

Nursing Programme 180 hp
Scientific methodology III, thesis.

**How care providers work with nursing on a
rehabilitation center for children with
disabilities in rural Peru.**

An observational study.

**Hur vårdgivare arbetar med omvårdnad vid ett
rehabiliteringscenter för funktionshindrade
barn på landsbygden i Peru.**

En observationsstudie.

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ABSTRACT

Background: In Peru it is estimated that ten percent of the population suffers from a disability. Nursing in rehabilitation setting is when the nurse aims to maximize the quality of life for a patient suffering from disability or chronic disease. **Aim:** The aim is to describe nursing by care providers on a rehabilitation center in rural Peru. **Method:** The method in this thesis is observational study with ethnographic approach. The observations is performed on a rehabilitation center in rural Peru. **Result:** Two themes and four sub-themes were identified from the collected data. Nursing care with including sub-themes clinical investigation and family-centered care. Mobilization and independency with including sub themes improve the chance to mobilize and promote self-management. **Conclusion:** The Peruvian nursing care provided through a rehabilitation center in rural Peru shows that care providers are working with very basic equipment and limited instructions about how to maximize the patient outcome with very few recourses. Education methods are adjusted to their patient group to promote family centered care. **Further research:** Guidelines for rehabilitation nursing should be developed for settings without high technologized equipment as well as how to maximize the patient and family outcome through family centered care with limited resources.

Keywords: disabled child, family centered care, rehabilitation nursing, rural areas

SAMMANFATTNING

Bakgrund: I Peru beräknas tio procent av befolkningen vara drabbad av ett funktionshinder. Rehabiliterings-omvårdnad syftar till att maximera livskvalitén för den patient som lider av ett handikapp eller en kronisk sjukdom. **Syfte:** Syftet är att beskriva vårdgivarens omvårdnad vid ett rehabiliteringscenter på Perus landsbygd. **Metod:** Metoden i denna studie är en observationsstudie med etnografisk ansats. Observationerna är utförda vid ett rehabiliteringscenter på Perus landsbygd. **Resultat:** Två teman och fyra sub-teman har identifierats utifrån insamlad data. Omvårdnad som inkluderar klinisk undersökning och familjecentrerad vård. Mobilisering och ökad självständighet som inkluderar ökad chans till mobilisering och främjande av egenvård. **Slutsats:** Den peruanska omvårdnaden som erbjuds vid ett rehabiliteringscenter på landsbygden i Peru visar att vårdgivare arbetar med väldigt basal utrustning samt begränsade instruktioner för att patienten ska kunna uppnå maximal funktion med få resurser. Undervisningsmetoder är anpassade till deras patientgrupp för att främja familje-centrerad omvårdnad. **Vidare forskning:** Riktlinjer för rehabiliteringsomvårdnad bör utvecklas avsett för en miljö utan högteknologisk utrustning samt beskriva hur patienter tillsammans med sin familj uppnår maximalt resultat med få resurser att tillgå.

Sökord: disabled child, family centered care, rehabilitation nursing, rural areas

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INTRODUCTION

As a student nurse on The Swedish Red Cross University College I was given the opportunity to perform my data-collection abroad to write my thesis. I have a personal interest in health systems and vulnerable patient groups all over the world and especially in developing countries. In Peru the disability rate is among 10 percent including all ages and worldwide 93 million children suffers from some kind of disability. The author together with two other students therefor decided to travel to a rehabilitation center in rural northern Peru to perform data collection about the nursing situation. The preparations showed that my chosen subject, nursing care for children with disabilities, was much unexplored. Both in developed- and developing countries were the scientific articles less.

Nursing care in rehabilitation settings is defined as the way to maximize quality of life for patients suffering from disability or chronic disease through daily life. The nurse works in relation to rehabilitation nursing scientific theories that promote patient self-care, psychosocial health and physical health. The rehabilitation nurse handle acute and subacute rehabilitation to assist the clients to adapt an altered lifestyle and create a therapeutic environment and development of the surrounding family.

Definition of concepts

The concept "disability" is central in this study and describes a patient with a motor impairment, sever or moderate. Caused by a chronic disease, a syndrome or a birth injury. "Disabled child" or "child with a disability" is a patient under eighteen years old who suffers from a motor impairment. "Holistic care" for the disabled child is when the care provider includes the family in the nursing care as a whole unit. The concepts "author" and "observer" refers to the same person in the study.

BACKGROUND

Global conditions for children with disabilities

Worldwide it is estimated that 93 million children under 14 years suffers from some kind of disability, moderate or severe (Unite for Children [UNICEF], 2013). Children with disabilities encounter different forms of exclusion in the society related to which form of disability they have (ibid.). In rural zones families with a disabled child estimates more costs and less capacity to help the family with the income (ibid.). Children with disabilities who lives in poverty is less likely to be benefitted of school and health care services and are often regarded as inferior and with less capacity (ibid.). The discrimination against children with disabilities is based on the discrimination against disability itself which stop disabled to integrate with normal developed children because schools and public services are adjusted to children without impairments (ibid.). Gender is also a factor which has a big impact on the future of the child and degree of vulnerability (ibid.). Girls with disabilities are the most vulnerable ones and less likely to attend education and health care (ibid.).

Care takers in low-income areas are less likely to bring their children with special needs to specialist health care centers and physiotherapy (Porterfield, Timothy & McBride, 2007). Children of parents with a higher education has a larger prevalence for participation in rehabilitation programs and similar devices (ibid.). Lower socio-economic groups suffer from much higher rate of disability compared to higher socio-economic groups (Fatmi et al., 2009). Equal access to education, health and livelihoods differs when comparing urban and rural areas (UNICEF, 2013).

Disability in relation to poverty does express in different ways (Fisher & Shang, 2013). Some children experience their disability thru lack of access to mobility devices related to the economic situation of the family (ibid.). Other families experience poverty because of the cost of the disability support for the child (ibid.). The family constellation differs in between cultures and areas (ibid.). In low-income families it is common that the first hand caregiver to the child with a disability is a grandparent (Sen & Yurtsever, 2007). The grandmothers are usually the ones coping with the daily-caregiving (Gona, Newton, Hartley & Bunning, 2014). The care takers of children with motor impairments much commonly suffer from some physical dysfunction themselves such as musculoskeletal disorders and spinal pain regarding their daily struggle to carry the child in lack of mobility devices in rural areas and poor conditions (Geere et al., 2011).

Informative support for children in rural areas has a low prevalence of presence (Fisher & Shang, 2013). Families who are less educated and are living in low-socioeconomic areas do not have access to trustful informative sources (ibid.). Parents to children with special needs find it difficult to understand the needs of the child without professional information (ibid.). Common information sources in rural areas are for example TV commercials and local doctors (ibid.). Families does commonly spend money on cures which is not the most effective for the child related to TV commercials and incorrect information provided by doctors (ibid.). Related to those information obstacles families are not receiving the information about disability support options including health, therapy and support (ibid.). Knowledge about school services for children with special needs are also undermined (ibid.). Without necessary information it is common that children with a disability does miss the opportunity for interventions such as therapy (ibid.).

