

Pathways to Care

Help-seeking for child and adolescent mental health problems

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Pathways to Care

Help-seeking for child and adolescent mental health problems

Wegen naar zorg

Het zoeken van hulp voor emotionele problemen en gedragsproblemen van jeugdigen
(met een samenvatting in het Nederlands)

PROEFSCHRIFT

ter verkrijging van de graad van doctor aan de Universiteit Utrecht, op gezag van de Rector Magnificus, Prof. dr. W. H. Gispen, volgens het besluit van het College voor Promoties, in het openbaar te verdedigen op vrijdag 13 mei 2005, des middags te 16.15 uur

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Prof. dr. J. M. Bensing
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'In a perfect world, the mere presence of symptoms would be sufficient for people to desire and obtain treatment. Since this is not the case, knowing who receives care or who has a propensity to seek care informs us about what happens to people with mental health problems' (Pescosolido & Boyer, 1999, p. 395).

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1

Introduction

Introduction

The study described in this thesis addresses the process of help-seeking for child and adolescent psychopathology in professional and informal service settings, and variables influencing this process. This study was part of the Second Dutch National Survey of General Practice, which was conducted between April 2000 and January 2002. Additional data were collected from parents and children between January 2001 and July 2003. This first chapter presents a short overview of the prevalence of child and adolescent psychopathology, and the structure of the Dutch mental health care system. The study objective and main research questions are described within the frame of the theoretical model behind this study. After discussing the design of the study, the chapter ends with a description of the outline of this thesis.

Background

Child emotional and behavioural problems in the community

Approximately one quarter of the Dutch population (four million people) is under 20 years of age (Centraal Bureau voor de Statistiek, 2005). The majority of these youngsters are doing well. A recent international survey showed that Dutch adolescents generally regard their lives as more positive than their peers in other European countries and North America. They have few psychosomatic complaints compared to youngsters in other countries, most of them live in stable family conditions and they tend to have relatively large networks of friends (Currie et al., 2004).

Still, a minority of children and adolescents in the general population fare less well. They show emotional or behavioural problems, which impair their everyday functioning and well-being. Prevalence rates for these problems are comparable over countries (Crijnen et al., 1997) and range from 17 % to 26 % for school-aged children (Briggs-Gowan et al., 2000; Costello, 1989; Lavigne et al., 1996; Verhulst et al., 1985), with 7 % being rated as severely disturbed by clinicians (Verhulst et al., 1985). Comparable prevalence rates have been reported for adolescents (Fergusson et al., 1993; McGee et al., 1990; Verhulst et al., 1997a; Whitaker et al., 1990).

Despite the fact that these problems show considerable persistence (Verhulst and Van der Ende, 1995) and can cause impairment in children's lives, they are rarely brought to the attention of general practitioners (GPs) (Foets et al., 1996; Ford et al., 2003) and mental health

care professionals (Burns et al., 1995; Flisher et al., 1997; Leaf et al., 1996; Pavuluri et al., 1996; Saunders et al., 1994; Sourander et al., 2001; Verhulst and Van der Ende, 1997). Early identification and treatment of these problems may, however, be important for preventing persistence into late adolescence and adulthood (Angold et al., 2000). Therefore, insight into the help-seeking process for child and adolescent psychopathology, and possible barriers within this process, is needed. Before turning to the theoretical models of the help-seeking process used in this study, a short overview of the structure of the Dutch health care system for children and adolescents with emotional and behavioural problems is presented.

Health care for child emotional and behavioural problems in the Netherlands

Almost all Dutch inhabitants are registered within general practices. These practices are accessible to all and close to the community. Because every inhabitant is, in principle, covered by a private or public health insurance, major financial constraints to the availability of care are lacking, as opposed to the situation in for instance the USA. General practice is the formal point of entry into the Dutch mental health care system, and the GP is supposed to function as gatekeeper. This indicates that, formally, children are able to enter mental health care only after referral by their GP. Any study on child mental health care utilisation in the Netherlands should therefore include the GP and his role in the help-seeking process.

Dutch mental health care is part of a larger system of youth welfare work, aimed at children and adolescents with psychological, social or pedagogical/educational difficulties, their parents and other caregivers. Apart from child mental health care, this system consists of youth assistance work, judicial youth care, and care for youth with mild mental disabilities. This thesis is focused at the child mental health care part of Dutch youth welfare work.

In the Netherlands, child mental health care comprises institutes for ambulatory mental health care, psychiatric out-patient and in-patient clinics, which provide diagnostic assessment, treatment, and assistance to children or adolescents and their caregivers. In 2002, the capacity for part-time child mental health care consisted of 508 places, and 1,380 beds for clinical care (excluding admissions to psychiatric departments of academic hospitals) were available. The latter figure includes 137 beds

for which the financial means could also be used for other purposes, such as part-time or ambulatory care (College Tarieven Gezondheidszorg, 2003). Based on a population of approximately four million children, this corresponds with 0.13 part-time places and 0.35 clinical beds per 1000 children. The majority of care provided within Dutch child mental health care is ambulatory (67 % in 2002). Twenty-one percent of care is clinical, and 12 % is part-time (Van den Berg et al., 2004a).

As in many countries, demand for child mental health care in the Netherlands exceeds supply, as can be seen from the numbers of children on waiting lists. Table 1.1 presents these numbers for various stages in the process of getting treated. The first stage, the enrolment stage, refers to the period between enrolment in the mental health care system and intake. The diagnostic stage refers to the period between intake and treatment recommendation, and the third stage, the pre-treatment stage, includes the period of time between recommendation and first treatment contact.

Table 1.1 Waiting list data for Dutch child mental health care in 2002

Numbers of children waiting	Absolute Per 1000 children	
– in enrolment stage	4,072	1.0
– in diagnostic stage	7,217	1.8
– in pre-treatment stage	3,446	0.9
<hr/>		
Length of waiting period (in weeks)		
– in enrolment stage	8	
– in diagnostic stage	6	
– in pre-treatment stage	18	

Data derived from waiting list registration (Taskforce Aanpak Wachlijst, 2002)

At present, changes are taking place within the Dutch system of youth welfare work, following the Law on Youth Welfare Work (Ministerie van Volksgezondheid, Welzijn en Sport and Ministerie van Justitie, 2004). This law aims to strengthen the positions of parents and children within the youth welfare system, to improve the quality of youth welfare work and to increase transparency in its structure. The law officially came into effect on the 1st of January 2005. From this date onwards, Youth Welfare Work Offices are the only entrance points into all youth welfare work. These offices assess each request for help and determine whether care is needed, and, if so, which type of care is appropriate. Thus, youth welfare offices form the link between detectors of child problems (e. g. parents, GPs, youth health care workers, school personnel) and providers of care

(e.g. child mental health care, judicial youth care). In principle, GPs are no longer supposed to refer children to mental health care directly. The sole exception to this rule is when the presence of a serious psychiatric disorder is suspected by the GP.

The study on which this thesis is based took place before the Law on Youth Welfare Work was implemented. At this stage, it is not clear which consequences these rather drastic changes in the structure of youth welfare work will have on the process of help-seeking for child and adolescent psychopathology.

Theoretical models of the help-seeking process

In past decades, several authors have formulated models to describe the process of help-seeking (Aday and Andersen, 1974; Andersen, 1995; Andersen and Newman, 1973; Fischer et al., 1983; Goldberg and Huxley, 1980; 1992), but few of these models specifically apply to help-seeking for child and adolescent psychopathology. Although the models differ in content and emphasis, they have some key elements in common. Firstly, help-seeking is assumed to be a stage-like process. An important example in this respect is the model by Goldberg and Huxley (1980; 1992), who distinguished between five levels at which mental health problems could be manifest: (a) in the community, (b) among attenders of primary care, (c) as recognised by primary care providers, (d) among individuals referred to ambulatory mental health care, and (e) among those admitted to mental hospitals. To move from one level to the next on the pathway to specialist mental health care, individuals are assumed to pass through filters, which separate the five subsequent levels from each other. Since these filters are selectively permeable, some individuals are more likely to pass through than others. The filters refer to (a) problem recognition by the individual and his decision to consult a GP, (b) problem recognition by the GP, (c) referral to mental health care by the GP, and (d) admission to in-patient mental health care (figure 1.1). Because this model is based on the British health care system, which is comparable to the Dutch system with respect to the gatekeeping function of GPs, a central role in the help-seeking process is attributed to the GP.

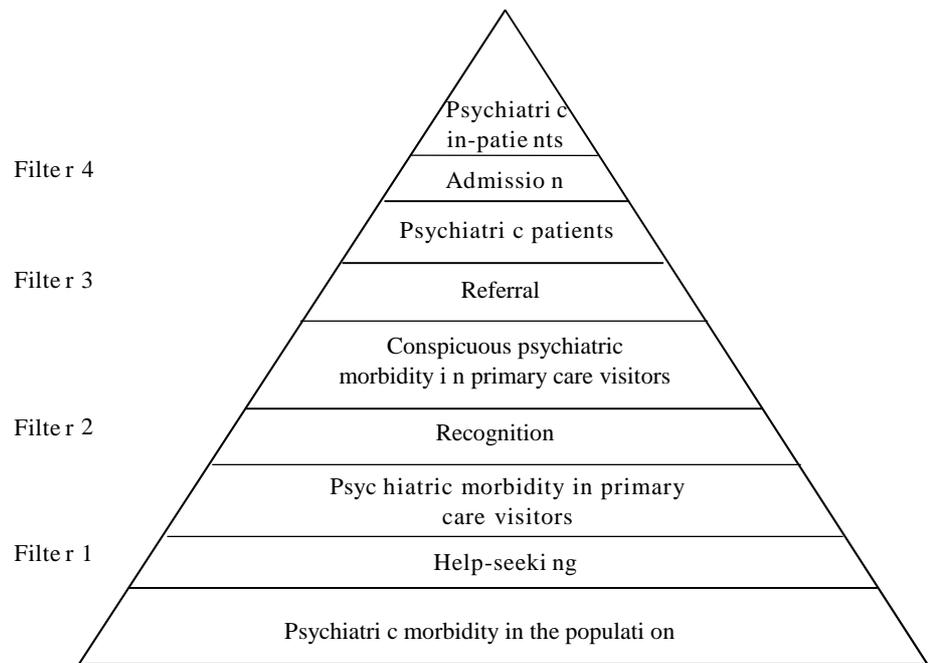


Figure 1.1 The process of help-seeking for mental health problems (Goldberg and Huxley, 1980; 1992)

This model was adapted by Verhulst and Koot (1992) to make it applicable to the process of help-seeking for mental health problems in children and adolescents. What differentiates help-seeking for children and adolescents from help-seeking for adults is the fact that not merely the child or adolescent himself, but also his parents and possibly other caregivers are involved. The first filter in the help-seeking model therefore refers to parents' recognition of problems in their child and their initiative to consult the GP for these problems.

Several investigators have expanded this general model. Logan and King (2001), for example, introduced parents' initial awareness of child problems as a stage preceding parental problem recognition. Costello et al. (1998) stressed the importance of including the broader social context in a model on help-seeking for child psychopathology.

A second central element of help-seeking models is the assumption that progress on the pathway to specialist care is influenced by other

variables, which can either obstruct or facilitate progress through the various help-seeking stages. Not only characteristics of the child or adolescent, but also characteristics of the broader environment (parents, family, social context) are hypothesised to influence the help-seeking process.

The filters in the model by Goldberg and Huxley represent selection processes that determine for which individuals help will be sought and at which level treatment will be obtained. Therefore, applying this model to the process of help-seeking for child and adolescent psychopathology by taking into account recent adaptations to the model (Costello et al., 1998; Logan and King, 2001; Verhulst and Koot, 1992), or - more specifically - investigating the filters and their correlates, will provide useful information about variables enhancing or obstructing progress on the pathway to care. The central research questions of this thesis, which will be described in the following paragraph, focus on these filters.

In addition to studying the pathway to professional care provided by GPs and mental health care specialists, this study also explicitly included informal sources of care, because parents more easily turn to friends, relatives and teachers than to more formal service providers for advice concerning child emotional or behavioural problems (Cohen et al., 1991; Pavuluri et al., 1996). Moreover, factors influencing professional help-seeking are not necessarily the same as those influencing informal help-seeking (Rickwood and Braithwaite, 1994).

Objective and research questions

The central aim of this study was to increase understanding of the process of help-seeking for child and adolescent emotional and behavioural problems. Using the help-seeking models described above as central framework, the following research questions were addressed in the present study:

1. What are determinants of various stages in the process of help-seeking for child and adolescent emotional and behavioural problems? Which variables in child, family, and context are associated with:
 - a. parents' need for help for their children's emotional and behavioural problems?
 - b. help-seeking in general practice for children's emotional and behavioural problems?

- c. identification of children's emotional and behavioural problems by the GP?
 - d. help-seeking from mental health services for children's emotional and behavioural problems?
 - e. help-seeking from informal sources of care (teachers and friends or relatives) for children's emotional and behavioural problems?
2. To what extent are parental problem recognition and utilisation of professional and informal services associated with change in children's emotional and behavioural problems over the course of one year?

Study design

This study consisted of three stages, which are summarised in figure 1.2. An overview of variables and measures included in this thesis is presented in table 1.2. A more detailed description of the variables and instruments is given in the following chapters.

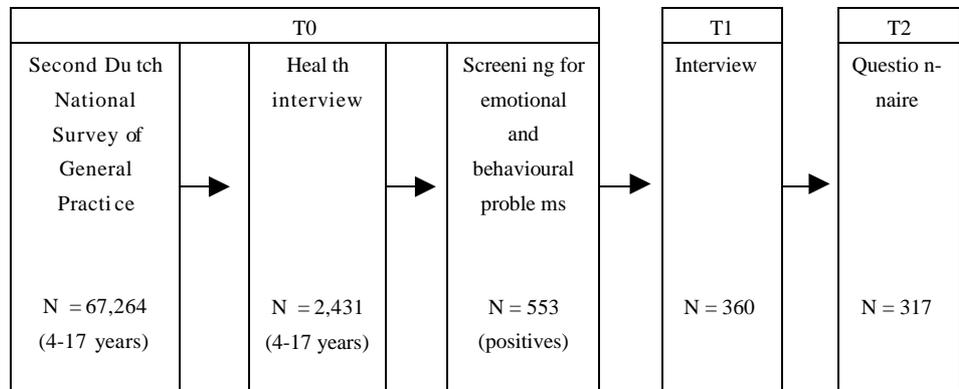


Figure 1.2 Study design and numbers of respondents

Data for the first stage were derived from the Second Dutch National Survey of General Practice, which examined morbidity and treatment in a representative sample of 104 Dutch general practices with 195 GPs and 385,461 listed patients, of whom 67,264 were between 4 and 17 years of age. Data were obtained in the period between April 2000 and January 2002 (Westert et al., in press). The participating GPs were representative for all Dutch GPs with respect to age, gender, region of residence, and urbanisation level. Single practices were underrepresented (Westert et al., in press). The patients listed in the participating general practices were

comparable to the general Dutch population with respect to age, gender, and type of health insurance (Westert et al., in press).

During one calendar year, all contacts with patients in the participating general practices were recorded, resulting in approximately 1.6 million contacts. Morbidity presented to the GP during these contacts was electronically registered using the International Classification of Primary Care (ICPC; Lamberts et al., 1993). Morbidity data of eight practices were excluded because of incomplete data collection.

A random sample of the practice population ($N = 12,699$) participated in an extensive health interview survey, for which the total response rate was 64.5%. The interviews were carried out between December 2000 and December 2001, spread over a whole year to avoid seasonal patterns. Participants were comparable to the practice population with respect to gender, age, and place of residence (Westert et al., in press). Among them were 2,431 children and adolescents aged 4 to 17 years. For children aged 4 to 11 years, a proxy interview was administered to one of the parents, whereas adolescents (12 to 17 years) answered the questions themselves. The interview contained sections concerning sociodemographic characteristics, health indicators, health care utilisation, life style, social context characteristics, and opinions about health care.

As part of the health interview, children and adolescents were screened for the presence of emotional and behavioural problems by means of the Child Behavior Checklist (CBCL; Achenbach, 1991a), the Youth Self-Report (YSR; Achenbach, 1991c), and the Teacher's Report Form (TRF; Achenbach, 1991b). Children and adolescents who scored in the borderline or clinical range of the CBCL, TRF, or YSR Total Problems scale ($T \geq 60$) were selected for participation in the next stage of the study (T1). Of the total number of 553 children and adolescents who were selected, 360 (65.1%) agreed to participate. Respondents and non-respondents did not significantly differ in age, gender, CBCL and TRF Total Problems scores, but participating parents were more highly educated (Mann-Whitney U -test; $p < .05$) and participating adolescents had lower YSR Total Problems scores (T -test; $p < .05$).

In the next stage (T1), a standardised psychiatric interview, the National Institute of Mental Health Diagnostic Interview Schedule for Children, version 4 (DISC-IV; Shaffer et al., 2000), was administered to the child's primary caregiver to obtain psychiatric diagnoses. The youth version of

this instrument was used to obtain adolescent self-report data of the presence of psychiatric symptoms. In addition to this, parents were interviewed about child and family characteristics, problem recognition, and help-seeking for child emotional or behavioural problems in the preceding twelve months.

After one year (T2), parents were contacted again by mail. They were asked to complete the CBCL and a questionnaire that contained questions comparable to the ones in the help-seeking interview at T1. Children aged 12 years and older were asked to fill in the YSR. In total, 317 of the original 360 participants responded (88.1%). Respondents and non-respondents did not significantly differ in gender, age, parental education level, CBCL Total Problems scores, and contact with professional or informal service providers at T1.

Table 1.2 Variables and measures included in this thesis

Database	Variables	Measures	
T0	Contact registration	Contact with general practitioner Diagnoses for: - psychological problems (P-codes) - social problems (Z-codes)	ICPC
	Health interview	Child gender Child age Child emotional and behavioural problems: - parent report - teacher report - adolescent report Child school problems Child chronic physical problems General impression of child health Parental mental health problems Family constellation (single or two-parent family) Parental education level Family income Type of insurance	CBCL ^a TRF ^a YSR ^a GHQ ^b

- table 1.2 continues -

- table 1.2 continued -

Database	Variables	Measures
T1 Psychiatric interview	Psychiatric symptoms and impairment:	
	- parent report	DISC-IV-P
	- adolescent report	DISC-IV-Y
Help-seeking interview	Parental problem recognition	
	Child special education	
	Mental health service use by relative	
	Family functioning	FAD ^b
	Presence of siblings	
	Changes in family structure	
	Help-seeking for child emotional/behavioural problems:	
	- in general practice	
	- from mental health services	
	- from friends or relatives	
T2 Questionnaire	Emotional and behavioural problems:	
	- parent report	CBCL ^a
	- adolescent report	YSR ^a
	Parental problem recognition	
	Child special education	
	Mental health service use by relative	
	Changes in family structure	
	Help-seeking for child emotional/behavioural problems:	
	- in general practice	
	- from mental health services	
- from friends or relatives		

Note: ICPC = International Classification of Primary Care; CBCL = Child Behavior Checklist; TRF = Teacher's Report Form; YSR = Youth Self-Report; GHQ = General Health Questionnaire; DISC-IV-P = Diagnostic Interview Schedule for Children, parent version; DISC-IV-Y = Diagnostic Interview Schedule for Children, youth version; FAD = McMaster Family Assessment Device.

^a See Appendix 1

^b See Appendix 2

Chapter 3 of this thesis is based on data obtained in a previous study on psychopathology and mental health service use, conducted by the Department of Child and Adolescent Psychiatry of the Erasmus MC-Sophia Children's Hospital in Rotterdam, the Netherlands. For a detailed description of sample selection and methodology of this study, see Verhulst et al. (1997a).

Outline of the thesis

First, a literature study was conducted to investigate which factors in the child, parents, family and broader context were associated with help-seeking for child and adolescent psychopathology. *Chapter 2* of this thesis presents the results of this literature review, which was focused on determinants of problem recognition by parents and adolescents, help-seeking, and problem recognition by the GP.

In *chapter 3*, parent, family, and adolescent variables are investigated as correlates of adolescent mental health service utilisation, self-perceived need for help, and unmet need. This chapter is based on data from the Department of Child and Adolescent Psychiatry of the Erasmus MC-Sophia Children's Hospital in Rotterdam, the Netherlands.

Using theoretical models of the help-seeking process and previous findings, in *chapter 4*, a comprehensive model of the help-seeking process for child psychopathology is formulated, which includes several help-seeking stages as well as child, family, and context variables as possible determinants of these stages. This model is tested by means of structural equation modelling.

In *chapter 5*, structural equation modelling is used to investigate a path model concerning stages and actors involved in the process of help-seeking for adolescent internalising psychopathology.

Chapter 6 presents general population data on GP contacts for children and adolescents with psychological problems, and diagnoses of psychological problems by the GP. Various child and family characteristics are investigated as possible correlates of GP consultation and GP psychological diagnoses.

Chapter 7 addresses the association of parental problem recognition and utilisation of professional and informal services with change in child emotional or behavioural problems over the course of one year.

Finally, in *chapter 8*, the main findings of this study are summarised and discussed. Methodological reflections, recommendations for future research, and implications for clinical practice are presented.

2 Help-seeking for emotional and behavioural problems in children and adolescents

A review of recent literature

This chapter was published as:

Zwaanswijk, M., Verhaak, P. F. M., Bensing, J. M., Van der Ende, J., Verhulst, F. C. (2003). *Eur Child Adolesc Psychiatry*, 12, 153-161.

Abstract

In order to understand the discrepancy between rates of child and adolescent psychopathology and rates of mental health service use, variables influencing the help-seeking process need to be investigated. The present article aims to extend and refine previous findings by reviewing 47 recent empirical studies on parental and adolescent problem recognition and help-seeking, and problem recognition by the general practitioner. Several variables (child age, the presence of medical and school-related problems, informal help-seeking, past treatment of parents or relatives, family size, and type of maltreatment) were discovered to influence parental/adolescent problem recognition and/or help-seeking, while refinements were found for the effects of type of psychopathology, child gender, adolescent attitudes and personality, parental psychopathology, social support, and sociodemographic variables. Although recent studies uncovered several determinants of problem recognition by the GP (child gender, age, past treatment, academic problems, family composition, life events, type of visit, and acquaintance with child), this aspect of the help-seeking pathway remains relatively uncharted, and therefore needs to be the focus of future research.

Keywords: help-seeking, child and adolescent psychopathology, problem recognition, mental health services

Introduction

Studies have repeatedly shown that a substantial number of children and adolescents suffer from emotional or behavioural problems (Brandenburg et al., 1990; Verhulst et al., 1997a). Although these problems can hamper everyday functioning and well-being, only a minority of disordered children and adolescents receive help from mental health services (Burns et al., 1995; Flisher et al., 1997; Leaf et al., 1996).

