group and the books content in cooperation with the participatory design team.

Participatory design team and criteria for selection

First a participatory design team had to be chosen to support the developer in book construction. The institution as well as the participatory design team was chosen via convenience sampling. The inclusion criteria were expert knowledge of the concerning question (knowledge about examination, about the children who come in contact with the book) as well as being a potential user. Due to the fact that the book shall focus on the specific medical examination after sexual abuse, an institution is needed, that specializes in that kind of treatment. The "Vestische Kinder und Jugendklinik", a hospital for children in Datteln (Germany), was chosen to be part of the participatory design team. They have got a “Kinderschutzambulanz”. This ambulance is specialized in the medical detection of any kind of child abuse. Also chosen to be part of the participatory design team, was the head physician of the "Kinderschutzambulanz", who could support the book production actively. Due to the fact that not many hospitals or doctors in Germany are specialized in child abuse, the participatory design team for step one only consists of the developer and the main physician of the "Kinderschutzambulanz" (Germany).

Instrumentation and procedure

In order to define goals, the target group and the examination planning a semi-structured questionnaire was used. This can be found in the attachments (Attachment 4 – Questionnaire one: Book content). To answer the questionnaire, the head physician met with the developer at the physician’s examination room in the hospital. The face-to-face interview took about 2.5 hour. First of all, the questionnaire asked the doctor to define the books’ goals (1) “what should the goals of this book be?”, and the potential target group (2) “which target group should be addressed?”. Afterwards, the doctor was asked (3) “what are the main steps of examination?”. This was necessary to divide her examination into different steps starting with her arrival at the hospital and finishing with her departure. The final question was (4): “Can you give detailed information per step about the process, sensory input and possible coping instructions?”. The results were written down with pen and paper in headwords after each question. If one question was not answered completely, the developer was allowed to ask the question again.
Finally, the questionnaire asked to evaluate those steps. Therefore, in the last part (5), the doctor checked each step of the developers’ notes (steps of examination, sensory and process information and coping instructions) for correctness. As needed the notes are corrected with pen and paper. In the end the headwords were worked out on the computer.

Analysis
The answers that were given by the head physician of the Kinderschutzambulanz were divided into the paragraph “goals”, expressing all information about the potential goals of the book, the paragraph "target group", concerning the possible target group of the book. The information about examination was first divided into main steps of such as “arrival” or “genital examination”. Afterwards the information per main step was split into procedural information, sensory information and coping instructions were.

3.2 Step 2: Constructing Mock-up
In this paragraph, the mock-up construction is described by looking at the instruments needed and the procedure that was chosen to create the mock-up.

Instruments
To develop the mock-up, the examination plan with the sub steps were used to give the needed information that should be worked out in the mock-up. During the mock-up production, the knowledge of adequate children information distribution such as visual support of the information given, should be kept in mind (Gofferje & Stenker, 2007 & Ewers, 2009). The first sketch of the story and characters were written down in headwords with pen and paper. The final text was written on the computer and the pictures were painted with pencil and normal A4 paper.

Procedure
To develop the mock-up, firstly a story and characters were sketched by the developer. Both story and characters must fit into the examination plan and meet the target group. These sketches of the story and characters were written down in headwords with pen and paper. Secondly, the story was fit in detail to the examination plan and sub steps. The pictures are not colored yet nor are the characters drawn in detail. Both texts and pictures were written and drawn by the developer herself. During development, the developer constantly took in account that the pictures and text fulfill the expectancies of adequate child information.

3.3 Step 3: Collecting Feedback
In this paragraph feedback was collected.

Participatory design team
Additionally to the main physician of the “Kinderschutzambulanz” and the developer, the participatory design team for this step was extended by a social worker. The social worker supports the doctor of the “Kinderschutzambulanz” when conducting family conversations or when meeting with the youth welfare service. He meets the inclusion criteria for mock-up feedback by being somebody who is in contact with the children and who can assess his impression on whether the
layout and the text are appropriate for these kinds of children. He was the only one of the social worker team who was able, available and willing to participate and who was a potential user.

**Instruments**

In order to analyze the feedback given by the social worker and the doctor, questionnaire two was used (Attachment 7 – Questionnaire two: Feedback). This semi-structured questionnaire asks the interviewees to give his or her general impression (“What is your general impression of the book?”), the impression of different aspects (“Do the pictures match the book’s content?”), effectiveness (“Does the book meet its goals?”), address of the target group (“Does the book appeal to the target group?”) and general questions (“Who could hand the book to the children?”). The answers were recorded with the voice function of the mobile phone and were first typed out literally before further development.

**Procedure**

Firstly the pictures were shown and the text was read out by the developer separately for the social worker and the doctor. Afterwards the doctor and the social worker were separately interviewed by the developer by means of questionnaire two. If a question was not completely answered, the developer could ask the question again. Afterwards, both results were compared with each other and equalities and differences were worked out. The mock-up presentation and interviews took about one hour per person.

**Analysis**

To analyze the interviews, the consensus analysis method was chosen. In this method answers are compared and differences and similarities are defined. Therefore, both the results of the doctor’s interview and the social worker’s interview were correlated with each other per question. Furthermore, agreements and disagreements were illustrated.

### 3.4 Step 4: Revision and Book Production

The following paragraph explains how the mock-up was revised and the book was produced.

**Participatory design team**

In this step, the participatory design team was reduced to the main physician and the developer. A decision must be made whether the critics’ concerning the mock-up, are accepted or not. The doctor of the "Kinderschutzambulanz" was chosen to make this decision due to the fact the she is the one with the most experience with children during examination and she is the one who will be involved with the book most of the time.

**Instruments & Procedures**

At first the disagreements about the mock-up were taken and discussed by the developer and the main physician. After discussion both finally decide about working out the criticisms. This discussion and the final decision were written down with pen and paper in headwords and later digitalized with the computer.
Secondly, the accepted criticism was worked out in the mock-up. In other words, if the criticism was going to be further processed, the mock-up was changed. Thirdly the pictures were worked out in detail. They were drawn by the developer herself who also wrote down the reason for the pictures the way they were drawn. The feedback discussion took about one hour; drawing the picture took about two days. The final pictures were drawn with aqua color on special aqua color paper in A4. The pictures were scanned into the computer and printed together with the text. Finally the papers were bound together with a binder.

4 Results

The following paragraph describes the results of the book production. The structure of the results is identical to the method’s structure. It is also divided in four steps of the participatory design of Wickens et al. (2004).

4.1 Step 1 – Needs Assessment

The goals of the picture book

According to the doctor of the “Kinderschutzambulanz”, the children need to be prepared for examination "so the children are less afraid and perhaps they are more motivated to cooperate during examination." The chosen possibility to prepare the children for examination and reduce the typical children anxiety was to give them good information. Therefore children should be well-informed to reduce fear of (1) unknown surroundings and examinations ("because they see all instruments and know what is going to happen"), and the (2) fear of being ill. Because “the book can explain that it is not fatal to have a wound at the vagina or that their body can heal”. (3) They can be able to understand what happens to them because “they can be adequately informed”. Besides, the feeling of situation control (4), (“that they can stop at any time and decide what they do”) and social support (5), (“that they do not have to go to examination alone”) should be increased.

Therefore, the goal was to develop an education book (3) that is adequate to inform children. That can give all important information about the different steps of examination, and procedural- and sensory information (1-2) as well as coping instructions (4-5) per step to be able to reduce children's anxiety and improve their willingness of being treated and increase the quality of examination.

Target group

To identify the target group, the potential group was discussed with the chief physician of the “Kinderschutzambulanz” and the developer. Based on the doctors experience she explained that “both pre-adolescent and adolescent children do have problems with this kind of examination, very small children do not, not that much at least”. The children who come to the ambulance differ in age, sex and cultural background: "Any kind of children have come to me because of suspicion of sexual abuse". The Kinderschutzambulanz cares not only for victims of sexual abuse but all sorts of child abuse and mistreatment. Nevertheless, this concept should focus on children who are suspected to be abused in a sexual way “and the special treatments” of child genital and anal
Due to the fact that girls are more affected by sexual abuse than boys, the concept especially focuses on the general aspects of "gynecological medical treatment after a suspicious of sexual abuse."

Therefore, the book's target group is defined as pre-adolescent and adolescent girls of any kind of religion, social status, or culture who are in suspicious of being victims of sexual abuse.

**Steps of examination**

The doctor was asked to divide her examination in cases of suspicious sexual abuse into the different steps (arrival, genital and anal examination etc.). Furthermore, she was asked to describe the procedural and sensory information as well as coping instructions she uses for each step.

An attempt was made to find out in detail what children experience during the examination. It seemed that the examination can be divided into nine steps. An overview over those steps is given in table one. For each step, the doctor was asked to explain the process the children go through (what is going to happen), the sensory input they get (what do they see, hear, smell or feel) and what coping instruments (how can the situation become more comfortable) the doctor can offer for each main step. Therefore, an examination plan was developed that shows each main step of examination (from the arrival of the children and their genital examination to leaving the hospital) and gives the information about the three subcategories: procedural information and sensory information, and possible coping-instructions per step. Table 1 shows the main steps and a summary of the three subcategories. A detailed description of each step can be found in attachment 5.
Revision of examination steps
The elaborated examination steps were submitted to the doctor again. She was asked to check the correctness of each step and subcategories. She pointed out a couple of aberrations. One of the aberrations is described below; a whole list of all aberrations can be found in attachment 6.

Aberration 1: The first one was discovered under the point “Examination of genital and anal region.” The first version of the plan says that the doctor looks at the screen the “whole time” (procedural information). It is not correct and was changed in "most of the time”. "The whole time, the doctor looks at the screen and not at the genital region directly" was changed into, “most of the time; the doctor looks at the screen and not the genital region directly”
All correction points were written down in headwords with pen and paper during the meeting and were afterwards typed into the computer. A correct and complete version of the nine steps of the examination plan (arrival, at the front desk, examination room, introductory conversation, start of examination – taking samples, stuffed animal examination, general treatment on children, genital and anal examination and ending) can be found in attachment 5 “Examination planning”.

4.2 Step 2: Construction Mock-up

The following paragraph shows the different aspects of mock-up constructions. The first part describes the sketches of the story and the character and the second part is about the mock-up’s picture and text production

Sketch of story and characters

At first the developer thought about the possible story and the characters of the book. For this, she orientated at the main steps of examination (arrival, genital and anal examination etc.) and the target group.

The story is about two girls who experienced sexual abuse and who need to go to the hospital for examination. In the hospital they go through exactly those experiences the doctor considers in the examination plan. The characters should meet the target group. The target group was defined as girls before and in puberty. Therefore the main characters were two girls before and in puberty to help the children at any age to identify with one of the characters. Both children “Elena” and “Bia” were used to verbalize loads of children’s anxieties and thoughts. The older girl “Elena” is more skeptical and angry towards the examination, and the younger girl was designed to be fearful but nosy.

The fact that they are sisters explains why they go together for examination. There was no information given about their cultural or social background. The girls are accompanied by a person in charge of their residential community. This is due to two aspects. On the one hand the story should focus on the relationship between doctor, examiner and patient and not for example a mother-child relationship. Therefore, the person who accompanies the children should function as a secure base and must be someone who is familiar with the children, but who hasn’t got too close a relationship with the children so that it might influence the examination. In case the mother of the children would come along, they might not want to talk about sex in front of her. These characteristics come together in the form of a person in charge of a residential community. On the other hand it is due to the information given by the doctor that most of the children come to her with somebody of the government. The character of the doctor bases upon the head physician of the “Kinderschutzambulanz” in Datteln (Germany). They are similar in appearance; way of speaking and they carry the same name.

Piaget states that children believe in a magical world where stuffed animals for example, might have emotions. Besides, the doctor explained that she uses a stuffed animal to show the examination. For this reason, the book contains a stuffed animal namely a bear named Bobo. The bear carries out different functions. On the one hand it is the secure base for the younger child.
(takes him in her arms, when she is afraid). On the other hand it does also have emotions (it can be afraid of something) to address children who believe in this magical world. Because the bear possesses human characteristics, it can support the children’s’ feelings of social support as well.

Picture and text production
Based upon the sketch and the detailed information of the examination plan, a mock-up of the book was created. This mock-up includes all the main steps as well as the content of almost all subcategories. The information was expressed in text and pictures. The following is an example of how information is put in picture and text.