Peru: society and situation

Society

Peru is a country located in the northern part of South America (Lindahl, 2014). It has a strong economy but big inequalities between the inhabitants and six percent of the population has a daily income below the poverty line (ibid.). The poverty in general is widespread and near a third of the population are affected of the unequal system and lives' in poverty (ibid.). The poverty has localizations over all parts of Peru but are more common in rural areas (ibid.).

Situation

Year 2007 the prevalence of disability in Peru was 10, 9 per hundred persons including patients in all ages (World Health Organization [WHO], 2011). Around twenty percent of children under five and ten percent of the adolescents suffers from malnutrition (ibid.). Lack of access to healthcare is dominating on the country side and most of the educated health staff are close to the bigger cities such as the capital (ibid.). According to Ardisson, Campos & Nekrassovsky (2013) registered nurses in South America had a very spread definition on the education levels for registered nurses which affects the quality of nursing care. Nearly twenty percent has no access to running water or sanitation (Lindahl, 2014) and the most common infections are intestinal infections, respiratory infections, malaria and tuberculosis (Paz & Blair, 2006).

Pediatric nursing care

Nurses are supposed to offer everyday support to families of the sick child (Hopia, Tomlinson, Paavilainen & Åstedt-Kurki, 2004). Consulting depended on what kind of home situation and the kind of life the family have outside the hospital or health care center (ibid.). The nurse should have knowledge of what factors and environment issues that will affect the child and family in their daily home life (ibid.). It is of significant importance to adapt information in both quality and quantity to the family as an individual for further caring in the home (ibid.). The nursing provided to the disabled child is almost coming from the primary caretakers, the family (Sen & Yurtsever, 2007). The nurses roll is to see the family around the disabled child as a whole, give support and be a part of the crises the family face (ibid.). A nurse is the professional who tends to be closest to the family, build long-term relationships and be easy to reach during the whole concept of healthcare (ibid.). The nurse is supposed to be involved in everything around the child from rehabilitation to surgery (ibid.). Nurses are the ones in the healthcare team with most knowledge about the child, the family and the community (ibid.). Caring for a child with disabilities is stressful for the whole family including social, psychosocial and economic difficulties (ibid.). Family-centered nursing is of significant importance and the nurse is supposed to develop coping strategies together with each family and individual (ibid.). Nurses have a vital role in providing support to families which includes a child with a disability (ibid.).

Rehabilitation nursing care

The rehabilitation staff nurse work in the field with patients who suffers from a disability or chronic disease (Jacelon, 2011). The rehabilitation nurse works in relation to nursing scientific theories that promote patient self-care, psychosocial health, physical health and spiritual health (ibid.). Rehabilitation staff nurses works in different fields in both inpatient and outpatient environment to maintain as maximum function as possible thru daily life (ibid.). The nurse work with acute and subacute rehabilitation to assist the clients to adapt an altered lifestyle and create a therapeutic environment and development of the surrounding family (ibid.). Rehabilitation for disabled patients is one of the best health-care investments because in long-term it builds human capacity (WHO, 2011). Rehabilitation increases people with disabilities health because it promote functioning which leads to a higher level of participation in the fields of education and employment (ibid.). The benefits of rehabilitation also reflects in the social life and the increased accessibility for the patient to take part of the society and the area close to where they live related to the health conditions which increases

in broad range (ibid.). In less-resource settings the primary care of rehabilitation should be community-based rehabilitation with secondary services as a complement (ibid.).

Community-based rehabilitation is shown in a society where everyone, impairment or not, are available to take part of the social services such as school and health care units (UNICEF, 2013).

Competency Model for Rehabilitation Nursing

According to the *Association for Rehabilitation Nursing* competency model for professional rehabilitation nursing, nursing practices is divided into four different domains team

(Association of Rehabilitation Nurses [ARN], 2015; Jacelon, 2011; Association of Rehabilitation Nurses [ARN], 2014). The domains are nurse-led interventions, promotion of successful living, leadership and inter-professional care (See figure 1) (ibid.).

Nurse-led interventions

Nurse-led interventions is described thru four sub-domains: provide client and caregiver education, implement intervention based on best evidence, use supportive technology for improved quality of life and deliver client and family-centered care team (ARN, 2015; Jacelon, 2011; ARN, 2014). The

rehabilitation nurse should provide nursing care to the whole family as a unit, use supported technology and current evidence to deliver the optimum patient and family-centered care (ibid.). The nurse should identify nursing needs and improve self-management by implementing usage of appropriate technology which also benefit the functionality and quality of life for individuals with disability or chronic illness (ibid.). It is of significant importance that the nurse suggest technology that is possible for the client to afford (ibid.). Seeing every case as unique and adjust to specific situations (ibid.). To manage common disabilities and chronic diseases, for example, stroke, amputation, TBI and neuromuscular disorder the nurse is supposed to use nurse-led evidence based interventions (ibid.). Such as lead an inter-professional team that surround the client and family, integrating cultural sensitivity and gender preference in the constellation (ibid.). The nurse shall provide consultative

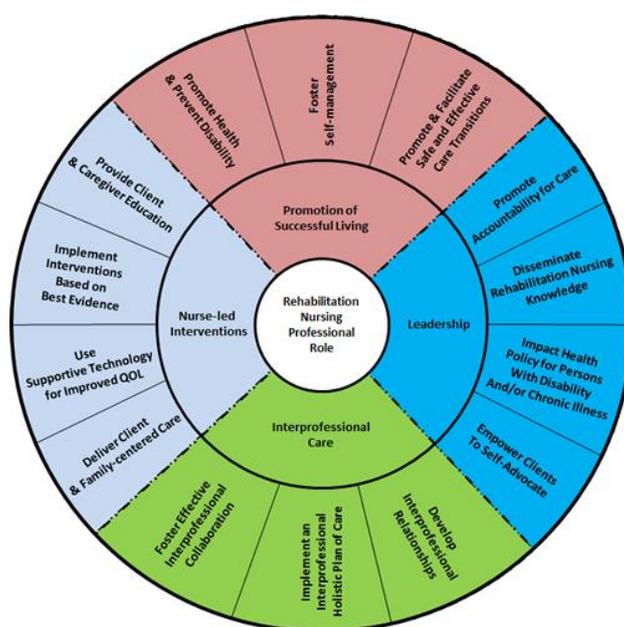


Figure 1, Competency Model

rehabilitation education about activities of daily life management, mobility, communication safety and disease management (ibid.). The education should be adjusted and are not limited to describe the areas but they're usually included (ibid.). The consultative education are supposed to reach the client and surrounding family as well as the inter-professional team and the community (ibid.). The nurse is responsible for the client's wish of goals and the family's impact regarding the nursing care, the nurse shall work as an advocate for the client's and family's decisions (ibid.).