In order to improve our understanding of this discrepancy, it is important to investigate factors that influence the process leading to receiving professional help. The model proposed by Verhulst and Koot (1992) provides us with a useful framework in this respect. Following Goldberg and Huxley (1980; 1992), the help-seeking process for child and adolescent psychopathology is described as consisting of five levels, each separated by a filter. The filters refer to (1) parental recognition of the problematic nature of the child's behaviour and the subsequent decision to consult a general practitioner (GP), (2) recognition of the child's problems by the GP, (3) the GP's decision to refer the child to psychiatric

care, and (4) the psychiatrist's decision to refer the child from out-patient to in-patient psychiatric care. Several variables in the child, parents, family, GP and environment were hypothesized to influence these filters (table 2.1).

Although many researchers have acted upon the request for more research in this field, to our knowledge these findings have not been systematically reviewed in the decade following Verhulst and Koot's work. The present article will describe recent results concerning determinants of help-seeking for child and adolescent psychopathology, focusing on the way in which these results extend and refine previous findings. Confirmations of past findings will be mentioned only briefly. Our focus will be exclusively on the first two filters, in which parental and adolescent problem recognition and help-seeking, and problem recognition by the GP are central.

Table 2.1 Variables influencing filters 1 and 2 in the help-seeking process (adapted from Verhulst and Koot, 1992)

	Child	Parents and family	Environment	GP/ paediatrician
1 Parental help-seeking	Type of problems Severity of problems Gender	Awareness of problem Distress threshold Personality Psychopathology Attitudes and beliefs Education level Support from extended family Psychosocial family stress	Sociodemographic factors Availability of services	
2 Problem recognition by GP/paediatrician	Type of problems Severity of problems		Sociodemographic factors Availability and use of screening measures	Training Interview style Personality Attitudes

Methods

Psych lit and Medline databases were searched for empirical studies published between 1992 and 2001, within a limited age range of 0-18 years, and restricted to publications written in English. To find studies dealing with the first filter, the keywords (child OR adolescent) AND (psychopathology OR psychiatry OR disorder OR behaviour problem OR emotional problem) were combined with the terms (help-seeking OR mental health service use), while studies concerning the second filter

were searched by combining the first keywords with the terms (recognition OR referral) AND (general practitioner OR paediatrician OR clinician). This resulted in 70 hits for the first, and 36 hits for the second filter. We continued searching by means of the 'snowball method'.

Some countries provide the possibility of directly consulting a mental health professional. As this kind of help-seeking was believed to be comparable to help-seeking from a GP in countries like the Netherlands and Great Britain, both were included as part of the first filter.

Excluding non-empirical and methodological articles, 47 publications were selected as relevant for our review, with 35 publications applying to the first filter (table 2.2), and 12 to the second filter (table 2.3).

Results

Child characteristics influencing the first filter

Although the presence of child psychopathology does not automatically lead to parental problem recognition (Pavuluri et al., 1996), the chance of concern about, and help-seeking for child psychopathology was confirmed to increase with comorbidity (Gasquet et al., 1999; Harris, 1996), and with increasing severity and persistence of problems (Barker and Adelman, 1994; Burns et al., 1995; Farmer et al., 1999; Garland et al., 1996; Harris, 1996; Leslie et al., 2000; Sourander et al., 2001). Adolescents' experience of psychological distress and functional impairment was confirmed to increase their help-seeking (Leaf et al., 1996; Rickwood and Braithwaite, 1994; Wu et al., 1999; 2001).

Recent studies have provided contradictory results concerning the effect of type of child psychopathology on problem recognition and help-seeking. While several studies have confirmed the hypothesis of an increased chance of problem recognition and help-seeking for externalising problems (Cornelius et al., 2001; Pavuluri et al., 1996; Wu et al., 1999), others have found an opposite effect (Harris, 1996), or no effect at all (Gasquet et al., 1999; Sourander et al., 2001; Verhulst and Van der Ende, 1997).

The effect of the child's gender on parental problem recognition and help-seeking is dependent on the age of the child. In childhood and early adolescence more help is sought for boys, whereas in late adolescence, girls seek help more frequently (Feehan et al., 1994; Gasquet et al., 1997; 1999; Schonert-Reichl and Muller, 1996; Zahner and Daskalakis, 1997).

Table 2.2 Studies conducted since 1992 on filter 1 of the help-seeking process for child and adolescent psychopathology

Authors	N*	Age	Subjects	Sample	Variables included
Angold et al., 1998	1015	9-13	Parents Children	School-based sample of children scoring above a cut-off on part of the Child Behavior Checklist, demographic and service-use questions, as well as matched controls	Child psychopathology and impairment Impact of child's symptoms on family Parental mental health problems Sociodemographic variables Mental health service use
Barker and Adelman, 1994	471	16-20	Children	School-based sample of lower SES, ethnic minority backgrounds	Adolescent psychopathology and distress Social support Sociodemographic variables Accessibility and organisation of help services Mental health service use and attitudes towards seeking help
Briggs-Gowan et al., 2000	1060	5-9	Parents	Paediatric practice-based sample of children scoring at/above the subclinical range of the Child Behavior Checklist or rated as problematic by the Provider Rating Form, as well as controls without problems	Child psychopathology Parental mental health problems Stressors and social support Sociodemographic variables Mental health service use
Burns et al., 1995	1015	9-13	Parents Children	School-based sample of children scoring above a cut-off point on part of the Child Behavior Checklist, demographic and service-use questions, as well as matched controls	Child psychopathology and impairment Impact of child's symptoms on family Parental mental health problems Sociodemographic variables Mental health service use

- table 2.2 continues -

- table 2.2 con tinued I -

Authors	N*	Age	Subjects	Sample	Variables inclu ded
Cohen and Hesselbart, 1993	760	12-21	Parents Children	General population sample	Child psyc hopathology Sociodemograp hic variables Mental health servi ce use
Cornelius et al., 2001	196	14-16	Parents Children	Primarily treatment-admitted sample of fathers who met DSM-III-R criteria for substance abuse, as well as a self-selected control group	Adolescent psychopathology Parental mental health problems Sociodemograp hic variables Mental health servi ce use
Costello et al ., 1997	1256	9-13	Parents Children	School-based sample of American Indian and White children	Child psyc hopathology and impairment Sociodemograp hic variables Family devia nce and fa mily mental illness Mental health servi ce use
Cuffe et al., 1995	478	12-15	Parents Children	School-based sample of adolescen ts scor ing high on a depressi on or suicide scale, as well as a control-group	Adolescent psychopathology and impairment Sociodemograp hic variables Mental health servi ce use
Cunn ingham and Freiman, 19 96	6216	6-17	Parents	General population sam ple	Child mental an d general health and i mpairme nt Family member's mental health status Family str ucture Sociodemograp hic variables Mental health servi ce use

- table 2.2 con tinues -

- table 2.2 con tinued II

Authors	N*	Age	Subjects	Sample	Variables inclu ded
Curry, 1998	94	5-11	Parents	Non-rando m convenience samp le of Black parents	Child psyc hopathology Parents' attitu des towards and satisfaction with professio nal help Sociodemograp hic variables Mental health servi ce use
Farmer et al., 19 97	1015	9-13	Parents Children	School-based sample of children scoring above a cut-of f point on part of the Child Behavior Checklist, demograp hic and servi ce-use questions, as well as matched controls	Child psyc hopathology and impairment Impact of child's sym ptoms on family Sociodemograp hic variables Mental health servi ce use
Farmer et al., 19 99	1007	9-13	Parents Children	See Farmer et al., 1997	See Farmer et al., 1997
Feehan et al., 19 94	976	7-15	Parents Children	General population sample	Child psyc hopathology Sociodemograp hic variables Mental health servi ce use
Flis her et al., 19 97	1285	9-17	Parents Children	Multi-site comm unity sa mple	Child psyc hopathology and impairment Attitudes towards mental health servi ces Parental mental health status Percep tions of mental health stat us Sociodemograp hic variables Mental health servi ce use and barriers to servi ce use
Garland et al., 1 996	662	2-17	Caretakers	Sample o f children who were in foster care for at least 5 months	Child psyc hopathology Type of child maltre atment Mental health servi ce use

- table 2.2 con tinues -

- table 2.2 continued III -

Authors	N*	Age	Subjects	Sample	Variables included
Gasquet et al., 1997	3287	12-20	Children	School-based sample	Adolescents' somatic and mental health Aspects of adolescents' daily life (leisure, sexual relations) Quality of family relations Sociodemographic variables Mental health service use
Gasquet et al., 1999	868	12-20	Children	School-based sample of adolescents with probable psychiatric problems	Adolescent psychopathology Adolescents' perceived physical health Social network support Sociodemographic variables Mental health service use
Harris, 1996	2881	10-19	Children	School-based sample of adolescents who did not receive professional help during the previous 3 months and who were never diagnosed with a mental disorder	Adolescent self-reported health status Sociodemographic variables Adolescent problem recognition
John et al., 1995	1587	6-16	Parents Children Teachers	General population sample	Child psychopathology, medical and school problems Parental mental health Family functioning Sociodemographic variables Mental health service use
Lavigne et al., 1998	388	2-8	Parents Children	Paediatric practice-based sample of children scoring above the 90 th percentile of the Child Behavior Checklist, and a matched control group of low scorers	Child psychopathology and impairment Parental psychopathology Family environment and life events Sociodemographic variables Mental health service use

- table 2.2 continues -

- table 2.2 continued IV -

Authors	N*	Age	Subjects	Sample	Variables included
Leaf et al., 1996	1285	9-17	Parents Children	Multi-site community sample	Child psychopathology and impairment Sociodemographic variables Mental health service use
Leslie et al., 2000	480	1-17	Caregivers Mental Health data sets	Sample of children who entered long-term foster care	Child psychopathology Child maltreatment history and placement pattern Sociodemographic variables Mental health service use
Logan, 2000	59	?	Parents Children	Sample of depressed adolescents and a control group	Adolescent and parental psychopathology Quality of adolescent-parent communication Parental awareness of adolescent problems Mental health service use
McMillen and Weisz, 1996	192	7-17	Parents	Sample of families admitted to community mental health clinics	Parental perception of severity of child problems Parental attitudes towards mental health services Sociodemographic variables Mental health service use
Pavuluri et al., 1996	128	2.5-5	Parents	School-based sample of children scoring above a cut-off point on the Behaviour Check List, Hyperactivity Scale, and Internalising Disorder Scale, as well as matched controls	Child psychopathology Sociodemographic variables Mental health service use and barriers to service use
Pumariaga et al., 1998	2405	11-19	Children	School-based, tri-ethnic sample	Adolescent psychopathology Sociodemographic variables Mental health service use

- table 2.2 continues -

- table 2.2 continued V -

Authors	N*	Age	Subjects	Sample	Variables included
Rickwood and Braithwaite, 1994	715	16-19	Children	School-based sample	Adolescent psychological impairment/distress Adolescent personality Adolescent social support Sociodemographic variables Mental health service use
Saunders et al., 1994	4274	12-18	Children	School-based sample of adolescents who identified themselves as having a mental health problem	Adolescent psychopathology and physical health Adolescent attitudes towards help-seeking Adolescent history of abuse, suicidal ideation Sociodemographic variables Mental health service use
Schonert-Reichl and Muller, 1996	221	13-18	Children	School-based sample	Adolescent personality variables Sociodemographic variables Mental health service use
Sourander et al., 2001	857	8-16	Parents Children Teachers	General population sample	Child psychopathology (reported by parents, teachers, adolescents) Sociodemographic variables Mental health service use
Verhulst and Van der Ende, 1997	2227	4-18	Parents	General population sample	Child psychopathology, school problems and physical health Parental psychopathology Parental perception of child psychopathology Family functioning and life events Sociodemographic variables Mental health service use

- table 2.2 continues -

- table 2.2 continued VI -

Authors	N*	Age	Subjects	Sample	Variables included
Wu et al., 1999	1285	9-17	Parents Children	Multi-site community sample	Child psychopathology, impairment, and physical health Parental and child perceptions of the need for services Sociodemographic variables Parental history of mental health service use Mental health service use
Wu et al., 2001	206	9-17	Parents Children	Sample of children who met DSM-III-R criteria for depressive disorders	Child psychopathology and impairment Parental perception of the need for services and unmet need Sociodemographic variables Maternal history of mental health service use Mental health service use
Zahner et al., 1992	822	6-11	Parents Teachers	School-based sample	Child psychopathology and impairment Parents' and teachers' perception of need for help Sociodemographic variables Mental health service use and barriers to service use
Zahner and Daskalakis, 1997	2519	6-11	Parents	School-based sample	Child psychopathology, impairment, physical health, and school problems Parental perception of need for help, and attitudes towards help Family stressors Sociodemographic variables Mental health service use

* Number of subjects in last stage of the study

Table 2.3 Studies conducted since 1992 on filter 2 of the help-seeking process for child and adolescent psychopathology

Authors	N*	Age	Respondents	Sample	Variables included
Briggs-Gowan et al., 2000	1060	5-9	Parents	Paediatric practice-based sample of children scoring at/above the subclinical range of the Child Behavior Checklist or rated as problematic by the Provider Rating Form, as well as controls without problems	Child psychopathology and possible child abuse Parental mental health problems Stressors and social support Sociodemographic variables Mental health service use
Brugman et al., 2001	4480	5-15	Parents Child health professionals	General health service-based sample	Parents' perception of child psychopathology Child health professionals' perception of child psychopathology Child academic problems Sociodemographic variables Past treatment for child psychosocial problems Life events
Evans and Brown, 1993	232	8-14	Parents GPs	GP practice-based sample	Child psychopathology Parents' and GPs' perception of the need for services Mental health service use
Horwitz et al., 1992	1886	4-8	Parents Clinicians	Paediatric practice-based sample	Parents' and clinicians' perception of child psychopathology Sociodemographic variables Characteristics of clinical visit
Horwitz et al., 1998	1148	4-8	Parents Paediatricians	Sample of children scoring high on the Child Behavior Checklist or identified as having a psychological problem by their physician, as well as randomly chosen controls	Parental and paediatrician's perception of child psychopathology Sociodemographic variables Parental help-seeking intentions and actual help-seeking

- table 2.3 continues -

- table 2.3 continued I -

Authors	N*	Age	Respondents	Sample	Variables included
Kelleher et al., 1997	10250	4-15	Parents Clinicians	Primary practice-based sample	Parents' and clinicians' perception of child psychopathology Clinicians' attitudes towards mental health care Clinicians' training and experience Family functioning Type of insurance Visit characteristics Sociodemographic variables
Kelleher et al., 1999	14910	4-15	Parents Clinicians	Primary practice-based sample	Parents' and clinicians' perception of child psychopathology Sociodemographic variables
Kelleher et al., 2000	21065	4-15	Clinicians	Primary practice-based sample	Clinicians' identification of child psychosocial problems Visit characteristics Sociodemographic variables Type of insurance
Kramer and Garralda, 1998	136	13-16	Parents Children GPs	GP practice-based sample	Adolescent psychological and physical health and impairment GPs' perception of adolescent psychopathology Maternal psychopathology Sociodemographic variables
Lavigne et al., 1993	3876	2-5	Parents Paediatricians Child psychologists	Paediatric practice-based sample of children scoring above the 90 th percentile of the Child Behavior Checklist, as well as a matched control group of low scorers	Parents' perception of child psychopathology Paediatrician's perception of child psychopathology Psychologists' perception of child psychopathology/impairment Sociodemographic variables

- table 2.3 continues -

- table 2.3 continued II -

Authors	N*	Age	Respondents	Sample	Variables included
Stiffman et al., 1997	792	13-17	Children Service providers	Health care and welfare service-based sample	Child psychopathology Providers' perception of child psychopathology and of problems in identifying child psychopathology Sociodemographic variables Mental health service use
Wissow et al., 1994	234	0.5-14	Parents Paediatricians	Paediatric practice-based sample	Child behaviour and development Parental psychosocial distress Patient-physician communication

* Number of subjects in last stage of the study

This finding may result from the fact that externalising problems, which are more prevalent in boys than girls, tend to decrease with age, whereas internalising problems, which are more typical for girls, tend to increase with age.

The child's age per se has also been found to be associated with professional help-seeking, although debate remains concerning the nature of this association. Some investigators have found help-seeking to be increased in middle and late adolescence compared to early adolescence (Gasquet et al., 1997; Leslie et al., 2000; Schonert-Reichl and Muller, 1996), whereas others (Cohen and Hesseltine, 1993) have found a decrease in mental health service use in late adolescence. Verhulst and Van der Ende (1997) found the child's age only to be related to parental service need, and not to service utilisation.

While some researchers found self-consciousness and self-worth to be negatively related to adolescents' professional help-seeking (Schonert-Reichl and Muller, 1996), others found self-consciousness and the willingness to disclose one's mental health only to be related to adolescents' informal help-seeking (Rickwood and Braithwaite, 1994), which, in turn, was found to increase the chance of adolescents seeking professional help (Saunders et al., 1994).

The presence of additional medical and school-related problems has repeatedly been shown to increase help-seeking for child psychopathology (Flisher et al., 1997; Gasquet et al., 1997; John et al., 1995; Zahner and Daskalakis, 1997). Since school problems did not increase parental problem recognition, this may indicate the importance of the teacher in the detection and referral of disordered children (Verhulst and Van der Ende, 1997).

Parent and family characteristics influencing the first filter

Recent findings confirmed the notion that parental problem recognition and help-seeking is dependent on the amount of distress or burden parents experience in raising their child, rather than on the level of child psychopathology per se (Angold et al., 1998; Farmer et al., 1997; 1999; Logan, 2000; Wu et al., 1999; 2001).

Confirmation has also been found for the influence of parental attitudes and beliefs (Flisher et al., 1997; Pavuluri et al., 1996), education level (Farmer et al., 1999; John et al., 1995; Saunders et al., 1994), and family

stress (Cunningham and Freeman, 1996; Gasquet et al., 1997; 1999; Lavigne et al., 1998; Sourander et al., 2001; Zahner and Daskalakis, 1997) on help-seeking.

The presence of psychological problems in the parents has been shown to increase problem recognition, but not to increase mental health service need and utilization (Cornelius et al., 2001; Flisher et al., 1997; Verhulst and Van der Ende, 1997). When parents or relatives received mental health care themselves, an increase in help-seeking for child psychopathology did show (Cunningham and Freeman, 1996). However, when a differentiation between general and professional help-seeking was applied, only the first was significantly related to the acquaintance with other mental health care users (Rickwood and Braithwaite, 1994).

Family size proved to exert a comparable differential effect on parental problem recognition and help-seeking, for it was found that the presence of siblings was related to a smaller chance of parents perceiving child behaviour as problematic (Verhulst and Van der Ende, 1997), but not to a decrease in the likelihood of these parents seeking help (Cornelius et al., 2001; Feehan et al., 1994; Verhulst and Van der Ende, 1997).

The type of maltreatment children experienced has been shown to be associated with service use for children in foster care. Active types, such as sexual or physical abuse, are related to increased service use (Garland et al., 1996), while more passive types of maltreatment like neglect or caretaker absence are associated with decreased help-seeking (Leslie et al., 2000).

Characteristics of the environment influencing the first filter

The previously found association between low social support and parental help-seeking disappeared when a differentiation between determinants of informal and professional help-seeking was applied (Rickwood and Braithwaite, 1994).

A negative association between ethnic minority status and parental and adolescent help-seeking has been found (Barker and Adelman, 1994; Costello et al., 1997; Cuffe et al., 1995; Cunningham and Freeman, 1996; Leslie et al., 2000; Wu et al., 2001; Zahner and Daskalakis, 1997), but this association seemed to disappear when socioeconomic variables were controlled for (Pumariega et al., 1998; Zahner et al., 1992). Informal help-seeking was found to be increased in minority groups and other cultures

(Curry, 1998; McMiller and Weisz, 1996; Pavuluri et al., 1996; Rickwood and Braithwaite, 1994).

The influence of sociodemographic factors like SES, income, and type of insurance on help-seeking seems to depend largely on a country's health care system. Whereas studies conducted in the USA and Australia have found different effects of these variables on help-seeking (Briggs-Gowan et al., 2000; Burns et al., 1995; Cohen and Hesselbart, 1993; Cunningham and Freiman, 1996; Farmer et al., 1999; Flischer et al., 1997; Pavuluri et al., 1996; Saunders et al., 1994), studies in countries like France, Finland and the Netherlands, in which health care is readily available, and where there are no major financial constraints to receiving professional help, have not found any association between SES and help-seeking, after controlling for the effect of SES on child psychopathology (Gasquet et al., 1997; 1999; Sourander et al., 2001; Verhulst and Van der Ende, 1997).

Child, parent, and family characteristics influencing the second filter

Although identification of child psychosocial problems in primary care increased significantly in previous decades (Kelleher et al., 2000), problem recognition by the GP or paediatrician still forms an important barrier on the way to specialised psychiatric help (Horwitz et al., 1998; Kelleher et al., 1997; Kramer and Garralda, 1998; Stiffman et al., 1997), as a significant number of disordered children are not identified as such by their physician (Brugman et al., 2001; Evans and Brown, 1993; Lavigne et al., 1993). This could partly be due to the fact that parents and adolescents, who recognise their child's or their own problems, often do not mention these problems to their physician (Briggs-Gowan et al., 2000; Horwitz et al., 1998; Kramer and Garralda, 1998).

Problem recognition was found to be greater for boys (Horwitz et al., 1992; Kelleher et al., 1997), older children (Kelleher et al., 1997), and children of single parents (Horwitz et al., 1992). Kelleher et al. (1997) found a lower proportion of clinicians' recognition for African-American versus non-African-American children, but this association failed to reach significance when sociodemographic factors were controlled for (Kelleher et al., 1999). This led the authors to believe that clinician biases may not be the primary cause of ethnic differences in mental health service use found in other studies.

Brugman et al. (2001) found problem recognition to be related to the severity of child psychopathology, past treatment for psychosocial problems, life events, and academic problems. When these factors were taken into account, the effect of sociodemographic factors on problem recognition disappeared.

Characteristics of the GP influencing the second filter

Confirmation was found for the effects of training (Stiffman et al., 1997), interview techniques (Wissow et al., 1994), and the availability and use of screening measures (Horwitz et al., 1992; Stiffman et al., 1997) on problem recognition by the GP.

Problem recognition was found to be lower for children with whom the physician was less well acquainted (Horwitz et al., 1992; Kelleher et al., 1997), and for acute care visits versus long visits, probably because developmental and behavioural issues are more likely to be discussed during long visits (Horwitz et al., 1992).

Discussion

Recent studies have provided extensions and refinements of variables described by Verhulst and Koot (1992) to influence parental/adolescent problem recognition and help-seeking and problem recognition by the GP.

The differential effects of several variables on parental/adolescent problem recognition versus help-seeking underline the importance of distinguishing between these aspects of the first filter in future research.

Recent results showed the importance of other sources of help for understanding the help-seeking process, as informal help-seeking and past treatment of parents or relatives proved to increase help-seeking for child psychopathology, and past treatment of the child proved to increase problem recognition by the GP. Moreover, differentiating between determinants of professional and informal help-seeking can be crucial for understanding the effect of certain variables on help-seeking.

