Determinanten der Nutzung von stationären Rehabilitationsmassnahmen durch Kinder und Jugendliche: Design und Methode der rekju-Studie

Determinants of inpatient rehabilitation utilization among children and adolescents: Design and methods of the rekju-study

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Zusammenfassung

Stationäre Kinderrehabilitationen der Deutschen Rentenversicherung zielen darauf ab, eine Verschlimmerung des Gesundheitszustandes chronisch kranker Heranwachsender zu vermeiden. Trotz zunehmender Prävalenzen chronischer Erkrankungen bei Heranwachsenden zu Lasten sozial schwacher Statusgruppen sinkt die Inanspruchnahme von stationären Rehabilitationsmaßnahmen. Diese Entwicklungen können nicht alleinig durch eine verbesserte ambulante Versorgung und den demographischen Wandel erklärt werden. Ziel der Studie ist es daher, die Auswirkungen sozialer Ungleichheit auf Zugang und Inanspruchnahme stationärer Rehabilitationsmaßnahmen zu untersuchen und die zentralen Faktoren des Zugangs und der Inanspruchnahme bzw. Nichtinanspruchnahme zu identifizieren. In der rekju-Studie wird ein zweiarmiges Studiendesign, bestehend aus prospektivem und retrospektivem Studienarm, angewendet. Der prospektive Studienarm ist eine kombinierte Kinderarzt-Eltern-Befragung, wobei in Mitteldeutschland Kinderärzte bei Reha-Bedarfsermittlung (N_P) und Eltern von chronisch kranken, reha-bedürftigen Heranwachsenden (7-17 Jahre) bei Bedarfsermittlung und möglicher Antragstellung (T_1) und 3 Monate (T_2) danach befragt werden. In der retrospektiven Befragung werden Eltern von chronisch kranken Heranwachsenden (7-17 Jahre) befragt, die eine stationäre Kinderrehabilitation in einer der drei kooperierenden Reha-Kliniken absolviert haben. Es werden soziodemographische und sozioökonomische Variablen, gesundheitsbezogene Faktoren, psychosoziale und persönliche Determinanten sowie strukturelle Rahmenbedingungen der stationären Rehabilitationsmaßnahmen erhoben. Die Studie untersucht erstmalig den Zugang und die Inanspruchnahme von stationären Rehabilitationsmaßnahmen für Heranwachsende und beschreibt Heranwachsende, die die Maßnahme erreicht und beendet haben.

Schlüsselwörter: *soziale Ungleichheiten | Inanspruchnahme | Zugang | stationäre Kinderrehabilitation*

Abstract

Inpatient medical rehabilitation supported by statutory pension insurance is one appropriate measure to avoid deterioration of health status in chronically ill children. Despite the increasing prevalence of childhood chronic conditions to the detriment of socially deprived groups in Germany, the utilization of inpatient rehabilitation decreases. Improved ambulant treatment and demographic change cannot explain those developments. So far, no study has analysed the determinants of the (non-) utilization of rehabilitation therapies among children with chronic conditions. A study named "Determinants of inpatient rehabilitation utilization among children and adolescents (rekju)" was planned. The aims of the rekju-study were to investigate the effect of social inequality on application and utilization of inpatient rehabilitation among children and adolescents and to determine the main factors behind application and (non-) utilization. The rekju study is based on a prospective longitudinal and a retrospective cross-sectional substudy. The prospective study as a combined paediatrician-parents survey includes surveys of paediatricians in Central Germany (N_P) and parents of children with chronic health conditions (aged 7 to 17 years) who are questioned before (T_1) and after (T_2) completing a rehabilitation application to their statutory pension insurance. The retrospective study includes a parental survey of children (aged 7 to 17 years) who received an inpatient rehabilitation measure in one of three cooperating rehabilitation centres. The questionnaires assess sociodemographic and socioeconomic variables, health-related factors, psychosocial and personal determinants, as well as structural conditions of the rehabilitation therapy. The study is the first to analyse social inequalities in access to and utilization of inpatient rehabilitation therapies among children and adolescents while considering social inequalities during the application procedure and the consequences of approval or rejection of a rehabilitation application. In addition, a detailed description of children and adolescents who achieve and finish inpatient rehabilitations is given.