Promotion of successful living

Promotion of successful living is described thru three sub-domains: promote health and prevent disability, foster self-management and promote and facilitate safe and effective care transitions (ARN, 2015; Jacelon, 2011; ARN, 2014). The rehabilitation nurse focus to maximize the independency in the home-living environment and integrate community care services that manage disability and supports health over time (ibid.). Promote and encourage wellness by health management promotion, harm prevention such as helmet safety, transportation services, nutrition education and lifestyle modifications (ibid.). The rehabilitation nurse should have a collaborative approach for the client to achieve the highest quality of life as possible while living with a chronic disease (ibid.). The nurse shall incorporate the client's self-efficacy, past experience and health literacy to problem solve and create decisions about the own nursing and health care (ibid.). The nurse is responsible to ensure an optimal collaboration and coordination in between the client, the family and the health care professionals (ibid.). Promotion of safe and timely transitions across different care settings is of significant importance (ibid.).

Leadership

Leadership is described thru four sub-domains: promote accountability for care, disseminate rehabilitation nursing knowledge, impact health policy for persons with disability or chronic illness and empower clients to self-advocate (ARN, 2015; Jacelon, 2011; ARN, 2014). For a successful rehabilitation the nurse should be a team leader and a competent key partner (ibid.). The nurse shall have a routinely collaborate with other care settings and professionals to promote optimum care across the continuum for individuals with chronic illness or disability (ibid.). The domain leadership focus on accountability, advocacy, sharing rehabilitation knowledge with the client and the families as well as other members of the inter-professional team (ibid.). Accountability for care is a continues and multi-dimensional

process that promotes client, ethical, cost-effective and family-centered quality outcomes for a patient with chronic illness or disability (ibid.). The rehabilitation nurse should spread the rehabilitation nursing knowledge in different settings such as agency, unit, government and academia (ibid.). To spread the nursing knowledge it includes to publicize, to have presentations, to instruct students and to have a professional organization engagement (ibid.). The nurse should also focus on minimizing environmental barriers and develop public policies to improve community services and reduce social attitudes (ibid.). Encourage the client to independently take part of community resources and systems and empowering the client through education (ibid.). The nurse should work as a safeguard for the client autonomy (ibid.).

Inter-professional care

Inter-professional care is described thru three sub-domains: foster effective inter-professional collaboration, implement an inter-professional holistic plan of care and develop inter-professional relationships (ARN, 2015; Jacelon, 2011; ARN, 2014). The rehabilitation nurse should effectively communicate and collaborate within the inter-professional team and is responsible for development of a plan of care and to involve all different professions in the process (ibid.). The nurse should use effective strategies to build and maintain inter-professional teams (ibid.). Strategies such as huddles, client conferences and team meetings (ibid.). Together with different involved professions the nurse should develop a plan of care that prescribe alternatives, strategies and interventions to attain desired outcomes (ibid.). To provide an exemplary client care the nurse should implement the family in the inter-professional team (ibid.).

The rehabilitation center in Chulucanas

The rehabilitation center in Chulucanas in Peru was created by a Swedish couple who started their work in Chulucanas 1975 (<http://rbcingles.galeon.com/>). They've been working in Sweden with disabled children and were involved in the Network of Child protection runned by the Swedish government (ibid.). The first step for the rehabilitation center was Sunday school in Chulucanas held by the couple and fund by their church *House of Prayer* which has much focus on children (ibid.). During Sunday school 60 children participated and went educated about the Lord Jesus (ibid.). The couple discovered there were hundreds of children in the church of Chulucanas, *House of Prayer*, but no children with disabilities (ibid.). They created information papers where they drew the heart of Jesus and explained that Lord has

not forgot anyone because of their disability (ibid.). In the Piura region 1999, the area that include Chulucanas, the church *House of Prayer Evangelical Piura Department* started a caring programme for patients with disabilities regarding recommendations from the World Health Organization concerning Community Based Rehabilitation (ibid.). In corporation with the missionary foundation PMU InterLife the Swedish couple received training and equipment from a physician rehabilitation physiotherapist (ibid.). The physician suggested community based rehabilitation as method and the work to create a rehabilitation center begun (ibid.). The center has the Spanish name *Rehabilitación basada en la Comunidad, Rehabilitación Física Para niños, adolescents y adultos* and is abbreviated *R.B.C.* (ibid.) Today R.B.C still work with community based rehabilitation and have developed three specific objectives: rehabilitation, training and sensitization (ibid.). They aims to create an individual rehabilitation plan in the home of the child and appropriate, to teach parents about the importance of participation in rehabilitation and to publicize information about the rights of children with disabilities thru media (ibid). The center cooperates with the Christian church *Iglesia Casa de Oración* and provide physiotherapy and nursing assistance in rural areas to a cheaper price than governmental services for children with disabilities (ibid.).

PROBLEM STATEMENT

The nursing role around the disabled child is to care for the family as a whole unit and adjust the mobility advices to the capacity of the family regarding economic and social situation. Patients within low-socioeconomics in rural areas suffers from a higher rate of disability then in general and have a lower participation in rehabilitation and health care settings. In Peru most of the well-educated health-care staff is located in bigger cities and less in rural areas and families to children in rural areas commonly get their information from local doctors and commercials. Nursing care for children with disabilities in rural Peru is not well described in the literature and therefor interesting to investigate.

AIM

The aim is to describe nursing by care providers on a rehabilitation center in rural Peru.

METHOD

Design

The design of this study was participating observation inspired by ethnography to describe the nursing work on a rehabilitation center in Chulucanas, northern rural Peru. The study is describable and qualitative and data was collected thru observations in the field (Polit & Beck, 2010) of a rehabilitation center.

Participating observation inspired by ethnographic

During the time on the rehab-center the author has done an observational study to document the nursing work (Lofland & Lofland, 1995). The observation is performed as a *participating observation* (ibid.). Participating observations are the process in which an investigator establishes a many sided and relatively long-term relationship with a human association in its natural setting, for the purpose of developing a scientific understanding of that association (ibid.). Inspired by ethnography where the observer describes the reality according to an individual or group (Pilhammar Andersson, 2005). Ethnographic methods are when the observer does observe, in this case nursing on a rehab-center, and discover a reality without making any hypothesis or rejecting theories (ibid.). The observations are made as second-hand observation where the observer starts to analyze the collected data, finished observations, during the data collection (ibid.). The observer should describe situations either in emic-perspective or etic-perspective (ibid). The emic-perspective is the individual view. The etic-perspective is the researchers view (ibid.). In this study the observer chose to observe with the etic-perspective for having the most correct answer on the aim as possible (ibid.). The etic-perspective allows the author take in charge the authors own culture and experiences while observing the care providers (ibid.).