School-related problems were found to play an important role in the help-seeking process, influencing both parental help-seeking and problem recognition by the GP. Future research should, therefore, focus on the role of school personnel in the detection, referral and provision of help for

child and adolescent psychopathology, and on the effect this exerts on mental health service use.

In spite of the apparent importance of the second filter, only a few studies have investigated variables influencing problem recognition by the GP. Although these studies have uncovered several determinants of the second filter not mentioned by Verhulst and Koot, it is often unclear whether these results are due to differential problem recognition by the GP or differential patterns of reporting by parents. For example, the increase of clinicians' problem recognition for boys (Horwitz et al., 1992; Kelleher et al., 1997) may also be due to the fact that boys have a greater chance of exhibiting externalising problems that cause disturbance in their environment, thereby increasing the chance of parents mentioning these problems to the GP. Clearly, much more research needs to be done to further unravel factors affecting problem recognition by the GP.

3

Factors associated with adolescent mental health service need and utilization

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Abstract

Objective: To determine the association of parent, family, and adolescent variables with adolescent mental health service need and utilization.

Method: Correlates of adolescent mental health service utilization, self-perceived need and unmet need were investigated in a general population sample of 1,120 Dutch adolescents aged 11 to 18 years (78 % response rate).

Results: 3.1 % of the sample had been referred for mental health services within the preceding year, and 3.8 % reported unmet need. 7.7 % of adolescents at risk for psychopathology, and 17.8 % of those indicating a need for help, had been referred. Family stress and adolescent's self-reported problems were most strongly associated with service need and utilization. Internalizing problems, female gender, and low education level were associated with self-perceived unmet need. Adolescent ethnicity and competence in activities and school were associated with service use, but did not influence service need, while the opposite effect was found for adolescent age and parental psychopathology.

Conclusion: In designing intervention programs aimed at increasing adolescent mental health service use, distinctions should be made between efforts focused at adolescents not recognizing their problems, and those with unmet need.

Key Words: epidemiology, mental health services, adolescents, Youth Self- Report

Introduction

Studies have repeatedly shown that a substantial proportion of adolescents in the community meet criteria for emotional or behavioral psychopathology (Fergusson et al., 1993; McGee et al., 1990; Saunders et al., 1994; Whitaker et al., 1990). Although these problems can hamper everyday functioning and well-being, many adolescents with disorders do not receive specialist mental health services, while utilization of these services in adolescence may be particularly salient for preventing persistence of psychopathology into adulthood (cf. Feehan et al., 1993; Harrington et al., 1996). Saunders et al. (1994) reported that 23 % of adolescents who identified themselves as having a mental health problem had sought professional help in the preceding year. Likewise, 28 % of a sample of Finnish adolescents, whose parents perceived them as having significant behavioral or emotional problems, had been in contact with mental health services. Of adolescents who perceived themselves as having a serious problem, only 13 % had been referred (Sourander et al., 2001).

To understand the discrepancy between the proportion of adolescents with a psychiatric disorder, and the proportion receiving mental health care, it is important to investigate factors that influence the process leading to receiving professional help (Goldberg and Huxley, 1980; 1992; Verhulst and Koot, 1992). In an 8-year follow-up, Sourander et al. (2001) studied concurrent and predictive associations of several child and family factors and service use at age 16. At the age of 8, the most potent predictors of later referral were parent-reported total behavior problems and antisocial problems, the teacher's perception of the child's need for referral, and living in other than a biological two-parent family. At age 16, parent-reported externalizing, internalizing and total behavior problems, self-reported total competence, and family composition were associated with mental health service use.

Many studies on mental health service use for child and adolescent psychopathology treat help-seeking as a one-step process, i.e. they investigate whether or not help is being sought and which variables are associated with one or the other. However, because the majority of psychiatrically disturbed adolescents do not seek professional help, it is also important to know whether they feel the need to seek help but do not translate this need into help-seeking actions, or whether they do not at all recognize the problematic nature of their state. Therefore, to attain a more complete picture of the help-seeking process, studies should focus on correlates of mental health service need as well as utilization. Two studies that explicitly made this distinction are those by Saunders et al. (1994) and Verhulst and Van der Ende (1997). In a large school-based sample of adolescents, Saunders et al. found a history of abuse, poor self-rated physical health, suicidal ideation, and female gender to be related to adolescents' need for professional help. Actually obtaining professional help was associated with suicidal ideation, informal help-seeking, the interaction between race and socioeconomic status, parental marital status, and having had a medical check up within the previous year.

In a general population sample of children and adolescents aged 4 to 18 years, Verhulst and Van der Ende (1997) found the child's internalizing, externalizing, and academic problems, and family stress to be the most potent factors associated with mental health service need and utilization. Parental and family psychopathology, life events, the absence of siblings, child age, and the presence of a physical handicap in the child were associated with an increased chance of parent-reported mental health service need, but did not increase the likelihood of service utilization.

In addition to studying factors associated with mental health service need and utilization, it is also important to study correlates of unmet need, which is defined as the presence of psychopathology and associated functional impairment, for which no mental health services have been received (Brewin et al., 1987; Flissher et al., 1997). Seventeen percent of children and adolescents in the study by Flissher et al. met these criteria. Unmet need was significantly associated with indicators of socioeconomic disadvantage, parents' and children's opinions that the latter had poor mental health, parental psychopathology, poor school grades, and parental beliefs regarding their child's opinion of mental health services.

We used a somewhat different definition of unmet need, as we did not include an objective measure of psychopathology and functional impairment, but instead used adolescent self-reporting of a need for professional help without having obtained it as operationalization of unmet need. To distinguish between these different definitions of unmet need, we will refer to our operationalization as 'self-perceived unmet need'.

In our previous study cited above (Verhulst and Van der Ende, 1997), we found that adolescents were especially reluctant to seek professional help. The present study therefore aims at further unraveling factors influencing adolescent help-seeking.

Instead of treating help-seeking as a one-step process, the present study extends previous findings by assessing three distinct aspects of adolescent help-seeking (mental health referral, need, and unmet need) as related to characteristics of parents, adolescent, and family in a general population sample of 1,120 adolescents aged 11 to 18 years. While our previous study used parents as the main informants, the present study relies on adolescent self-reports of service use and need and the presence of psychopathology, in addition to parental reports of service use.

Method

Participants

The sample used in this article is part of a larger study on psychopathology and mental health service use in a Dutch national sample of children and adolescents. We will describe the selection of the original sample (involving subjects aged 4 to 18 years), before describing the sample used in the present study.

The target population for the original study consisted of all 4-to-18-year-olds who were of Dutch nationality and living in the Netherlands. Respondents were recruited using a stratified multi-stage cluster and random-sampling design. The population was stratified according to four country regions and four degrees of urbanization. A two-stage sampling procedure was followed, with a selection of clusters in the first stage, followed by a selection of individuals in the second stage. For each stratum, the number of clusters to be selected was determined. The eight largest cities were selected on the basis of cluster size and sampling fraction. Other municipalities were randomly selected within each of the strata with a probability of selection that was proportional to size. In this way, 81 municipalities were selected in addition to the eight largest cities. Municipalities were requested to send names and addresses of a specified number of subjects aged 4 to 18 years on January 1, 1993, equally divided across both sexes and selected randomly from municipal population registers that list all residents.

Trained lay interviewers with previous survey experience visited or phoned the parents to make an appointment for an interview, preferably with the mother. If parents were not initially reached, at least five callbacks were made on different days and at different times of the day. If the subject was 11 years or older, the interviewer handed out a copy of the Youth Self-Report (YSR, Achenbach, 1991c) and explained it to the adolescent. The adolescent was asked to complete the YSR in a room separate from the one where the parent was interviewed, to ensure that information from the adolescent was obtained independently from that of the parents. After the adolescent completed the YSR, it was checked for missing or incorrect information, and any questions were answered. Adolescents also completed a questionnaire concerning demographic features, self-perceived need for help, unmet need, and referral for mental health services. For a more detailed description of methodology, see Verhulst et al. (1997a).

A total of 1,120 adolescents aged 11 to 18 years (51.5 % boys, 48.5 % girls; response rate : 78 %) completed the questionnaires. Adolescents were included in the sample only if they were of Dutch nationality. Of the sample, 7.2 % had one or both parents who were of Mediterranean (mostly Hispanic, Turkish, or Moroccan) or non-Caucasian (mostly black or of Asian descent from former Dutch colonies) origin.

Parental education level was scored on a 7-point scale, with 7 being the highest level. The parent with the highest education level was used to dichotomize the sample in low education level (scores 0, 1, and 2), which comprised 33.7 % of the sample, and high education level (scores 3-7), which comprised 66.3 % of the sample. Adolescent education level was also dichotomized, resulting in 22.2 % scoring low (including no education, special elementary and secondary education for children with learning difficulties, and lower vocational education), and 77.8 % scoring high (ranging from general elementary to academic education).

Parental occupation level was scored on a 6-point scale, with 6 being the highest level (Van Westraak et al., 1975). If both parents worked, the score for the parent with the highest occupation status was taken. The sample was dichotomized, resulting in 54.2 % scoring low (scores 1-3), and 45.8 % scoring high (scores 4-6) on occupation level.

Measures

Youth Self-Report

The YSR (Achenbach, 1991c) was used to obtain standardized adolescent self-reports of problem behaviors and competencies over the preceding 6 months. The YSR has good reliability and discriminative validity in both American (Achenbach, 1991c) and Dutch samples (Verhulst et al., 1989).

The YSR scores were dichotomized into those in the normal range versus those in the borderline or clinical range of the distributions based on the Dutch normative sample. A *T* score of 67 was used as cutoff point for the syndrome scales, a *T* score of 37 as cutoff point for the competence scales, and a *T* score of 60 as cutoff point for the Total Problems, Internalizing and Externalizing scales (Achenbach, 1991c).

Current Demographic and Help-Seeking Features Interview

Three help-seeking variables were measured: (1) referral for specialized mental health services, (2) adolescent's report of having problems that are more serious than other adolescents' problems (problem recognition or need), and (3) adolescent's report of a need for professional help without having obtained it (self-perceived unmet need). Parent, family, and adolescent variables thought to be relevant for understanding the help-seeking process were assessed during the interview (table 3.1). All variables pertained to the 12 months preceding the assessment. All scores were dichotomized.

Table 3.1 Demographic and help-seeking variables included in the present study (N = 1,120)

Help-seeking variables

Adolescent report of referral for specialized mental health services (3.1 % yes vs. 96.9 % no)
Adolescent report of having problems that are more serious than other adolescents' problems (problem recognition or need) (10.5 % yes vs. 89.5 % no)
Adolescent report of need for professional help without having obtained it (self-perceived unmet need) (3.7 % yes vs. 96.3 % no)

Parent variables

Education level (66.3 % high [scored 0] vs. 33.7 % low [scored 1])
Occupation level (45.8 % high [scored 0] vs. 54.2 % low [scored 1])
Ethnicity (92.8 % Dutch [scored 0] vs. 7.2 % non-Caucasian or Mediterranean [scored 1])
Parental psychopathology (88.8 % normal range [scored 0] vs. 11.2 % at or above P90 [scored 1])

Family variables

One-parent family (8.1 % yes vs. 91.9 % no)
No. of children in family under 18 years (23.5 % one [scored 0] vs. 76.5 % more than one [scored 1])
Parent report of any change in family composition (3.0 % yes vs. 97.0 % no)

Adolescent variables

Gender (51.5 % boys [scored 1] vs. 48.5 % girls [scored 0])
Age (51.9 % 11-14 years [scored 1] vs. 48.1 % 15-18 years [scored 0])
Education level (77.8 % high [scored 0] vs. 22.2 % low [scored 1])

Note: All variables were entered as 1 = yes, 0 = no, unless noted otherwise

Statistical analysis

To determine the strength of the association between parent, family, and adolescent variables and the three help-seeking factors, simple logistic regression analyses were performed for each association separately.

Stepwise multiple logistic regression analyses were performed to determine the unique contribution of each of the parent, family, and adolescent variables to an increase in the likelihood of the help-seeking variables over and above the effect of all other variables. The hierarchical relationship of the eight YSR syndrome scales, the Externalizing, Internalizing, and Total Problems scale made it necessary to perform regression analyses on three different sets of variables: one including the Total Problems score, the second including Externalizing and Internalizing scores, and the third including the eight syndrome scales.

Results

Thirty-five adolescents (54 % boys; 46 % girls) reported a referral for mental health services in the 12 months preceding the assessment. This represents 3.1 % of the total sample. Of the 209 adolescents who scored in the deviant

range of the YSR Total Problems scale, only 7.7 % had been referred for mental health services. However, of the 35 adolescents who were referred, 45 % were in the deviant range on the YSR Total Problems scale.

Of the total sample, 425 adolescents (37.9 %) perceived themselves as having a behavioral or emotional problem. Of these adolescents, only 6.4 % were referred for mental health services. Of the 118 adolescents (10.5 % of the total sample) who reported having a behavioral or emotional problem, more serious than other adolescents' problems, 17.8 % were referred.

Forty-two adolescents (3.8 % of the total sample) reported having a need for professional help, without having obtained it.

Simple logistic regression analyses

Results are listed in table 3.2. Only significant odds ratios are reported. Sociodemographic variables, such as ethnicity and adolescent education level, aspects of family composition, and adolescent problem and competence scales were significantly related to mental health referral.

Adolescents' need for help was significantly associated with parental psychopathology, aspects of family composition, and all YSR problem scales. Girls and older adolescents were more likely to report a need for help than boys and younger adolescents.

The likelihood of self-perceived unmet need was increased for girls, older, and less-educated adolescents. All YSR problem scales except for Withdrawn and Social Problems were identified as increasing the likelihood of self-perceived unmet need.

Table 3.2 Results from simple logistic regression analyses for three help-seeking variables

	Mental health referral (N = 35)		Self-perceived need for help (N = 118)		Self-perceived unmet need (N = 42)	
	OR	95% CI	OR	95% CI	OR	95% CI
Parent						
Education level						
Occupation level						
Non-Caucasian or Mediterranean	3.8	1.7-8.7				
Psychopathology			2.0	1.2-3.3		

- table 3.2 continues -

- table 3.2 continued -

	Mental health referral (N = 35)		Self-perceived need for help (N = 118)		Self-perceived unmet need (N = 42)	
	OR	95 % CI	OR	95 % CI	OR	95 % CI
Family						
One-parent family	3.2	1.4-7.2	2.3	1.4-4.0		
No. of children < 18						
Change in family composition	5.5	2.2-14.1	4.7	2.5-9.1		
Adolescent						
Gender			0.5 ^a	0.4-0.8	0.4 ^a	0.2-0.8
Age			0.4 ^b	0.3-0.7	0.5 ^b	0.3-0.9
Education level	3.4 ^c	1.7-6.7			2.0 ^c	1.0-3.8
YSR						
Activities	4.1	1.7-9.8				
Social	3.4	1.3-9.1				
School						
Total Competence						
Withdrawn			4.4	2.3-8.4		
Somatic Complaints			2.8	1.4-5.5	3.0	1.1-8.1
Anxious/Depressed	5.3	2.3-12.3	6.5	3.8-11.1	4.2	1.9-9.5
Social Problems			2.9	1.6-5.5		
Thought Problems	5.2	2.2-12.4	4.9	2.7-8.8	2.7	1.0-7.1
Attention Problems	5.4	2.2-13.0	5.2	2.8-9.3	4.3	1.8-10.2
Delinquent Behavior	3.9	1.7-9.3	4.7	2.7-8.1	4.4	2.0-9.6
Aggressive Behavior	4.7	2.0-10.6	2.2	1.2-4.0	2.5	1.0-6.2
Internalizing	2.5	1.2-5.1	4.5	3.0-6.7	5.5	3.0-10.3
Externalizing	4.2	2.1-8.4	3.5	2.3-5.2	2.8	1.4-5.3
Total Problems	3.9	2.0-7.7	5.2	3.5-7.8	4.7	2.5-8.8

Note: All odds ratios were significant at $p < .05$. Due to rounding, some confidence intervals include the value 1.0, which was in fact somewhat larger. OR = odds ratio; CI = confidence interval; YSR = Youth Self-Report

^a Greater likelihood for girls versus boys

^b Greater likelihood for older (15-18) versus younger (11-14) adolescents

^c Greater likelihood for low versus high education level

Multiple logistic regression analyses

Results are shown in table 3.3 for each of the three sets of variables separately. Only variables that were entered and not removed in the step wise regression procedure are listed. These variables contributed significantly to an increase in the likelihood of the presence of the help-seeking variable.

As in the simple logistic regression analyses, these analyses identified sociodemographic variables and aspects of family composition as significantly increasing the likelihood of mental health referral. YSR Total

Problems, Externalizing, two out of eight syndrome scales, and two competence scales were also related to mental health referral.

The multiple regression results for adolescents' need for help were similar to the simple regression results, with the exception that the effect of four YSR syndrome scales disappeared when other variables were controlled for.

For self-perceived unmet need, the effects of adolescent age, Externalizing, and three YSR syndrome scales disappeared in the multiple regression analyses, while the effects of adolescent female gender, low education level, YSR Total Problems, Internalizing, Anxious/Depressed and Delinquent Behavior remained significant.

Table 3.3 Results from multiple logistic regression analyses for three help-seeking variables

	Mental health referral (N = 35)		Self-perceived need for help (N = 118)		Self-perceived unmet need (N = 42)	
	OR	95 % CI	OR	95 % CI	OR	95 % CI
I. Analysis including YSR Total Problems						
Family						
One-parent family	3.6	1.5-8.7	2.3	1.3-4.1		
Change in family composition	9.5	3.3-27.2	6.5	3.2-13.5		
Adolescent						
Gender			0.5 ^a	0.3-0.8	0.4 ^a	0.2-0.8
Age			0.5 ^b	0.3-0.7		
Education level	2.9 ^c	1.4-6.0				
YSR						
Activities	4.0	1.6-10.3				
School	0.2	0.0-0.9				
Total Problems	3.8	1.9-7.9	4.9	3.2-7.4	4.8	2.6-9.1

- table 3.3 continues -

- table 3.3 continued -

	Mental health referral (N = 35)		Self-perceived need for help (N = 118)		Self-perceived unmet need (N = 42)	
	OR	95 % CI	OR	95 % CI	OR	95 % CI
II. Analysis including YSR Int and Ext						
Parent						
Non-Caucasian or Mediterranean	2.7	1.1-7.0				
Family						
One-parent family	2.9	1.2-7.3	2.8	1.6-5.0		
Change in family composition	7.3	2.5-21.6	6.0	2.9-12.4		
Adolescent						
Gender			0.5 ^a	0.3-0.7	0.4 ^a	0.2-0.8
Age			0.4 ^b	0.3-0.7		
Education level	2.8 ^c	1.4-5.8			2.0 ^c	1.0-3.8
YSR						
Activities	4.1	1.6-10.7				
School	0.2	0.0-1.0				
Externalizing	3.5	1.7-7.3	2.3	1.5-3.6		
Internalizing			3.6	2.3-5.7	5.6	3.0-10.6
III. Analysis including YSR symptoms						
Parent						
Non-Caucasian or Mediterranean	2.8	1.1-7.3				
Psychopathology			1.8	1.1-3.1		
Family						
One-parent family	2.5	1.0-6.4	2.2	1.2-4.1		
Change in family composition	5.5	1.9-16.0	5.7	2.7-12.1		
Adolescent						
Gender			0.5 ^a	0.3-0.8	0.4 ^a	0.2-0.8
Age			0.5 ^b	0.3-0.8		
Education level	3.2 ^c	1.6-6.6			2.0 ^c	1.0-3.8
YSR						
Withdrawn	5.3	2.1-13.5	2.3	1.0-4.9		
Anxious/Depressed	4.0	1.5-10.5	4.0	2.1-7.8	3.9	1.7-9.2
Thought Problems	3.5	1.2-9.7	2.7	1.3-5.5		
Delinquent Behavior			3.2	1.8-6.0	3.3	1.5-7.6

Note: All odds ratios were significant at $p < .05$. Due to rounding, some confidence intervals include the value 0.0, which was in fact somewhat larger. OR = odds ratio; CI = confidence interval; YSR = Youth Self-Report; Int = Internalizing; Ext = Externalizing

^a Greater likelihood for girls versus boys

^b Greater likelihood for older (15-18) versus younger (11-14) adolescents

^c Greater likelihood for low versus high education level

Discussion

Of our total sample of Dutch adolescents, 3.1 % were referred for mental health services. This figure is lower than the 5.8 % reported by Saunders et al. (1994) and the 7 % reported by Sourander et al. (2001). These differences may be ascribed to differences in definitions of mental health service use, differences in prevalence rates for adolescent psychopathology between nations (Verhulst et al., 1993; Verhulst et al., 2003), or differences in the organization of mental health services in the nations under study.

Of the adolescents scoring in the deviant range of the YSR Total Problems scale, 7.7 % had been referred for mental health services, whereas of the adolescents who perceived themselves as having an emotional or behavioral problem, only 6.4 % had been referred. These findings are lower than the 13 % and 14 % referral found for parent-reported Total Problems and parent reports of their child having a behavioral or emotional problem (Verhulst and Van der Ende, 1997). The differences may partly be ascribed to the fact that the 1997 study involved children as well as adolescents, whereas the present study involved only adolescents. However, a comparable difference in the predictive value of parent-reported versus adolescent-reported problems was found by Sourander et al. (2001), who found parental perceptions of problems to be related to 28 % referral, whereas adolescents' perceptions were related to 13 % referral. Apparently, adolescents who recognize the problematic nature of their behavior and feelings are less likely than parents to translate their concern into help-seeking actions, and they are less able to single-handedly initiate mental health service use.

The finding that mental health service use increased from 6.4 % for adolescents perceiving themselves as having an emotional or behavioral problem, to 17.8 % for adolescents who perceived their problems to be serious, indicates the importance of adolescent problem recognition for mental health service use. However, problem recognition is not a sole prerequisite for mental health service use, as 3.8 % of the total sample of adolescents reported a need for help, without having obtained it.

Our operationalization of unmet need resulted in a considerably lower figure than Flisher and colleagues' (1997) more objective measure of this concept (3.8 versus 17 %). By using a self-report measure of unmet need, adolescents with disorders who do not recognize the problematic nature of their state are not taken into account, resulting in an underestimation of unmet need. On the other hand, adolescents who report unmet need

themselves are the ones who are best motivated to obtain care, and the use of a self-report measure will therefore help to identify those adolescents at whom interventions can be directed.

Remarkable is the finding that only 45 % of the adolescents who were referred for mental health services in the preceding year, also scored in the deviant range of the YSR Total Problems scale. This finding is in sharp contrast to the 71 % of referred children scoring in the deviant range on the CBCL Total Problems scale (Verhulst and Van der Ende, 1997). As was previously found (Sourander et al., 2001), parent evaluations of child symptoms are apparently more strongly associated with service use than adolescent self-reports, indicating the importance of parents in initiating mental health service use.