keywords: *social inequalities | utilization | access | inpatient rehabilitation | children*

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INTRODUCTION

For many decades, childhood and adolescence was considered a healthy period of life, free of disease and adverse health. Even though the health status of children and adolescents is better than ever before, recent studies have illustrated an increasing rate of new health impairments in almost all modern societies (Perrin et al., 2007). More children and adolescents suffer from chronic conditions (García García et al., 2013; Ogden et al., 2012b; Akinbami et al., 2009; Kurth & Schaffrath Rosario, 2007; Fazeli Farsani et al., 2013; Berry et al., 2010) and psychosomatic disorders (Kieling et al., 2011; Hölling et al., 2014; Fombonne, 1998; Vanaelst et al., 2012), which are often associated with co-morbidities (Ross et al., 2009; Newacheck & Stoddard, 1994; Halfon et al., 2013; Combs-Orme et al., 2002). This situation is aggravated by the unequal distribution of the burden of disease across socioeconomic groups. Disadvantaged children and adolescents generally have worse health and a greater need for health care compared to children and adolescents from more privileged backgrounds (Berry et al., 2010; Lampert & Richter, 2009; Singh et al., 2010). The findings from several health care areas have indicated that they have a lower utilization of health care services and benefit less from health care compared to children who are more privileged (Siegrist & Marmot, 2008; Bauer et al., 2008; Richter & Hurrelmann, 2009; Lampert et al., 2005; Amre et al., 2002).

These developments require increased sensitivity to the health care needs of young people, especially in the field of rehabilitation. Despite an increasing prevalence of chronic conditions, the utilization of inpatient rehabilitation has recently decreased in Germany [1]. This decline cannot be explained by advanced outpatient care and/or demographic changes. Empirical studies have not yet provided reliable data that would illustrate the various determinants of rehabilitation utilization. The rekju study aims to identify key factors associated with (non-) utilization of rehabilitation in childhood and adolescence. To evaluate the (non-) utilization of rehabilitation therapies, predisposing characteristics, enabling resources, and need factors in the form of various disease-related, psychosocial, and personal factors are investigated based on the "Behavioral Model of Health Services Use" by Andersen (Andersen, 2008, 1995). This model has often been used in studies investigating the use of health services in adulthood (Thode et al., 2005; Janßen et al., 2014; Lengerke, 2014). This study offers a more detailed approach to close the gap in research on inequalities in access to and utilization of inpatient rehabilitation therapies among children and adolescents with chronic health conditions.

[1] Deutsche Rentenversicherung Bund, 2017: Statistik der Deutschen Rentenversicherung - Reha-Antrags-/Erledigungsstatistik, verschiedene Jahrgänge. Url: http://forschung.deutsche-rentenversicherung.de/ForschPortalWeb/contentAction.do?statzrID=6235180565B1C4F4C1256AE9004F666E&chstatzr_Rehabilitation=WebPagesIIOP71&open&viewName=statzr_Rehabilitation#WebPagesIIOP71 Accessed :2017-08-03

BACKGROUND

The changing pattern of child and adolescent health

The epidemiology of health conditions in children and adolescents has changed considerably over the last decades. Several international studies have shown that children and adolescents face an increasing number of chronic conditions and psychosomatic disorders, particularly being overweight or obese (García García et al., 2013; Ogden et al., 2012a; Singh et al., 2010; Schönbeck et al., 2011), atopic diseases like asthma (Akinbami et al., 2009), as well as mental and behavioural disorders (Kieling et al., 2011; Hagquist, 2009; Berntsson & Kohler, 2001). For example, in the Netherlands and in the United States, the prevalence of being overweight or obese among boys and girls has more than doubled since 1980 (Ogden et al., 2012b; Schönbeck et al., 2011; Ogden et al., 2012a). For Germany, the data from the German Health Interview and Examination Survey for Children and Adolescence (KiGGS baseline study) showed that about 15% of boys and girls (3-17 years) were overweight and 6% of them were obese (Kurth & Schaffrath Rosario, 2007). More than a quarter of the boys and girls suffered from atopic diseases such as neurodermatitis, hay fever, or asthma (Schmitz et al., 2014). In addition, more than one fifth of the 11 to 17-year-olds showed behavioural disorders in form of symptoms of eating disorders (Hölling & Schlack, 2007). Estimates suggest that around 10% to 15% of German children and adolescents suffered from chronic conditions (Pinquart, 2013).