Study sample

The observations has taken place on *R.B.C., Rehabilitación basada en la Comunidad, Rehabilitación Física Para niños, adolescents y adultos* in Chulucanas, northern Peru. R.B.C. is a rehabilitation center which cooperate with a Christian church, *Iglesia Casa de Oración*, which provides physiotherapy and nursing assistance in rural areas to a cheaper price than governmental services for children with motor impairments. Observations has been done both on the center regarding the work from physiotherapist and in home visits provided by a nurse. The contact to the rehabilitation center was made by the author interest to contact them thru their website.

Data-collection

The data collection was perceived under four weeks with a various schedule depending on when the nurse where able to perform home visits to children living in rural areas. There were five observations made in the field of home visits. All data collection from the work of the physiotherapists were collected the second week during five different rehab situations. In total ten observations has been made thru the data collection.

During the observations nursing memo-notes have been written in a logbook. The observer had various roles during different observational occasions related to the field of data-collection. While observing in the center the observer use to sit on a bench beside the mattress where the physiotherapist performed physiotherapy together with the child. The observer sometimes participated by helping the physiotherapist to bring-forth mobility devices and accessibility aid to the mattress. While observing during the home visits performed by a nurse the family of the child use to put chairs in a semicircle for everyone who were present. The observer took notes while the nurse assisted the family. Sometimes the observer assisted the nurse with required equipment. During observations in both fields the observer brought an informative letter in Spanish which described the aim of the visit and also some instructions to the family of the child. The Peruvians where very curious about the visitor from Europe who came to their village so there were encouraged to focus on the care provider as usual and not on the observer (See appendix 1). The notes had been retyped into a cohesive text as soon as possible after the data collection. Photographs has been taken during the observations as a complement in order to clarify the content. There are no patient presence, only the care provider, some material and facilities on the photographs. The ambition has been to observe without making any impact on the observed situation.

The literary part of the thesis is collected during the time for observations to seek background information about the result from the data-collection in field. Used keywords were mostly rehabilitation nursing, rural areas, disabled child, family centered care and pediatric rehabilitation. The databased that are used is EBSCO discovery service.

Data analysis

The memo-notes made into a cohesive text were processed with quality content analysis inspired by Graneheim and Lundman (2004). The collected data were processed according to following steps:

1. The observations were read a few times to get an overview about the content of the collected data. There were ten cohesive texts with observations. An observed situation can be everything between some few words to a piece of text containing a number of sentences. Examples on observations in this study are; the nurse inform the family members of the child about nutritional recommendations illustrated in pictures, the physiotherapist are bringing forth a soft accessibility aid, the nurse measures the weight with a regular foot scale etc.
2. The well-read material was sorted and divided into different groups to clarify the content. The author used different colors to mark the different groups. The different groups were then putted into meaning units. 78 meaning units were found. All meaning units was marked with a number.
3. Created meaning units were processed to a smaller amount of text without losing focus on the core content. The condensed meaning units should respond on the aim of the study and be the manifest content of the observations.
4. Condensed meaning units has been interpreted to present the underlying meaning, the latent content. Examples on interpretation can be; the nurse educates the family about nutrition (latent content), the nurse shows pictures that describes nutritional recommendations (manifest content) etc.
5. The meaning units which had common signification have been linked to each other and placed under same sub-theme. The made sub-themes describes the manifest content of the collected data. Manifest content is the content that does express immediate in the text without any interpretations read between the lines. Four sub-themes has been created; (1) clinical investigation (2) family centered care, (3) improve the chance to mobilize, (4) promote self-management
6. The sub-themes has at least been divided and presented in different themes. The themes describes the latent content of the collected data. Latent content is the interpretations of the text and conclusions made by reading between the lines. Two themes has been created; (1) nursing care, (2) mobilization and independency.

Meaning unit	Condensed meaning unit. Description close to the text.	Condensed meaning unit. Interpretation of the underlying meaning.	Sub-theme	Theme
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Graneheim & Lundman (2004)

Full analysis, see appendix 2

Ethical aspects

The person of responsible for *R.B.C.*, was informed a long in advance in time about the observations that had been made in this study. The person of responsibility had informed the other health care staff further about the author's arrival and aim to visit the rehabilitation center. During every data collection the author brought an informative letter written in Spanish about the aim of the author's presence.

According to Polit and Beck (2013) when humans are used as study participants, care must be exercised to ensure that their rights are protected. Especially when it comes to children, children is a group that nurse researchers should consider vulnerable and on the rehabilitation-center the patients were children (ibid.). Legally and ethically, children do not have competence to give informed consent during an observation period (ibid.). Parents or legal guardians must be obtained (ibid.). A child older than seven years shall be informed about the study to obtain an assent (ibid.). The assent means that the child agrees to participate (ibid.). If the child is mature enough to understand basic informed consent information (example a 12-year old), it is advisable to obtain written assent from the child as well, as evidence of respect for the child's right to self-determination (ibid.). Patients has not participated in this research, but they have been in the same field while observing the health care staff (ibid.). The observations have been done with respect for the patients' situation such as excluding them from the memo-notes and everything else that have been collected during the collection period (ibid.). The author has only been interested and focused on the health-care staff (ibid.). Even if the collected data describes only the health-care staff the author has been very careful and responsible with the memo-notes and kept them not in public area (Vetenskapsrådet, 2011).

RESULT

This observational study describes the nursing on a rehabilitation center in rural Peru during ten observational situations. The result is described with two themes followed by two sub-themes each. The themes are *nursing care* and *mobilization and independency*. The sub-themes *clinical investigation* and *family centered care* describe the theme *nursing care*. The sub-themes *improve the chance to mobilize* and *promote self-management* describe the theme *mobilization and independency*. Photographs taken during the observations are presented in the result as figures to visually clarify the content in the sub-themes. Some meaning units from the data-collection is presented frequently combined with body text to describe the found result. For all meaning units, see appendix 2.



Figure 2, footscale

Nursing care

The theme nursing care is described by two sub-themes; *clinical investigation* and *family centered care* which describes the nursing work in the field of home visits.

Clinical investigation

The theme describes nursing work with limited access to modern equipment while working in rural areas with disabled children. The nurse used parental support to measure the weight of the child with motor impairment. A foot scale were used and it was not always well-



Figure 3, measurment wooden board

functioning (See figure 2).

“The nurse is taking forth a regular scale and weighing the parent together with the child in the bosom for a total weight (32)”...” It is difficult to have some value on the scale because of the rammed earth floor which is not flat (42)”. “After the new measurement the nurse picks’ up the scale to recheck the trustworthiness of the value (52)”.

A measurement tape were in use for different aims such as measuring the extremities and the length.

” The nurse is picking up a measuring tape and measure one of the arms and one of the thigh just upside the knee (69)”..

A measurement wooden board is used to measure the length of the child with capacity to stand on its own (See figure 3).