Parent factors

Simple as well as multiple analyses showed a significant effect of ethnicity on adolescent mental health referral. Adolescents from non-Caucasian or Mediterranean descent were more likely to have received mental health care than Caucasian youths. This finding is in contrast with previous studies (Cuffe et al., 1995; Cunningham and Freiman, 1996; McMiller and Weisz, 1996; Wu et al., 2001), in which ethnic minority status was associated with a lower likelihood of children and adolescents receiving mental health care. We should, however, keep in mind the relatively small number of adolescents from ethnic minorities in the present study ($N = 81$), and the probable differences in status and living conditions of ethnic minorities in the countries under study.

After controlling for the effect of other variables, parental psychopathology was significantly associated with adolescents' perceptions of serious problems, indicating that adolescents with parents who have psychiatric disorders may have lower thresholds for reporting problems themselves. However, parental psychopathology was not significantly related to mental health referral.

Previous studies have provided contradictory results regarding the effect of socioeconomic variables such as education and occupation level on help-seeking for child psychopathology. In general, the influence of these variables seems to depend largely on a country's health care system. In countries where health care is not readily available to everyone, financial constraints are likely to influence service use, and socioeconomic factors are likely to influence professional help-seeking. In countries like France

and the Netherlands, however, where the health care system is organized in such a way that there are no major financial constraints to receiving professional help, socioeconomic variables have been found not to influence mental health service use, even after controlling for the effect of these variables on child psychopathology (Gasquet et al., 1997; 1999; Sourander et al., 2001; Verhulst and Van der Ende, 1997). The present finding that parental education and occupation levels do not exert an influence on any of the three help-seeking variables is in concordance with these previous findings.

Family factors

As was previously found (Gasquet et al., 1997; 1999; Laitinen-Krispijn et al., 1999; Sourander et al., 2001; Verhulst and Van der Ende, 1997), family factors such as living in a one-parent family and changes in family composition made a unique contribution to adolescent mental health referral and the perception of problems, even after controlling for the influence of other variables.

Although the presence of siblings has been found to decrease the chance of parents perceiving their child's behavior as problematic (Verhulst and Van der Ende, 1997), family size did not influence adolescent problem recognition or help-seeking. Maybe adolescents are more likely to use their peers instead of siblings as frame of reference against which they judge their behavior, whereas parents are more prone to form an opinion of their child's behavior by comparing their children with each other.

Adolescent factors

The adolescent's report of the presence of problem behavior was associated with mental health service need, self-perceived unmet need and referral. However, although Verhulst and Van der Ende (1997) found both parent-reported externalizing and internalizing problems to be associated with service need and utilization, in the present study differential effects of internalizing and externalizing problems on the three help-seeking variables were found. Whereas both internalizing and externalizing problems were associated with adolescents' reports of serious problems, internalizing problems did not increase the likelihood of referral over and above the effect of externalizing problems. While adolescents suffering from internalizing problems did recognize the problematic nature of their state, their need was not converted into referral, which was also reflected in the significant effect of internalizing problems on self-perceived unmet need.

In the multiple logistic regression analyses, two of eight YSR syndrome scales were associated with adolescent mental health referral, and four YSR syndromes were associated with adolescent perception of serious problems. While adolescents with poor competence in activities (i.e. low participation and skill in sports, hobbies, and jobs) and better school results were more likely to be referred, these YSR competence scales were not significantly associated with adolescents' perceptions of serious problems. Although these adolescents do not perceive themselves as having problems, they are probably more likely to follow their parents' or teachers' advice to seek help.

Adolescent girls had higher rates of self-perceived serious problems than adolescent boys, a finding also reported by Saunders et al. (1994). However, mental health referral rates did not differ significantly for boys versus girls. This mismatch between problem recognition and help-seeking can also be derived from the significant association between female gender and self-perceived unmet need.

A similar effect was found for age: older adolescents perceived themselves as having serious problems more often than younger adolescents, but this service need was not effectuated into referral. This finding is in concordance with the elevated non-effectuated parent-reported service need for older children found by Verhulst and Van der Ende (1997). The authors hypothesized that this finding could be ascribed to adolescents' striving for autonomy, which makes them reluctant to actually seek help from professionals. The present results provide confirmation for this statement.

Although parental education level was not associated with any of the help-seeking variables, adolescent education level was significantly related to self-perceived unmet need and mental health referral in the multiple analyses. Adolescents with low education levels were more likely to experience a need for help without obtaining it, and were also more likely to be referred for mental health services.

Limitations

Because of differences between countries' health care systems, caution should be exercised in generalizing these findings to nations with systems unlike the Dutch one, in which no major financial constraints hamper availability of services, and in which the general practitioner fulfills a gate-keeping role and mental health care can be obtained only indirectly.

The present study was cross-sectional, thereby limiting the possibility of establishing the causal directionality of the associations found. Future longitudinal studies are needed to further unravel factors influencing the process leading to mental health service utilization.

The results of this study may also be limited because of the reliance on self-report data. We relied on adolescents' judgments of the presence of emotional or behavioral problems, and it is unknown how many adolescents would have met formal diagnostic criteria. On the other hand, an adolescent's report of the presence of emotional or behavioral problems is probably a valid indicator of the distress the adolescent experiences. Moreover, adolescents' self-reports have been found to be valid and reliable (Achenbach, 1991c, Verhulst et al., 1989), and clinical researchers have suggested that adolescents' self-reports are critical for the study of emotional disturbance (Edelbrock, 1987; Weissman et al., 1980).

The present study did not specifically address possible reasons for service need not being effectuated into referral (e.g. demand exceeding supply), but a study currently being conducted does.

Finally, our dataset did not contain any information about adolescents' use of informal sources of help, such as family and friends. Since several researchers (e.g. Rickwood and Braithwaite, 1994, Saunders et al., 1994) have shown the importance of informal help-seeking for adolescents, and have shown that factors that influence professional help-seeking are not necessarily the same as those that influence informal help-seeking, future studies should explicitly involve both kinds of help.

Clinical implications

The distinction made in the present article between need for help, unmet need, and mental health service utilization is valuable for designing new intervention programs. Adolescents who do not recognize the problematic nature of their state (i.e. those scoring in the deviant range of a screening instrument for psychopathology, but not indicating a need for help) could benefit from interventions focused at providing information about the nature of mental health problems and how common they are. Adolescents who report unmet need should be provided with information about how and where to get professional help. The latter kind of intervention may also be important for adolescents who are less conscious of their unmet need, but who do report a need for help which is not effectuated into referral.

Indicators of family stress and the presence of problem behaviors were the most potent factors associated with adolescent mental health service need and utilization. Differential effects were found for internalizing and externalizing behavior problems: while both types of problems were related to service need, internalizing problems did not increase the likelihood of referral over and above the effect of externalizing problems. Adolescents with internalizing problems apparently do recognize their problems, but these concerns are not effectuated into mental health referral. Mental health professionals and others working with adolescents should therefore focus their efforts to reduce adolescents' thresholds for mental health service use specifically at adolescents with internalizing problems.

4 Help-seeking for child psychopathology

Pathways to informal and professional services in the Netherlands

This chapter has been submitted for publication as:

Zwaanswijk, M., Van der Ende, J., Verhaak, P. F. M., Bensing, J. M., Verhulst, F. C. Help-seeking for child psychopathology: Pathways to informal and professional services in the Netherlands.

Abstract

Objective: To test a model describing the process of help-seeking for child psychopathology in professional and informal service settings.

Method: Using structural equation modeling, associations between several help-seeking stages, and the influence of child, family and context characteristics upon these stages were investigated in 246 Dutch children (4-11 years), who were selected for having emotional or behavioral problems from a representative sample of children registered in general practices.

Results: School personnel play an important role in the process of help-seeking for child psychopathology, both in influencing service need, and in the provision of and the referral for help. Although the Dutch GP is supposed to be gatekeeper in the provision of mental health care, his role in help-seeking for child psychopathology is limited. Various family characteristics are shown to influence service need, informal or professional help-seeking. The influence of child characteristics on the help-seeking process is limited.

Conclusions: Interventions aimed at increasing child mental health service use should focus on improving school personnel's abilities to detect and help children with psychopathology.

Keywords: mental health services, child, psychopathology, health behavior, social support

Introduction

The pathway that leads to professional mental health care for children with psychopathology is paved with obstacles, causing a discrepancy between the number of disordered children in the community and the number of these children receiving professional care (Burns et al., 1995; Flisher et al., 1997; Leaf et al., 1996; Pavuluri et al., 1996; Verhulst and Van der Ende, 1997). Understanding which factors are involved in the help-seeking process may provide suggestions on how to increase service use for these children. A fruitful way to integrate findings on help-seeking stages and their determinants is to include them in one comprehensive model. Although many models concerning the help-seeking process have been formulated (Aday and Andersen, 1974; Andersen, 1995; Andersen and Newman, 1973; Fischer et al., 1983; Goldberg and Huxley, 1980; 1992), few specifically apply to help-seeking for child and adolescent psychopathology.

A first example is the model by Verhulst and Koot (1992), who have adapted the Goldberg and Huxley model (1980; 1992) to make it

applicable for child and adolescent help-seeking. In this model, help-seeking is described as consisting of five subsequent levels, each separated by a filter. The filters refer to (1) parental problem recognition and consultation of a general practitioner (GP), (2) problem recognition by the GP, (3) referral to psychiatric care, and (4) referral to in-patient psychiatric care. Because of the gatekeeping function of Dutch and British GPs in the provision of mental health care, a central role is attributed to the GP.

Logan and King (2001) have expanded this model by including parents' initial awareness of child problems as a stage preceding parental problem recognition. Their definition of problem recognition explicitly involves an evaluative element, in which parents acknowledge that the child's problems are severe enough to require help-seeking. In this respect, it resembles Andersen's (cf. 1995) construct of perceived need for help.

The focus on the parental side of the help-seeking process is broadened by Costello et al. (1998), who stressed the importance of family, school and context in their comprehensive model of access to child mental health services.

To our knowledge, researchers have thus far only investigated particular help-seeking stages in isolation from each other, without testing a help-seeking model as a whole. Our aim is to combine several existing help-seeking models and findings on determinants of help-seeking into one comprehensive model (figure 4.1). Testing this model will not only provide insight into the influence of several determinants on stages of the help-seeking process, but will also clarify the way in which the help-seeking stages influence each other.

Our focus is on the parent-mediated pathway to child mental health care. This does not imply a disregard of the roles other adults can play in the help-seeking process. By including several family- and context-based determinants, we acknowledge the ecological nature of the process. Our model does not include adolescent help-seeking, as this is characterized by more autonomy and is influenced by different factors than help-seeking for child psychopathology (Zwaanswijk et al., 2003a).

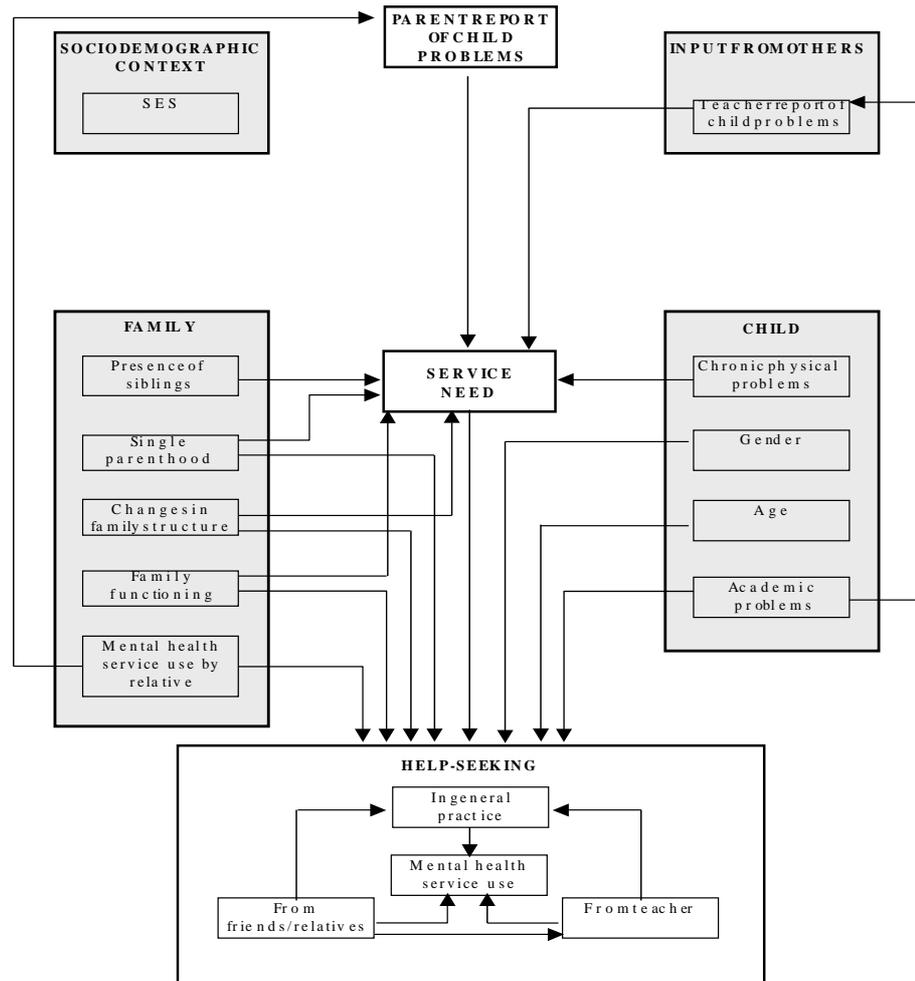


Figure 4.1 Theoretical model of the help-seeking process and its determinants

Following Logan and King (2001), the first step in the help-seeking process is assumed to be parents' initial awareness that their child shows problematic behaviors or emotions (Parent report of child problems, figure 4.1), followed by parents' need for services. Service need is defined as the presence of parent-reported psychopathology and associated functional impairment in the child (Brewin et al., 1987). This

operationalization is somewhat more objective than previously used measures of service need, in which parents were directly asked whether their child was in need of help (e.g. Verhulst and Van der Ende, 1997).

Based on previous research and theory (Logan and King, 2001; Verhulst and Van der Ende, 1997), the following variables are expected to influence service need: child chronic physical problems, family functioning, changes in family structure, single parenthood, the presence of siblings, and the teacher's perception of child psychopathology.

Help-seeking is investigated in both professional (general practice, mental health care) and informal service settings (teachers, friends /relatives). Because the threshold for seeking help from friends or relatives is considered to be lower than for any other kind of service, we assume this kind of help-seeking to precede the use of other services. By including the GP as service provider, we acknowledge the gatekeeping role of Dutch GPs in the provision of mental health care, and have the opportunity to explicitly examine this role.

Help-seeking is assumed to be influenced by child gender, age, academic problems, family functioning, changes in family structure, single parenthood, and mental health service use by a relative (Briggs-Gowan et al., 2000; Feehan et al., 1994; Gunther et al., 2003; Jensen et al., 1990; John et al., 1995; Lavigne et al., 1998; Rickwood and Braithwaite, 1994; Verhulst and Van der Ende, 1997; Zahner and Daskalakis, 1997).

Some differentiations regarding the influence of determinants on the various components of the help-seeking process are included. Firstly, based on previous results concerning the importance of the school in the detection of children with coexisting academic problems and the provision of care to these children (Verhulst and Van der Ende, 1997; Zahner and Daskalakis, 1997), academic problems are expected to affect service need through teachers' perceptions of child problems rather than through parents' report of child symptoms, and to be related to school service use only.

Since the acquaintance with a relative who has used mental health care has been suggested to sensitize parents to perceive problems in their child (Verhulst and Van der Ende, 1997), an association between this variable and parental report of child problems is expected. Furthermore, mental health care use by a relative is assumed to influence help-seeking

from friends or relatives only (Rickwood and Braithwaite, 1994; Verhulst and Van der Ende, 1997).

No major financial constraints hamper the availability of care in the Dutch health care system. In principle, all Dutch children are covered by private or public health insurance. As was found for countries with comparable financial availability of health care (Gasquet et al., 1997; 1999; Sourander et al., 2001; Verhulst and Van der Ende, 1997), the socioeconomic indicators included in our model (education level, income, type of insurance) are expected not to affect service need or the utilization of services directly.

Because of differences between health care systems, our theoretical model may not be directly applicable to nations in which health care depends more heavily on financial factors. In these countries, sociodemographic variables are likely to influence the help-seeking process (Briggs-Gowan et al., 2000; Pavuluri et al., 1996). Some systems also provide the opportunity of consulting mental health care without GP referral. Nevertheless, we believe to provide a more generic method for studying help-seeking (i.e. by testing a comprehensive help-seeking model as a whole instead of investigating its separate parts), which can be adapted to different health care systems.

Method

Participants

Our study involved a two-stage procedure. Data for the first stage were obtained from the Second Dutch National Survey of General Practice, which examined morbidity and treatment in a representative sample of 104 general practices with 195 GPs and 385,461 listed patients, between April 2000 and January 2002 (Westert et al., in press). A random sample of the practice population ($N = 12,699$), including 1,497 parents of children aged 4-11 years, participated in an extensive health interview survey (total response rate: 64.5%). Participants of this survey were comparable to the practice population with respect to gender, age, and place of residence (Westert et al., in press).

As part of the interview, 1,319 parents completed the Child Behavior Checklist (CBCL; Achenbach, 1991a). Parents were also asked permission to send the Teacher's Report Form (TRF; Achenbach, 1991b) to the teacher who was the most familiar with the child's functioning. Responses were received from 974 teachers (180 respondents refused to

give permission to contact the teacher, 64 teachers refused to cooperate, 96 teachers did not respond, and 5 children were too young to attend school).

Children scoring in the borderline or clinical range on CBCL or TRF Total Problems scale ($T \geq 60$) were selected for participation in the second stage of the study. Of the 362 selected children, 246 participated. Second stage respondents and non-respondents were comparable with respect to age, gender, and level of CBCL and TRF Total Problems scores. However, subjects who did not participate were more likely to be living in single-parent families (16 versus 8%; $p = .03$), and to have parents with lower education levels ($Z = -4.06$; $p = .00$). Since these characteristics have been shown to be associated with elevated levels of child problems, this study may underestimate the presence of child psychopathology.

In the second stage, a standardized psychiatric interview (DISC-IV; Shaffer et al., 2000), was administered to the child's primary caregiver to obtain psychiatric diagnoses. Parents were also asked details about their help-seeking actions.

Measures

Child Behavior Checklist

The CBCL (Achenbach, 1991a) was used to obtain standardized parents' reports of children's problem behaviors over the preceding 6 months. The CBCL has good reliability and discriminative validity in both American (Achenbach, 1991a) and Dutch samples (Verhulst et al., 1996).

Teacher's Report Form

The TRF (Achenbach, 1991b) was used to obtain standardized teachers' reports of children's problems over the preceding 6 months. The good reliability and validity of the original TRF (Achenbach, 1991b) were confirmed for the Dutch version (Verhulst et al., 1997b).

NIMH Diagnostic Interview Schedule for Children, version 4

This structured interview (DISC-IV; Shaffer et al., 2000) is designed to assess psychiatric disorders in children and adolescents, using DSM-IV criteria (American Psychiatric Association, 1994). The presence of psychiatric symptoms as well as disorder-related impairment in functioning is assessed. Sections concerning anxiety disorders, mood disorders, and disruptive behavior disorders were used to obtain an indication of service need (see Statistical analyses).

Current Help-seeking Features Interview

Help-seeking from professional and informal sources in the preceding 12 months was measured, as well as several child, family and sociodemographic variables thought to be relevant for understanding the help-seeking process (table 4.1). Parental education level was scored on an 11-point scale, with 11 being the highest level. The parent with the highest education level was used to stratify the sample in low (scores 1-3), moderate (scores 4-8) and high (scores 9-11) education level. Family income was scored on a 5-point scale. Mean family income (2,168 euro) was comparable to the income of the general Dutch population (Centraal Bureau voor de Statistiek, 2005).

McMaster Family Assessment Device

During the second-stage interview, the FAD General Functioning scale (Epstein et al., 1983) was administered to measure family functioning. This scale constitutes a reliable and valid global indicator of family functioning (Byles et al., 1988).

Table 4.1 Characteristics of participants

		N*
Child		
Gender	43.9 % girls [scored 0]	246
Age	4-11; mean: 7.73; sd. 2.32	246
Academic problems	38.9 %	244
Chronic physical problems	38.4 %	245
Family		
Presence of siblings	91.9 %	246
Single parenthood	8.4 %	237
Changes in family structure	10.2 %	245
Mental health service use by relative	35.1 %	245
Sociodemographic context		
Type of insurance	53.5 % public; 46.5 % private	243
Parental education level	13.1 % low; 51.0 % moderate; 35.9 % high	245
Family income	27.2 % ≤ € 1,849	235
	19.1 % € 1,850-2,249	
	26.0 % € 2,250-2,649	
	26.8 % € 2,650-3,149	
	0.9 % ≥ € 3,150	

* Numbers of respondents for whom data were available

Statistical analyses

Structural equation modeling (AMOS 4.0; Arbuckle and Wothke, 1999) was used to test the applicability of the theoretical model (figure 4.1) to our data. Our model contained six latent variables; all other variables were included as observed variables. CBCL Internalizing and Externalizing scores made up the latent variable Parent report of child problems, whereas TRF Internalizing and Externalizing scores represented Teacher report of child problems. For the latent variable Family functioning, the 12 items of the FAD General Functioning scale were treated as observed variables. High scores reflect poor family functioning. The latent variable SES was measured by variables indicating education level, family income, and type of insurance. Mental health service use was operationalized by two variables indicating different types of mental health service use.

The latent variable Service need was operationalized by two DISC-IV variables, which indicated whether the child had *any* psychiatric diagnosis plus impairment on respectively internalizing (anxiety disorders and mood disorders) or externalizing (disruptive behavior disorders) diagnoses. Impairment was considered to be present when at least two out of six diagnosis-specific DISC-IV impairment items indicating moderate, or one item indicating severe personal, social or academic difficulties were present. This operationalization of need corresponds to the definition of impairment as a global rather than diagnosis-specific concept (Bird et al., 2000).

Since chi-square has a tendency to indicate a significant probability level as sample size increases (generally above 200; Schumacker and Lomax, 1996), other fit indices were also inspected. Values of the Root Mean Square Error of Approximation (RMSEA) $< .05$ were considered to indicate a close model fit (Browne and Cudeck, 1993). Values of the non-normed fit index (NNFI; Bentler and Bonett, 1980), also known as the Tucker-Lewis coefficient (TLI; Tucker and Lewis, 1973), close to 1 indicate a very good fit.

Results

To gain insight into the seriousness of child problems in our sample, numbers of children scoring in the deviant range on CBCL and TRF Internalizing and Externalizing scales are reported in table 4.2. Note that continuous rather than dichotomous scores on these scales were used in

the structural equation model. Rates of service need and service use are also reported in table 4.2.