Example:
Procedural information and book format


The needed procedural information is given in the text such as that they first need to take off her upper clothes ("Es wäre gut wenn du dein Oberteil ausziehen könntest"), then check the heartbeat and afterwards the upper body ("Erst hörte sie auch Bias Herz mit ihrem Stethoskop ab. Dann schaute sie sich Bias Arme und Beine, den Bauch und den Rücken an."). For more procedural information it is also explained that in case of injury, a photo is taken of the wound ("Dann mache ich ein Bild von der Narbe") together with a lineal to see the size of the injury in the photo ("Das Lineal brauchen wir, damit wir auf dem Foto erkennen wie groß die Narbe ist!") and afterwards everything is documented ("Frau Dr. Brüning notierte alles auf einem großen weißen Zettel"). To increase the feeling of control, the doctor gives her the impression that she needs the girl’s help by encouraging the girl to help her find injuries ("Du kannst mir super helfen, wenn du mir sagst wo..."
"dir wehgetan wurde") and taking the ruler herself ("[...]dann kannst du das Lineal selbst festhalten"). The Picture supports the information that she needs to take off her upper cloth (she sits without her t-shirt on the couch), the detection of injuries (The girl has got a wound on her arm) and the photo that must be taken (doctor sits with a camera next to the girl).

To create the book adequately for children, the following has been taken into account. Firstly, the picture must support the texts content. Secondly, the language should be everyday language („Vom Hauen, der Freund von meiner Mama hat mich gehauen!”) and the sentences should be short and easy to read for children („So, als nächstes schauen wir mal nach deinem oberen Körper. Es wäre gut wenn du dein Oberteil ausziehen könntest.", sagte Frau Dr. Brüning.").

The structure of the book is the same as the structure of the main steps. That means that all main steps are put in different pictures and matching text. However, in some cases, more than one picture was used in one step (table 2).

**Sensory information**

Eigentlich tun die Untersuchungen nicht weh, aber manchmal passiert es, wenn eine Wunde noch frisch, dass ihr das doch unangenehm findet.

The text gives the information about the sensory information during examination. It describes that the examination actually do not hurt, but in cases of acute injuries it is possible that they do not feel unpleasant. That information was not especially worked out in the picture because this information is a part of the general information of the examination. Therefore the picture shows the kinds of examination instead of giving further information about the single examinations.

**Coping Instructions**
„Möchtest du mit mir gucken ob alles in Ordnung ist oder soll ich das alleine machen?“ „Nein, ich will das nicht anschauen, ich will da gar nicht hingucken!“, sagte Bia. „Brauchst du auch nicht, sagte Frau Dr. Brüning, ich kann dir den Fernseher anmachen oder Sonia könnte mit dir ein Buch anschauen. „Ja ein Buch!“rief Bia und die Ärztin gab Sonia ein Buch. Sonia begann Bia vorzulesen. Das Buch war so spannend, dass Bia Sonia ganz genau zuhörte.

The texts shows that different coping possibilities during the genital examination. The children could watch TV or read a book to distract during examination. The picture shows the kind of distraction the child "Bia" chose. It shows her reading a book during the genital examination.
<table>
<thead>
<tr>
<th>Main step (No Pictures)</th>
<th>Mock-up Pictures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrival (1+2)</td>
<td><img src="image1" alt="Mock-up Picture" /> <img src="image2" alt="Mock-up Picture" /></td>
</tr>
<tr>
<td>At the front desk (3+4)</td>
<td><img src="image3" alt="Mock-up Picture" /> <img src="image4" alt="Mock-up Picture" /></td>
</tr>
<tr>
<td>Examination room (5)</td>
<td><img src="image5" alt="Mock-up Picture" /> <img src="image6" alt="Mock-up Picture" /></td>
</tr>
<tr>
<td>Introductory conversation (6+7)</td>
<td><img src="image7" alt="Mock-up Picture" /> <img src="image8" alt="Mock-up Picture" /></td>
</tr>
<tr>
<td>Start of examination- taking samples (8+9)</td>
<td><img src="image9" alt="Mock-up Picture" /> <img src="image10" alt="Mock-up Picture" /></td>
</tr>
<tr>
<td>Stuffed animal examination (10+11)</td>
<td><img src="image11" alt="Mock-up Picture" /> <img src="image12" alt="Mock-up Picture" /></td>
</tr>
<tr>
<td>General treatment on children (12+13)</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td></td>
</tr>
<tr>
<td><img src="image1.png" alt="Diagram" /></td>
<td></td>
</tr>
<tr>
<td><img src="image2.png" alt="Diagram" /></td>
<td></td>
</tr>
<tr>
<td><img src="image3.png" alt="Diagram" /></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Genital and anal examination (14+15+17)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image4.png" alt="Diagram" /></td>
</tr>
<tr>
<td><img src="image5.png" alt="Diagram" /></td>
</tr>
<tr>
<td><img src="image6.png" alt="Diagram" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ending (18 + 19+20)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image7.png" alt="Diagram" /></td>
</tr>
<tr>
<td><img src="image8.png" alt="Diagram" /></td>
</tr>
<tr>
<td><img src="image9.png" alt="Diagram" /></td>
</tr>
</tbody>
</table>

The parts of the examination plan (attachment 5) are highlighted in the text.
4.3 Step 3: Collecting Feedback

The following paragraph shows the analysis of both interviews. Agreements and disagreements were worked out. The full interviews are attached. The following table shows a summary of the answers of both interviews per question.
Table: 3 – Answers Feedback Questionnaire (2)

<table>
<thead>
<tr>
<th>Questions Questionnaire 3</th>
<th>Answers doctor</th>
<th>Answers social worker</th>
</tr>
</thead>
<tbody>
<tr>
<td>General impression 1. What is the general impression of the book?</td>
<td>Very, very good It shows in detail how it works Its shows the focus of bodily integrity</td>
<td>Very informative Cares for the children’s needs Process is explained in detail The anxieties especially of the little sister are explained in detail</td>
</tr>
<tr>
<td>Impression of different aspects Do the pictures match the book's content?</td>
<td>Yes absolutely, everything is explained and shown well!</td>
<td>yes</td>
</tr>
<tr>
<td>Is there anything lacking (content etc.)?</td>
<td>No I think it is great!</td>
<td>After the examination of the little sister, a conversation picture with the older sister is needed. The transition was just too sudden in my view. Besides, if there a conversation in the text before, why is it not illustrated? It is only suited for girls</td>
</tr>
<tr>
<td>Effectiveness Does the book meet its goals? (inform the children/reduce anxiety)</td>
<td>Yes absolutely It shows the children what is going to happen It is complete Explained in detail Yes, I think so (reduce anxiety) The children in living groups can support each other with the book (to reduce anxiety)</td>
<td>It meets its goals. completely It informs the children exactly Yes absolutely, especially because it keeps its promise.</td>
</tr>
<tr>
<td>Can it be used in other hospitals too?</td>
<td>Yes, because the setting is always similar There are international standards</td>
<td>In general well They have maybe problems with the needed time. The staff is not specialized and they do not have the needed instruments.</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Do you expect the book to work?</td>
<td>Yes absolutely</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Adress the target group</td>
<td>Does the book appeal to the target group?</td>
<td>Yes the target group that was planned addresses the target group Girls before and in puberty</td>
</tr>
<tr>
<td>General questions</td>
<td>At which moment the children can get in contact with the book?</td>
<td>Before examination If anything happens in school as fast as possible</td>
</tr>
<tr>
<td></td>
<td>Who can give the book to the children?</td>
<td>Residential community Youth welfare service Schools in consultation hours</td>
</tr>
<tr>
<td></td>
<td>Are there possible negative effects?</td>
<td>Children are possibly surprised at how many thing happen Especially blood sample But then it is explained that the children in the book do not make a bad experience.</td>
</tr>
<tr>
<td>Other notes?</td>
<td>No not for examination</td>
<td>I would like the people in the last picture to look at each other, so that you can see the faces.</td>
</tr>
</tbody>
</table>
Analysis feedback mock-up

In general, the book made a good impression on both the doctor and the social worker of the "Kinderschutzambulanz". Both complimented the informative and detailed structure of the book. On one hand the doctor appreciated the fact that the examination was depicted in great detail and her focus on bodily integrity was illustrated. On the other hand, the social worker’s positive impression focused on information in general as well as on the reduction of anxiety. Both thought that the goals of the book are met because "it shows the children what is going to happen", "it is complete" and "it explains in great detail" therefore "it informs the children exactly" and reduces anxiety. Among other merits "promises [made in the book] are kept".

Both agree that the book "addresses the target group of girls before and in puberty", "especially due to the funny situations such as shaking the bud" The doctor and the social worker thought as well that the pictures absolutely match to the content.

They added for consideration that the children might be surprised about "how many things happen [...] especially the blood sample" but the doctor explained that since it "is explained that the children in the book do not make a bad experience," she does not expect real negative effects.

The social worker assumed that the lady from the welfare service might scare the children because she does not say anything and her role and relation to the children are not worked out very much in the book.

The social worker expressed two change requests. On one hand he suggested adding another picture. The picture of the little sister during genital examination is directly followed by the older sisters’ genital examination. "It is just too sudden in my view.”

Secondly, the social worker wanted the characters to look at each other in the last picture. In the mock-up picture the three characters were shown from behind going away, and only the younger sister was looking at the older one. The picture is shown below.
Implementation

They agree that the book should be given to the children before examination or in suspicion of sexual abuse. The social worker added that it could be given to the children in any case of suspected sexual abuse. The points of distribution could be a residential community, the youth welfare service, the school, in consultation hours, the criminal police, the victim information center, the pension-office and the district youth welfare service. Besides, the doctor and the social worker expect the book to work, due to the international standards of examination that are the same at any hospital. Furthermore she said: "If it cannot be used there, the setting of the hospital should be changed [...] maybe other hospitals can learn from this book." The social worker's point of view is more critical. He assumes that it is in general well possible but often they do not have the time needed due to a lack of specialized hospital staff and the needed instruments.

4.4 Step 4: Revision and Book Production

The following paragraph shows the results after the recommendations were updated. Moreover, there is an explanation of how and why the mock-up pictures were drawn the way they are.

Handling disagreements

The first criticism on the mock-up was that the lady from the welfare service might scare the children because she does not say anything and her role and relation to the children are not worked out very much in the book. The social worker is not quite right though, because for example in the beginning the lady has verbal contact with the children „Das ist eine Klinik extra für Kinder“. Furthermore she offers social support and the children ask her for help during examination:

„Sonia, soll hierbleiben“, schoss es aus Bia heraus, und auch Elena nickte. and „Sitzen, aber nicht alleine! Sonia und Bobo sollen herkommen!“, rief Bia. Sonia setzte sich auf die Liege und Bia setzte sich auf die Liege, lehnte sich an Sonia an und hielt Bobo ganz fest in ihren Armen. So fühlte Bia sich sicher [...].

These aspects create a positive image of the person in charge. Besides, the book focuses on the relationship between doctor and patient. Therefore, the role of the minor character was not extended. After discussing this criticism with the doctor, the decision was made not to change this aspect.

Furthermore the social worker asked to add another picture because of the little sister during genital examination is directly followed by the older sisters’ genital examination. He thinks that the cross over is too sudden and that a conversation photo must be added.
The developer and the doctor agreed. Therefore the following picture was added in the final book version and the text that actually belongs to picture 17 was divided between picture 16 and 17.

Picture 16

Jetzt war Elena an der Reihe. „Magst du jetzt zu mir kommen, Elena?“, fragte Frau Dr. Brüning. Elena stand auf: „Frau Dr. Brüning? Ich will, dass wir was finden, ehrlich! Ich will Beweise haben für das, was mir angetan wurde.“ „Ich kann dich gut verstehen und ich verspreche dir, wir werden uns alles genau angucken! Es hilft, wenn du mir sagst, wo du Verletzungen oder Schmerzen hattest oder was dir passiert ist, dann habe ich einen Hinweis, wo ich ganz genau hingucken muss. Es kann aber gut sein, dass wir nichts finden. Das ist aber gar nicht schlimm, denn dann können wir froh sein, dass dein Körper dich schon wieder toll geheilt hat. „Ja ok!“ antwortete Elena und erzählte so gut wie sie konnte, wie und wo ihr weh getan wurde. „Ich finde es super, wie viel Vertrauen du zu mir hast, und wir werden uns die Stellen gleich ganz genau angucken. Aber erst mal gucken wir uns auch bei dir die Ohren, den Mund, den Herzschlag und deinen Körper an. Wie bei deiner Schwester, ok?“

(Text picture 17)

„Ja ok!“ antwortete Elena. Frau Dr. Brüning untersuchte die Ohren, den Mund, den oberen Körper, den Herzschlag und den unteren Körper. Genau wie bei Bea. Dann setzte auch Elena sich auf die grüne Liege und machte Ihre Beine auseinander. Wie ein Schmetterling seine bunten Flügel. „Ich möchte zusehen und helfen, sagte Elena“. „Gerne, also ich werde dir vorher erklären, was ich mache. Wenn dir was tut, sag sofort Bescheid. Dann machen wir das anders. Also, ich schaue mir jetzt als erstes mit dem Koluskop deine Scheide an. Dann deinen Popo und den Damm. Das ist das kleine Stucken zwischen Popo und Scheide. 29

The social worker wanted the characters to look at each other in the last picture. In the mock-up picture the three characters were shown from behind walking away, and only the younger sister was looking at the older one. The picture is shown below. Because people tend to look at each other while talking, the doctor and the developer agreed to change the picture, as shown in the picture of the final book version.