“The nurse support the child to step up on the measuring board and the nurse measure the length (50)”.

Family centered care

Which describes how the nurse during home visits in rural areas give instructions about what to eat to the family of the disabled child by taking part of earlier paper journals collected by the families for further recommendations.

“Another relative bringing forth some papers received on a hospital (61). The nurse take a look on the papers and (62)... [...]”.



Figure 4.1, length and weight curves

The nurse inform the family members with instructions illustrated in pictures. The illustrations shows how much food related to age the child should consume and also length- and weight curves (See figure 4,1-2).

“The nurse point on a paper with recommendations formed in pictures (63)”. “The nurse look in a paper sample who contains weight- and length curves and also recommendations in pictures on how many spoons a child should eat related to age (71)”.



Figure 4.2, length, weight and nutritional recommendations

The nurse also use pictures on different types of food to encourage the family about variety in nutrition.

“The nurse is bringing forth a plastic pocket who contains pictures on different types of food (36)”.

Mobilization and independency

The theme mobilization and independency are described by two sub-themes; *improve the chance to mobilize* and *promote self-management*. Which describes the nursing in the rehabilitation field and also some work with mobility devices during home visits.

Improve the chance to mobilize

The sub-theme *improve the chance to mobilize* describes how care providers give the child with a disability a chance to mobilize with support from some accessibility aid during time of rehabilitation (See figure 5). Physical practice are also included such as



movements to mobilize forward.

“The physiotherapist does place a supportive soft accessibility aid around the legs of the child (6)”.

“...supportive hands around the child’s knees and moving the legs forward in a crawling movement (40)”.



Figure 5, accesibility aid

Promote self-management

The sub-theme promote self-management describes how care providers do as little as possible thru a moving section during rehabilitation time to increase the confident of the child to move with the own capacity. Strength and balance is practised for further capacity outside the rehabilitation centre. The sub-theme also describes the promotion for the child with a motor impairment to move and act independent without having a care giver nearby. For example usage of a wheelchair create availability to move without help from caregiver.



Figure 6, walking passage

“The physiotherapist does place the child in a secured side-position and then uses the own weight of the child to roll over (24).” “The physiotherapist brings the child to a passage for practicing walking (12). The physiotherapist is standing very close to the child, gives supportive hands under its arms while the child are doing the exercise on its own (13).”

The caregiver practice together with the child in the walking passage to increase strength and balance (See figure 6). Teach the child to be more independent during a walking process.

Usage of pillow to change position instead of being changed by caregiver (See figure 7).

“Does place a round big sausages-shaped pillow under the chest of the child (77).”

The nurse investigates if the wheelchair is comfortable and practical to use for the child. The nurse educate the parent about the function of the footrest to prevent damages on the child.



Figure7, supportive pillow

“The nurse feels and squeeze on the different seat pads in the wheelchair and also refurbish the pads (56). The nurse does also investigate the harness which holds the child while using the wheelchair (57).” “The nurse touches the footrest who is set on the wheelchair and are showing the parent that it is adjustable (17).”

DISCUSSION

Discussion of method

This study has qualitative and descriptive design. The data-collection were performed thru observations in the field of a rehabilitation center including home visits provided by a nurse. Observational notes were written in a logbook during the period of observation, pictures were also taken to illustrate the findings further. Observations were performed as data-collecting method because of the language challenges, the observer has very limited knowledge in Spanish and is not able to have fluent conversations. An interview based study had might result in a much more detailed data-collection compared to observational data. The emic perspective seemed more natural while doing an observational study in an unexplored context to find a reality without rejecting theories or take in charge the authors own perception about right and wrong exert of nursing. Further details and creation of interview questions might had reflect the author’s view of nursing. The language barrier does undermine the result

during observations in the field of home visits. The nurse spent a lot of time to have conversations with the family members' about the child with a motor impairment during the home visits. According to Saldana, Marcela, Alarcon, Romero and Herly (2015) communication, teaching, verbal supporting and information have a big role in nursing work. The author documented some parts of the recommendations given to family members' by the nurse in the logbook. Because of the author's lack of knowledge in Spanish the conversations were excluded from the further analyze. A similar situation with the language barrier were not seen during observations in the field of the rehabilitation center. The observational notes are still usable for the analysis according to Graneheim and Lundman (2004) and a result is presence. The result are useful but can be seen as incomplete related to Saldana et al. (2015) perception about communication as a part of nursing. An interpreter could have been beneficial to have a more complete result in this study. The result does only describe the visual part of the nursing.

The data analysis according to Graneheim and Lundman (2004) is supposed to respond on the aim of the study. Creation of meaning units who were similar between the observations collected during home visits can be seen as emic-descriptive because they describe the reality of nursing work in Chulucanas, Peru without impact from the author about the definition of nursing. Further it is interesting if the data analysis are in emic- or etic-perspective while analyzing the collected data in the field of the rehabilitation center. While observing the physiotherapists the author wrote down very detailed notes about the work. In the analysis from the observational text the author were supposed to create meaning units with a focus on the nursing care. The author had to make decisions about what in the data-collection which were rehabilitation verses nursing care. Therefor the data-analysis, half of it, can be seen as a work from the etic-perspective. The researchers view of which actions who are defined as nursing.

Observation as method has its own limitation regarding the observer's impact on the observed situation (Parahoo, 2014). The awareness of being observed is likely to lead people to be self-conscious and that may influence their behavior in a way they normally would not behave (ibid.). The observer did affect the result of this study by her presence in the observed situation (ibid.). According to Monahan and Fisher (2010) truths about profound social and cultural phenomena will still express even if the observer make impact on the observed situation. Sometimes it will even reject more information by being present as an observer

because it is likely to generate critical insights about the observed field (ibid.). The observer is able to notice more details for further observing and if possible questioning for a more detailed data-collection (ibid.).

The lack of knowledge in Spanish and time for a further data-collection in the field of nursing work during home visits might undermine the result and the validity of the study. According to Olson and Sørensen (2011) validity relates to the measuring instruments ability to measure what was intended to be measure. Five observational opportunities without an interpreter might not respond to the aim with the same result as if the data collection were more comprehensive including a Spanish speaking researcher or interpreter. According to Olson and Sørensen (2011) reliability is the degree of the conformity of measurements with the same measuring instrument. The reliability in this study would have been strengthened with knowledge in Spanish and more time for further observations. In the field of the rehabilitation center the data collection were more reliable and valid related to less barriers to perform observations.