Table 4.2 Frequencies of borderline/clinical Internalizing and Externalizing Problems, service need, and service use

	Rater	%	N*
Internalizing problems	P	58.1	143 (246)
	T	33.3	69 (207)
Externalizing problems	P	52.8	130 (246)
	T	45.4	94 (207)
Internalizing + Externalizing problems	P	37.8	93 (246)
	T	17.9	37 (207)
Internalizing service need	P	15.0	37 (246)
Externalizing service need	P	20.3	50 (246)
Internalizing + Externalizing need	P	6.9	17 (246)
General practice	P	13.1	32 (245)
Mental health care	P	15.4	38 (246)
Teacher	P	28.6	70 (245)
Friends/relatives	P	27.3	67 (245)

Note: P: parent; T: teacher

* In parentheses are the numbers of respondents for whom data were available

Figure 4.2 depicts, in a simplified version of figure 4.1, the percentages of parents at various stages of the help-seeking process, thereby including our assumptions concerning the sequence of help-seeking stages. For the sake of clarity, internalizing and externalizing disorders were combined. A total number of 180 parents indicated the presence of deviant internalizing and/or externalizing problems in their child. To do justice to the notion that only some parents move from one help-seeking stage to the next, whereas others stay behind on a previous level (cf. Goldberg and Huxley, 1980; 1992), the percentages in figure 4.2 are hierarchically ordered. This means that 60 (33.3 %) of the children, who were regarded as having deviant internalizing and/or externalizing problems, were *also* considered to be in need for help. Twenty percent of children in need for help used mental health services without consulting a GP, thereby passing by the gatekeeping role of the Dutch GP.

To increase our understanding of the GP's gatekeeping role, we investigated pathways to mental health services from a retrospective point of view, i.e. with mental health service use as starting point. Of the 38 parents using mental health services for their children, 16 (43.2 %)

were referred by their GP, whereas 21 (56.8 %) of these parents ended up obtaining mental health care for their children through other pathways (information was not available for one child). Whereas one third of these parents reached mental health care directly, two thirds got there with the help of other service providers, of which the majority came from school settings (school physicians, school psychologists, educational support services).

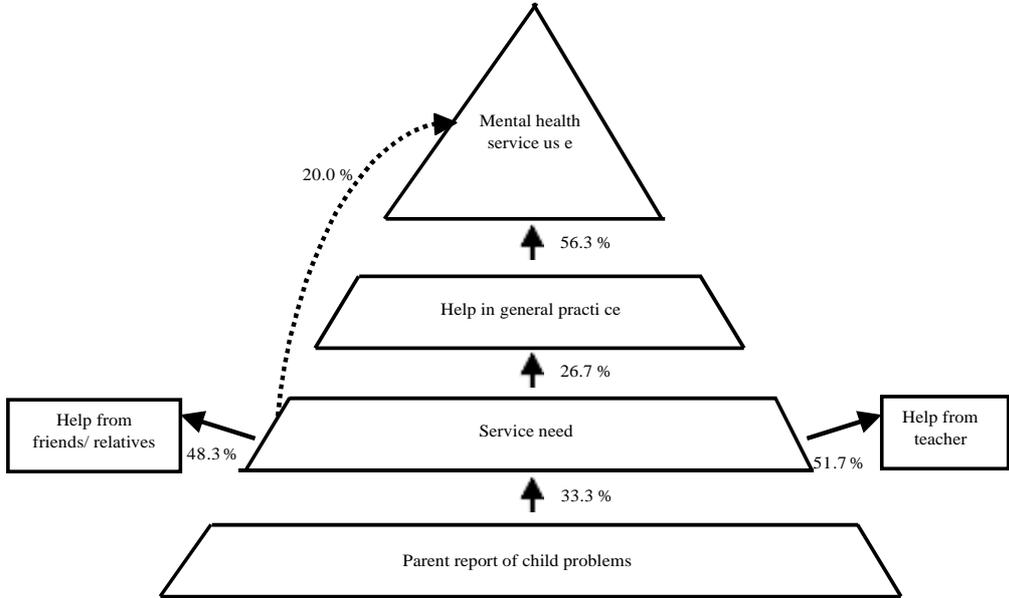


Figure 4.2 Percentages of parents at various stages of the help-seeking process

Evaluation of the structural equation model

Our initial theoretical model as depicted in figure 4.1 did not yield an adequate fit ($\chi^2 = 924.00$; $df = 498$; $p < .001$; $RMSEA = .059$; $NNFI/TLI = .957$). To increase model fit, some modifications were made. Firstly, because of the considerable percentage of parents consulting mental health professionals directly rather than via the GP as gatekeeper (figure 4.2), the first modification included adding a direct link between service need and mental health service use, resulting in $\chi^2 = 907.73$; $df = 497$; $p < .001$; $RMSEA = .058$; $NNFI/TLI = .958$. Consequently, non-significant

paths were deleted from the original model one by one, resulting in $\chi^2 = 934.82$; $df = 521$; $p < .001$; RMSEA = .057; NNFI/TLI = .960. Finally, modification indices were inspected and only those with theoretical relevance and which resulted in a considerable improvement of model fit were implemented. Because these indices cannot be computed with incomplete data, they were computed for the part of the sample with complete data ($N = 183$). These indices suggested adding a path from Child gender to Teacher report of child problems, and adding correlations between (1) Child age and Academic problems, (2) Single parenthood and Changes in family structure, (3) Single parenthood and SES, and (4) Mental health service use by relative and Family functioning. This significantly increased model fit ($\chi^2 = 819.56$; $df = 516$; $p < .001$; RMSEA = .049; NNFI/TLI = .970). Although a significant chi-square normally indicates an inappropriate model fit, we still perceive the model as appropriate, as indicated by other goodness-of-fit measures.

The structural part of this final model is depicted in figure 4.3. For a decrease in the complexity of this figure, parameters associated with the measurement model are not included. Within the measurement model, factor loadings for each observed variable were positive and significant at $p < .001$. Standardized loadings ranged from .35 to .85, with a median of .59.

Discussion

This study was aimed at investigating in one overarching model the process of help-seeking for child psychopathology in both professional and informal service settings. By means of structural equation modeling, characteristics of the child, family, and context were investigated as determinants of various stages in the help-seeking process.

In general, structural equation modeling proved to be a fruitful method for concurrently testing associations between various stages in the help-seeking process and their hypothesized determinants. We believe the merits of this method not to be restricted to countries with comparable health care systems, but consider it also useful as a more generic approach for clarifying the help-seeking processes in other countries. Although it is likely to produce different results depending on the health care systems in which it is used, a general use of this approach will increase comparability of results.

Based on his gatekeeping role in the Dutch health care system, the GP was expected to play a central role in our model. Contrary to expectation however, both the percentages of parents at subsequent stages of the help-seeking process (figure 4.2), as well as the regression weights in our help-seeking model (figure 4.3) indicated that only a minority of children who are considered to be in need of help, actually received help from their GP. Apart from using the GP as a gatekeeper, many parents enter the mental health care system directly or with the help of other service providers.

An explanation for parents seeking help from mental health services without GP referral could be the fact that these help-seeking actions involved follow-up consultations for persisting child problems. In that case, GP referral might have taken place over a year ago and therefore have fallen outside the time range assessed in our study. However, of the 21 children who entered mental health care without GP referral, only 4 (19.0 %) had used the same kind of mental health care in the period *before* the year of assessment, and were therefore likely to be in long-term contact with these services. For the remaining 81 %, this possibility was ruled out.

The limited role of the GP in the help-seeking process might be explained by the previously reported limitations of GPs in adequately recognizing emotional and behavioral problems in young children (Kramer and Garralda, 1998). Future research is needed to investigate the influence of GP-characteristics on the help-seeking process. Results may provide suggestions on how to increase the importance of the GP in help-seeking for child psychopathology.

A considerable number of children entered mental health care with the help of school-based service providers instead of the GP. During primary education, most Dutch children are routinely screened for physical and psychosocial problems by school physicians and nurses. This screening apparently plays an important role in the detection and referral of child psychopathology. In addition to this, the teacher was found to be an important source of help. These findings are in concordance with previous studies, in which the education sector was indicated as the most commonly used source of help for child psychopathology (Burns et al., 1995; Farmer et al., 2003; Ford et al., 2003).

Several variables in child, family, and context were investigated as determinants of the help-seeking process. Remarkably, the impact of

child characteristics appeared to be marginal. Some of these variables (child gender and coexisting academic problems) did exert their influence on the help-seeking process only indirectly, through their impact on the teacher's perception of child problems, whereas child age influenced neither service need nor help-seeking. The only child characteristic directly influencing the help-seeking process was the presence of coexisting chronic physical problems, which was associated with an increased service need (cf. Verhulst and Van der Ende, 1997).

Family characteristics had a stronger impact on the help-seeking process, although the previously found influence of family structure and size (i.e. single parenthood and the presence of siblings; Briggs-Gowan et al., 2000; Jensen et al., 1990; Verhulst and Van der Ende, 1997) could not be detected in our data. Changes in family structure were shown only to influence mental health service use, without affecting service need or help-seeking in other settings.

Remarkable is the differential effect of family functioning on service need and help-seeking. Although service need is significantly present in poorly functioning families, parents in these families seem to experience barriers in actually seeking teachers' help. In contrast with previous findings (Lavigne et al., 1998; Verhulst and Van der Ende, 1997), family functioning was not directly related to other types of help-seeking.

As expected (Verhulst and Van der Ende, 1997), the acquaintance with a relative who had used mental health services increased the likelihood of parents perceiving problems in their child without directly increasing service need. It also increased the chance of parents using support of family and friends (cf. Rickwood and Braithwaite, 1994). The presence of a relative who has consulted mental health services may indicate certain willingness to discuss mental health matters in the family system, which may facilitate help-seeking for child psychopathology within this system.

An important context factor influencing the help-seeking process is the teacher's perception of child problems. This variable is almost as strongly related to service need as parents' own report of child problems, which is remarkable considering the limited agreement between parents' and teachers' reports of child problems (Achenbach et al., 1987). This finding again indicates the influential role of teachers in the help-seeking process.

Sociodemographic context variables (parental education level, family income, type of insurance) were confirmed not to influence the help-seeking process directly. This finding can probably be ascribed to the Dutch health care system in which there are no major financial constraints on the availability of care.

Limitations

Because of differences between countries' health care systems, caution should be exercised in generalizing these results to nations with systems unlike the Dutch one (i.e. with financial constraints for receiving care and without the GP as gatekeeper). We therefore advocate using our method with help-seeking models adapted to other health care systems.

Although the assumptions in our model were based upon theory and associations established in previous research, and our final model adequately fit the data, we acknowledge the relatively data-driven nature of model-adjustment (e.g. removing non-significant associations and adding some associations suggested by modification indices). Therefore future studies, preferably longitudinal ones, are needed to confirm our findings and establish causal directionality of the associations found. Longitudinal studies, as the one by Farmer et al. (2003), could also shed more light on the sequences of help-seeking stages.

The results of this study may be biased because of the reliance on parent reports of service need and utilization. Our indicator of service need is more objective than used in previous studies, in which parents are directly asked whether their child is in need of help. Whereas our measure corresponds better with formal diagnostic criteria, a more direct reflection of parents' need for services may give a better view of parents' own reality. However, the finding that parents' report of the presence of child problems exerts its influence on the four help-seeking variables only indirectly - through service need -, suggests that our measure of service need discriminates between parents who do experience problems in their child but are able to manage these problems without help, and parents for whom the impact of child problems is strong enough to require outside help.

With respect to the parental reports of service utilization, we believe parents to be the best informants on service use for this young age group. Previous evidence suggests that parental reports are reasonably accurate, compared to administrative records (Fendrich et al., 1999). However, as

parents may have difficulties discriminating among multiple service settings (Bean et al., 2000), rates of service utilization may be biased. Including additional sources of data may strengthen our findings.

Clinical implications

Considering the importance of school personnel in influencing service need, as well as in the provision of help and the referral for mental health services, interventions aimed at increasing mental health service use should strengthen school personnel's possibilities in adequately handling these issues (e.g. by increasing attention for detection of child psychopathology in teachers' education or additional courses on referral possibilities). However, improving the detection and referral of child mental health problems is only useful if services are sufficiently available to meet the demands of children. By structurally including school psychologists into school teams, some children with less serious problems may be able to be helped within schools. Moreover, these school psychologists can support teachers in detecting child problems and referring the more serious cases to specialist mental health care.

5

The process of help-seeking for adolescent internalizing psychopathology in the Netherlands

This chapter has been submitted for publication as:

Zwaanswijk, M., Van der Ende, J., Verhaak, P. F. M., Bensing, J. M., Verhulst, F. C. The process of help-seeking for adolescent internalizing psychopathology in the Netherlands.

Abstract

Objective: To increase insight into the process of help-seeking for adolescent internalizing psychopathology by investigating stages and actors involved in this process.

Design: Based on a cross-sectional health interview survey, adolescents with internalizing problems were selected for a subsequent interview.

Setting: Participants were patients registered in a representative sample of 104 Dutch general practices.

Participants: 114 Adolescents scoring in the borderline/clinical range on the Child Behavior Checklist, Teacher's Report Form, or Youth Self-Report Total Problems scale ($T \geq 60$), and their parents, selected from an original sample of 934.

Main outcome measures: Structural equation modeling was used to evaluate a path model of the help-seeking process, with service need and help-seeking from professional (general practitioner and mental health care) and informal sources (teacher and friends/relatives) as dependent variables.

Results: The sequence of stages and the actors involved in help-seeking for adolescent internalizing psychopathology were similar across gender. Parents and adolescents had comparable impacts on the help-seeking process. The first obstacle on the pathway to care was the acknowledgement of the seriousness of problems. Whereas the general practitioner functioned as gatekeeper for mental health care, the teacher's role in the process was limited.

Conclusions: Considering parents' and adolescents' impacts on the help-seeking process, interventions aimed at increasing service use should include both. A starting point may be the distinction between adolescents with sufficient resources to cope with their internalizing problems and those who need additional help. Intervention efforts could best be focused on general practitioner's role in detection and referral.

Introduction

Although a substantial number of adolescents in the community suffer from emotional or behavioral disorders (Verhulst et al., 1997a), the majority of these adolescents do not receive specialist mental health care (Sourander et al., 2001; Zwaanswijk et al. 2003a), whereas treatment of these disorders may prevent them from persisting into adulthood (cf. Feehan et al., 1993; Harrington et al., 1996). Adolescents with internalizing problems (i.e. problems reflecting internal distress, such as anxiety, depression, withdrawal, and somatic complaints) seem to be particularly unlikely to be identified by others or to be referred (Cohen et

al., 1991; Fergusson et al., 1993; Logan, 2000). Moreover, although these adolescents do recognize their problems themselves, their concerns are not effectuated into mental health referral (Zwaanswijk et al., 2003 a). Insight into the process leading to service utilization for these adolescents may offer directions for the development of intervention programs focused on increasing service use.

The present study aims to empirically test a model concerning the process of help-seeking for adolescent internalizing psychopathology in professional and informal service settings (figure 5.1).

Based on previous models on help-seeking in general (Andersen, 1995; Goldberg and Huxley, 1992), and help-seeking for child and adolescent psychopathology in particular (Costello et al., 1998; Logan and King, 2001; Verhulst and Koot, 1992), we assume the help-seeking process to consist of a sequence of stages. Parents' or adolescents' global notion of the presence of adolescent internalizing problems is assumed to initiate the help-seeking process, followed by the acknowledgement that these problems are serious enough to require outside help (service need). Help-seeking is investigated in both professional (general practice, mental health care) and informal service settings (teachers, friends /relatives). Because the threshold for seeking help from friends or relatives is considered to be lower than for any other kind of service, we assume this kind of help-seeking to precede the use of other services. By including the general practitioner (GP) as service provider, we acknowledge the gatekeeping role of Dutch GPs in the provision of mental health care.

The model in figure 5.1 not only depicts our assumptions regarding the stages involved in the process of help-seeking for adolescent psychopathology, but also depicts the roles different actors play in this process. Whereas parents continue to play an important role in initiating service use for adolescents (cf. Sourander et al., 2001; Zwaanswijk et al., 2003 a), as they did for younger children, adolescents' increasing autonomy strengthens their influence on the help-seeking process. Adolescents may be particularly reluctant to seek help, as can be seen from their generally negative attitudes towards seeking help (Garland and Zigler, 1994) and their reluctance to consult mental health services even when they acknowledge the presence of problems (Zwaanswijk et al., 2003 a).

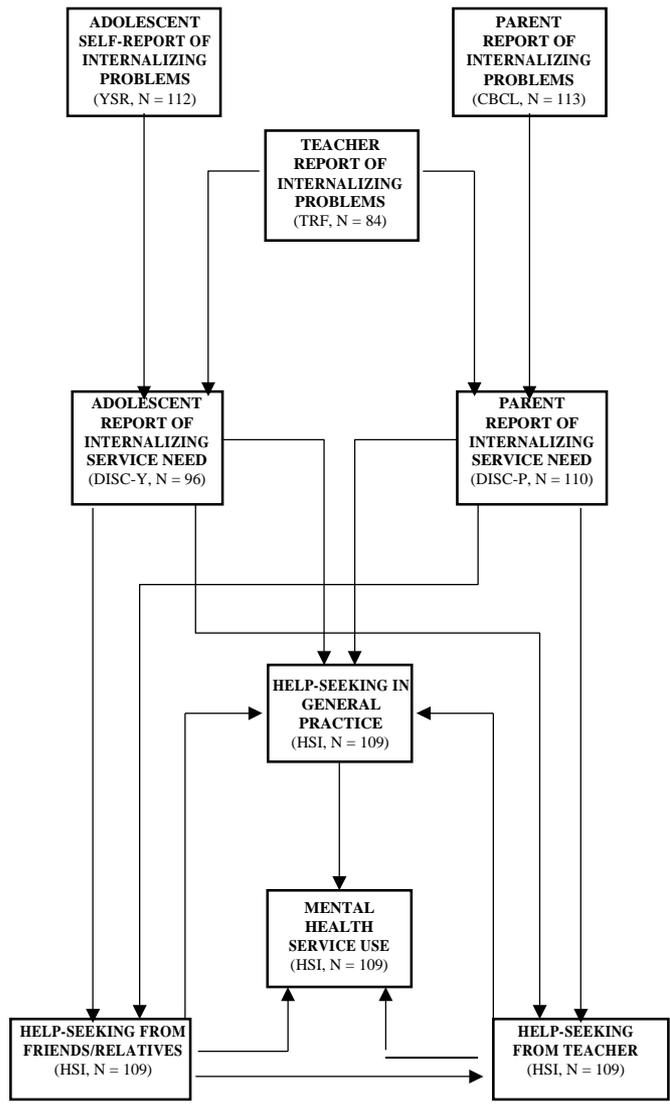


Figure 5.1 Theoretical model of the help-seeking process for adolescent internalizing psychopathology. In parentheses are measures used for each variable and numbers of respondents for whom data were available. HSI: Help-seeking interview.

Because teachers may be able to increase the awareness of the need to seek help (cf. Stanger and Lewis, 1993), their perception of the presence of problems is also included in the model.

By testing a model that simultaneously includes several help-seeking stages and service providers, this study will provide a more complete picture of the help-seeking process than previous studies, which have investigated these help-seeking stages in isolation from each other. Furthermore, previous research has mainly focused on mental health service use, whereas utilization of other service providers, particularly informal ones (Rickwood and Braithwaite, 1994; Saunders et al., 1994), may also be important in the process of help-seeking for adolescent internalizing psychopathology.

Since internalizing problems are generally found to be more prevalent in adolescent girls than boys, differences may exist in the help-seeking processes of both genders. Therefore, the applicability of the help-seeking model across gender is investigated.

Methods

Study population and procedures

Data for this paper were derived from a broader study on help-seeking for child and adolescent psychopathology in general. This study involved a two-stage procedure. Data for the first stage were obtained from the Second Dutch National Survey of General Practice, which examined morbidity and treatment in a representative sample of 104 general practices with 195 GPs and 385,641 listed patients, in the period between April 2000 and January 2002 (Westert et al., in press). A random sample of the practice population ($N = 12,699$), including 934 adolescents (12-17 years), participated in an extensive health interview survey (total response rate: 64.5%). As part of this interview, parents completed the Child Behavior Checklist (CBCL; Achenbach, 1991a), and adolescents completed the Youth Self-Report (YSR; Achenbach, 1991c). Responses were received for a total number of 830 adolescents (data were available for 810 parents and 814 adolescents). Respondents were asked permission to send the Teacher's Report Form (TRF; Achenbach, 1991b) to the teacher who was the most familiar with the adolescent's functioning. Responses were received from 507 teachers (213 respondents refused to give permission to contact the teacher, 28 teachers refused to cooperate, 67 teachers did not respond, 13 adolescents did not attend school, and 2 teachers could not be contacted due to incompleteness of school address).

Adolescents scoring in the borderline or clinical range on the CBCL, TRF or YSR Total Problems scale ($T \geq 60$) were selected for participation in the second stage of the study. Of the 191 selected adolescents, 114 (50.9 % boys, 49.1 % girls) agreed to participate. Available were 113 CBCL's, 110 YSR's, and 84 TRF's. Adolescents for whom TRF data were available did not differ from adolescents with missing TRFs on any of the study variables.

Second stage respondents and non-respondents were comparable with respect to age, gender, CBCL and TRF Internalizing Problems scores. However, subjects who did not participate had higher YSR Internalizing Problems scores (means 11.0 versus 14.2; $t = 2.63$; $df = 182$; $p = .01$). This may indicate that adolescents with high levels of internalizing problems felt more reluctant to cooperate.

In the second stage, a standardized psychiatric interview (DISC-IV; Shaffer et al., 2000) was administered to the adolescent and his/her primary caregiver to obtain adolescent psychiatric diagnoses. Data from this psychiatric interview were available for 96 adolescents and 110 parents. Parents were also interviewed about help-seeking for adolescent problems in the preceding 12 months. Data were available for 109 parents.

Measures

Parent, adolescent, and teacher perceptions of the presence of adolescent problems over six months preceding the first stage assessment were measured by validated Dutch translations of the CBCL (Achenbach, 1991a), YSR (Achenbach, 1991c), and TRF (Achenbach, 1991b). These instruments consist of 120 problem items (102 for the YSR), which yield Total Problems, Internalizing, Externalizing Problems, and eight specific syndrome scores. The Internalizing Problems scores were used as indicators of parents', teachers', and adolescents' global notions of the presence of internalizing problems (see figure 5.1).

Adolescent and parent perceptions of service need were assessed by the National Institute of Mental Health Diagnostic Interview Schedule for Children, version 4 (DISC-IV), parent-version and youth-version. This structured interview is designed to assess psychiatric disorders in children and adolescents, using DSM-IV criteria (American Psychiatric Association, 1994). For this report, sections concerning anxiety disorders and mood disorders were used. Our measure of service need was

composed of the informant's perception of the presence of internalizing psychopathology and associated functional impairment (cf. Brewin et al., 1987). Impairment was considered to be present when at least two out of six diagnosis-specific impairment items indicating moderate, or one item indicating severe personal distress, social or academic difficulties were present. This indicator corresponds more with formal diagnostic criteria than measures of need used in previous studies, in which respondents are directly asked whether they are in need for help.