Socioeconomic differences in health and healthcare for children and adolescents

Several studies have shown that social inequalities are strongly linked to people's health and well-being (Richter et al., 2008; Lampert et al., 2005; Mackenbach, 2006). Although socioeconomic differences in health are less apparent in children and adolescents than in adults, studies have also found significant inequalities in health among young people (Rajmil et al., 2014). For example, in comparison to other social groups, socially disadvantaged adolescents report a greater number of multiple health complaints (Holstein et al., 2009), worse subjective health status (Moor et al., 2012), and a lower level of life satisfaction (Moor et al., 2014). This social gradient is also apparent for chronic conditions such as asthma (Thakur et al., 2013), being overweight (Magnusson et al., 2014; Miqueleiz et al., 2014; Matthiessen J et al., 2014), and mental and behavioural disorders (Weitzman et al., 2014; Reiss, 2013; Dashiff et al., 2009; Huaqing Qi & Kaiser, 2003). In contrast, atopic diseases such as bronchial asthma, neurodermatitis, and hay fever are more often found in children from higher socioeconomic groups (Lampert T. et al., 2010). Thus, disadvantaged children and adolescents have worse health status accompanied by a far greater need for health care services (Berry et al., 2010; Singh et al., 2010). However, some studies found that access to outpatient and inpatient health care services is insufficient (Larson & Halfon, 2010; Elixhauser et al., 2002; Newacheck et al., 1998). Therefore, these young people do not profit equally from these health services (Amre et al., 2002). For example, in outpatient care, children and adolescents from lower socioeconomic

groups contact medical specialists less often compared to higher socioeconomic groups (Lampert T. et al., 2010; Groholt et al., 2003). Additionally, they are more often admitted to hospitals for longer stays (Amre et al., 2002; Chang et al., 2014; Guttmann et al., 2010; Agha et al., 2007; Brownell et al., 2010), get surgeries more often (Rattay et al., 2014), and visit emergency departments more frequently (Chang et al., 2014). In addition, there is evidence that children and adolescents from socially disadvantaged families use preventative care (Allin & Stabile, 2012), for example, screening examinations, less often (Rattay et al., 2014; Langness, 2008). International evidence on adult rehabilitation indicates that access and utilization of rehabilitation largely depends on social status. Studies in the field of cardiovascular diseases show that persons from lower socioeconomic groups have less access to rehabilitation therapies (Brown et al., 2009; Grace et al., 2008; Clark et al., 2013; Suaya et al., 2007). In the UK, disadvantaged patients were just as often invited to cardiac rehabilitation after myocardial infarction as were their more privileged counterparts. However, they were less likely to start or complete therapies compared to more privileged patients (Cierpka, 2008; Schneewind, 2010). For Germany, studies have revealed that the utilization of rehabilitation therapies is largely unaffected by socioeconomic status. Altenhöner and colleagues (2005) have shown that groups with a higher social status are less likely to use rehabilitation measures after myocardial infarction (Altenhöner et al., 2005). In the field of oncology rehabilitation, Geyer and Schlanstedt-Jahn (2012) found no evidence of inequalities in the utilization of inpatient rehabilitation among women with breast cancer (Geyer & Schlanstedt-Jahn, 2012). Nonetheless, members from lower social groups tend to have less information about the purpose and process of the rehabilitation therapy as well as the goals of the rehabilitation (Deck, 2008, 2012). Deck (2008, 2012) also found that rehabilitants from lower status groups enter the rehabilitation care system with stronger health impairments and leave it with less favourable results compared to rehabilitants with higher social status (Deck, 2008, 2012). Strong social inequalities have also been found for the successful reintegration into working life (Hofreuter-Gätgens et al., 2013; Hofreuter et al., 2008).