Discussion of result

The findings in this study shows that clinical investigation of the child does play a role in nursing care. Clinical investigations were shown thru the nurses' interest in seeking a value for bodyweight and length for further follow up. According to Våga, Moland, Evjen-Olsen, Leshabari, & Blystad (2013) and Fassin (2008) it is common that nurses' who does work in a context with short material supplies and weak supporting systems does pay attention to medicalized- and task-oriented care instead of patient oriented care. The result confirm that the nurse might prioritize the task-oriented care as most needed in the situation. According to Robert, Tilley and Petersen (2014) intuition plays a big role in nursing actions in all settings of nursing work. Intuition is defined as the way a person act without fully understanding way (ibid.). It is common that nurses use their intuition as guideline for their nursing actions instead of evidence based guidelines (ibid.). The nurse may have made decisions regarding which actions were necessary related to a personal perception of nursing care (ibid.).

According to Sen and Yurtsever (2007) the nurse is supposed to work holistic with the whole family who surround the disabled child. The finding in this study shows that the nurse commonly uses a parent as a supply during weight measuring because of use of a regular foot scale. Geere et al, (2011) describes how the first hand caregivers to the child commonly

suffers from some musculoskeletal disorder or spinal pain related to lack of devices. Usage of parental support during measuring can therefore be seen as a dilemma between nursing work with lack of equipment and the holistic view of the family.

In the result it is present that the nurse investigate the wheelchair that belongs to a child with a disability and then educate the participant parent about how to adjust the footrest so it won't harm the child physically. According to Fisher & Shang (2013) a family member who is disabled can generate poverty to the family because they invest in mobility devices, therefore nurses have a role to adjust the technology equipment to every single family and to be cost effective related to the family income to maximize the quality of life related to each circumstances. Nurse-led interventions should be in a holistic perspective to increase the benefits and functionality in the home living environment (Jacelon, 2011). Maybe it was time for the nurse to suggest implementing of a new wheelchair but related to specific situation the nurse chose to educate the parent to use the wheelchair further. Transportation services is a responsibility for the rehabilitation nurse to encourage self-management and promote independency in the home living environment (ARN, 2014). According to Gzasa and Lorenzo (2008) children and young people commonly suffers from lack of privacy while carrying out daily functions such as washing, toileting and dressing. It is important that the care provider can manage and provide dignity of the child to increase the quality of life (ibid.). Nurses have the power and responsible to alleviate barriers of independence (ibid.).

According to collected data the nurse educate the family about variety in nutrition. Hopia et al, (2004) claims that pediatric nursing is provided by family centered care, the holistic view on the family as a unit that includes a child with nursing needs. Rehabilitation nursing care is developed with a similar approach, to involve family members and different professionals that surrounds the client (Jacelon, 2011). The rehabilitation nurse is supposed to promote a successful living by being responsible for nutritional education and lifestyle modifications (ibid.). In the collected data it is presence that the nurse uses illustrated material to clarify the growth of the child. The nurse explained in firsthand to the parents and other relatives living in the same building. According to Ilmonen, Isolauri and Laitinen (2012) nurses almost uses informative discussions as nutrition counselling. More creative initiatives as food diaries and frequent food questionnaires were less common to be used (ibid.). According to Horodynski et al, (2007) it is reported that low-income mothers find it hard to understand feeding advice from health professionals to their infants. It is common that the feeding habits of the infant

relates to beliefs and cultural aspects (ibid.). For example the introduction of solids in the feeding schedule for the young infant related to beliefs that cereals would generate longer sleep at night (ibid.). Solid food also represent development of the child and it is an important milestone united with parental pride (ibid.). This study shows that usage of pictures as informative source is usable for nurses to reach parents in low-income areas. Nursing presence in low-income areas also results in good outcome for the child and the family as a unit according to Olds et al (2004), home visiting provided by nurses were at significant importance while measure the child outcome in families including a parent with social problem. The children in families with continuous nursing contact had a higher rate of intellectual functioning, receptive language and were reported to have fewer problems in the borderline and clinical range of the total problems scale (ibid.). A similar study on a younger study sample also present positive impact from families were nurses have had a continuous home visiting (Olds, Robinson, Pettitt, Luckey & Holmberg, 2004). The measured child outcome shows more conducive to early learnings, better language development, superior executive functioning and better behavioral adaption (ibid.).

The result shows how the nurse react documents from earlier hospital visits or contacts with different community services provided by the relatives to the child. The rehabilitation nurse is supposed to organize and maintain inter-professional relations and involve different professions in the care of plan for the child (Jacelon, 2011). Use the medical history to together with the family create new nursing goals and encourage independence and self-management (ibid.). According to Potter and Perry (2007) the nurse and care provider should encourage the child with disabilities to be as independent as possible. Self-care should be encouraged and instructions should be given repeatedly to give the child with disabilities a chance to perform as much as possible independently (ibid.).

In rehabilitation nursing the care provider is supposed to create a therapeutic environment to maintain maximum function for the client with a disability or chronic illness (Jacelon, 2011). In this study the result shows that the physiotherapist provided for example accessibility aids during moving exercise to support the child during mobilization. During the home-visits provided by the nurse there were less focus on mobilization and more focus on nutritional education and the functionality of some mobility devices. Mobility is not seemed as a firsthand priority during caring time which affects the child's possibility to attend social services such as school and it also result in social exclusion (WHO, 2011).

Conclusion

The Peruvian nursing care provided through a rehabilitation center in rural Peru shows that care providers are working with very basic equipment and limited instructions about how to maximize the patient outcome with very few recourses. The care providers are using an adjusted method for their patient group to educate them in nutrition to involve the family in the special needs of their child. The used method is to visually explain with pictures which kind of food and which amount who is to prefer related to the age of the child. With support from basic mobility devices the care providers assists the children to mobilize as much as possible independently to promote further independence.

Clinical significance

Nursing in rural areas with limited equipment and guidelines is not only an interest for Peru to have described. Even Swedish healthcare staff can be beneficial by influences regarding coping strategies from other parts of the world. In Sweden we very often work in the field with patients from different cultures with a different way of thinking and communicate. For example this study showed how to reach low-socioeconomic clients thru illustrated information, pictures to encourage a variety in nutrition. In Sweden such as other developing countries we should take the opportunity to develop a many sided communication habit to reach as many clients as possible.

Suggestion for further research

Further this area would have a bigger potential if the researcher were Spanish speaking and able to perform an investigation without the language barrier. Guidelines for rehabilitation nursing should be developed for settings without high technologized equipment. Focusing questions would for example be how to involve the children in social services such as the school for further employment ability. Also how to maximize the patient and family outcome thru family centered care with limited resources.

Authors contribution

The author of this report is Sofia Ström. A lot of time has been spent to fulfill this report including all stages of process. Hard struggling with Spanish combined with unregularly timetable that made some delays during the process. The author has been both observer and author and enjoyed they stay in South America a lot. The humanitarian situation in rural Peru was sometimes heartbreaking and the author's aim to finish the bachelor thesis sometimes felt such a small struggle while comparing life situations with the Peruvians.

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APPENDIX

Appendix 1

Informative Spanish letter used during data-collection. Presented in Spanish version (1) and English version (2).