Help-seeking from professional and informal sources in the preceding 12 months was assessed by items from the second-stage parent interview.

Statistical analysis

Structural equation modeling (AMOS 4.0; Arbuckle and Wothke, 1999) was used to test the applicability of the theoretical model to our data. To ensure an adequate amount of estimated parameters in relation to the limited sample size ($N = 114$), only observed variables were included in the model. After testing and modifying the general model (figure 5.1) to increase fit, multi-group analyses were performed to test the applicability of the model across gender.

Results

Table 5.1 shows the percentages of adolescents perceived to have borderline or clinical internalizing problems and service need by separate informants. Parents of 57 adolescents (50.4%) reported CBCL Internalizing Problems scores in the borderline or clinical range ($T \geq 60$), whereas 24 adolescents (21.8%) reported YSR Internalizing Problems in this range. Teachers reported borderline or clinical TRF Internalizing Problems for 32 adolescents (38.1%).

Based on parent report of the presence of internalizing psychopathology including functional impairment (see Measures), internalizing need was considered to be present in 16 adolescents (14.5%). Adolescent self-reports indicated a total number of 10 adolescents (10.4%) as having internalizing need (table 5.1).

Table 5.1 Percentages of adolescents with borderline/clinical internalizing problems or service need, as reported by separate informants, and overlap between informants

		Boys		Girls		Total	
		%	N*	%	N*	%	N*
Internalizing problems	Parent (P)	51.7	30 (58)	49.1	27 (55)	50.4	57 (113)
	Adolescent (A)	21.1	12 (57)	22.6	12 (53)	21.8	24 (110)
	Teacher (T)	32.6	14 (43)	43.9	18 (41)	38.1	32 (84)
	P + A	15.8	9 (57)	17.3	9 (52)	16.5	18 (109)
	P + T	16.3	7 (43)	14.6	6 (41)	15.5	13 (84)
	A + T	4.7	2 (43)	7.7	3 (39)	6.1	5 (82)
	P + A + T	2.3	1 (43)	7.7	3 (39)	4.9	4 (82)
	Service need	P	12.3	7 (57)	17.0	9 (53)	14.5
	A	6.3	3 (48)	14.6	7 (48)	10.4	10 (96)
	P + A	2.1	1 (47)	2.2	1 (45)	2.2	2 (92)

Note: Data on service need were obtained from parents and adolescents only

* In parentheses are the numbers of respondents for whom data were available

Agreement between informants' perceptions of the presence of borderline or clinical internalizing problems or service need was limited (table 5.1). Rates of service use in the four settings are reported in table 5.2.

Table 5.2 Rates of service use in four settings

	Boys (N= 57)		Girls (N= 52)		Total (N= 109)	
	%	N	%	N	%	N
General practice	14.0	8	15.4	8	14.7	16
Mental health care	14.0	8	19.2	10	16.5	18
Teacher	26.3	15	23.1	12	24.8	27
Friends/relatives	26.3	15	28.8	15	27.5	30

Of the 57 adolescents whose parents indicated the presence of borderline or clinical internalizing symptoms, 11 were also regarded as having service need by their parents. Of the 24 adolescents who reported the presence of internalizing problems themselves, merely 4 also reported service need.

Differences between girls and boys were non-significant, except for YSR Internalizing Problems; girls reported significantly more internalizing problems than boys (means: 13.1 versus 9.1; $t = 2.79$; $df = 108$; $p = .01$). However, these elevated scores for girls remained mainly in the normal range, as girls did not score in the borderline or clinical range significantly more often than boys.

Evaluation of the path model

The initial theoretical model (figure 5.1) did not yield an adequate fit (model A, table 5.3). To increase model fit, non-significant paths were deleted from the model one by one, resulting in model B (table 5.3). Consequently, modification indices were computed for the part of the total sample, for which complete data were available ($N = 66$). Only one of the suggested associations, a covariance between parent and adolescent reports of internalizing problems, was theoretically relevant and was therefore added to the model (Model C, table 5.3).

Table 5.3 Fit measures of subsequent models in the process of improving model fit

Model	χ^2	df	p	NNFI/TLI	RMSEA	90 % CI
A	58.81	20	.00	.863	.131	.093-.171
B	61.87	26	.00	.903	.110	.075-.146
C	35.71	25	.08	.970	.062	.000-.104
D	20.92	17	.23	.985	.045	.000-.101
E	23.58	20	.26	.988	.040	.000-.094
Multi-group						
F	47.54	40	.19	.976	.041	.000-.080
G	50.21	46	.31	.988	.029	.000-.071

Note: NNFI/TLI: non-normed fit index /Tucker-Lewis coefficient; RMSEA: Root Mean Square Error of Approximation; CI: confidence interval

Since all assumed associations involving teacher report of internalizing problems were found to be non-significant and therefore deleted, and no other theoretically relevant associations were suggested by the modification indices, the variable was deleted from the model (model D, table 5.3).

Finally, regression weights of equivalent associations for parents and adolescents (i.e. associations between parent/adolescent reports of internalizing problems and service need; between parental/adolescent

service need and GP-consultation; and between parental/ adolescent service need and help-seeking from friends/relatives) were constrained to be equal. Results of a chi-square difference test, which showed no significant differences between the resulting model E (table 5.3) and the unconstrained model D ($\chi^2 = 2.66; df = 3; p > .05$), were in favor of the more parsimonious model E.

To test the applicability of our model across gender, multi-group analyses were performed on the general model (model E). We first tested a model in which all paths were estimated independently for boys and girls. Thus, the constraints that were imposed in model E were retained *within* the groups of boys and girls, but *between* these groups the parameters were allowed to vary. The resulting model adequately fit the data (model F, table 5.3). Next, regression coefficients were constrained to be identical *between* boys and girls, only when this resulted in a significant improvement of model fit. All regression coefficients could be constrained to be equal across gender, except for the association between seeking help from the teacher and mental health service use, which was stronger for girls than for boys (figure 5.2). Because no significant differences were found between the resulting model G (table 5.3) and the model without constraints between genders ($\chi^2 = 2.67; df = 6; p > .05$), the more parsimonious model G was chosen as the best fitting model.

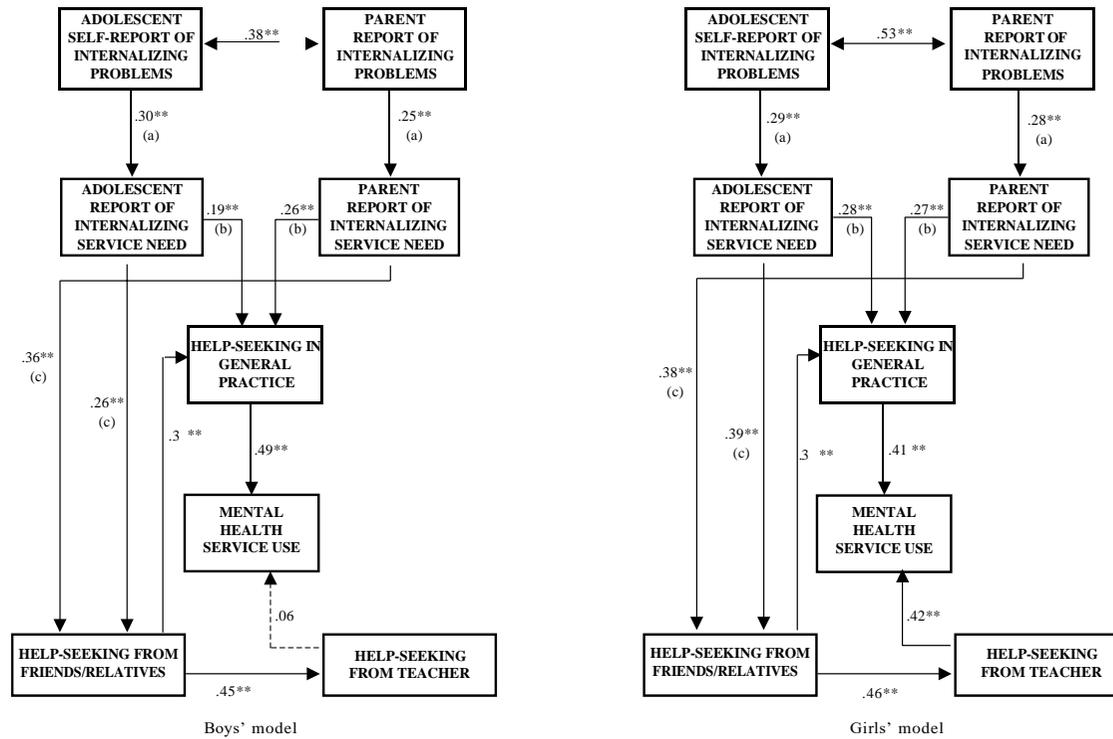


Figure 5.2 Final model of the help-seeking process for adolescent inter nalizing psychopathology, reported separately for boys and girls. Presented are standardized regression weights (single-headed arrows), correlations (double-headed arrows), and a non-significant association (dashed line). Paths with (a), (b), and (c) were constrained to be equal across parents and adolescents. ** $p < .01$

Comment

This study was aimed at investigating the process of help-seeking for adolescent internalizing psychopathology. By means of structural equation modeling, a path model that takes into account the sequential nature of help-seeking and the involvement of multiple actors and service providers was tested.

Our results confirmed adolescents' increasing autonomy as well as parents' continuing influence on the help-seeking process, as both exerted a considerable influence on the help-seeking process. Taking into account the assumed difficulties of parents in recognizing internalizing problems in their adolescent offspring (Logan, 2000), and the limited overlap between adolescent and parent perceptions of the presence of internalizing problems or need, the influences of both were remarkably similar. These comparable impacts underscore the need for intervention programs to be directed at both parents and adolescents.

A first obstacle in the help-seeking process is the acknowledgement of a need to seek help when internalizing problems are present. Only a minority of adolescents with borderline or clinical internalizing problems (19.3 % based on parent report, and 16.7 % based on adolescent report) were regarded also to be in need of services. On the other hand, some adolescents (n= 4 for parent report, and n= 6 for adolescent report) were reported to be in need of services, without their internalizing problems reaching borderline or clinical level (data on the presence of internalizing problems were unavailable for one of these parents). These findings indicate that internalizing problems may to some extent be regarded as normal for adolescence, and not requiring special care. Although some adolescents will indeed have enough resources to cope with their problems, others may benefit from care, even when they do not acknowledge a service need, or when their problems do not reach a clinical level. In designing intervention programs, it is important to find ways to distinguish between these groups of adolescents, and adjust intervention activities to their respective needs.

Mobilizing teachers to increase parents' or adolescents' awareness of a need to seek help when internalizing problems are present does not seem to be the best strategy, however. In contrast with findings for elementary school children (Zwaanswijk et al., submitted-a), teachers' perception of problems did not appear to influence service need. Perhaps teachers'

ability to identify internalizing problems is hampered by the limited time they spend with their adolescent pupils.

The less prominent role of the teacher was accompanied by a more important role of the GP. In contrast with findings for young children (Zwaanswijk et al., submitted-a), the Dutch GP functions more according to his formal role as gatekeeper to mental health care in the process of help-seeking for adolescent internalizing psychopathology. Both the regression weights in our path model (figure 5.2) and the retrospective inspection of mental health referrals confirmed this: 61 % of adolescents (compared to 41 % of young children) in mental health care had entered this care by GP referral. This increase in the GP's role might be explained by an association between adolescent internalizing problems and somatic complaints (Kramer and Garralda, 1998), which could increase GP consultation in general.

The robustness of our model was demonstrated by its consistency across gender. Although adolescent girls reported more internalizing problems than boys, their help-seeking processes were remarkably similar. This finding is in concordance with previous results, in which the elevated self-perceived problems in girls were not accompanied by elevated referral rates (Saunders et al., 1994; Zwaanswijk et al., 2003a). The only difference between genders was the stronger association between help-seeking from the teacher and mental health care use for girls.

Our limited sample size prohibited the concurrent testing of determinants of the help-seeking process. Further research on this matter will improve our understanding of variables influencing adolescent help-seeking, thereby possibly providing directions for interventions. Replication of our results in future studies, preferably longitudinal ones, is also required to confirm the findings and establish causal directionality of the associations found.

Caution should be exercised in generalizing the present findings to health care systems in which the GP does not function as gatekeeper to mental health care. We believe, however, the merits of this method not to be restricted to countries with comparable health care systems, but consider it also useful as a more generic approach for clarifying the help-seeking processes in other countries, as it takes into account the multiple stages and actors involved in these processes. We therefore advocate using our method with help-seeking models adapted to other health care systems.

Moreover, we believe our results concerning parents' and adolescents' impacts on the help-seeking process, and the generalizability of the model across genders to be of more general value.

Generalizability may be hampered by the fact that adolescents with high self-reported internalizing problems were less likely to participate in our study. Non-responding adolescents may be reluctant not only to participate in a study on help-seeking, but also to seek help in general, which could have caused an overestimation of help-seeking rates in this study.

One of the strengths of this study is the inclusion of parent and adolescent reports of internalizing problems and service need. However, information regarding service use was obtained from parents only, which may not adequately reflect adolescent service use. Reports of utilization of friends/relatives are particularly likely to vary, because of differences between social networks of parents and adolescents. Since this type of help is regarded as important for adolescents as part of their increasing autonomy (cf. Rickwood and Braithwaite, 1994; Saunders et al., 1994), future studies should include adolescent reports of service use.

Considering the differential roles of teachers and GPs in the help-seeking processes of children and adolescents, interventions aimed at increasing service use should be adapted to the age range of the target population. For children, efforts can best be focused on strengthening school personnel's abilities to detect problems and provide help. Screening for psychosocial problems by school physicians may be a promising option for these children (Brugman et al., 2001). For adolescents, however, efforts should be focused on the role of primary care practitioners in detection and referral.

What this study adds

Adolescents with internalizing problems seem to be particularly unlikely to be identified or referred to specialist mental health care. Improving our understanding of the help-seeking process of these adolescents is crucial for designing interventions to increase service use. This study takes into account the complex nature of help-seeking by testing a model that simultaneously includes several subsequent help-seeking stages and the involvement of multiple actors and service providers (professional and informal). With respect to the first obstacle on the pathway to care – the acknowledgement of the seriousness of problems –, finding ways to

distin guish between adolescents with sufficient resource s to cope with their problems and those in need of additional help is useful for designing interventions. The find ing that both parents and adolescents had considerable impacts on the help-seeking process ind icates the necess ity of includ ing both in interventio ns. Considering the roles of teachers and general practitioners in the help-seeking process, intervention efforts could best be focused on the latter.

6

Consultation for and identification of child and adolescent psychological problems in Dutch general practice

This chapter has been submitted for publication as:

Zwaanswijk, M., Verhaak, P. F. M., Van der Ende, J., Bensing, J. M., Verhulst, F. C. Consultation for and identification of child and adolescent psychological problems in Dutch general practice.

Abstract

Background : Child and adolescent psychological problems are rarely brought to the attention of GPs. Children and adolescents with psychological problems who do visit their GP are seldom identified as such by the GP.

Objective: To investigate in a general population sample of 2,449 Dutch children and adolescents (4-17 years) GP consultation and GP diagnoses of child psychological problems, and the influence of child and family characteristics upon these variables.

Methods: The degree to which parent, teacher, and adolescent reports of the presence of child psychological problems are in concordance with GP diagnoses of these problems was determined. Logistic regression analyses were used to examine correlates of GP consultation and psychological diagnoses.

Results: Approximately 80 % of children and adolescents with psychological problems had visited their GP within the preceding year. GP consultation was most strongly associated with child/adolescent chronic physical disorders. Concordance between GP psychological diagnoses and parent, teacher, and adolescent reports of psychological problems was limited. Children and adolescents with psychological problems according to parent or teacher report, children with school problems, young boys, adolescents with negative health perceptions, and adolescents from single parent families were more likely to be diagnosed with psychological problems by GPs.

Conclusion: Improving GPs' interview techniques, introducing standardised screening measures in general practice, increasing GPs' awareness of the possible presence of psychological problems in children consulting for physical problems, and strengthening collaboration between GPs and mental health professionals may increase GP identification of child psychological problems and enhance access to care for those in need.

Keywords: mental health, child development, consultation, clinical diagnosis, public health

Introduction

Although psychological problems are relatively common in children and adolescents, they are rarely brought to the attention of general practitioners (GPs). Ford et al. (2003) found that merely 24 % of children with ICD-10 diagnoses of psychiatric disorders (World Health Organization, 1993) had been in contact with primary health care for these problems over a 18-month period. Using a less restrictive measure

of the presence of child psychological problems and considering GP consultation in general, Foets et al. (1996) found that 69% of children with a Child Behavior Checklist Total Problems score (Achenbach, 1991a) in the clinical range had been in contact with their GP in the preceding year. Rates of GP consultation did not differ significantly between children with and without scores in the clinical range.

In addition to the fact that not all children with psychological problems come into contact with their GP, a significant number of these children who do visit their GP are not identified as such by their physician (Costello et al., 1988; Kelleher et al., 1997). Dulcan et al. (1990) found that merely 17% of psychiatrically disordered children were identified as such by their primary care paediatrician. Although parents' specifically mentioning their child's problems to the paediatrician increased identification, 67% of disordered children remained unidentified. The study by Dulcan et al. was conducted in the US health care system, in which general practitioners are not designated as gatekeepers to mental health care, as they are in the Netherlands and the UK. However, the authors acknowledged that primary care physicians performed this role increasingly often. A more recent British study showed that parents' explicit expression of concern about child mental health problems during consultation increased GPs' identification of both cases and non-cases (Sayal and Taylor, 2004).

The limited identification of psychological problems by GPs is also found in adult populations (Goldberg and Huxley, 1992). GPs' lack of skills, the limited duration of consultations, the co-occurrence of physical and psychological symptoms, patients presenting primarily with physical complaints instead of psychological ones, and patients' tendency to normalise symptoms, have been mentioned as possible reasons for low identification in adults (Kessler et al., 1999; Kirmayer et al., 1993; Wittchen et al., 2002).

As most children attend their GP on a regular basis, GPs are strategically well placed to detect child mental health problems and to motivate their families to obtain care when needed. However, the Dutch GPs' formal role as gatekeeper is not always as pronounced as expected (Zwaanswijk et al., submitted-a), and only a minority of children and adolescents with psychological problems enter specialist mental health care (Burns et al., 1995; Leaf et al., 1996; Verhulst and Van der Ende, 1997; Zwaanswijk et

al., 2003a), which suggests that obstacles affecting children's progress on the pathway to care may exist in general practice.

So far, studies have mainly focused on factors associated with consultation for child psychological problems, whereas factors associated with GP identification of such problems have received little attention (Zwaanswijk et al., 2003b). The present study aims to investigate GP consultation and GP diagnoses of child psychological problems in a large general population sample. The degree to which parent, teacher, and adolescent reports of the presence of psychological problems are in concordance with GP diagnoses of these problems is determined. Various child and family characteristics are investigated as correlates of GP consultation and GP psychological diagnoses.

Methods

Participants

Our sample consisted of 2,449 children and adolescents and their primary caregivers, of whom 1,507 were children (4-11 years), and 942 were adolescents (12-17 years). Data were obtained from several databases. An overview of the numbers of respondents for each of these databases is presented in figure 6.1. The main source of data was the Second Dutch National Survey of General Practice, which examined morbidity and treatment in a representative sample of 104 general practices with 195 GPs and 385,461 listed patients (67,264 were 4-17 years of age) (Westert et al., in press). In this sample, GP consultation and psychological diagnoses were assessed by means of the contact registration, in which participating GPs electronically recorded each diagnosis made during patient contacts. Data collection took place during one calendar year, in the period between April 2000 and January 2002. Morbidity data of eight practices were excluded because of incomplete data collection.

A random sample of the practice population was asked to participate in a health interview survey (total response rate: 64.5%), which contained questions on socio-demographic characteristics, health care utilisation etc. Participants were comparable to the practice population with respect to gender, age, and place of residence (Westert et al., in press). The interviews were carried out between December 2000 and December 2001, spread over a whole year to avoid seasonal patterns. For children aged 4-11 years, a proxy interview was administered to one of the parents, whereas adolescents (12-17 years) answered the questions themselves.

During the health interview, parents completed the Child Behavior Checklist (CBCL; Achenbach, 1991a), and adolescents completed the Youth Self-Report (YSR; Achenbach, 1991c) to screen for the presence of psychological problems. Responses were received for a total number of 2,149 children and adolescents. Respondents were asked permission to send the Teacher's Report Form (TRF; Achenbach, 1991b) to the teacher who was the most familiar with the child's functioning. A total number of 1,481 teachers responded (485 parents/adolescents or teachers refused to cooperate, 163 teachers did not respond, 18 children did not attend school, and 2 teachers could not be contacted due to incomplete school addresses). Children and adolescents with available and missing TRF data were comparable with respect to gender, CBCL and YSR Total Problems scores, and presence of school problems.

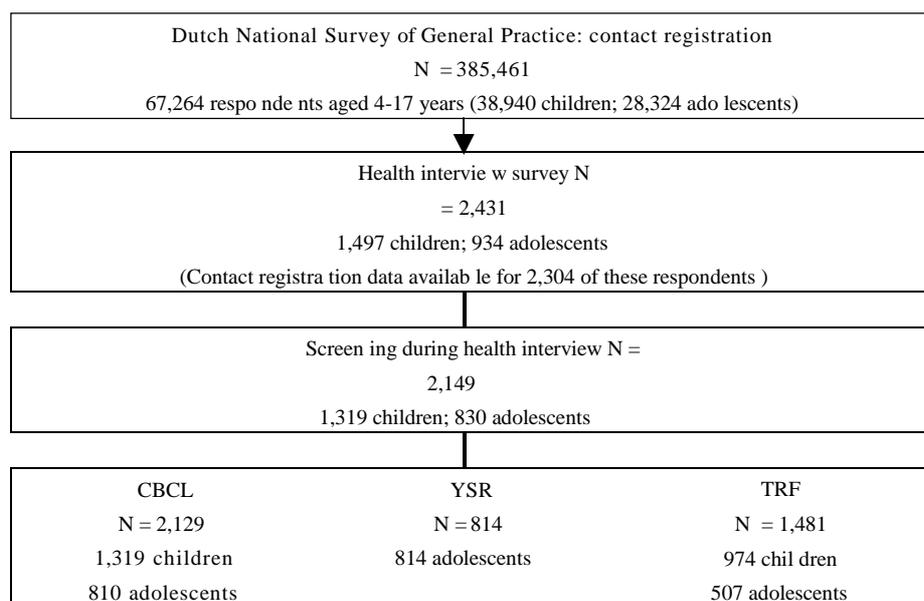


Figure 6.1 Numbers of respondents for each aspect of the study. Due to incomplete overlap between databases, the total sample on which analyses were performed included 2,449 children and adolescents.