Children's rehabilitation in Germany

Children's inpatient rehabilitation therapy is a suitable approach to sustainable prevention of a deterioration of health. In Germany, the statutory health insurance institution (Gesetzliche Krankenversicherung) and the statutory pension insurance institution (Gesetzliche Rentenversicherung) are equally responsible for children's inpatient rehabilitation therapies. Inpatient rehabilitation of children and adolescents is financed by the statutory pension insurance institution through the insurance of the parents or legal guardians if later earning capacity of the children and adolescents is promoted. The elimination of significant risks to health or significant improvements of impaired health are also important factors. This is generally assumed for diseases such as allergies, psychosomatic disorders, and behavioral disorders as well as respiratory, skin, and musculoskeletal diseases [2]. If legal insurance parameters of parents or legal guardians for the entitlement of inpatient rehabilitation are fulfilled, parents must – together with the paediatrician – fill out an application form in order to obtain inpatient rehabilitation. The application must contain the application form for rehabilitation completed by the parents as well as a structured medical report in which the physician in charge indicates the need for rehabilitation. Parents submit the forms to the pension insurance institution or a service centre of rehabilitation. Generally, the pension insurance institution reviews the application for children's inpatient rehabilitation within four to six weeks. The parents get approval or refusal by mail. In the case of refusal, they can directly object to the decision within one month and give respective reasons. In 2012, 67,207 applications for children's inpatient rehabilitation were registered in Germany [3]. A total of 36,850 applications have been approved by the pension insurance institution in 2012 and 32,103 children´s inpatient rehabilitations took place in 2012 [4],[5].

The current study

The number of inpatient rehabilitation therapies financed by the German statutory pension insurance for children and adolescents in Germany has decreased recently from 36,254 completed rehabilitation therapies in the year 2009 to 30,812 in 2013 [6]. To explain this decline, better outpatient care, improved outpatient treatment and demographic changes are discussed. However, these factors do not fully explain the decrease. Previous studies on inpatient children's rehabilitation focused on the evaluation of the structure (Hoffmeister et al., 2011), effect (Farin et al., 2012; Farin & Jäckel, 2011; Deck & Röckelein, 1999)), and sustainability (Hofreuter-Gätgens et al.,

[2] GBE-Bund (2016): Abgeschlossene stationäre Leistungen zur Kinderrehabilitation in der Gesetzlichen Rentenversicherung. Url: http://www.gbe-bund.de/oowa921-install/servlet/oowa/aw92/dboowasys921.xwdevkit/xwd_init?gbe.isgbetol/xs_start_neu/&p_aid=3&p_aid=7574471&nummer=695&p_sprache=D&p_indsp=-&p_aid=61060938 Accessed :2017-08-03

[3] Deutsche Rentenversicherung Bund, 2017: Statistik der Deutschen Rentenversicherung - Reha-Antrags-/Erledigungsstatistik, verschiedene Jahrgänge. Url: http://forschung.deutsche-rentenversicherung.de/ForschPortalWeb/contentAction.do?statzrID=FF85DB40A5048295C1256AE900411905&chstatzr_Rehabilitation=WebPagesIIOP47&open&viewName=statzr_Rehabilitation#WebPagesIIOP47 Accessed :2017-08-03

[4] see footnote 1

[5] Deutsche Rentenversicherung Bund, 2017: Statistik der Deutschen Rentenversicherung - Reha-Antrags-/Erledigungsstatistik, verschiedene Jahrgänge. Url: http://forschung.deutsche-rentenversicherung.de/ForschPortalWeb/contentAction.do?statzrID=A94BB512B54C82B1C1256AF8002E89C3&chstatzr_Rehabilitation=WebPagesIIOP23&open&viewName=statzr_Rehabilitation#WebPagesIIOP23 Accessed :2017-08-03