![Picture 20 mock-up](image1)
![Picture 20 book](image2)

Book production
When the mock-up was corrected, the pictures of the final book were painted. Apart from the information included in the book, several other aspects had to be considered in this step.

The pictures should be drawn in a way that is adequate for children. The pictures are colorful and the characters are painted realistically. Also, the adults are drawn smiling to make them seem friendly and inoffensive to the children. The hospital building resembles the hospital building of the “Vestische Kinder und Jugendklinik Datteln”, and the examination room is similar to that of the “Kinderschutzambulanz”. To illustrate what kind of treatments are done, picture eight was drawn to give an overview of the examination. The stuffed animal was created to function as a coping instruction for the younger child and it was also a way to verbalize Bia’s thoughts through a conversation between Bia and her stuffed animal (“Gut das Sonia dabei ist, nicht wahr Bobo?!”). Furthermore, this stuffed animal can be used to illustrate the demonstration of the examination.
Due to the fact that there are two girls who are treated, it was possible to show two possible attitudes (Bia is afraid but nosy and Elena seems angry and negative about examination), or two possible choices the children have during examination (Bia wants to read a book during genital examination and Elena wants to look at the laptop screen that shows her possible injuries).

The examination of Bia is almost completely shown, the examination of Elena starts in the pictures with the genital examination. That there has been a general examination before is only mentioned in the text. This is because it was less complicated to illustrate the upper-body check (as part of the general examination) of the younger sister because there are no secondary sexual characteristic yet that must be drawn. If the developed secondary sexual characteristics of Elena had been drawn, it might aware the children that their breasts must be shown. In puberty this might feel the children uncomfortable which might reduce their willingness to take off their upper clothes.

One picture shows the knee-chest-position that is necessary to secure evidence (picture 15). The problem is that the position is also a typical position which might have been used by the offenders during abuse. To differentiate between those experiences and that the examination it was depicted as a funny game the ”Popotanz”. In the picture as well as in reality, both the child and the doctor take the respective position. In the picture, both characters are laughing, which supports the impression of fun.

The last pictures show laughing children which shall support the impression of happy children and a happy ending. The following table shows the final pictures per main steps and give notes about the reason why they are drawn the way they are.
Table: 4 – Main Steps with Book Pictures and Notes

<table>
<thead>
<tr>
<th>Main step (No. Pictures)</th>
<th>Pictures</th>
<th>Notes</th>
</tr>
</thead>
</table>
| Arrival (1+2)            | ![Picture](image1.png) ![Picture](image2.png) | Colorful pictures  
Realistic, pretty characters  
Lady from the youth welfare instead of parents  
Adults smiling all the time  
hospital building  
Bia fearful/ Elena angry Building looks like the “Vestische Kinder und Jugedklinik Datteln” |
| At the front desk (3+4)  | ![Picture](image3.png) ![Picture](image4.png) | colorful surroundings  
doctor looks like and is named after the real doctor of the “Kinderschutzambulanz”.  
Stuffed animal can be used to verbalize Bia’s thoughts in a conversation |
| Examination room (5)     | ![Picture](image5.png) | room looks like the examination room of the "Kinderschutzambulanz” |
| Introductory conversation (6+7) | ![Picture](image6.png) ![Picture](image7.png) | Bia’s fear, Sonia’s support as well as Elena’s denial should be expressed.  
The smile and the attractive appearance of the doctor should communicate safety |
| Start of examination-taking samples (8+9) | ![Picture](image8.png) ![Picture](image9.png) | Give an overview of examination  
Illustrates Bia’s fear |
| Stuffed animal examination (10+11) | ![Picture](image10.png) ![Picture](image11.png) | Stuffed animal can be used for demonstration exercise  
Pictures focus on main aspects |
| General treatment on children (12+13) | ![Picture](image12.png) | Stuffed animal can support Bia  
No secondary sexual characteristics need not to be drawn |
Afterwards, all pictures were scanned with the computer. They were printed together with the text and were bound together by means of a binder. Attachment 9 ("Schmetterling und Popotanz") shows the completed book with references used for the examination plan.

| Genital and anal examination (14+15+16+17) | Bia does not want to look at the examination and is therefore detracted. Elena wants to look at it and therefore everything is explained to her by the doctor. Doctor and child are in chest-knee position doing the "Popotanz" laughing. |
| Ending (18+19+20) | Laughing children. Support impression of happy ending. |
5 Discussion
This thesis explains the difficulty of the first medical examination of children who are under suspicion of being victims of sexual abuse. Hermann et al. (2010) state that immediate and accurate examination in case of suspected sexual abuse is important for several reasons. For example it is often the only possibility to secure evidence of sexual abuse. Children are often scared to go to the hospital for examination (Busch & Noller, 2007; Gofferje & Stenker, 2007). To reduce or solve these anxieties Bush & Noller (2007) and the studies of Railey (1985) & Aranda et al. (2010) state that preparing children well by offering detailed information of examination (procedural information, sensorial information and coping instructions) is very important. Gofferje & Stenker (2007) and Ewers (2009) assume that not only the content of information is essential, but also the layout must be adequate for children.

The goal of this thesis was to develop an educational tool for preparing children for the first medical examination in four steps, when the suspicion has arisen that they were victims of sexual abuse. Towards this end, a picture book was created in cooperation with the "Vestische Kinder und Jugendklinik Datteln" (Germany). This book should contain all the information that is needed to reduce children’s anxiety and improve the children’s feeling of wellbeing during examination. The following paragraph will discuss the results of this production process and will also point out some improvement points for subsequent research per step.

Step 1
Firstly, the main physician of the „Kinderschutzambulanz“ and the developer as the participatory design team had to define the book’s goals and target group. A participatory design is characterized by the fact that it is very close to the users needs (Wickens et al., 2004). According to the developer, a participatory design was a good method to produce an education tool. A tool in general has to meet the needs of the one who is going to use the tool (Wickens et al., 2004). Nevertheless there were a few points of critique that must be mentioned.

First of all, the production cyclus was not entirely worked out. The simplified production cycles depended on four steps (Wickens et al., 2004): At first, the needs assessment, secondly the mock-up production, thirdly the feedback on the mock-up and fourthly the decision about the handling of the mock-up and the book production. This is a reduced form of a production cycle. It was decided to reduce the complexity of the cycles because further steps of the production cycles would have exceeded the scope of his thesis. Nevertheless, to get a more accurate result, the cycles could have been expended in each step. For example the mock-up could have been checked again after working out the feedback or the social worker could have got the chance to defend his point of view against the decisions of the gynecologist and the developer (Step 4 - Revision). Moreover, the participatory design team was not involved in all steps. For example the mock-up as well as the final book were only developed by the developer herself (Step 2 -Mock-up Production; Step 4 –Book Production). This is due to two different reasons: Firstly, the
doctor and the social worker were not available all the time so it would have been difficult to involve them more in the book production, and secondly more time would have been needed to make decisions jointly. The participatory design team had no influence on the pictures or text production at first; they were only able to give feedback. Moreover, only the doctor and the developer were involved in the decision whether or not to accept the feedback.

It must also be mentioned that one user group was totally ignored. Actually the user group of this book consists of two groups: the examination staff (user) and the potential abused children who receive the book (user and target group). The last group was not involved in the development of the book at all. The main reason for this is that it is very difficult to get in contact with this target group. When sexually abused children are involved in testing or interviews and are part of a test, there is special care needed to make sure that they are not harmed.

Furthermore, the literature about typical children’s anxieties (Busch & Noller, 2007; Gofferje & Stenker, 2007) refers to children without experiences of sexual abuse. Therefore, it is not sure whether this knowledge can also be used for abused children or whether sexually abused children have other fears as well.

There were several instruments used that differ per method step. In general it must be said that the used questionnaires were self-made with a view to collecting information and were not checked for validity or reliability. The questionnaire had to be self-made because there were no questionnaires available that could be used to collect the needed information.

Due to the close cooperation with the “Kinderschutzambulanz” Datteln, the book perfectly meets the situation and the needs of “Vestische Kinder und Jugendklinik”. Nevertheless, no studies have been conducted to evaluate whether it can be also used for other hospitals that examin suspected victims of sexual child abuse. On the other hand, the information offered by this thesis and the book, could still meet educational purposes for hospital staff with less knowledge of how to handle examinations of sexual child abuse.

The doctor of the “Kinderschutzambulanz” was a good choice for the participatory design team because of her broad range of experiences and her close contact to the target group. However, knowledge of other specialists on this area should be included in future research.

The developing team agrees that the book was a good choice of adequate visually supported information for children. It can be read anywhere; there is no additional equipment needed (such as a DVD-player), and it is a user controlled medium (pages can be turned over and back). On the other hand, younger children who cannot yet read need somebody who can read the book out to them. The target group is thus limited to those who can read and understand German. In general it is up to future research to underline
the effect and usability of this research production as well as checking the thesis assumptions for correctness.

The book is attuned to the "Kinderschutzambulanz" Datteln, especially with regard to the environmental sensory inputs. Whether the book can indeed be used for other clinics, too, is a matter of further research. On the one hand there are international examination standards that should be adhered to in any hospital, but on the other hand there are just a small number of specialized wards in other hospitals that know about these standards and can comply with them. Further research into whether this book might be an educational instrument for hospitals that are not specialized in examination after sexual abuse could be worthwhile too.

Additional research is needed to evaluate the book’s effectiveness, for example whether the book addresses the target group as expected. Therefore further research could be done with the target group directly: the abused children. This way it can also be checked whether the book indeed meets its goals and reduces anxiety via information. Moreover, the question arises whether there is more possible information that can be helpful (except procedural information, sensory information and coping instructions) to better prepare children for examination.

Comparative research could be done to anxieties during examination concerning abused children and other children in order to find out the general differences between the target groups and their specific anxieties. The book is only about the examination of children before and in puberty suspected of having been sexually abused. This target group could be expanded and it could be tried to find a possibility to hand this kind of information to boys or victims of other kinds of abuse.

It could be tried to find out how to hand over information about possible bad results, for example when results point out a HIV infection or what examination looks like when the doctor suspects that the person who accompanies the children is involved in sexual abuse and the child must stay alone in the room with the doctor. Moreover, it would be interesting to expand research into how the children can best be informed about the consequences of sexual abuse, the doctor might have to inform the police or the welfare service.

Step 2
As mentioned above, the mock up was created without the help of the doctor and the social worker. Had they been involved, the result could have been different and maybe there would have been more ideas that could have been worked out in the mock-up.

Step 3
To receive feedback on the mock-up, the mock-up was shown to the doctor and the social worker of the "Kinderschutzambulanz". They were the only two who were able, willing and available to check the book. More opinions would have been welcome though.
The doctor and the social worker were satisfied with the result of their developing research. The goals of the product could be defined and they are expected to be met “it shows the children what is going to happen”, “it is complete” and “it explains in great detail” therefore “it informs the children exactly” and reduces anxiety. The doctor and the social worker expect this book to be a way to reach the chosen target group (girls before and in puberty without paying attention to their religious, social or cultural background but who are suspected victims of sexual child abuse) by creating an information tool that is adequate for children.

Step 4
In the last step the feedback was worked out and the book was designed. It was difficult to make a decision on how to handle the feedback the doctor and the social worker did not agree about. Therefore, it was agreed that, due to her enormous experience, the doctor should choose should be done. Actually more people were needed to give feedback.

There were different problems with the picture production. The material (pen and paper) that was used was not professional. Furthermore the drawer was no professional drawer but an amateur who had not very much experience in drawing. This leads to a less professional lay-out. In the end a satisfactory result has been achieved for the participatory design team. The scans of the pictures and the self-bound version of the book are just meant as demonstration material. Additionally, should the prototype pass the field test, a publisher has to be found. Distribution (through welfare services, hospitals and residential communities) is quite easy.