Instruments

Parent, adolescent, and teacher perceptions of the presence of child and adolescent psychological problems over six months preceding assessment were measured by validated Dutch translations of the CBCL, YSR, and TRF. These instruments consist of 120 problem items (YSR: 102), which

yield Total Problems, Internalizing and Externalizing Problems, and eight syndrome scores. These scales are hierarchically ordered; the Internalizing Problems score consists of the sum of scores for the syndromes Anxious/ Depressed, Somatic Complaints, and Withdrawn, whereas the Externalizing Problems scale comprises the syndromes Delinquent Behavior and Aggressive Behavior. The Total Problems score is computed by summing the Internalizing and Externalizing scores, and scores for the syndromes Social Problems, Thought Problems, and Attention Problems. Scores on the CBCL, YSR, and TRF Total Problems, Internalizing, and Externalizing scales can be dichotomised into those in the clinical versus normal range of the distributions based on Dutch normative samples, using a *T* score > 63 as cut-off point. The clinical cut-off point has been found to discriminate between children showing similarities with children who were and who were not referred to mental health care (Achenbach, 1991 a; b; c). Since children scoring just below the clinical cut-off point may also show problems that require special care, the instruments also include a deviant range, referring to both borderline and clinical scores, with a *T* score of 60 as cut-off point. Because analyses were performed mainly using the dichotomisation into deviant and normal groups, results refer to this dichotomisation, except when the clinical range is explicitly mentioned.

The health interview assessed child and family characteristics thought to be associated with GP consultation and GP psychological diagnoses (table 6.1). During this interview, parents were asked to indicate the presence of child chronic physical disorders on a 19-item list, including problems such as migraine, asthma, and severe neck/shoulder ailments (Van den Berg and Van der Wulp, 2003).

Table 6.1. Characteristics of participating children (*N* = 1507) and adolescents (*N* = 942)

	Children		Adolescents	
	%	N*	%	N*
Child				
CBCL Internalizing	23.2	304 (1311)	15.1	122 (806)
Externalizing	18.8	246 (1311)	16.9	136 (805)
Total Problems	20.4	268 (1311)	14.3	115 (806)

- table 6.1 continues -

- table 6.1 con tinued -

		Children		Adolescen ts	
		%	N*	%	N*
TRF	Internalizing	16.1	157 (974)	16.2	82 (507)
	Externalizing	19.7	192 (974)	15.8	80 (507)
	Total Prob lems	17.2	168 (974)	14.8	75 (507)
YSR	Internalizing	-	-	10.1	82 (808)
	Externalizing	-	-	9.3	75 (808)
	Total Prob lems	-	-	7.9	64 (808)
Male gender		52.0	783 (150 7)	47.6	448 (942)
Chronic physical disord ers		28.5	427 (149 7)	33.8	316 (934)
School probl ems		23.0	343 (149 1)	-	-
Moderate/bad general health impression		4.6	68 (1493)	5.1	48 (933)
Family					
Parental mental health problems		25.1	375 (149 6)	-	-
Education level: Low		14.1	211 (149 5)	19.2	177 (922)
Moderate		48.7	728 (149 5)	47.1	434 (922)
High		37.2	556 (149 5)	33.7	311 (922)
Constellatio n:	Two-parent	91.9	1322 (143 8)	89.4	813 (909)
	Single parent	8.1	116 (143 8)	10.6	96 (909)
Insurance:	Public	56.4	820 (145 4)	51.5	470 (912)
	Private	43.6	634 (145 4)	48.5	442 (912)

Note. Figures for CBCL, TRF, and YSR refle ct children and adolescen ts scoring in the deviant range.

* In parentheses are the numbe rs of respondents for whom data were available.

Parents' general impression of child health was assessed by means of a five-point self-report item, derived from the Short-Form 36 (SF-36; Ware and Sherbo urne, 1992). General im press ion of adolescent health was assess ed by adolescent self-report. Responses were dichotomised into good (scores 1-3) vers us moderate/bad (scores 4-5).

The presence of parental mental health problems wa s measure d by a validated Dutch translation of the 12-item version of the General Health Questionn aire (GHQ; Goldberg, 1972). The GHQ has been widely used to measu re general psychological distress, with a total score of 2 or more reflecting the prese nce of probl ems. This variable was assessed in parents of children aged 4-11 years only.

Parental education level was scored on an 11-point scale, with 11 being the highest level. The parent with the highest education level was used to trichotomise the sample in low (scores 1-3), moderate (scores 4-8), and high (scores 9-11) education level.

GP diagnoses of child and adolescent psychological problems were determined by codes from the International Classification of Primary Care (ICPC; Lamberts et al., 1993), which were electronically recorded by GPs during patient contacts. In the Netherlands, the ICPC is the standard for coding morbidity in general practice. It is included in all electronic patient record based morbidity recording systems, and training to use the classification system is organised on a regular basis. To ensure accurate coding, GPs also received manuals and a list on which all ICPC-codes were briefly specified. Moreover, the electronic recording system enabled searching for ICPC-codes by means of keywords. The quality of coding was demonstrated by the high concordance (on average: 81 %) between codes given to 30 fictitious patients by participating GPs and a panel of four GPs with specific expertise in using ICPC (Van der Linden et al., 2004).

Only ICPC-codes referring to psychological problems (P-codes) and social problems (Z-codes) were selected as relevant for our study. In our analyses, a dichotomous variable was used, indicating whether or not a child had received such a code.

Statistical analyses

Since child and family variables were derived from different sources depending on the age range of the participant (parent report for children aged 4-11 years; adolescent self-report for respondents aged 12-17 years), analyses were performed for children and adolescents separately. To clarify this distinction, children aged 4-11 years will be referred to in our results as 'young children' as opposed to 'adolescents'.

Concordance between parent, teacher, and adolescent reports of psychological problems and GP psychological diagnoses was assessed by determining percentages of respondents scoring in the deviant range on CBCL, TRF, and YSR Total Problems scales, who also received a GP diagnosis of psychological problems. To investigate whether severity of child problems affected GP identification, concordance with GP psychological diagnoses was also assessed for children and adolescents

scoring in the clinical range on CBCL, TRF, and YSR Total Problems scales.

To determine the association of child and family characteristics with GP consultation and GP psychological diagnoses, logistic regression analyses were performed. Since multilevel analyses testing the effect of clustering within general practices did not show significant effects of clusters, traditional simple logistic regression analyses were performed for each association separately. Subsequently, stepwise multiple logistic regression analyses were performed to determine the unique contribution of each of the child and family variables to an increase in the likelihood of GP consultation and GP psychological diagnoses over and above the effect of all other variables. The hierarchical relationship of the CBCL, TRF, and YSR scales (see Instruments) made it necessary to perform regression analyses on two different sets of variables: (1) including the Total Problems scores, (2) including Externalizing and Internalizing scores.

Results

Overall, 73.9 % of young children, and 76.2 % of adolescents had been in contact with their GP during the year of assessment. Of those who had visited their GP, 7.1 % of young children and 6.7 % of adolescents received a psychological diagnosis. The most frequently occurring diagnoses for young children were: specific learning problems/delay in development (P24; 18.9 % of all child P- and Z-diagnoses), enuresis (P12; 16.2 %), and overactive/hyperkinetic child (P21; 14.9 %). Adolescents were most frequently diagnosed with: enuresis (P12; 15.2 % of all adolescent P- and Z-diagnoses), relationship problems with parent/other family member (Z20; 13.0 %), and feeling anxious/nervous/tense (P01; 8.7%).

Frequencies of children and adolescents scoring in the deviant range of the CBCL, TRF, and YSR problems scales are presented in table 6.1. Agreement between parent, teacher, and adolescent reports of the presence of problems was limited; approximately one third of children and adolescents with deviant CBCL Total Problems scores also had TRF or YSR Total Problems scores in the deviant range, whereas 13.7 % of adolescents scored in the deviant range on both YSR and TRF Total Problems.

Children and adolescents with psychological problems in the deviant range suffered significantly more frequently from additional difficulties such as chronic physical disorders, moderate/bad general health, school problems, and the presence of a parent with mental health problems (table 6.2).

Of children and adolescents scoring in the deviant range of the CBCL Total Problems scale, 80.1 % and 86.0 % had been in contact with their GP, respectively. Consultation rates were comparable for children and adolescents rated as deviant by their teacher (79.1 % and 86.1 %) and by adolescent self-report (86.9 %).

Concordance between parent, teacher, and adolescent reports of the presence of child psychological problems and GP psychological diagnoses was limited, both when Total Problems scores in the deviant range as when scores in the clinical range were taken into account (table 6.3). Percentages of children and adolescents who scored in the normal range of the CBCL, TRF, and YSR Total Problems scales, and who were also diagnosed with GP psychological problems are reported in table 6.3 as well.

Table 6.2 Additional problems of children and adolescents scoring in the deviant versus normal range of the CBCL, TRF, and YSR Total Problems scales

	Child					Adolescent				
	CBCL					CBCL				
	deviant		normal		χ^2	deviant		normal		χ^2
	%	N	%	N		%	N	%	N	
Chronic physical disorders	41.6	111 (267)	24.5	253 (1034)	30.8**	51.8	59 (114)	30.4	208 (684)	20.0**
School problems	45.3	120 (265)	17.2	178 (1032)	93.6**					
Moderate/bad health impression	10.9	29 (266)	2.5	26 (1032)	36.6**	7.0	8 (114)	4.1	28 (683)	1.9 ^{ns}
Parental mental health problems	47.0	125 (266)	19.8	205 (1034)	82.4**					
	TRF					TRF				
	deviant		normal		χ^2	deviant		normal		χ^2
	%	N	%	N		%	N	%	N	
	Chronic physical disorders	33.5	56 (167)	25.0	201 (804)	5.2*	44.6	33 (74)	30.3	130 (429)
School problems	47.3	79 (167)	17.2	138 (801)	71.9**					
Moderate/bad health impression	9.0	15 (167)	2.1	17 (801)	20.3**	6.8	5 (74)	4.0	17 (429)	1.2 ^{ns}
Parental mental health problems	31.7	53 (167)	23.0	185 (804)	5.7*					

- table 6.2 continues -

- table 6.2 continued -

	Adolescent YSR				χ^2
	deviant		normal		
	%	N	%	N	
Chronic physical disorders	54.7	35 (64)	31.7	233 (736)	14.0**
Moderate/bad health impression	15.6	10 (64)	4.1	30 (735)	16.5**

Note: Child school problems and parental mental health problems were not assessed in adolescents. In parentheses are the number of respondents for whom data were available. * $p < .05$; ** $p < .01$; ns = non-significant

Table 6.3 Percentages of concordance between CBCL, TRF, and YSR Total Problems and GP psychological diagnoses

	Child				Adolescent					
	Deviant		Normal		Deviant			Normal		
	CBCL	TRF	CBCL	TRF	CBCL	TRF	YSR	CBCL	TRF	YSR
GP psychological diagnosis	12.8	14.5	5.0	4.0	14.4	11.9	23.1	4.6	5.8	5.1

	Clinical		Normal		Clinical		Normal			
	CBCL	TRF	CBCL	TRF	CBCL	TRF	YSR	CBCL	TRF	YSR
	GP psychological diagnosis	15.2	19.5	5.4	4.2	14.9	14.3	25.0	5.1	6.0

Children with deviant CBCL or TRF Total Problems scores who did not receive a GP psychological diagnosis, were mainly diagnosed with warts (S03; 6.1 % of all child ICPC codes excluding P- and Z-codes), upper respiratory tract infection (R74; 5.1 %), and cough (R05; 4.9 %). The most frequently occurring diagnoses for adolescents with unidentified psychological problems were upper respiratory tract infection (R74; 4.2 % of all adolescent ICPC codes excluding P- and Z-codes); hayfever/ allergic rhinitis (R97; 3.0 %), and family planning/oral contraceptive (W11; 3.0 %).

Logistic regression analyses

Results of simple logistic regression analyses are listed in table 6.4. Only significant odds ratios are reported. Results of multiple logistic regression analyses are shown in table 6.5 for the two sets of variables separately. Only variables that were entered and not removed in the stepwise regression procedure are reported.

Table 6.4 Simple logistic regression analyses: child and family characteristics influencing GP consultation and child psychological diagnoses by the GP

	GP consultation		GP psychological diagnoses	
	Child	Adolescent	Child	Adolescent
Child gender	-	0.6 (0.4-0.8) ***	2.6 (1.5-4.4) ***	-
Child chronic physical disorders	2.7 (2.0-3.6)**	2.8 (1.9-4.1)**	1.9 (1.2-3.0)*	3.3 (1.8-6.0)**
Child school problems	-	-	3.3 (2.1-5.3)**	-
Gen. impression of child health	3.8 (1.6-8.9)**	-	-	6.9 (3.2-15.1)**
Parent mental health problems	-	-	2.0 (1.2-3.3)**	-
Parental education level				
Moderate	-	-	0.5 (0.3-0.9) *	0.4 (0.2-0.8) *
High	-	-	-	-
Family constellation	-	-	2.0 (1.0-4.1) ^d *	2.3 (1.1-5.0) ^d *
Type of insurance	-	-	-	-
CBCL				
Internalizing	-	1.8 (1.1-3.0)*	1.9 (1.1-3.3)*	3.6 (1.8-7.3)**
Externalizing	-	1.8 (1.1-3.0)*	2.4 (1.4-4.1)**	-
Total Problems	1.6 (1.1-2.2)**	2.2 (1.3-3.8)**	3.1 (1.8-5.2)**	4.1 (2.0-8.2)**

- table 6.4 continues -

- table 6.4 continued -

	GP consultation		GP psychological diagnoses	
	Child	Adolescent	Child	Adolescent
TRF				
Internalizing	-	-	-	2.6 (1.1-6.2)*
Externalizing	-	-	5.7 (3.0-10.9)**	3.3 (1.4-7.9)**
Total Problems	-	2.1 (1.0-4.2)*	4.4 (2.3-8.5)**	-
YSR				
Internalizing		-		5.3 (2.6-10.8)**
Externalizing		-		3.0 (1.4-6.6)**
Total Problems		2.3 (1.1-4.8)*		6.3 (3.0-13.3)**

Note: Table entries are odds ratios with 95 % confidence intervals in parentheses. Due to rounding, some confidence intervals include the value 1.0, which was in fact somewhat larger. Child school problems and parental mental health problems were not assessed in adolescents. * $p < .05$; ** $p < .01$

^a Greater likelihood for girls versus boys

^b Greater likelihood for boys versus girls

^c Greater likelihood for low versus moderate education level

^d Greater likelihood for children from single parent families

Table 6.5 Multiple logistic regression analyses: child and family characteristics influencing GP consultation and GP psychological diagnoses

	GP consultation		GP psychological diagnoses	
	Child	Adolescent	Child	Adolescent
I. Analysis including Total Problems				
Child gender	-	-	2.2 (1.1-4.6) ^{a*}	-
Child chronic physical disorders	2.8 (1.8-4.2)**	2.8 (1.6-4.7)**	-	-
General impression of child health	-	-	-	7.2 (2.2-23.3)**
Total Problems (parent report)	1.5 (1.0-2.3)*	-	2.5 (1.3-5.1)**	5.0 (2.1-12.2)**
Total Problems (teacher report)	-	-	3.0 (1.5-6.1)**	-
Family constellation	-	-	-	3.2 (1.1-8.6) ^{b*}
II. Analysis including Int and Ext				
Child chronic physical disorders	2.9 (1.9-4.4)**	2.8 (1.6-4.7)**	-	-
Child school problems	-	-	2.5 (1.3-4.8)**	-
General impression of child health	-	-	-	6.7 (2.1-21.4)**
Internalizing (parent report)	-	-	-	3.9 (1.6-9.6)**
Externalizing (teacher report)	-	-	4.6 (2.4-9.0)**	-
Family constellation	-	-	-	3.7 (1.3-10.2) ^{b*}

Note: Table entries are odds ratios with 95% confidence intervals in parentheses. Due to rounding, some confidence intervals include the value 1.0, which was in fact somewhat larger. Int = Internalizing; Ext = Externalizing. Child school problems were not assessed in adolescents.

* $p < .05$; ** $p < .01$.

^a Greater likelihood for boys versus girls

^b Greater likelihood for adolescents from single parent families

Discussion

Of our sample of Dutch children and adolescents with psychological problems, approximately 80 % had been in contact with their GP during the year of assessment. This figure is higher than the 69 % reported in a previous Dutch study (Foets et al., 1996). However, the latter figure was based on parent reports of GP contacts rather than contact registration data. Although the previous study (Foets et al., 1996) also used contact registration data, consultation rates cannot be compared due to differences in lengths of registration periods (3 months for the previous versus 1 year for the present study).

Children and adolescents appeared to visit their GP mainly because of physical disorders, as individuals with these disorders were more likely to have consulted their GP. The presence of psychological problems also increased the chance of young children consulting their GP (cf. Dulcan et al., 1990; Sayal and Taylor, 2004), but this effect was not found for adolescents (cf. Potts et al., 2001).

Although the finding that young children with psychological problems were more likely to visit their GP is promising, GP identification of these problems was limited, both for children and adolescents. On average, one in seven children and one in eight adolescents who were considered by their parents or teachers to have psychological problems in the deviant range received a psychological diagnosis from their GP. When GP diagnoses were compared with adolescent self-report of psychological problems, concordance increased to 23 %, which is comparable to previous findings (Kramer and Garralda, 1998). This higher concordance may be attributed to the fact that adolescents are increasingly able to directly discuss their own concerns about psychological problems with the GP.

Severity of problems hardly affected GP identification of psychological problems, as concordance figures increased only slightly when only clinical CBCL, TRF, and YSR problem scores were considered.

The limited concordance between GP diagnoses and others' reports of psychological problems may be due to parents' reluctance to explicitly mention their concerns about child problems during consultation (Dulcan et al., 1990; Lynch et al., 1997; Sayal and Taylor, 2004). Due to increases in the frequency with which Dutch patients consult their GP and in Dutch GPs working part-time, GPs' workload has increased substantially

(Van den Berg et al., 2004 b). The resulting limited length of consultations (on average < 10 minutes) (Van den Berg et al., 2004b) may contribute to parents' reluctance, as more time is needed to discuss psychological issues (Horwitz et al., 1992; Van den Berg et al., 2004b). Improving GPs' skills in using psychologically oriented interview techniques, which facilitate parental disclosure of sensitive information concerning child mental health, and in actively eliciting parental concerns, may increase GP diagnoses (Sayal and Taylor, 2004; Wissow et al., 1994). Identification may also be enhanced by the introduction of standardised screening measures in general practice (Horwitz et al., 1992).

Efforts to improve GPs' skills may, however, be hampered by the fact that GPs' task conception regarding counselling in case of pedagogical or educational difficulties is rather limited and has decreased markedly during the previous decade. Whereas 3 % of Dutch GPs perceived this kind of counselling hardly or not at all as their task in 1987, this figure rose to 18 % in 2001. Merely 21 % of Dutch GPs believed pedagogical or educational counselling to fall largely or completely within their role as GP in 2001, whereas 57 % of GPs had this opinion in 1987 (Van den Berg et al., 2004 b).

Another explanation for the limited concordance may be reluctance on the side of the GP to diagnose a child or adolescent with psychological problems because of the stigma associated with the diagnosis. Particularly when the likelihood of obtaining specialist mental health care following referral is limited due to waiting lists, GPs may not see the benefit of diagnosing children with these problems. Strengthening collaboration between GPs and mental health professionals may prove useful in this respect.

Thirdly, concordance figures might have been underestimated since children and adolescents with parent, teacher, or self-reported psychological problems may truly have consulted their GP for physical instead of psychological complaints. This possibility is even more likely because chronic physical disorders were found to be elevated in those with psychological problems, and were associated with an increased chance of GP consultation. Since our study was part of a larger study on morbidity and treatment in general practice, data were collected on GP consultation in general, and we were not able to deduct whether GP assistance was sought for child psychological problems specifically. This means that GPs indeed might have been aware of the presence of

psychological problems, but did not register them as reason for consultation. However, restricting future analyses to consultations for psychological problems only could produce a too narrow focus, because previous research has shown that even if parents do express concerns about their child's psychological problems to the GP, they generally do this in the context of medical problems, instead of directly relating to the actual problems (Foets et al., 1996; Garralda, 1990).

The finding that child psychological problems were often accompanied by chronic physical disorders could be an indication of somatisation. GPs may have difficulty disentangling physical and psychological symptoms and may be more inclined to record the overt physical instead of the underlying psychological symptoms, thereby reducing identification of psychological problems. The fact that the diagnoses occurring most frequently among children and adolescents with unidentified psychological problems were primarily purely physical ones, argues against the possibility of GPs being aware of underlying psychological problems.

Some of the children and adolescents identified as having psychological problems by parent, teacher or self-report may be able to function adequately, which could partly explain why they were not identified by their GP. The limited consistency between parent, teacher, and adolescent reports of such problems (Achenbach et al., 1987) implies that there are no unequivocal criteria to define the distinction between normal and pathological behaviour. However, our finding that the presence of psychological problems is associated with a range of additional difficulties may indicate a reduced sense of well-being among children with psychological problems.

The probability of GPs diagnosing children and adolescents with psychological problems was increased for those whose parents also reported such problems in their child. Inspection of the specific types of problems associated with GP diagnoses shows a pattern that could be expected based on age-related differences in prevalence rates of the problem types: young children with externalising, and adolescents with internalising problems had better chances of being diagnosed.

Of the additional problems assessed in our study, only school problems (for young children) and moderate/bad perceived health (for adolescents) significantly increased the chance of receiving a GP psychological

diagnosis. The presence of chronic physical disorders, which did increase the likelihood of contact with the GP, did not affect the chance of receiving a psychological diagnosis when other variables were controlled for. Since chronic physical disorders occurred significantly more frequently in children and adolescents with psychological problems in the deviant range, increasing GPs' awareness of the association between chronic physical illness and the risk for psychiatric disorders (Meltzer et al., 2000; Rutter et al., 1970) might elevate identification.

The chance of receiving a psychological diagnosis was increased for young boys. This effect was only found in the multiple regression analysis including Total Problems, but disappeared in the analyses including Internalizing and Externalizing scores.

The only family characteristic associated with GP psychological diagnoses after controlling for the effects of other variables was family constellation, and this effect was found in adolescents only. Adolescents from single parent families were more likely to receive a GP psychological diagnosis. Apparently, GPs have an intensified focus on the possibility of psychological problems in these youngsters.

Although not all children and adolescents with psychological problems need additional care, the limited detection of disorders may prevent or delay the receipt of appropriate care for the ones who do. Efforts to improve GP detection of child and adolescent psychological problems may enhance access to care. Because Dutch GPs' task conception regarding the management of psychological problems has been narrowed in the last decade, and they tend to refer patients with psychological problems to other service providers (e.g. primary care psychologists, social workers) more frequently (Van den Berg et al., 2004 b), such efforts should be accompanied by good referral possibilities.