[6] see footnote 5

2013; Ravens-Sieberer et al., 2007; Brzoska et al., 2011; Bauer & Petermann, 2010) of rehabilitation therapies, especially for widespread chronic diseases, such as bronchial asthma, obesity, diabetes and psychological or behavioural disorders. So far, few studies have analysed whether there are inequalities in the (non-) utilization of rehabilitation therapy in childhood and adolescence despite equal access in Germany (Wolf et al., 2007; Vogel, 2007). This study protocol describes the design and method of the rekju-study, which analyses the determinants of the utilization and application of inpatient rehabilitation in Central Germany.

MATERIAL AND METHODS

Subject and aims

The rekju-study was conducted in three federal states of Germany (Saxony, Saxony-Anhalt and Thuringia) with the aim of investigating determinants of (non-) utilization of inpatient rehabilitation therapies among children and adolescents with chronic health conditions. Special attention was given to the effect of social inequalities on various disease-related, psychosocial and personal factors. The conceptual model (see Figure 1) illustrates the defined objectives, including the selected variables (see below). Using a combined longitudinal and cross-sectional approach, the following objectives have been defined:

(i) To assess the effect of social inequalities on the application and (non-) utilization of rehabilitation therapies among children and adolescents in Central Germany (arrow 1),

(ii) to identify disease-related, psychosocial and personal factors which affect the application and (non-) utilization of rehabilitation (arrow 2) and

(iii) to analyse the disease-related, psychosocial and personal factors in application and (non-) utilization that mediate the effect of social inequalities on application and (non-) utilization (arrow 3).

Finally, we also considered the structural conditions (arrow 4) of rehabilitation therapies (i.e., approval criteria of the application), which are likely to influence access and utilization.