Final remark
Despite the critical aspects that are mentioned above, a way has been found that is expected to reduce children’s anxieties during the first medical examination in cases of suspected sexual child abuse. These results are based upon cooperation of the participatory design team consisting of the doctor (“Vestische Kinder und Jugendklinik Datteln”, Germany), the social worker of the “Kinderschutzambulanz” and the developer of this thesis. Together a picture book was created with the needed information to prepare the target group for examination. Anxieties of children before examination are expected to be reduced in Datteln, and children can be better prepared for medical examination in cases of suspected sexual child abuse.

To proof whether these expectations are right is a matter of future research. This book could be a first step towards finding an improved way of preparing abused children for examination in the “Kinderschutzambulanz” (Datteln) and maybe to prepare abused children in general.
6 Index


## 7 Attachements

### 7.1 Attachment 1 – Physical injuries of sexual abuse

<table>
<thead>
<tr>
<th>Physical injuries of sexual abuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anus-genital aliment</td>
</tr>
<tr>
<td>Anus-genital eczema</td>
</tr>
<tr>
<td>Vaginal itch</td>
</tr>
<tr>
<td>Vaginal discharge (color, consistence, amount, smell)</td>
</tr>
<tr>
<td>Vaginal blooding</td>
</tr>
<tr>
<td>Artifacts in vagina or anus</td>
</tr>
<tr>
<td>Stomach age</td>
</tr>
<tr>
<td>Old anus-genital injuries</td>
</tr>
<tr>
<td>Sexual infections</td>
</tr>
<tr>
<td>Head ache</td>
</tr>
<tr>
<td>Astringency</td>
</tr>
<tr>
<td>pregnancy</td>
</tr>
</tbody>
</table>

### 7.2 Attachment 2 – Psychological short time injuries of sexual abuse

<table>
<thead>
<tr>
<th>Pre-school age</th>
<th>School age</th>
<th>Adolescence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold sight (eyes wide open, fixed facial expression: The child learned not to scream)</td>
<td>Development deficit (motoric, cognitive, emotional, social)</td>
<td>Anorexia, bulimia, adiposities</td>
</tr>
<tr>
<td>No emotional reaction when the child is separated from the parents</td>
<td>Sleeping disorders</td>
<td>Sleeping disorders</td>
</tr>
<tr>
<td>No or a little trust in important attachment figures</td>
<td>Anxiety</td>
<td>Anxiety</td>
</tr>
<tr>
<td>Exorbitant trust in strangers</td>
<td>Depressive symptoms</td>
<td>Depressive symptoms</td>
</tr>
<tr>
<td>Development deficit (motoric, cognitive, emotional, social)</td>
<td>Running away</td>
<td>Running away</td>
</tr>
<tr>
<td>Eating disorder</td>
<td>Aggressive or hyperactive behavior</td>
<td>Aggressive behavior</td>
</tr>
<tr>
<td>Sleeping disorder</td>
<td>Accident proneness</td>
<td>Self-deprecation</td>
</tr>
<tr>
<td>Anxious behavior</td>
<td>No age-appropriate behavior (knowledge about details of sexual behavior)</td>
<td>Suicidal tendency</td>
</tr>
<tr>
<td>Depressives symptoms</td>
<td>Suicidal tendency</td>
<td>School/ work problems</td>
</tr>
<tr>
<td>Running away</td>
<td>Social isolation</td>
<td>Problems with the law</td>
</tr>
<tr>
<td>Aggressive or hyperactive behavior</td>
<td>School difficulties</td>
<td>Psychosomatic problems (chronic stomach-ache, head-ache</td>
</tr>
<tr>
<td>Accident proneness</td>
<td>Problems with laws</td>
<td>Addictive behavior</td>
</tr>
<tr>
<td>No age-appropriate sexual behavior</td>
<td>Bed-wetting/defecating</td>
<td>Development of a personality disorder</td>
</tr>
</tbody>
</table>
7.3 Attachment 3 - Psychological long term injuries of sexual abuse

Psychological long term injuries of sexual abuse

- Post-traumatic stress disorder such as re-experience of the traumatic situation and avoiding of situations associated with the trauma.
- Anxiety disorder and depression such as sudden anxiety or a chronic feeling of sadness.
- Personality disorder: impulsivity, development of a personality disorder especially borderline.
- Addictive behavior (to drugs or alcohol).
- Self-injury: (risky behavior, tendency to hurt oneself).
- Trying to commit suicide or/ and suicidal thoughts.
- Psychosomatic problems body symptoms without actual body illness
- Dissociative disorders: amnesia, dissociative personality disorder
- Sleeping problems
- Eating problems
- Sexual problems (after sexual abuse) sexual function disorder or promiscuity e.g.
- Social relation problems no trust in others, afraid of humans e.g.

7.4 Attachment 4 – Questionnaire one: Book content

Questionnaire One

What are the goals of this book?
Who should be addresses by the book?
(Age, sex, ethnicity, social status other specialties)
What are the different steps of examination at the "Kinderschutzambulanz" (Beginning with the arrival until the end of examination)?
What are the procedural information, sensory information and possible coping instructions per main step?
Are all steps correctly expressed?
Are all steps completely expressed?
Are there any modification proposals?

7.5 Attachment 5 Examination planning

In this chapter the main stages in the gynecological examination process performed on children will be analyzed with special focus on procedural information, sensory information and coping instructions.
Arrival

Procedural information:
The children arrive at the hospital. After having walked a long way to finally enter the hospital building. They were sent to the Kinderschutzambulanz by their parents or other family members, by another doctor, by the youth welfare-service or by the police department. Therefore, they are often accompanied by somebody, who could be the parents, somebody from the youth welfare-service or a person in charge of their residential community.

Sensory information:
The child sees the big building of the children’s hospital. It looks like a typical gray hospital building that was not designed for children’s needs and does not allow for their cognition. Trees frame the way to the hospital entrance on the left and right. This makes the way appear much longer although the way only takes about 3 minutes. From a child’s point of view everything might seem bigger than it actually is.

Coping-instructions:
A possible coping instruction shall be to ask other people (parents or other attachment figures) for help and assurance. As mentioned above, the attachment figures are a kind of security base. In this case constructive emotion-based coping can be very helpful. Thus the attachment figures can support the children by a cooperate feeling ("We can take it!"); cooperate relaxation (singing a song together) and distraction (Lenz et al., 2011).

At the front desk

Procedural information:
When the children enter the hospital, they arrive directly at the front desk. There is a Receptionist behind a glass window who asks several questions concerning the name of the children and the doctor they want to see. After registration, the receptionist calls the doctor to pick them up. The waiting time until the doctor can see them varies depending on whether they are in time or too early, or on the doctor’s availability. As a rule they have to wait 10 to 20 minutes. Then the doctor meets them and checks whether they have all the necessary papers. This is the first time the children finally meet the doctor for the examination they came for. On the way to the examination room the children can choose to take the stairs or the lift upstairs. This might take another five to ten minutes.

Sensory information:
The waiting hall is designed more adequately for children’s needs (painted animals on the walls e.g.) than the clinic’s outside. The Receptionist is sitting behind a glass window. The organizational questions asked by the Receptionist might be difficult to understand. The children can look at the painted animals on the walls during their waiting time or while
they are on their way to the examination room when they take the stairs. The lifts are metallic as usual. The doctor herself does not wear a doctor’s overall but normal clothes and she takes care to appear friendly.

Coping instruments
Just like they were on their way to the hospital the children can be accompanied by an attachment figure and can make use of that social support to check in at the front desk. During their waiting time they may profit from something to play with like a book, a magazine, a game boy or to actively look at the painted animals or the pictures on the walls with the attachment figure. Besides, they may choose whether they use the stairs or the lift which can give them a feeling of control that might reduce anxiety. In the stairway, they can again look at the painted animals to distract themselves.

The examination room

Procedural information
The children enter the examination room together with the person who accompanies them and the doctor. They are allowed to look around the room and afterwards choose a chair where they want to sit down. The duration of this step depends on the time the child needs to get used to the room but in general it lasts for 5 to 10 minutes.

Sensory information
At the front door of the examination room there is a poster of three Disney princesses. The room is approximately 18 sq. m, it is at a pleasant temperature and it smells sweet. The children face the windows with lots of stuffed animals on the window sill. There is a kitchenette, shelves with books and a desk with a computer on the left. There is a gynecological couch in green which has two feet instead of two stirrups where the children can put their feet on with a soft blanket on it and a big green plastic leaf over it which gives the couch a kind of roof. Next to the couch there is a laptop and a colposcope with a camera. On the right side near the door there is a table with four chairs. Behind the chair there is a small cupboard and a box with children’s magazines. On the wall you see a television. The colors used are bright and friendly, and there are pink flower lamps on the front wall that support this impression.

Coping instruments
Again, social support can help to manage this situation. By checking the room before examination and by choosing a chair, they can get a feeling of situation control. The colorful impression of the room and furniture can be attractive to children and might calm the children down or distract the children from their fear of the examination.
The introductory conversation

Procedural information

When the children sit down at the table, the doctor lets them choose whether they want to start talking (tell about what happened to them or ask questions) or whether they want the doctor to start.

The doctor then gives a general explanation (1) the rights of the children, (2) the reason for examination, (3) the process of examination and (4) general aspects of examination. The (1) rights of the children are important to the doctor. The children (1.1.) do not have to do or say anything they do not want; besides (1.2.) the examination can be stopped at any point by the child. There are several (2) reasons for examination such as (2.1.) finding out what has happened to them, (2.2.) determining whether they need medical help and treating them appropriately. Besides, the doctor says that (2.3.) the examination is done to help and not to bother the children. She tells the children that they can even (2.4.) help them to find evidence. The doctor explains that (3) the children (3.1.) may choose a person who stays with them in the examination room. During the examination she performs some (3.2.) general procedures such as checking every part of the body: ears, mouth, and heart as well as (3.3.) genital parts, vaginal, and anal parts. Generally (4) the doctor informs the child that she (4.1.) will make notes all through the examination so that she does not forget about the things that are said or done. Besides, the doctor (4.2.) may need to take a photo of injuries. The child is reassured that those photos are only seen by the doctor and the public prosecution and that nobody can be recognized on the photos. (4.3.) When there are no injuries on the child at the time of the examination, the children are told that it does not mean that their story is not true; it only means that the body might have managed to heal the injuries already and that bad things do not necessarily leave marks on the body and although they have happened. Furthermore she explains (4.4.) that the children’s story is not unusual to her and that she met many children who have experienced something similar. This step is the most complex one and it takes about one hour. In how far the attachment figures are included in examination depends on the child’s wish. The role of the person who accompanies the children can vary from waiting outside the room to holding the child’s hand and to supporting the examination actively.

Sensory information

The sensory information does not differ much from the one when the child enters the room because nothing is shown to the child. But the doctor and the room are possibly observed in more detail by the child due to the stress and anxiety the surrounding may induce.

Coping instruments

The doctor takes care not to limit the child’s freedom of choice at all and she explains the structure of the examination in great detail and with great empathy which again supports the child’s feeling of situation control. Children can be accompanied by a well-known person and therefore feel social supported. The promise that the examination is done for
The children might help them to change their potentially negative attitude about the examination into a positive one. In great detail and with great empathy

Start of the examination – Taking samples

Procedural information
At first, the doctor explains that as part of the general examination she is going to take a few samples to check the following aspects. At first she wants to take (1) a blood sample to check whether the child came down with (1.1.) HIV, (1.2.) lues or (1.3.) hepatitis. In case of injection fear, there is a possibility to get an anesthetic plaster that numbs the skin. If such a plaster is used, an exposure time of one hour is necessary before the blood sample can be taken. Afterward, she describes that it is useful to take (2) a urine sample. This sample can show (2.1.) an infection with chlamydia, (2.2.) gonorrhea or (2.3.) trichomoniasis. Therefore he children are asked to collect the first morning urine in a cup. The sample can be taken at home. They get an urine cup and a pipette. Older girls are asked for (3) a second sample of urine to check for pregnancy. This sample can be taken immediately. Altogether it takes about 3-5 minutes.

Sensory information
The (1) plaster looks like a normal one, it is white/pink measuring about 6 X 6 cm. It has room temperature and putting it on the skin does not hurt nor is the anesthetic reaction itself detectable by the children. The (2) urine cup might already be known. It is of white or transparent plastic and it often has a colored lid. It has room temperature as well and it does not hurt to urinate in the cup. Together with the cup they get a pipette (an injection without needle) to fill the pipette up with urine and bring it back to the hospital. The children may go to the toilet at home on their own. For a (3) pregnancy test the doctor takes a urine sample immediately. The children may go to the toilet alone as well.