Hola,

Mi nombre es Sofía. Tengo veinte años y están estudiando para una enfermera. Yo vivo en Estocolmo, la capital de Suecia. Ahora estoy en el quinto semestre del programa de enfermería y se supone que tengo que escribir una tesis de licenciatura en ciencias de la enfermería. Mi elección para viajar a Chulucanas en Perú está relacionado con mi interés de trabajar como enfermera internacional cuando me gradué. Lo siento si no hablo español , pero estoy muy agradecido de estar aquí y visite a su pueblo. Mi tesis de licenciatura se supone que describen los cuidados de enfermería en el Perú y por eso me he unido a la médico del R.B.C. para realizar estudios de campo mientras ella ejercer su trabajo. Voy a hacer observaciones sobre la labor del médico y tome notas y quizás algunas fotografías. Le agradecería si no prestara atención a mí y se centran en el personal médico como de costumbre. Muchas gracias por leer mi carta!

Dios los bendiga

Sofía

Hello,

My name is Sofia. I am twenty years old and are studying to a nurse. I live in Stockholm the capital of Sweden. Right now I am in the fifth semester of the nursing programme and I am supposed to write a bachelor thesis in science of nursing. My choice to travel to Chulucanas in Peru is related to my interest to work international as a nurse when I have graduated. I am sorry I cannot speak Spanish but I am very thankful to be here and visit your village. My bachelor thesis is supposed to describe nursing care in Peru and that's why I have joined the care provider from R.B.C. for perform field studies while she exercise her work. I will make observations of the work of the care provider and take notes and maybe some photographs. I will appreciate if you do not give attention to me and focus on the care provider as usual.

Thank you very much for reading my letter!

God bless you,

Sofia

Appendix 2

Quality content analysis by Graneheim and Lundman (2004).

<u>Meaning unit</u>	<u>Condensed meaning unit. Description close to the text.</u>	<u>Condensed meaning unit. Interpretation of the underlying meaning.</u>	<u>Sub-theme</u>	<u>Theme</u>
The nurse weighing the child with a regular foot-scale (1). First the parent with the child in its arms and then just the parent (2). The nurse subtracts the total weight with the weight from just the child (3).	Weighing with regular foot-scale. Subtract weight of parent with total weight to measure the weight of the child.	Usage of basic equipment. Use parent as accessibility aid to receive weight of the child.	Clinical investigation	Nursing care
The nurse is taking forth a regular scale and weighing the parent together with the child in the bosom for a total weight (32). Then only the parent is weighing (33). Then the nurse subtracts the parent's weight from the total weight to get the weight of the child (34).	Weighing child and parent with regular scale. Subtracts weight of parent to get weight of child.	The nurse are using basic equipment and a parent for measuring the weight of the child.	Clinical investigation	Nursing care
Taking up the child in the arms and take a step up on the foot-scale who is placed on the ground by the nurse (41). It is difficult to have some value on the	The nurse measure the weight by taking a total weight on parent and child and then subtract the weight of the parent. Difficulties	Difficulties in nursing work related to bad living conditions. Using parent because of lack of adjusted equipment for disabled children	Clinical investigation	Nursing care

<p>scale because of the rammed earth floor which is not flat (42). After a while it works out when the scale is standing on a drain covers (43). First the nurse does take a total weight on the parent and child and then a weight of just the parent which subtracts from the total weight (44).</p>	<p>related to the rammed earth floor.</p>	<p>to measure weight.</p>		
<p>The nurse is taking forth a measuring tape (58). Then measure around upper arm on both arms (59). Then the nurse measure the length of the child (60).</p>	<p>The nurse measure around the upper arms and the length with a measure tape.</p>	<p>Using a measure tape because of lack of other equipment to measure the length on disabled patient.</p>	<p>Clinical investigation</p>	<p>Nursing care</p>
<p>The nurse is picking up a measuring tape and measure one of the arms and one of the thigh just upside the knee (69). The nurse gives the measuring tape to the child so it could hold it with its own hands (70).</p>	<p>The nurse measure arm and thigh with a measuring tape. Let the child touch the measuring tape.</p>	<p>Include the child in the exercise. Using basic equipment.</p>	<p>Clinical investigation</p>	<p>Nursing care</p>
<p>Nurse together with parent support the child to stand on the footscale (45). The nurse place the legs of the</p>	<p>The nurse measure length of the child with a measuring wooden board. Measure the</p>	<p>The nurse use a measuring board related to the capacity of the child to stand on its own. Recheck the measuring</p>	<p>Clinical investigation</p>	<p>Nursing care</p>

<p>child in right position for measuring (46). Then the nurse bring forth a measuring wooden board (47). It is created by a wooden board behind the back and one beyond the feet (48). On the board behind the back there's a measuring tape (49). The nurse support the child to step up on the measuring board and the nurse measure the length (50). The nurse is taking forth the footscale a second time and support the child to step up on the footscale (51). After the new measurement the nurse picks' up the scale to recheck the trustworthiness of the value (52).</p>	<p>weight following times.</p>	<p>value on the scale related to lack of function.</p>		
<p>The nurse bring forth a paper with different curves on weight, length and nutrition (4). The nurse is pointing on the different lines and have a conversation with the parent (5).</p>	<p>The nurse inform the family of the child about length, weight and nutrition recommendations.</p>	<p>The nurse teach the family how to keep the right values on the weight and length curves in the future and also show how to use the nutrition recommendations.</p>	<p>Family centered care</p>	<p>Nursing Care</p>
<p>The nurse is bringing forth a</p>	<p>The nurse shows pictures on</p>	<p>The nurse use pictures to</p>	<p>Family centered care</p>	<p>Nursing Care</p>

plastic pocket who contains pictures on different types of food (36). The nurse have a conversation about different vitamins and nutrients (37).	different types of nutrition.	educate the family in nutrition.		
The nurse takes a look on a description who includes growth curve and recommendations how much food a child need related to the age (35).	Reads a description with growth curve and age-related mealtime recommendations.	Takes part of a previous filled growth-sample for further recommendations to the family.	Family centered care	Nursing Care
Another relative bringing forth some papers received on a hospital (61). The nurse take a look on the papers and have a conversation with the parent about breastmilk and vitamins (62). The nurse point on a paper with recommendations formed in pictures (63). The nurses are saying the word egg and point on the length- and weight curves and have a conversation with the parent (64).	The nurse take part of papers such as hospital records and prescriptions. The nurse point to the parent in a description with length and weight curves and also shows mealtime recommendations formed in pictures.	The nurse take parts of all data around the child and then focus on inform the family further about length, weight and nutrition for as normal growth as possible.	Family centered care	Nursing Care
The nurse look in a paper sample who contains weight- and length curves and	The nurse reads paper samples who contains growth and diet	The nurse take part and explain further for the family the importance of	Family centered care	Nursing Care