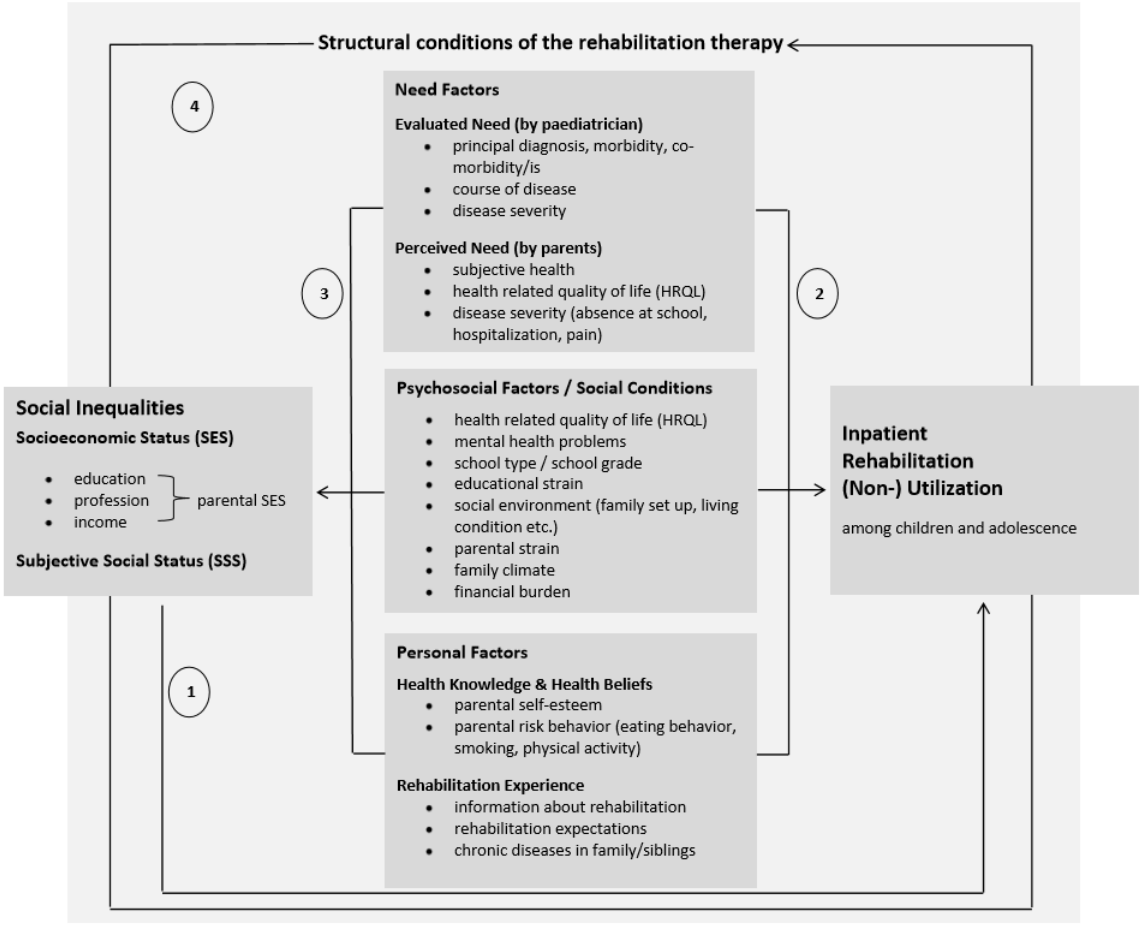

Fig. 1: Conceptual Model

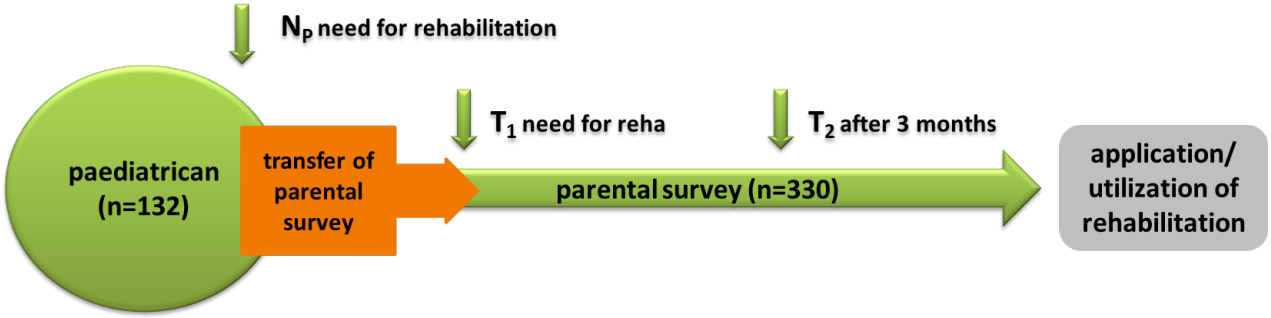

Fig. 2: Prospective Approach

To answer the research questions, two different approaches have been applied: a prospective and a retrospective approach. The survey was conducted from April 2012 to March 2014.

The prospective approach: Design, focus, sample and recruitment

Design and focus: The prospective substudy is designed as a longitudinal survey of parents with two measurement points and a cross-sectional survey of paediatricians. In the longitudinal survey, parents of children with chronic health conditions (aged between 7 and 17) complete a standardized questionnaire before (T_1) and three months after submitting the rehabilitation application (T_2) to the German statutory pension insurance for Central Germany ("DRV Mitteldeutschland") or Federation of German Pension Insurance Institutions ("DRV Bund"). The focus is to examine whether parents submit an application for inpatient rehabilitation by the "DRV Mitteldeutschland" or "DRV Bund" (T_1) after the paediatrician assesses the need for inpatient rehabilitation. An additional aim is to assess whether the statutory pension insurance institution approved the application for inpatient rehabilitation and whether the parents appeal the decision if the application is not granted. Finally, the survey investigates whether the child/adolescent utilizes the approved rehabilitation therapy (T_2). The focus of the parental survey is on sociodemographic and economic variables as well as on disease-related, psychosocial and personal factors. In addition the structural conditions of inpatient rehabilitation were surveyed. Access to the parents was obtained via paediatricians settled in the federal states of Saxony, Saxony-Anhalt and Thuringia. The paediatricians will complete a standardized questionnaire (N_P). The focus here is to examine whether the evaluated need for rehabilitation therapy, as determined by paediatricians (via indicators like disease severity, co-morbidities, course of disease, etc.), is related to the approval of the application for inpatient rehabilitation by the "DRV Mitteldeutschland" or "Bund".