Coping instructions
A very important coping instruction is to give the children a feeling of control; that means they are told that they can stop or reject the examination at any time. Taking the (1) blood sample is a frightening experience for many children. to reduce anxiety the doctor offers the anesthetic plaster. The (2) urine test is often already known to the children and It is not experienced as a threat. Besides, the sample of the first morning urine is taken at home, so it is taken in a well-known surrounding. In case of a (3) pregnancy check, children need to urinate directly in the cup. The doctor explains that this test is important to determine whether the child is pregnant or not. As already mentioned in the beginning of the test, bodily health is very important to the children and therefore they are willing to take the sample.
Stuffed animal examination

Procedural information

The doctor shows the children what is going to happen during the examination by examining a stuffed animal together with the children. They may use their own stuffed animal or they can opt for one of the doctor’s. The doctor starts by (1) putting on her gloves. Afterward she (2) asks what is wrong with the stuffed animal and the children often give an answer which is similar to the injuries they felt. Then the doctor (3) takes her (3.1.) otoscope or her (3.2.) stethoscope for example and checks the animal’s heartbeat etc. After demonstrating a few of the general examination procedure, she (4) shows how the gynecological instruments work. They let the stuffed animal sit (4.1.) down on the gynecological table and use the colposcope. She shows (4.2.) that the colposcope transmits the pictures to the monitor, and she explains that the child needs (4.3.) need to keep still during examination to guarantee good photos. The whole procedure takes about 5 to 10 minutes.

Sensory information

For the test-treatment of the stuffed animal the sensory information depends on the chosen animal. The (1) doctor’s gloves are of blue rubber. It is not painful to be touched by the rubber gloves. The temperature of the gloves depends on the temperature of the doctor’s hand.

When the doctor asks (2) what is wrong with the animal, the children focus on the respective part of the body (the arm hurts etc.). The animal is treated with the otoscope and stethoscope and at last on the gynecological couch with the respective instrument. The children will see what the instruments look like, how they are used and maybe also how it feels to use them but not how it is felt to be treated with them. The (3.1.) otoscope is about 12 cm long, black and it has a plastic covering. The head piece is made of plastic. The children feel the plastic grip and they are encouraged to look through the otoscope.

Furthermore, the children see how the (3.2.) stethoscope works. The stethoscope looks like a normal one which is probably already known to the children. It has got an ear clip which can be put in the ears and on the other side it has got a round end made of plastic and metal. When the children use the stethoscope, they feel the plastic clips in their ear and hear the rustling when the animal’s body is touched with the other end of the stethoscope.

The last part of the stuffed animals check is to (4) use the gynecological couch. The couch is made of green leather with a colored, warm and soft blanket on it. The couch is movable and you can chose to sit or lie on it. At the foot end there are two big foot rest shaped in form of feet. The leather feels cool. The colposcope (4.1.) is made of metal with a green coating, and light beams come out the one end that point at what the attached camera shall record. The whole (4.2.) couch is connected to a lap top which shows what the camera records. A photo can be made by means of a foot switch. When the animal moves, the children can that the photos are blurred.
Coping Instruments

No coping instruments are needed for this step, because the whole step rather is a kind of coping instrument to show the children what is going to happen to them and to support their feeling of control.

General examination

Procedural information

Then the general treatments of the child follow. The children may choose a towel, and then the doctor starts to check the (1) ears and the mouth with the otoscope. Afterward, she asks the children to take off their upper clothes, and a checkup of the heart with a (2) stethoscope, as well as an (3) inspection of the upper body follow. The doctor takes special care to detect any (3.1.) black and blue marks, (3.2.) scars or other (3.3.) injuries. When something is identified the doctor scales it with a ruler and takes a photo. During the whole time she takes notes to assure a careful and complete documentation. This takes about 5 minutes. Then the children are allowed to put on the upper clothes on and take the pants and underwear off to (4) check the lower part of the body. Therefore they must sit down on the couch. To detect injuries she also checks the legs and feet, which takes about 5 minutes. The children are allowed to choose whether they want to be accompanied by their attachment figure.

Sensory information

The children already know the (1) otoscope but now they feel the plastic part in their ear. It does not hurt and the temperature of the plastic end is not displeasing. When the doctor checks their mouth, they do not feel anything. When they take off their clothes, they feel the (2) metal end of the stethoscope on their skin which might be a little bit cold. When the children or the doctor find an (3.1.-3.3.) injury, the doctor scales the wound with a wooden ruler (about 15cm long) and takes a photo of it. Both methods are not hurtful. When they (4) sit down on the colored towel that they have chosen during the inspection of the lower body, they feel the soft and warm towel. When the children chose to do the examination together with the attachment figure, they also can feel, see, and smell the person.

Coping instruments

The use (1-2) of the otoscope and the stethoscope are not really necessary for this kind of examination. But those well-known unspectacular treatments (using the otoscope and checking the ears or mouth) help the children to relax. Besides, the doctor always supports the children by constant praise and if possible she gives them the feedback that everything is alright with them. When it (3-4) comes to the body-check, the doctor encourages the children to help her to find injuries. That can be organized as a kind of game in which the children try to find more injuries than the doctor which gives them a feeling of success when they find anything the doctor overlooked. Moreover they may help
the doctor to make photos (by holding the ruler). When they are afraid, they can make use of social support and sit down with the person of support.

**Genital and anal examination**

Procedural information

The children sit on the gynecological couch without pants and underwear. The doctor says that the following examination is actually not painful and but should they feel pain they must say that at once. They have to (1) put the feet on the foot rests of the couch, therefore they sit in a frog-leg position, the doctor first (2) points to the genital region with the colposcope. During first examinations, the children often pull their knees together. Therefore the doctor needs convince the child to pull the knees apart again to check the outside of the anus, the vagina and the perineum.

The following step (3) is the separation of the labia to take a look at the vaginal opening and the region around it. Therefore, the doctor pushes apart the outside region of the vagina, to see more of the vagina opening.

The second step is to spread the labia majora to take a closer look at the vaginal opening and the hymen in order to detect possible deeper vaginal injuries.

For the (4) pep test the doctor first gives a (4.1) demo swap to the children. They may try the swap on their arm skin. Below a picture of a demo swap is shown.

Afterwards, the doctor (4.2) takes a smear of the child’s vaginal zone. This is different from a normal smear because this one is only taken of the peripheral vaginal region, and not of the cervix as is the case when examining adult women. Most of the time, the doctor looks at the screen and not at the genital region directly. The last point is to (5) check the anal-region. Therefore the doctor pulls the bottom cheeks aside.

To take a photo the doctor just needs to pedal the camera with the foot. The whole procedure takes about 5 minutes. In case of injury it is necessary to turn the child around in knee-chest-position. This position is required by law when securing evidence. Therefore the children need to turn around and put the knees on the couch.

Sensory information

Although the examination is not painful, in some cases the genital regions are severely injured, and they might hurt. The children (1) put the feet on the foot rests and feel the leather on the skin. When the doctor first (2) checks the genital regions, the child usually does not feel anything but sees the light of the colposcope pointing at the genital region and the photos transmitted to the laptop screen. When the doctor (3) pulls the labia or bottom cheeks apart the child will feel the rubber gloves. The (4) smear is only done around the vaginal opening. The children first try the (4.1) demo-swap on the arm skin and feel that it is soft and it does not hurt. During the actual examination the child feels the same soft swap around the vagina opening which might tickle a little bit. Pulling apart the bottom cheeks is not painful either. The children see their genital regions and the photos that are taken by the doctor on the monitor. Those photos only show the very
special region which is hurt and nothing else. In case of injury the child turns around, feels the towel under the knees, and it can look out of the window. If it sits on the table with another person, it can look at her during examination. To take a photo the child only feels the doctor’s gloved hands.

Coping instruments
The child has to put the feet on the leather foot rests. The (1) doctor tries to detract the child by jokingly pointing out to her that the feet of the food rests only have got four toes. Children then start to count and do not think about the couch anymore. When they have to pull the knees apart, the doctor makes the child move the knees apart softly by asking whether they know how a butterfly moves its wings apart. The doctor might help by gently pressing against the knees until the children sit in a complete frog position. This might appear as a game to the children and so it is fun to them to comply do so. Now the children have two options (2-4) they can consciously follow the treatment or they can let themselves be distracted. When the children choose the first option, the doctor explains what she is doing and supports their feeling of well-being by confirming that everything is ok as far as possible. Furthermore, she says that she wants to find confirmation of the child’s story. Finding evidence for their abuse might make some of the children happy. If the children do not want to watch the examination, they can be distracted by reading a book by having somebody read a book to them or by watching TV. Especially in the knee-chest-position, social support can be a good coping instrument. The child can look at the person of trust and the person can pay attention to what the doctor does. Therefore the child can get a feeling of security although it cannot see what the doctor does herself. This is the position in which lots of children were abused, and so they might have a bad association which means extreme stress to them. The doctor can try to relax the stress by showing the children what they need to do herself. This may amuse the children and make the situation less scary.

Ending

Procedural
The children may put their clothes on again. In the end, they take off the plaster and have a blood sample taken. Then the children may choose one magazine out of a huge magazine box as reward for having been so brave. The doctor explains that they will get the results as soon as possible but if some results are positive she will contact the child immediately. Furthermore, she tells the child that she can call her whenever she has a question or when something comes into her mind. She ends the examination by stressing how good it was for the child to have come in for the examination and by praising her courage. This phase takes about five minutes.
Sensory information
Pulling off the plaster may drag a little bit. Children really do not feel any pain while the blood sample is taken, but they see the hypodermic needle going through the skin, pulling blood out of the vein and they might feel a kind of pressure. When they took on their clothes again, they may choose a magazine therefore, they see the box full of children magazine.

Coping instruments
The anesthetic plaster helps the children cope with the strain caused by blood sampling. The children may test whether they feel any pain in the spot where the plaster was (nip themselves). This helps the children to believe in the effect of the plaster. The magazine they can choose is a positive amplifier that makes them remember the doctor and the examination in a good way.

7.6 Attachment 6 Aberration of the examination plan

Aberration 1: The first one was discovered under the point “Examination of genital and anal region.” The first version of the plan says that the doctor looks at the screen the “whole time” (procedural information). It is not correct and was changed in ”most of the time”. “The whole time, the doctor looks at the screen and not at the genital region directly” was changed into, “most of the time; the doctor looks at the screen and not the genital region directly”

Aberration 2: The second mistake was that the plan says that the children do ”not feel taking the smear” (examination of genital and anal region; sensory information), this was corrected and now reads “might tickle a little bit”. “Afterward, while taking the smear the child does not feel taking the smear”, was changed into, ”Afterward, while taking the smear the child feels the same soft swap around the vagina opening what might tickle a little bit.”