also recommendations in pictures on how many spoons a child should eat related to age (71). A relative gives the nurse a paper with mealtime recommendations (72).	recommendations shown in pictures.	nutrition and growth.		
The physiotherapist does place a supportive soft accessibility aid around the legs of the child (6).	Support the child with accessibility aid on legs.	Support the child and promote movements.	Improve the chance to mobilize.	Mobilization and independency.
A supportive soft accessibility aid is placed on one of the forearms (7).	Support the child with accessibility aid on forearm.	Support the child and promote usage of forearm.	Improve the chance to mobilize.	Mobilization and independency.
The child is put on knees, the physiotherapist have supportive hands around the belly while the child are moving its legs (18). The physiotherapist brings a sausage-shaped pillow (19). Also does bring some soft supportive accessibility aid and then place them on the arms of the child (20). The sausage are placed under the chest (21). The child's arms are hanging in a straight direction forward to the	The caregiver are supporting the child while moving forward on knees. Gives support with accessibility aid and pillow.	Support the child to have straightened arms and to have the fingers next to the mattress.	Improve the chance to mobilize.	Mobilization and independency.

<p>mattress (22). The palms next to the mattress with the fingers spread (23).</p>				
<p>The child is put with the belly/front side against the balance-ball (38). The ball is rolled forward and back, so much back so the feet gets flat against the mattress before the ball rolls forward again (39).</p>	<p>The feet gets flat against the mattress while rolling the ball backwards.</p>	<p>The feet gets straightened while rolling the ball backwards. Usage of ball to put the child balanced in standing position.</p>	<p>Improve the chance to mobilize.</p>	<p>Mobilization and independency.</p>
<p>The physiotherapist held supportive hands around the child's knees and moving the legs forward in a crawling movement (40).</p>	<p>Supportive hands around the knees and moving legs forward in crawling movement.</p>	<p>Teach the child to do crawling movements.</p>	<p>Improve the chance to mobilize.</p>	<p>Mobilization and independency.</p>
<p>The child are lifting up and putted in a standing position on knees (7). The physiotherapist are standing very close to the child without touching it (8). At the same time giving support by hands when the child losing the balance (9). The physiotherapist are making pressure on the shoulders of the child while the child is moving</p>	<p>Support the child to move forward in an upraised position. Press on shoulders during the exercise.</p>	<p>Practice the balance and strength to do movements in un upraised position.</p>	<p>Promote self-management</p>	<p>Mobilization and independency.</p>

its knees forward on the mattress (10).				
The physiotherapist does place the child in a secured sideposition and then uses the own weight of the child to roll over (24). The exercise are repeated in the other direction (25).	Use the own weight to turn from secured sideposition.	Practice to do a rolling movement with minimum support by others.	Promote self-management	Mobilization and independency.
Does place a round big sausages-shaped pillow under the chest of the child (77). The head is held up with supportive hands (78).	Support by sausages-shaped pillow under the chest. Holding the head.	Usage of pillow to change position instead of being changed by caregiver.	Promote self-management	Mobilization and independency.
The balance-ball are rolling side to side, a bit to the right and then a bit to the left, the child's head are moving side to side in the same movements as the ball (11).	Rolling the balance-ball side to side with the child upon it. Doing movements with the head.	Giving the child a chance to move the head independently with help from the gravity power.	Promote self-management	Mobilization and independency.
The child is put on knees, the physiotherapist put its hands on the leg and moving the child forward step by step (53). The child is moving on knees (54). The physiotherapist does support with hands under the child's arms and	Moving forward on knees with movements done by caregiver. Moving on its own with support from caregiver.	Practice to move forward on knees with some balance support.	Promote self-management	Mobilization and independency.

are at the same time standing close to the child while it's doing the exercise on its own (55).				
The physiotherapist brings the child to a passage for practicing walking (12). The physiotherapist is standing very close to the child, gives supportive hands under its arms while the child are doing the exercise on its own (13). The hands of the child are placed on the handrails beside the walking area while the physiotherapist gives supportive hands around the belly (14).	The caregiver are supporting the child while walking in a passage for walking practice. Coordinate the child to keep its balance by itself.	Practice in the walking passage to increase strength and balance. Teach the child to be more independent during a walking process.	Promote self-management	Mobilization and independency.
The child is put in secure sideposition and the physiotherapist uses the weight of the child to roll over (65). Repeat the exercise a few times and then doing it in the other direction (66).	Uses the own weight to roll over from secured sideposition.	Practice to do the rolling movement more independently.	Promote self-management	Mobilization and independency.
The child is put on knees, the physiotherapist have supportive hands around the belly while the	The caregiver are supporting the child while moving forward on knees. Gives support with	Support the child to have straightened arms and to have the fingers next to the mattress.	Promote self-management	Mobilization and independency.

<p>child are moving its legs (26). The physiotherapist brings a sausage-shaped pillow (27). Also does bring some soft supportive accessibility aid and then place them on the arms of the child (28). The sausage are placed under the chest (29). The child's arms are hanging in a straight direction forward to the mattress (30). The palms next to the mattress with the fingers spread (31).</p>	<p>accessibility aid and pillow.</p>			
<p>The child is put with the belly/front side against the balance-ball (67). The ball is rolled forward and back, so much back so the feet gets flat against the mattress before the ball rolls forward again (68).</p>	<p>The feet gets flat against the mattress while rolling the ball backwards.</p>	<p>The feet gets straightened while rolling the ball backwards. Usage of ball to put the child balanced in standing position.</p>	<p>Promote self-management</p>	<p>Mobilization and independency.</p>
<p>Supporting the child to get in standing position (73). Hands around the chest (74). Gives support with the forearm beyond the chest (75). The physiotherapist is</p>	<p>Holding the child in standing position and doing walking movements with the child's extremities.</p>	<p>Give the child an opportunity to walk. Practice the strength and balance in walking positions.</p>	<p>Promote self-management</p>	<p>Mobilization and independency.</p>

standing behind the child and moving the legs step by step with the other arm (76).				
The child is placed on the sausage-pillow (15). The physiotherapist is holding one of the forearms beyond the child's arms and uses the other arm to walk with the child's legs on the upper side of the sausage-pillow (16).	Holding the child upon a sausage-pillow while doing walking movements with the child's legs.	Practice the strength to lift up the leg for more independent movements further.	Promote self-management	Mobilization and independency.
The nurse feels and squeeze on the different seat pads in the wheelchair and also refurbish the pads (56). The nurse does also investigate the harness which holds the child while using the wheelchair (57).	The nurse investigate the seat area in the wheelchair.	The nurse investigates if the wheelchair is comfortable and practical to use for the child.	Promote self-management	Mobilization and independency.
The nurse touches the footrest who is set on the wheelchair and are showing the parent that it is adjustable (17).	The nurse shows the adjustable footrest.	The nurse teach the parent the function of the footrest to promote damages on the child.	Promote self-management	Mobilization and independency.