Sample and Recruitment: The target sample size is 330 parents and their child. The parents of rehabilitation recipients will be consecutively recruited from the three cooperating inpatient rehabilitation centres that utilise the German statutory pension insurance for Central Germany or Federation of German Pension Insurance Institutions. The clinic staff will distribute the questionnaire along with the release documents to the parents at the end of the rehabilitation. The parents will complete the questionnaire at home and send it to the research team in prepaid return envelopes.

Incentives

A number of strategies will be applied to maximize participation: In the prospective approach leaflets will be created (supporting information for parents), participating paediatricians will get Amazon gift cards (10 Euros) and a lottery for participating parents will be used to increase response and retention. The main prize is a "Nintendo Wii Mini" console including the game "Wii sports". In addition, in the retrospective approach small incentives (1 Euro per returned questionnaire) are offered to increase participation in the retrospective investigation.

Ethical issues

The Ethics Committee of the University of Halle-Wittenberg approved the study. Data protection is strictly followed (e.g., anonymous/pseudonymized data, PCs with restricted access and password protection, data kept under locked storage, destruction of raw data once the evaluation is complete). Fully informed and written consent are obtained from all participants. Moreover, participants are informed of their right to withdraw without explanations or adverse consequences at any time. To ensure that the general statutory requirements for data protection are sufficiently considered, the data protection plan is also approved by pension insurances "DRV Mitteldeutschland" and "DRV Bund".

Variables and Instruments

The questionnaires for the paediatricians and parents contain questions on sociodemographic and socioeconomic variables, disease-related, psychosocial and personal factors as well as structural conditions of the rehabilitation therapy.

Sociodemographic and socioeconomic variables: The rekju-study collects basic information on the age and gender of the child/adolescent, family structure, school type and grade. The socioeconomic status (SES) of the parents is determined by using the Winkler Index (Winkler & Stolzenberg, 1999), which

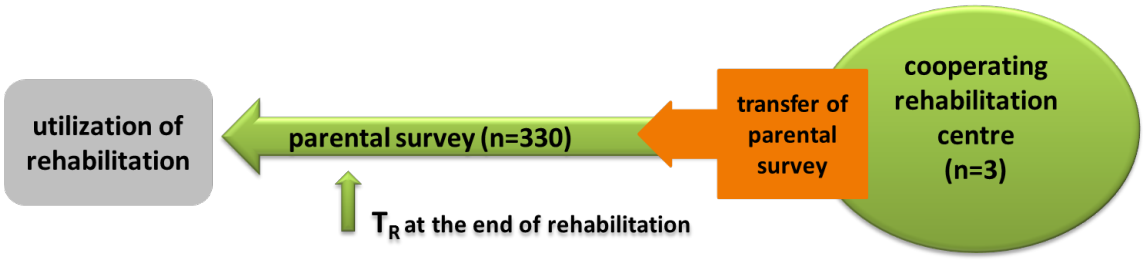

Fig. 3: Retrospective Approach

contains information about education, profession and income of the parents. In addition, we collect information about subjective social status (SSS) using the MacArthur Scale (Giatti et al., 2012).

Need factors (disease-related factors): Questions on health and health care issues of children and adolescents with chronic conditions are used in the paediatrician questionnaire as well as the parental questionnaires. The need for rehabilitation, as determined by paediatricians, includes information about the principal diagnosis, the course of disease, existing comorbidity and disease severity (Medical report for request for children's rehabilitation (DRV)). The need for rehabilitation, as perceived by parents, will be assessed by obtaining information about health-related quality of life (HRQoL). We will use the KIDSCREEN-27 instrument, which covers five dimensions (physical well-being, psychology well-being, autonomy and parent relations, social support and peers, school environment) (Ravens-Sieberer et al., 2008). Furthermore, we will ask parents about disease severity of the child via indicators such as current hospitalization, pain and absence from school.