Aberration 3: The third mistake was found under the point “Ending” (sensory information). The text says that the children ”do not feel anything” while taking the blood sample. The doctor says that this is not correct and that the children ”might feel a kind of pressure” when the injection enters the skin. “They really do not feel anything while the blood sample is taken, but they see the injection going through the skin, pulling blood out of it” was changed into, “They really do not feel any pain while the blood sample is taken, but they see the injection going through the skin, pulling blood out of it and they might feel a kind of pressure.”
7.7 Attachment 7 - Questionnaire two: Feedback

<table>
<thead>
<tr>
<th>Questions Questionnaire 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General impression</strong></td>
</tr>
<tr>
<td><strong>Impression of different aspects</strong></td>
</tr>
<tr>
<td><strong>Effectiveness</strong></td>
</tr>
<tr>
<td><strong>Can it be used in other hospitals too?</strong></td>
</tr>
<tr>
<td><strong>Does it inform the children?</strong></td>
</tr>
<tr>
<td><strong>Does it work?</strong></td>
</tr>
<tr>
<td><strong>Adress the target group</strong></td>
</tr>
<tr>
<td><strong>General questions</strong></td>
</tr>
<tr>
<td><strong>Who can give the book to the children?</strong></td>
</tr>
<tr>
<td><strong>Other notes?</strong></td>
</tr>
</tbody>
</table>

7.8 Attachment 7 - Feedback on the mock-up interview (doctor)

M: Was ist dein genereller Eindruck von dem Buch?
B: Mein genereller Eindruck, von dem was ich gesehen habe, ist sehr sehr gut, mh, weil das absolut widerspiegelt was ich hier jeden Tag mache, mh und ich finde das vermittelt den Kindern einen guten Eindruck von dem was passiert und das der Fokus darauf liegt auf der Körperlichen Unversehrtheit.
M: Denkst du das Buch hat sein Ziel erreicht?
B: Ja absolut!
M: denkst du dass, das Buch die Kinder gut informiert?
B: Ja weil es vollständig ist, und gut erklärt ist, und auch detailliert erklärt ist, und auch auf die Altersgruppen gut zugeschnitten ist.
M: Welche Zielgruppe würdest du da jetzt zuordnen?
B: Eh, ich könnte mir vorstellen, dass Bia etwa zwischen 5 und 6 Jahren alt ist und das Elena, mh...da würde ich es etwas weiter fächern, ich sag mal zwischen 11 und 13 ist. Ich glaube die pubertiert schn aber am Anfang der Pubertät. Also Mädchen vor und in der Pubertät!
M: Und das würde dann auch die Kinder in diesem Alter ansprechen?
B: Ja genau das glaube ich. Wie wir die Zielgruppe auch vorher geplant hatten.
M: Passen die Bilder zu den Inhalten in dem Buch?
B: Ja absolut und auch gut erklärt und dargestellt!
M: Könntest du dir auch negative Effekte vorstellen, die dieses Buch aufrufen könnte?
B: Ich könnte mir vorstellen, dass die Kinder überrascht sind was alles gemacht wird, gerade wenn das Wort Blutabnahme fällt, aber es wird ja dann erklärt, dass die beiden Kinder keine negativen Erfahrungen gemacht haben, aber das könnte ich mir vorstellen.
M: Wie könntest du dir vorstellen, wie das Buch eingesetzt wird, wem wird es gegeben und wann und durch wen wird es weiter gegeben?

B: Das erste was mir eingefallen ist, sind Wohngruppen, die ihre Kinder alle vorstellen, zur Diagnostik, ich kann mir auch vorstellen, dass Jugendämter das nehmen und ich kann mir auch vorstellen, dass Schulen das in Sprechstunden auslegen, weil viele Schulen auch mit dem Kreisgesundheitsamt zusammenarbeiten und da so Sprechstunden haben und mh, und es sind auch viele Kinder über die Sprechstunden schon gekommen, dass sie das auch benutzen, frühe Gymnasialstufe, so 5. Oder 6. Klasse

M: Und zu welchem Zeitpunkt sollte den Kindern das gegeben werden?

B: Auf jeden Fall bevor die Untersuchung gemacht wird und mh, von den Schulen, ich glaube das sind Kinder die das so das erste Mal so in den Raum stellen, also das wäre ganz gut wenn die sich das früh angucken und die sich dann früher öffnen falls da was vorgefallen ist und die dadurch wissen wie die Abklärung aussieht.

M: Denkst du dass das Buch funktionieren wird?

B: Ja!

M: Auch das es die Angst vermindern wird?

B: Ja das denke ich, und auch gerade in Gruppen, wenn neue Kinder dann da noch reinkommen, dass die sich dann gegenseitig auch gut mit dem Buch unterstützen können.

Wenn es dann tatsächlich so war, wie das was sie in dem Buch gesehen haben, ich glaube schon, dass das dann gut für sie ist.

M: Ist das Buch so geschrieben, dass es bei den Kindern ankommt?

B: Also was ich jetzt beurteilen kann, von den Kindern die ich sehe, denke ich schon, das muss man im Zweifel nochmal die Kinder fragen, aber ich könnte es mir gut vorstellen.

M: Könnte das Buch auch zu anderen Kliniken passen?

B: Ja glaube ich schon denn das Setting ist von denen die ich kenne ziemlich ähnlich, wo wir uns ja an die internationalen Standards halten und möglich anpasst, und wer das nicht tut sollte sich dem und den Kindern anpassen, das hier ist denke ich das ideal Setting für Kinder, vielleicht hat das Buch ja auch einen Lehreffekt für andere Institutionen.

M: fehlt sonst noch etwas an dem Buch?

B: Nein mir fällt jetzt nichts ein ich finde es super!

M: Fällt dir sonst noch was ein, positive oder negative Punkte?

B: Also, zumindest für die Untersuchungssituation nicht, weitere Schritte, wenn man das mal vervollständigen will, könnte man dann vielleicht noch gucken, z.B. bei einer Befundbesprechung, wenn der Befund positiv ist mit den Kindern, was ist wenn die es anzeigen und die Anzeige nicht funktioniert, obwohl sie ja hier waren und es abgeklärt haben, aber ich glaube, das sind so mehr der nächste und der überraschende Schritt.
7.9 Attechment 8 -Feedback on the mock-up interview (social worker)

M: Was ist der generelle Eindruck von dem Buch?
K: Es ist sehr informativ es geht auf die Bedürfnisse und Ängste der Kinder ein, der Ablauf wird im kleinsten Detail geschildert, ähm die Ängste, vor allem die der kleinen Schwester werden deutlich. Vorbei wir hier den Vorteil haben, dass die Figur sich verbalisiert, was bei den echten Kindern nicht immer der Fall ist. Die nehmen sich eher zurück und sprechen dann gar nicht, aber das Buch ist ja dafür da, die Ängste zu nehmen und da muss die Figur ja auch sprechen. Die ältere Schwester, die ist auch etwas älter, das sieht man auch ganz deutlich auf den Bildern und die hat auch ganz andere Ängste, das finde ich sehr treffend! Auch dieses Sicht erst mal zurücknehmen, alles ist blöd, alles ist doof, was jugendliche. Insbesondere junge Mädchen in dem Fall oft an den Tag legen deutlich wird zeigt das Buch auch die verbalen Äußerungen zeigt das Buch auch. Der Übergang, da wurde ich etwas stutzig, von der Untersuchung wo die kleine fertig war, saß die auf dem Bild schon auf dem Sofa, das fand ich etwas komisch, hätte ich mir noch mal ein Bild der Konversation zwischen Arzt und dem Mädchen gewünscht. Da hätte ein Bild genügt, dass die Ärztin das einfach nochmal erklärt. Mir war das einfach zu schell. Zumal es eine Konversation gibt warum ist das nicht dargestellt [...]. Also das Prozedere ist punktgenau eingehalten worden, ich war echt gespannt, wie geht es jetzt weiter, wie wird die große Schwester untersucht fangen die jetzt oben an und gehen nach unten oder von unten und gehen nach oben, aber es ist genau eingehalten worden. Man brauchte es ja auch nicht mehr ausführen weil bei der kleinen hat man schon alles gesehen. Gut im genital Bereich, ist deutlich geworden, da hat man ihr etwas angetan, es wurde dann auch nicht näher darauf eingegangen, weil das muss auch so sein, weil die jugendlichen sollen ja nicht die Geschichte nacherzählen. Das fand ich sehr gut. Im rausgehen, erst mal echt super Bilder, [...] ich hätte mir gerne gewünscht dass die Köpfe auf dem letzen Bild leicht nach innen geneigt sind.

M: Das man die Gesichter noch erkennen kann?
K: So halb ich weiß ob das geht, weil sie (Bia) ist ein sehr aufgewecktes Kind und sie spricht jetzt ihre Schwester direkt an und es ist keine Kommunikation. Weil Kinder achten sehr auf Blicke und ich hätte mir gewünscht, dass die Blicke leicht nach innen geneigt sind. Die Schwestern, spielen ja eine große Rolle [...] Wenn ich Kind wäre hätte ich Angst vor der Betreuerin und der Wohngruppe. Sie hält zwar das Buch und ist nett zu mir aber...Ich würde vielleicht mal zwei drei Dialoge zwischen Kindern, der Betreuerin und Frau Dr. Brüning schreiben. Weil die sagt ja n nix.

M: Am Anfang steht sie schon in verbalem Kontakt zu den Kindern, danach wird nur der Schwerpunkt auf die Kommunikation mit Frau Dr. Brüning gelegt. Sie würden sich da aber noch mehr wünschen?
K: Ja ich würde mir wünschen, weil wenn ich jetzt eine Jugendliche bin und mir ist die Rolle der Betreuerin nicht klar, dass die in dem Buch einfach nochmal sagt „ich kann dich gut verstehen usw.!”

M: Würden sie sagen, die Bilder passen gut zu dem Inhalt`?
K: Ja, ja, da habe ich drauf geachtet.
M: sind außer die Punkte, die bereits genannt worden noch andere negative Punkte aufgefallen?
M: Ok das ist ein guter Punkt, dass man das jetzt im Text nochmal aufgreift dass das eine Pipette ist.
K: Das ist aber super auch mit dem Body -check-up und der scheide etc. Aber das ist ja ein Buck für Mädchen, das gibt es aber auch noch für Jungs dann.
M: Also das Buch ist jetzt speziell für Mädchen bei sexuellem Missbrauch und das ist jetzt im Vorhinein bei der Zielgruppen Bestimmung so beschlossen worden. Ich glaube aber schon, dass man es leicht an Jungen anpassen kann.
K: Also das ist Ast rein, sehr freundlich und zugewannt dem Kind gegenüber, aber sie können wunderbar zeichnen. Auch hier wie sie sich da an die Betreuerin schmiegt, wunderbar (Bild Behandlung Bia auf dem gynäkologischen Stuhl)
M: Glauben Sie denn, das es Kinder der Zielgruppen erreicht?
K: Ja klar weil es einfach auch witzige Situationen sind, mit Popo wackeln usw. Und obwohl das so pikante Themen sind bringt das Buch die nicht sexualisiert rüber.
M: glauben Sie, dass es für den Zweck geeignet ist Angst zu reduzieren und zu informieren?
K: Ja absolut und sie hält auch die versprechen die sie im Buch gemacht hat. Z.B. dass sie ihr beim auseinanderziehen der Schamlippen nicht we getan hat
M: Was wäre es denn ihrer Meinung nach für eine Zielgruppe.
K: Also sie wirkt wie eine 16 Jährige und sie wie eine 6 Jährige. Vor und in der Pubertät denke ich, aber das sollte ja auch oder?
M: Ja, würde es auch auf beide Gruppen passen?
K: Ja ich denke schon.
M: Glauben sie das das auch für andere Kliniken geeignet ist?
K: Generell ja aber ich glaube, die haben Probleme mit dem Zeitfaktor, die können sich nicht die Zeit nehmen wie es im Buch beschrieben ist. Außerdem haben viele kein Personal was darin spezialisiert ist und nicht die passenden Geräte.
M: Wann sollte es den Kindern gegeben werden?
K: Ich würde ihnen das geben wenn was vorgefallen ist, wenn das Kind gesagt hat er hat mir was angetan, dann sowieso, ähm, jetzt gehe ich einen Schritt vor, wenn der Verdacht bestehet dass, dann kann man dem Kind wunderbar zeigen, dass es die Möglichkeit einer solchen Untersuchung gibt.
M:Was könnten so Stellen sein, die das dann austeilten können?
K: Auf jeden Fall könnten das Jugendämter sein, Kripobeamte, Opfer-Beratungsstelle, vom Versorgungsamt die mit Opferbetreuung arbeiten, das Landesjugendamt in Münster, die haben da 100% Interesse daran, die sind nämlich nicht weisungsbefugt sondern beratend tätig. Das die auch, die haben da bestimmt Interesse daran [...].
M: Glauben Sie dass, das Buch funktionieren wird?
K: Ja absolut! Es erfüllt voll sein Ziel
Das sind Elena und Bia. Elena ist die große Schwester von Bia und der den Bia in ihren Armen ganz fest hält das ist Bobo, Bias allerliebster Kuschelbär. Auf dem Bild waren sie gerade auf dem Weg ins Krankenhaus mit Ihrer Betreuerin Sonia. Elena und Bia konnten leider nicht mehr zu Hause wohnen, weil der neue Freund ihrer Mutter den beiden sehr weh getan hat. Er hat etwas getan, was eigentlich nur Erwachsene miteinander tun. Ihre Mutter konnte nicht genug auf die beiden aufpassen und damit ihr neuer Freund das nicht wieder tun kann wohnen die beiden jetzt bei Sonia in einer Wohngruppe.

Picture 2

2 Arrival (procedural information)
Accompanied by somebody of the person in charge of the residential community

3 Arrival (procedural information)
Accompanied by somebody of the person in charge of the residential community
Nach ein paar Minuten Fahrt stehen Elena, Bia, Sonia und Bobo vor der großen Klinik. „Die ist ja riesig“, sagte Bia und hielt die Hand von Sonia ganz fest. „Das ist eine Klinik extra für Kinder“, antwortete Sonia und lächelte Bia an, „kommt ihr beiden, wir müssen reingehen sonst kommen wir zu spät.“ Gemeinsam gingen sie den Weg zur Klinik hinauf.