Psychosocial Factors / Social Conditions: Mental health problems in children and adolescents constitute health impairments with major implications regarding individual wellbeing as well as daily and social functioning. In addition, these problems often burden the whole family of the individual. To examine these issues, we will administer the Strengths and Difficulties Questionnaire (SDQ) by Goodman (Ogden et al., 2012b; Goodman, 2006), a brief screening instrument, to the parents to assess emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems and pro social behaviour in their children. Family climate will be assessed using an adapted version of the 12-item family climate scale developed by Schneewind et al. (Schneewind K, 1985).

Personal factors: Information on health knowledge and health beliefs will be gathered via the parental questionnaire. The measures include parental self-esteem and risk behaviour, such as tobacco consumption and unhealthy eating behaviour (Kurth, 2007). In addition, the parents will be asked about their own chronic diseases, previous rehabilitation experience, knowledge about the structural conditions of rehabilitation therapies and rehabilitation objectives.

Structural conditions: In addition to disease-related, personal and psychosocial factors, the structural conditions of the rehabilitation (i.e., insurance framework conditions) are also important for rehabilitation utilization. Rehabilitation therapies are granted to children and adolescents only when the criteria for access defined by the pension insurance are met. Therefore, the questionnaire assesses approval or rejection of the applications and the types of rehabilitation and asks about accompanying persons, expected beginning of rehabilitation, expected duration of rehabilitation and proposed approach if the application is rejected.

EXPECTED RESULTS

So far, most studies focused on structure, effects and sustainability of inpatient rehabilitation of children and adolescents. The rekju-study is among the first to analyse the determinants of the application for and (non-) utilization of inpatient rehabilitation of children and adolescents with chronic health conditions while considering social inequalities. The study focuses on disease-related, psychosocial and personal factors in addition to structural conditions of inpatient rehabilitation. Two different approaches are applied, a longitudinal prospective substudy and a cross-sectional retrospective substudy. The prospective substudy will be conducted as a combined paediatrician-parent study which addresses parents of chronically sick children and adolescents in need of inpatient rehabilitation. The retrospective substudy will be conducted by surveying parents at the end of the inpatient rehabilitation of their children in one of three cooperating rehabilitation centres. This study design with two different approaches is chosen because of the challenge to identify those children who need rehabilitation but do not receive it. In general, the main challenge in care research is to address those people who have a need for special medical services and do not receive those medical services. The two way approach provides insight into the process of application for, access to and utilization of inpatient rehabilitation. Descriptive information will be obtained about those children who have a need of rehabilitation and those children which receive it, also if the comparison of those groups is limited in the informative value. The rekju-study explores the utilization of inpatient rehabilitation while considering social inequalities during the application procedure and the consequences of approval or rejection of the rehabilitation

application. At the same time, the study will provide a detailed description of children and adolescents who completed inpatient rehabilitation and assessed various characteristics and perceptions of parents and paediatricians (prospective substudy). The assessment of the paediatricians is important because of their gatekeeper function in inpatient rehabilitation. Furthermore, the study will collect information from parents and paediatricians on the way to inpatient rehabilitation and characterize children and adolescents who complete inpatient rehabilitation. Thus, not only the application process for inpatient rehabilitation but also the utilization of inpatient rehabilitation in Central Germany will be examined. The study attempts to gather new information about social inequalities in access to and utilization of inpatient rehabilitation therapies among children and adolescents. The results of the study contribute to understanding the access and utilization of inpatient rehabilitation and the basic mechanisms and determinants of utilization in Central Germany. This is important because there has been an increasing rate of chronic conditions among children and adolescents, yet applications for inpatient rehabilitation have been decreasing.

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