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4 Arrival (sensory information):
See the big building of the hospital
Not designed for children (decent color etc)
Framed way to hospital, that makes appear the way much longer

5 Arrival (sensory information):
The clinic might appear very big to the children

6 (Coping instruction):
Social support

7 Arrival (Coping instruction):
Social support
Die drei gingen durch die große Glastür und betraten die Eingangshalle der Klinik. „Schau mal ein Elefant!“, rief Bia und zeigte auf den lustigen Elefanten der auf eine Wand gemalt war, „der ist ja ganz bunt, solche Elefanten gibt es doch gar nicht!“ Bia kicherte. Sonia sagte: „So ihr beiden wir müssen uns jetzt erst mal anmelden“ und ging zu einer Dame.

---

8 At the front desk (sensory information):
  Painted animals on the wall
  Receptionist behind a glass window
  (coping instruction)
  Distraction (using a book)
  (procedural information):
  Patients need to wait for the doctor
9 At the front desk (procedural information):
  Arrive directly at the front desk
10 At the front desk (sensory information):
  Painted animals on the wall
  Secretary behind a glass window
11 At the front desk (coping instruments):

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die hinter einer großen Glasscheibe an einem Schreibtisch saß. „Darf die Frau nicht aus dem Glaskasten?“, fragte Bia, denn Bia und Bobo kam das sehr komisch vor, dass eine erwachsene Frau den ganzen Tag hinter einer Glasscheibe sitzen musste. „Das ist die Sekretärin!“, sagte Elena etwas genervt. „Ich finde es trotzdem komisch!“, raunte Bia Bobo zu, der sie mit seinen großen Augen anschaute. „Guten Tag“, rief die Frau hinter der Glasscheibe und lächelte. „Wir haben einen Termin bei Frau Dr. Brüning“, antwortete Sonia. „Um wen geht es?“, fragte die Frau. „Elena und Bia“, erwiderte Sonia. Die Dame schaute in ihrem Computer nach und sagte dann: „Ah ja Sie sind etwas früh, ich werde mal schauen ob ich Frau Dr. Brüning schon erreiche. Setzen Sie sich doch schon mal auf die Bank.“ „Vielen Dank“, sagte Sonia und alle drei gingen zu der Wartebank und die beiden Mädchen setzten sich hin. Elena fand das alles ganz schön blöd und noch blöder war es, dass sie jetzt noch warten mussten. Zum Glück hatte sie ihr Buch mitgenommen. Sie zog ihren superspannenden neuen Vampirroman aus der Tasche und begann zu lesen. Bia schaute sich um und je mehr sie sich umschaute, desto mulmiger wurde ihr. „So viele Menschen und so ein großes Haus“, dachte sie und hielt Bobo ganz fest, „wie der Doktor wohl aussieht?“. Bia war nicht wohl dabei, dass sie gleich zu einer ganz fremden Person ins Zimmer musste. „Gut dass Sonia dabei ist, nicht wahr Bobo?“: flüsterte Bia dem kleinen Bären zu.

Social support

12 At the front desk (Procedural information):
Registration of the patients

13 At the front desk (procedural information):
Secretary calls the doctor

14 At the front desk (procedural information):
Patients need to wait for the doctor

15 At the front desk (coping instruments):
Distraction (reading etc.)
„Hallo seid ihr Elena und Bia?“, fragte eine freundlich klingende Stimme und beide schauten auf. „Ob das die Ärztin ist? Die sieht ja gar nicht so gefährlich aus“, dachte Bia und schaute die junge Ärztin an. „Hallo Frau Dr. Brühning“, sagte Sonia. „Bobo sie sieht aus wie Dornröschen“ flüsterte Bia und hatte plötzlich viel weniger Angst. „Wer aussieht wie Dornröschen muss doch nett sein!“ „Ich hoffe ihr musstet nicht allzu lange warten, wenn Eure Betreuerin mir einmal eure Papiere gibt, dann schaue ich ob alles da ist, und dann kann es auch schon losgehen!“ sagte Frau Dr. Brühning und kontrollierte die Papiere der Mädchen. „Wunderbar, es ist alles vollständig“, sagte sie, „möchtet ihr die Treppe

16 At the front desk (sensory information):
Doctor does not wear a doctor’s overall
Doctor appearing friendly

17 At the front desk (procedural information):
Children meet the doctor for the first time

18 At the front desk (sensory information):
Doctor appearing friendly

19 At the front desk (procedural information):
Doctor controls the papers of the girls
oder den Fahrstuhl nehmen? Wir müssen nämlich zu meinem Behandlungszimmer in den vierten Stock. „Die Treppe“, rief Bia sofort. „Ich bin doch nicht blöd!“, sagte Elena, „ich laufe doch nicht in den vierten Stock!“. „Dann nehme ich mit Bia die Treppe und Sonia und du ihr nehmt den Fahrstuhl, ok?“, schlug die Ärztin vor. Es waren alle einverstanden und machten sich auf den Weg. „Mal gucken wer schneller oben ist“, sagte Frau Dr. Brühning und Bia lachte. Das würde Bia nicht zulassen, dass ihre große Schwester das Rennen gewinnt und beide stiegen zügig die Stufen hinauf. Und tatsächlich, kurz bevor die Fahrstuhltür aufging waren Bia und Frau Dr. Brühning oben.

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20 At the front desk: (procedural information):
Choice stairs or lift
(coping instruments)
Choice (stairs/lift) supports feeling of control
Gemeinsam gingen sie den Gang entlang und schließlich kamen sie zu einem Zimmer. An der Tür hingen Bilder mit Schneewittchen, Aschenputtel und Dornröschen. „Das sieht nett aus“, dachte Bia. Die Tür ging auf. Das Zimmer war nicht sehr groß. Es sah überhaupt nicht wie ein normales Arztzimmer aus, fand Bia. Dort standen ein Regal mit ganz vielen

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21 Examination room (sensory information):
Kitchenette, a shelf, desk with a computer, gynecological bank, green plastic leaf, flower lamps, table and chairs
(coping instructions)
very colorful impression (adequate for children what calms them down)

22 Examination room (procedural information)
All together go to the room
(coping instructions)
Social support
(Sensory information)
A photo of three princesses at the front door
Büchern, eine kleine Spüle, einen Schreibtisch mit einem Computer, ein Tisch mit Stühlen
und eine grüne Behandlungsleine. „Wofür die wohl ist?“, dachte Bia. Darüber hing wie ein
Dach, ein großes grünes Blatt. Neben der Liege war ein Laptop angebracht. Auf der
Fensterbank saßen ganz viele Kuscheltiere. An der Wand hangen zwei rosa
Blümchenlampen und ein Fernseher. „Schaut euch in Ruhe um und wenn ihr alles gesehen
habt, könnt ihr euch einen Platz an dem Tisch dort aussuchen“, sagte Frau Dr. Brüning.
Elena setzte sich sofort an den Tisch zu Sonia, aber Bia schaute sich ganz genau um. „Es
sieht nett aus hier. Ui, wie viele Kuscheltiere es hier gibt und es ist warm und duftet
lecker“, dachte Bia. Als sie sich schließlich alles genau angeschaut hatte, setzte auch sie
sich hin. Weil ihr das Ganze aber doch noch etwas unheimlich war beschloss sie sich
sicherheitshalber auf den Schoß von Sonia zu setzen. „Man kann ja nie wissen“, dachte sie
und kletterte auf Sonia’ Beine.

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23 Examination room (sensory information):
Kitchenette, a shelve, desk with a computer, gynecological bank, green plastic leaf, table
and chairs, lap top, TV
Warm temperature
Sweet smell
Many stuffed animaly

24 Examination room (procedural information):
Take a look (as long as needed)
Choose a chair
(coping instruction):
Support feeling of controle
„Ich habe überhaupt kein Bock irgendetwas zu erzählen, dachte Elena, alle wollen mit mir darüber reden, ich aber nicht mit ihnen!“ „Möchtet ihr anfangen etwas zu erzählen, oder soll ich das machen?“ fragte Frau Dr. Brüning. „Du!“ Schoss es aus Bia heraus und es war etwas lauter als sie wollte, „Sie, bitte“ sagte sie schnell. Elena schwieg, denn sie hatte nicht vor auch nur ein Wort mit der Doktorin zu wechseln.

25 Introductory conversation (procedural information):
choice whether they or the doctor start talking
(coping instruments):
choice and explanation of conversation structure (support feeling of control)
„Gut!“, sagte Frau Doktor Brüning, „Ich denke mal am besten ist wenn ich euch erst mal erkläre warum ihr zu mir kommen solltet. Also ich bin Ärztin und zu mir kommen Kinder und Jugendliche denen sehr wehgetan wurde. Das sind mittlerweile schon ganz schön viele Kinder gewesen, die ich kennen gelernt habe und denen ähnliches passiert ist wie euch. Es ist ganz wichtig, dass wir die Untersuchung machen, weil wir dann gucken können ob mit euren Körpern alles in Ordnung ist und wenn nicht können wir ihn dann behandeln. Ich werde mir ab und zu mal Notizen machen, damit ich nichts vergesse was wir gefunden haben, in meinem Alter kann das schon mal passieren“, sagte Frau Dr. Brüning und

26 Introductory conversation (procedural information):
explains:
stories of abuse are not unusual to her
there are many children who experienced something similar

27 Introductory conversation (procedural information):
explains:
medical help and treatment is necessary

28 Introductory conversation (procedural information):
explains: she takes notes
lachte. „Ja toll und wenn sie nichts finden dann glaubt uns keiner!“ rief Elena plötzlich. „Ich glaube euch, egal was wir gleich finden werden. Wenn wir nichts finden, zeigt das doch nur wie toll euer Körper eure Wunden schon wieder geheilt hat.“ Ihr könnt euch aussuchen ob Sonia hierbleiben soll, oder ob ihr die Untersuchung lieber mit mir alleine machen wollt." „Sonia, soll hier bleiben“, schoss es aus Bia heraus und auch Elena nickte. „Kein Problem“, sagte Frau Dr. Brühning, „also wir werden uns alles angucken:

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29 Introductory conversation (procedural information):
explains:
no injury does not mean no abuse
no injuries show that the body has already managed the injuries

30 Introductory conversation (procedural information):
explains:
may chose a person who stays inside the room during examination
(coping instruments):
Potential social support
Die Ohren, den Mund euren Herzschlag und eure Arme und Beine. Aber wir schauen uns auch Popo und Scheide an. Manchmal müssen wir auch ein Foto machen, z.B. von einer Narbe. „Das können Sie mal sofort vergessen, sagte Elena, ich will nicht, dass irgendjemand Fotos von mir macht. „Du brauchst dir keine Sorgen machen, das sind keine Fotos wie ihr sie kennt, die Aufnahmen zeigen nur die Wunden und man würde nie darauf kommen wer das ist. Die Bilder sieht auch niemand außer uns Ärzten und wenn nötig die Staatsanwaltschaft. Ich finde das sehr gut, dass du das anmerkst, wenn ihr etwas nicht

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31 Introductory conversation (procedural information): explains:
there are general and genital examinations

32 Introductory conversation (procedural information): explains:
It is sometimes needed to take a photo

33 Introductory conversation (procedural information): explains:
person is not recognizable on the photo
only seen by the doctor and public prosecution

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34 Introductory conversation (procedural information):
explains:
must not do anything they do not want.
Can stop at any time
(coping instructions):
supports the feeling of control
35 Start of examination (procedural information):
Explains:
Blood and urine sample must be taken (illness and pregnancy)
36 Start of examination (procedural information):
Get an urine cup and a pipette, to put the urine in there
(sensory information):
a pipette that likes of a injection
37 Start of examination (procedural information):
explains
that the children need to bring her the first pee in the morning
38 Start of examination (procedural information):
take a second urine sample to check pregnancy
„WAAAAAAAAS?“, schrie Bia und Tränen schossen in ihre Augen. „Ich will keine Spritze!“ „Keine Angst Bia“, sagte Frau Dr. Brüning sanft, „Es tut nicht weh, ich habe nämlich Zauberpflaster, wir kleben eines auf deinen Arm und dann spürst du den Piecks gar nicht.“ „Ach Sie lügen doch!“ raunte Elena. „Ich werde es euch beweisen, sagte Frau Dr. Brüning und holte zwei weiße große Pflaster aus einem Schrank, „So kommt mal her“. Erst klebte die Ärztin Bia das Pflaster auf den rechten Arm. Selbst Elena krempelte ihren Ärmel hoch.

39 Strat of examination (procedural information):
They get an anesthetic plaster
(sensory information)
6X6 cm with/pink plaster
Feel the plaster on the skin but no pain
Urine cup (white or transparent)
(coping instructions):
Helps to reduce anxiety
40 Start of examination (sensory information):
Looks like a normal 6X6 with/pink plaster
und ließ sich das Pflaster bereitwillig aufkleben. „Das muss jetzt eine Stunde drauf bleiben damit es richtig wirken kann\textsuperscript{41}, sagte Frau Dr. Brüning.

\textsuperscript{41} Start of examination (procedural information):
Get the plaster (exposure time 1 h)
„Du hast aber einen süßen Bären, wie heißt er denn?“, fragte Frau Dr. Brüning. „Bobo!“, sagte Bia und streichelte Bobo über seinen Kopf. „Tut Bobo denn auch was weh?“ fragte die Ärztin weiter. „Oh ja, rief Bia, „die Arme, das eine Bein und der Popo“. „Ja dann fangen wir am besten mit der Untersuchung bei Bobo an, vielleicht könnt ihr mir dabei ja helfen?“ schlug Frau Doktor Brüning vor, während sie ihre blauen Gummihandschuhe anzog. „JAA!“ Bia war begeistert. „Ich habe da kein Bock drauf“ nörgelte Elena. „Vielleicht, kannst du ja aufpassen, dass Bia und ich nichts übersehen?“ fragte Frau Dr. Brüning. „Meinet wegen!“, sagte Elena. Also gingen Bia, Bobo und Frau Dr. Brüning hinüber...
zu der grünen Liege. „Die hat ja Füße“, rief Bia und lachte, „aber nur vier Zehen!“47. Weil Bobo etwas Angst hatte alleine auf der Liege zu liegen, kam Sonia mit und Bobo setzte sich auf ihren Schoß. Frau Dr. Brüning gab Bia, das Stethoskop und sie hörte Bobos Herzschlag ab. Bobos Fell raschelte ganz schön und durch das Stethoskop konnte Bia das sehr gut hören. „Alles in Ordnung!“, sagte Bia zufrieden, und dann schauten sie sich noch Bobos Mund an, seine Arme, Beine, Ohren und seine großen braunen Augen48. „Super, wie du das machst, sagte Frau Doktor Brüning und Bia strahlte. Frau Dr. wusste ja nicht, dass Bia auch gerne Ärztin werden wollte, „Du hattest gesagt, dass Bobo’s Popo auch weh tut. Den schauen wir uns dann auch noch an.“

47 Examination room (sensory information):
Gynecological couch with feet
48 Stuffed animal examination (sensory information):
See and feel the instruments

49 Stuffed animal examination (sensory information): See how the corposcope look like
50 Stuffed animal examination (sensory information): Children see that they are not allowed to move
Frau Dr. Brüning und Sonia nickte. „Gott sei Dank haben wir die Stelle gefunden die dir weh tut, jetzt können wir die helfen“, sagte Bia und schloss Ihren Lieblingsbären ganz doll in die Arme.
„Wer von euch möchte, als nächste?” fragte Frau Dr. Brüning. „Ich” sagte Bia etwas besorgt, „Nicht dass bei mir auch eine Naht aufgegangen ist!” „Bei dir kann keine Naht aufgehen, sagte Elena und verdrehte die Augen, „du bist doch kein Stofftier!” „Das finde ich ganz mutig von dir”, sagte Frau Dr. Brüning, „du darfst dir jetzt als erstes ein Handtuch aussuchen51, welches hättest du gerne?“. „Das pinke!” sagte Bia, legte das Handtuch auf die Liege und setzte sich ganz mutig mit Bobo darauf. Als erstes schaute Frau Dr. Brüning mit den Otoskop in Bias Ohr und dann in den Mund. „Super machst du das!” sagte Frau Dr. Brüning, „Es ist alles in Ordnung!“.

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51 General examination (procedural information):
They may choose a towel
(Sensory information):
Feel the soft twol
(coping instructions):
Situation control (may choose a towel)
noch traurig machte. Frau Dr. Brüning notierte alles auf einem großen weißen Zettel\textsuperscript{54} und sagte: „Toll wie du mir hilfst Bia!“.

\textsuperscript{54} General examination (procedural information): Complete documentation
„Dein Oberteil kannst du schon wieder anziehen, jetzt würde ich gerne deine Beine angucken!“, sagte Frau Dr. Brüning. „Das ging ja schnell!“ antwortete Bia und zog ihren Pullover wieder an und ihre Hose und ihren Schlüpfer aus. Sie setzte sich auf das weiche Handtuch auf der Liege. Frau Dr. Brüning schaute sich Beine und Füße an. „Da hast du einen blauen Fleck“, sagte Frau Dr. Brüning, und legte das Lineal an. Bia wusste genau was sie zu tun hatte und hielt das Lineal ganz fest, so dass Frau Dr. Brüning ein Foto machen konnte, „Weißt du noch woher der blaue Fleck ist?“. „Ja da bin ich hinge Fallen“, antwortete Bia. Die Ärztin notierte was Bia geantwortet hatte und sagte: „Jetzt kannst du die Überlegen ob du dich auf die Liege setzt oder legen möchtest!“ „Sitzen, aber nicht alleine! Sonia und Bobo sollen herkommen!“, rief Bia. Sonia setzte sich auf die Liege und Bia setzte sich zu ihr und lehnte sich an Sonia an. Dabei hielt sie Bobo ganz fest in ihren Arm. Jetzt fühlte sich Bia sicher und stellte ihre Füße auf die großen grünen Füße mit vier

55 Genital examination (procedural information):
   Lie or sit down on the couch
   Together with somebody or alone
56 Genital examination (coping instructions):
   Sit together with somebody on the couch
   (Sensory information):
   Feel the attachment figure
   Feel the towel
77
„Bia, ich habe hier eine kleine Schramme gefunden“, sagte Frau Dr. Brüning plötzlich. „Ist das schlimm?“, fragte Bia besorgt. „Nein“, sagte Frau Dr. Brüning. „Aber damit ich davon ein Foto machen kann müssen wir ein bisschen turnen.“ „Wie soll das denn gehen,“ fragte Bia und runzelte die Stirn. „Ich zeige es dir!“ sagte die Ärztin und eh sich Bia versah kniete die Ärztin auf dem Boden und zeigte Bia was sie zu tun hatte. Bia lachte und rief: „Haha! Das ist doch kein Turnen, da muss man nicht so mit dem Popo tanzen.“ „Ja was ist es denn dann?“ fragte die Ärztin gespannt. „Ja ein Popotanz natürlich!“, sagte Bia, lachte und drehte sich auf der Liege um. Sonia las weiter und ehe sie zur letzten Seite gekommen war sagte Frau Dr. Brüning: „So fertig! Du bist wirklich ganz tapfer gewesen. Es sieht alles gut aus. Dein Körper hat schon tolle Arbeit geleistet, es sind kaum noch Wunden zu sehen!“

(coping instructions):
60 the doctor shows what must be done and
61 they call the knee-chest position “Popotanz” can lighten up the atmosphere
62 Genital examination (procedural information):
Children but be put in knee-chest position to secure evidence
Jetzt war Elena an der Reihe. „Magst du jetzt zu mir kommen, Elena?“, fragte Frau Dr. Brüning. Elena stand auf: „Frau Dr. Brüning? Ich will, dass wir etwas finden, ehrlich! Ich will Beweise haben für das was mir angetan wurde.„ „Ich kann dich gut verstehen und ich verspreche dir, wir werden uns alles genau angucken! Es hilft wenn du mir sagst wo du Verletzungen oder Schmerzen hattest oder was dir passiert ist. Dann habe ich einen Hinweis wo ich ganz genau hingucken muss. Es kann aber gut sein, dass wir nichts finden. Das ist aber gar nicht schlimm, denn dann können wir froh sein, dass dein Körper dich schon wieder so toll geheilt hat. „Ja ok!“ antwortete Elena und erzählte so gut wie sie konnte wie und wo ihr weh getan wurde. „Ich finde es super wie viel Vertrauen du zu mir hast und wir werden uns die Stellen gleich ganz genau angucken. Aber erst mal gucken wir uns auch bei dir die Ohren, den Mund, den Herzschlag und deinen Körper an, wie bei deiner Schwester, ok?“

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63 Introductory conversation (procedural information):
Explanation:
- Examination can find evidence of abuse
- Coping instruments:
- May change attitude (I want the examination to find evidence)
„Ja ok!“ antwortete Elena und Frau Dr. Brüning untersuchte, wie bei Bia die Ohren, den Mund, den oberen Körper, den Herzenslag und den unteren Körper. Dann setzte auch Elena sich auf die grüne Liege und machte Ihre Beine wie einen Schmetterling auseinander. „Ich möchte zusehen und helfen, sagte Elena“. „Gerne, also ich werde dir vorher erklären, was ich mache. Wenn dir etwas weh tut, dann sag sofort Bescheid, dann machen wir das anders. Also ich schaue mir jetzt als erstes mit dem Koluskop deine Scheide, deinen Popo und den Damm, das kleine Stückchen zwischen Popo und Scheide an. Da sieht alles gut aus. Als nächstes werde ich die Schamlippen etwas auseinander ziehen“ sagte Frau Dr. Brüning. Elena war überrascht, dass es gar nicht weh tat. Frau Dr. Brüning und Elena schauten sich alles gemeinsam auf dem Laptop an. „Ich sehe hier eine Schramme Elena, kannst du dich erinnern was da passiert ist?“, fragte die Ärztin. „Ja“, sagte Elena, „da wurde mir weh getan, sehr weh getan!“ Frau Dr. Brüning machte zur Sicherung eine Aufnahme von der Schramme und sagte: „Nun müssen wir noch einen Abstrich machen.

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64 Genital examination: (procedural information): If the child wants the doctor explains what she does
65 Genital examination: (procedural information): Look at the genital/anal region in general and than in detail (sensor information)
66 Genital examination: (procedural information): A smear must be taken

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67 First try it on the arm
68 (sensory information)
Tickling but no pain
69 (Procedural information):
Anal check
(sensory information):
Feel the rubber gloves on the skin
82
„Das habt ihr wirklich gut gemacht! Jetzt sind wir fast fertig, wir müssen nur noch Blut abnehmen“, erklärte Frau Dr. Brüning. "Ich werde es zuerst machen", sagte Elena nachdem sie sich wieder angezogen hatte. Sie setzte sich auf die Liege. Frau Dr. Brüning zog ihr „Zauberpflaster" ab und sagte: „So jetzt dürftest du nichts mehr spüren. Versuche dich doch mal an der Stelle zu kneifen." Elena kniff sich an der Stelle, an dem gerade noch das Pflaster saß. „Tatsächlich, ich spüre gar nichts", rief Elena erstaunt. Und auch als die Spitze durch die Haut ging merkte sie nur einen leichten Druck, aber weh tat es überhaupt nicht. Jetzt wollte es Bia auch wissen. „Denn was Elena kann, kann ich schon lange“ dachte sie und auch bei ihr tat die Blutabnahme gar nicht weh.

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70 Ending (procedural information):
Do the clothes on, the plaster off and take the blood sample
71 (coping instructions):
The anasthetische plaster helps to reduce anxiety
72 (sensory information)
Do not feel pain but possible a soft pressure
„So jetzt sind wir aber endgültig fertig!“, sagte Frau Dr. Brüning. „Ich finde es wirklich toll, wie tapfer ihr ward. Ich sage euch Bescheid wenn die Ergebnisse da sind. Bitte denkt daran, mir die Urinproben noch vorbei zu bringen. Wenn ihr noch Fragen habt oder euch noch etwas einfällt, ruft mich einfach an. Meine Nummer gebe ich euch noch mit. Und weil ihr das so toll gemacht habt, dürft ihr euch jetzt aus der Kiste dort, jeder eine Zeitschrift aussuchen.“73

73 Ending (procedural information):
Children may choose a magazine
(coping instruction):
Children are happy about the presents and forget about their anxiety
Das taten die Mädchen auch und als sie jeder eine Zeitschrift gefunden hatten verabschiedeten sie sich von Frau Dr. Brüning und verließen das Krankenhaus. „Du Elena“, sagte Bia zu ihrer großen Schwester, auf dem Weg aus der Klinik, „Ich bin wirklich froh, dass wir da waren.“ „Ja, ich auch!“ antwortete Elena und sie und Bia und Sonia und Bobo gingen nach Hause.