7 Change in children's emotional and behavioural problems over a one-year period

Associations with parental problem recognition and service use

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Abstract

Although children with emotional or behavioural problems are at increased risk for future problems, knowledge of factors associated with persistence and change in child problems once these problems exist is limited. Using repeated measures analyses of variance, the present study investigated the association of parental problem recognition, professional and informal service use, and socio-demographic factors with change in child problems over a one-year period, in a sample of 360 children and adolescents with emotional and behavioural problems. Higher overall problem levels were found for children (aged 4-11 years at baseline) versus adolescents (aged 12-17 years), for boys, and for children with less educated parents, which indicates the need to address preventive actions at these groups. Children who had been in contact with general practitioners or mental health services had higher overall problem levels, suggesting that children who need it most end up receiving professional care. Although child emotional and behavioural problems decreased significantly over time, this change was not associated with utilisation of professional or informal services. Our findings imply the need for methodologically sound research into the effectiveness of professional and informal services for child emotional and behavioural problems.

Keywords: child and adolescent psychopathology, problem recognition, service use, longitudinal change

Introduction

Children with emotional or behavioural problems are at increased risk for persistence of problems in following years (Verhulst and Van der Ende, 1992). Little is known, however, about factors associated with persistence and change in child problems once these problems exist. In a sample of children referred to a psychiatric clinic, improvement in child problems was positively associated with male gender, child age, and length of follow-up interval. The strongest predicting factor for later psychopathology was previous child psychopathology, and few other child, family, and treatment-related factors had additional predictive value (Heijmans Visser et al., 2003).

Although Heijmans Visser et al. investigated the association of service use with later child psychopathology, their focus was restricted to mental health service use only. Since only a minority of children with emotional or behavioural problems receive mental health care (Burns et al., 1995; Leaf et al., 1996; Verhulst and Van der Ende, 1997; Zwaanswijk et al., 2003a), and parents of problematic children tend to seek help from a

variety of sources besides mental health care (e.g. informal care, primary care), it is interesting to investigate the association of these various types of care with change in child problems over time. The present study aims to provide a reflection of this multi-faceted nature of service use for child emotional and behavioural problems by investigating the extent to which utilisation of professional (general practitioner, mental health care) and informal services (teacher, friends or relatives) is associated with change in children's problems over a one-year period. Parents' acknowledgement of the presence of emotional or behavioural problems in their child (problem recognition) and sociodemographic factors (child gender, age group, parental education level) are also investigated as possible correlates of change in children's problems.

Methods

The sample used in this article is part of a larger study on help-seeking for child emotional and behavioural problems. For a more detailed description of the methodology of this study, see Zwaanswijk et al. (submitted-a; b). Data were obtained from the Second Dutch National Survey of General Practice, in which 2,431 parents of children (aged 4-17), who were randomly chosen from a representative sample of Dutch general practice patients, participated in an extensive health interview survey (Westert et al., in press). The patients listed in the participating general practices were comparable to the general Dutch population with respect to age, gender, and type of health insurance (Westert et al., in press). As part of the health interview, children were screened for the presence of emotional or behavioural problems by means of the Child Behavior Checklist (CBCL; Achenbach, 1991a), Teacher's Report Form (TRF; Achenbach, 1991b), and Youth Self-Report (YSR; Achenbach, 1991c). Parents of children scoring in the deviant range of the CBCL, TRF, or YSR Total Problems scales based on the cut-off points suggested by Achenbach (1991a; b; c), were asked to participate in an interview on help-seeking (T1). Parents of 360 of the originally 553 selected children participated (65.1%). Children of respondents and non-respondents did not differ significantly in age, gender, CBCL and TRF Total Problems scores, but participating parents were more highly educated (Mann-Whitney U -test; $p < .01$) and their children had lower YSR Total Problems scores (T -test; $p < .05$).

One year after the first interview, 317 respondents (response: 88.1%) again filled in the CBCL, YSR, and a questionnaire on help-seeking (T2). No significant differences between respondents and non-respondents

were found for child gender, child age, parents' education level, CBCL Total Problems score, and contact with professional or informal services on T1.

At both time points, parents were asked whether or not they had used help for child emotional or behavioural problems from general practitioners (GPs), mental health care, teachers, and friends or relatives during the year preceding assessment. Parental problem recognition was assessed at T1 by asking whether the child had an emotional or behavioural problem.

To investigate factors associated with change in the level of problem scores, repeated measures analyses of variance were used, with the variables listed in table 7.1 as between-subjects factors. Based on child age on T1, the sample was dichotomised into children (aged 4-11 years) and adolescents (aged 12-17 years). Because of the effect of parental education level on T1 participation, we controlled for this variable in the analyses. Analyses were restricted to parent reports of child problems (CBCL Total Problems), because TRF data were not obtained at T2, and the number of respondents for whom YSR Total Problems scores were available for both time points was limited ($N = 87$).

After testing the strength of the association of each variable with change in problem scores independently, variables with significant effects were entered into a multiple analysis to determine their unique contribution over and above the effects of all other variables. When a significant effect was found for parental education level, dummy variables were subsequently included in the model to test whether the patterns of change for children from highly and moderately educated parents differed significantly from the pattern for children from parents with low education level.

Table 7.1 Descriptives of factors included in the present study, and their within-subjects and between-subjects effects on the change in the CBCL Total Problems scores

	N	%	Total Problems					
			Means		Within		Between	
			T1	T2	F	p	F	p
Child gender	360	54.4 % boys 45.6 % girls	39.35 34.02	31.33 24.62	.38	.54	4.08	.04

- table 7.1. continues -

- table 7.1 continued -

	Total Problems							
			Mean s		Within		Between	
	N	%	T1	T2	F	p	F	p
Child age group at T1	360	68.3 % child 31.7 % adolescent	38.76 32.96	29.97 24.26	.01	.93	7.98	.01
Parental education level	357	13.4 % low 50.1 % moderate 36.5 % high	39.81 38.35 34.08	33.00 30.65 23.45	.82	.44	5.14	.01
Parental problem recognition	354	42.9 % yes 57.1 % no	43.39 32.23	37.04 21.44	.03	.87	2.21	.14
Service use								
General practitioner	311	17.4 % yes 82.6 % no	50.24 34.36	44.72 24.98	.10	.76	7.27	.01
Mental health services	311	18.0 % yes 82.0 % no	47.09 34.89	41.95 25.18	1.53	.22	4.11	.04
Teacher	311	36.0 % yes 64.0 % no	44.20 33.14	37.68 23.08	.14	.71	.10	.75
Friends or relatives	311	34.4 % yes 65.6 % no	45.45 32.75	38.82 22.83	.16	.69	2.82	.09

Note: Service use was assessed at T1 and/or T2

Results

Since our sample was screened for the presence of emotional or behavioural problems, the overall mean CBCL Total Problems scores at T1 (36.9; sd. 18.3) and at T2 (28.3; sd. 20.9) were above the means of a Dutch normative sample (Verhulst et al., 1996). However, because screening was based on deviant Total Problems scores on at least one of three separate measures (CBCL, TRF, and YSR), not all, but 244 children (68 %) in our sample had deviant CBCL Total Problems scores at T1.

Overall, CBCL Total Problems scores decreased significantly over a one-year period (T -test; $p < .01$). In 43.3 % of our sample, scores changed from deviant to normal level during the assessment period, whereas in 2.2 % scores deteriorated from the normal to the deviant range. Comparable percentages of children remained in either the deviant (33.3 %) or the normal range (30.2 %).

When asked directly whether their child had an emotional or behavioural problem (parental problem recognition), 42.9 % of parents confirmed the presence of such problems. This percentage was somewhat higher (48.8 %) for parents whose children scored in the deviant range of the CBCL Total Problems scale at T1. Children with deviant CBCL Total Problems scores combined with parental problem recognition scored significantly higher on all CBCL syndrome scales (except for Somatic Complaints; *T*-tests; $p < .05$) than deviant scoring children without parental problem recognition.

Frequencies of professional and informal service use for the total sample are presented in table 7.1. Children who had used services had significantly more problems at baseline than those who had not used the same type of services, both when CBCL Total Problems were assessed continuously (*T*-tests; $p < .01$) and when they were dichotomised into deviant versus normal range (χ^2 -tests; $p < .05$). Within the group of children scoring in the deviant range of the T1 CBCL Total Problems scale, service utilisation was significantly more frequent among those with additional parental problem recognition (χ^2 -tests; $p < .01$; data not shown in table 7.1). Users and non-users showed significant reductions of Total Problems scores over time (*T*-tests; $p < .05$). These effects were found for professional as well as informal services.

When assessed independently, all factors had significant within-subjects or between-subjects effects on the change in the CBCL Total Problems scores, and were therefore included in the multiple repeated measures analysis of variance. Results of the latter analysis are listed in table 7.1.

After controlling for the presence of other variables, none of the variables included in the analysis had significant within-subjects effects on the change in CBCL Total Problems scores. Child gender, child age group at baseline, parental education level, contact with GP, and mental health service use had significant between-subjects effects. Higher Total Problems scores were therefore found for children (aged 4-11 years at baseline) versus adolescents (aged 12-17 years), for boys, and for children who had used help from GPs or mental health services at T1 and/or T2. Children from parents with low education level had significantly higher CBCL Total Problems scores than children from highly educated parents.

Discussion

The present study was aimed at investigating the extent to which parents' recognition of child emotional and behavioural problems, professional and informal service use for these problems, and sociodemographic factors were associated with change in child problems over a one-year period.

In general, emotional and behavioural problems decreased significantly over the course of one year, both in the sample as a whole and in children who had used professional or informal services. However, the mean CBCL Total Problems scores for the total sample and for service users remained above the normative mean after one year, indicating the problematic nature of the sample.

The finding that children who had used services had significantly more emotional and behavioural problems at baseline than children who had not used services (cf. Angold et al., 2000; Heijmens Visser et al., 2003), suggests that, in part, children who need it the most end up receiving care. This was confirmed by the finding that, after controlling for other variables, children who had been in contact with GPs or mental health care had significantly higher problem scores over the course of one year.

Whereas service use was significantly more frequent for children with emotional or behavioural problems in the deviant range, parents' acknowledgement of the presence of such problems had an additional influence on the frequency of service use within the deviant scoring group. Considering the fact that less than half of the parents who reported child problems in the deviant range also acknowledged the presence of these problems when asked directly, parents' non-recognition of child problems could constitute a first reason for parents not seeking help. On the other hand, children with deviant CBCL Total Problems scores who were also recognised as problematic by their parents had more serious problems than children without parental problem recognition. The concept of parental problem recognition may therefore distinguish between children with emotional or behavioural problems who are able to function adequately, and those requiring special attention.

The elevated problem scores in boys, younger children and children from less educated families indicate the need to address preventive actions at those groups. This is even more salient since children from lower educated families were underrepresented in this study and problem

levels in those children may therefore have been underestimated. Moreover, the previous finding of older children showing more improvement in emotional and behavioural problems over a six-year interval (Heijmans Visser et al., 2003) underscores the need to focus preventive interventions at young children.

An intriguing question is whether children with emotional or behavioural problems need some sort of care to ensure them to develop towards less problematic behaviour, or whether their problems would anyhow reduce over time. The absence of an association between any of the four types of service use and the change in child problems found in the present study might be interpreted as evidence for the latter assumption. However, we believe that this finding does not automatically imply the ineffectiveness of professional and informal services in reducing child emotional and behavioural problems. Service use may have affected aspects of the child's development not covered by our outcome measure, and the limited time span of the study may have prevented detection of any associations between service use and change in child problems. More importantly, our study contained limitations that are typical for naturalistic designs, such as the impossibility of random assignment to conditions, inclusion of a broad range of treatments, and the presence of many possibly confounding factors, which restricts the possibility of drawing firm conclusions about the effectiveness of services in reducing child symptoms. The chronicity of child psychopathology and the limited use of empirically validated treatments may, on the other hand, indeed prevent services from being effective. What our findings do imply, therefore, is the need for methodologically sound research into the effectiveness of professional and informal services for child emotional and behavioural problems, with large samples, multiple data waves, and assessment of outcomes on multiple domains (Angold et al., 2000).

8

Summary and discussion

Summary

After summarising the study design and its main results, findings of the present study are discussed in the light of theoretical considerations and previous results. Based on the limitations of this study, some recommendations for future research are presented. The chapter ends with implications of the results for clinical practice.

Background, research questions, and method

The main aim of the study presented in this thesis was to investigate the process of help-seeking for child and adolescent psychopathology. The general help-seeking model by Goldberg and Huxley (1980; 1992), and adaptations of this model to the situation of child and adolescent psychopathology (Costello et al., 1998; Logan and King, 2001; Verhulst and Koot, 1992) were used as central framework. In these models, the help-seeking process is defined as a sequence of stages proceeding towards increasingly intensive forms of care for mental health problems, ranging from the general community, in which no special care is provided, through consultation and problem recognition in general practice, to treatment in mental hospitals. This pathway towards mental health care is hypothesised to include several filters, which represent selection processes that determine at which stage treatment will be obtained. Progress on the pathway is influenced by characteristics of the child, his or her parents, the family, and the broader social context.

In this thesis, we investigated the contribution of various characteristics of child, family, and broader social context on (1) parents' need for help for child emotional or behavioural problems, (2) help-seeking in general practice for these problems, (3) identification of child emotional and behavioural problems by the GP, (4) help-seeking in mental health care, and (5) help-seeking from informal sources of care. Additionally, change in children's emotional and behavioural problems over a one-year period was studied in association with parental problem recognition and utilisation of professional and informal services.

The study consisted of three stages. In the first stage, which was part of the Second Dutch National Survey of General Practice, GP contacts and morbidity presented to the GP were electronically recorded during one calendar year for patients registered in 104 Dutch general practices. A random sample of 2,431 children and adolescents aged 4 to 17 years participated in an extensive health interview survey. Data for children aged 4 to 11 years were obtained by means of a proxy interview

administered to one of the parents, whereas adolescents aged 12 to 17 years were interviewed themselves. The interview included questions concerning sociodemographic characteristics, health indicators, health care utilisation, life style, social context characteristics, opinions about health care, and a screening for the presence of child emotional and behavioural problems.

Children and adolescents who were screened positive for the presence of emotional or behavioural problems were selected for participation in the second stage of the study. A total number of 360 participated (response rate: 65.1 %). By means of a standardised psychiatric interview, administered to the child's primary caregiver (for all participants), and to the adolescent himself (for participants aged 12 to 17 years), psychiatric diagnoses were obtained. In addition to this, parents were interviewed about child and family characteristics, problem recognition, and help-seeking for child emotional or behavioural problems in the preceding twelve months.

One year after the previous data collection, participants were contacted again by mail. Parents were asked to indicate the presence of emotional and behavioural problems in their child, and were asked to complete a questionnaire concerning problem recognition and help-seeking for these problems in the preceding year. Adolescents aged 12 years and older were also asked to indicate the presence of any emotional or behavioural problems. Of the original sample, 317 (88.1 %) participants responded.

Chapter 3 of this thesis was based on data obtained in a previous study on psychopathology and mental health service use, conducted by the Department of Child and Adolescent Psychiatry of the Erasmus MC-Sophia Children's Hospital in Rotterdam, the Netherlands (Verhulst et al., 1997a; Verhulst and Van der Ende, 1997).

A review of recent findings on help-seeking for child and adolescent emotional and behavioural problems (chapter 2)

First, a literature review was conducted to gain insight into recent findings concerning the help-seeking process for child and adolescent psychopathology, focusing on determinants of parental and adolescent problem recognition and help-seeking, and problem recognition by the GP. Searches for empirical studies published between 1992 and 2001 in Psych lit and Medline databases yielded a total number of 47 relevant publications.

Several variables in the child (age, the presence of medical and school-related problems, adolescents' informal help-seeking), and the parents or family (past mental health service use by parents or other relatives, family size, and type of child maltreatment) were found to influence parental or adolescent problem recognition and/or help-seeking, whereas refinements were found for the effects of type of child psychopathology, child gender, adolescent attitudes and personality, parental psychopathology, social support, and sociodemographic variables. Problem recognition by the GP proved to be influenced by child gender, child age, past treatment for child psychosocial problems, school problems, family composition, life events, the type of visit, and acquaintance with the child.

The results of the literature review called for further research in to problem recognition by the GP and the role of school personnel in the detection and referral of, and provision of help for child and adolescent psychopathology. The results also implied the necessity to differentiate between professional and informal sources of care in future studies.

Factors associated with adolescent mental health service use, self-perceived need for care, and unmet need (chapter 3)

Whereas parents are usually the ones who initiate service use for young children's emotional or behavioural problems, help-seeking in case of adolescent mental health problems also involves the adolescents themselves. Chapter 3 was specifically focused on adolescents' help-seeking. Parent, family, and adolescent characteristics were investigated as correlates of adolescent mental health service utilisation, self-perceived need for care, and unmet need, using a general population sample of 1,120 Dutch adolescents aged 11 to 18 years.

Approximately 3 % of the adolescents in this sample were referred for mental health services, and almost 4 % of adolescents reported an unmet need for help. Adolescent mental health service utilisation and self-perceived need were most strongly associated with adolescents' self-reported problems and indicators of family stress (single parenthood and changes in family composition). Adolescents with low education level, poor competence in activities and better school results, and adolescents from non-Caucasian or Mediterranean descent, were more likely to be referred to mental health care. The chance of adolescents reporting self-perceived need for services was increased in girls, older adolescents, and adolescents who had parents with psychiatric disorders. Unmet need was

significantly associated with adolescents' self-reported problems, female gender, and low adolescent education level. Results showed the reluctance of adolescents to consult mental health services, even when they acknowledged the presence of emotional or behavioural problems. Particularly adolescent girls, adolescents with internalising problems, and older adolescents were at risk for not effectuating their concerns into mental health care utilisation.

The help-seeking process for children aged 4-11 years (chapter 4)

In previous studies, help-seeking for child emotional and behavioural problems has been studied mainly by investigating separate help-seeking stages in isolation from each other, instead of investigating the help-seeking process as a whole. We believed the inclusion of multiple help-seeking stages, professional as well as informal service providers, and various characteristics of the child, family, and context as possible determinants of the help-seeking process to be essential for understanding the complex nature of help-seeking. Therefore, structural equation modelling was used to empirically test a comprehensive model of the help-seeking process for child psychopathology in a sample of 246 children aged 4 to 11 years, who were selected for having emotional or behavioural problems.

The Dutch GP was found to play a limited role in this help-seeking process, both as service provider as well as gatekeeper to mental health care. Although Dutch children are supposed to enter mental health care only after referral by their GP, many children entered mental health care directly, or with the help of other service providers. Particularly school-based personnel (school physicians, school psychologists, educational support services) were influential in this respect. The importance of the child's school in the help-seeking process was also demonstrated by the finding that teachers were often used as service providers. Parents frequently consulted friends and relatives for their child's problems as well.

Inspection of the influence of child, family and context variables on the help-seeking process showed the marginal impact of child characteristics. Only the presence of coexisting chronic physical problems in a child was directly related to the help-seeking process, as children with these problems were more likely to be considered in need of care. Child gender and coexisting academic problems did exert their influence on the help-seeking process only indirectly, through their impact on the teacher's

perception of child problems, whereas child age influenced neither service need nor help-seeking. Family characteristics had a stronger impact on the help-seeking process, with changes in family structure, family functioning and the acquaintance with a relative who had used mental health care influencing several aspects of the pathway to care. An important context factor affecting the help-seeking process was the teacher's perception of emotional or behavioural problems in the child, which affected service need almost as strongly as parents' own perception of child problems. The absence of any effects of sociodemographic context variables (parental education level, family income, and type of insurance) on the process of help-seeking can probably be ascribed to the nature of the Dutch health care system.

The help-seeking process for adolescents with internalising problems (chapter 5)

Because of the apparent obstacles for adolescents with internalising problems on the pathway to mental health care (chapter 3), chapter 5 specifically addressed help-seeking for this group of adolescents. This was done by empirically testing a path model of the help-seeking process, which was comparable to the model for children used in chapter 4 with respect to the help-seeking stages and service providers included. Due to limited sample size, determinants of the help-seeking process could not be taken into account. Since adolescents were expected to exert an increased influence on the help-seeking process, the model in chapter 5 included not only parents' and teachers' perceptions of problems, but also adolescents' perception of the presence of internalising problems and their need for services. Participants for this part of the study were 114 adolescents aged 12 to 17 years, who were selected for having emotional or behavioural problems.

Although adolescent girls reported more internalising problems than boys, the help-seeking model was demonstrated to be consistent across gender. Results confirmed adolescents' increasing autonomy as well as parents' continuing influence on the help-seeking process. The acknowledgement of the need to seek help when problems are present was detected as the first obstacle on the pathway to care for adolescents with internalising problems. Mobilising teachers to increase parents' or adolescents' awareness of the need to seek help was shown not to be the best strategy, however, as, in contrast with findings for younger children (chapter 4), teachers' perception of problems did not influence service need. The less prominent role of the teacher in the help-seeking process

for adolescent internalising psychopathology was accompanied by an increasingly important role of the GP, who functioned more according to his formal role as gatekeeper in the help-seeking process for adolescents than for younger children.

The role of the GP in the help-seeking process (chapter 6)

Because the GP's role was found to be different in help-seeking for child versus adolescent psychopathology (chapters 4 and 5), this role was further investigated in chapter 6. Child and family characteristics were investigated as correlates of GP consultation and GP diagnoses of child psychological problems in a general population sample of 2,449 children and adolescents (aged 4 to 17 years) and their primary caregivers.

Results showed that although approximately 80% of children and adolescents with psychological problems had been in contact with their GP during the year of assessment, they appeared to have consulted their GP primarily because of the presence of chronic physical disorders. Concordance between parent, teacher, and adolescent reports of the presence of psychological problems, and GP diagnoses of such problems was limited. The likelihood of being diagnosed with psychological problems by the GP was increased for children and adolescents whose parents or teachers also reported such problems, for children with school problems and young boys, for adolescents with negative health perceptions, and for adolescents from single parent families.

Although not all children and adolescents with psychological problems need additional care, the limited consultation for child mental health problems and the limited detection of disorders by GPs may prevent or delay the receipt of appropriate care for the ones who do.

Correlates of change in children's and adolescents' emotional and behavioural problems over a one-year period (chapter 7)

Although children and adolescents with psychopathology are at increased risk for future problems, knowledge of variables associated with persistence and change in child problems once these problems exist is limited. In chapter 7, the change in child emotional and behavioural problems over a one-year period was investigated in association with parental recognition of the presence of such problems, utilisation of informal and professional services, and socio-demographic variables (child gender, age group, and parental education level), in a sample of

360 children and adolescents selected for having emotional or behavioural problems.

Elevated overall problem levels were found for children (aged 4-11 years at baseline) versus adolescents (aged 12-17 years), boys, and children with less educated parents. Furthermore, children who had received help from the GP or mental health services had generally higher emotional or behavioural problem scores than non-users. This indicates that, in part, children who need it the most end up receiving care.

Whereas service use was significantly more frequent for children with emotional or behavioural problems in the deviant range, parents' explicit acknowledgement of the presence of child problems had an additional influence on the frequency of service use within the deviant scoring group. Less than half of the parents who reported child problems in the deviant range also acknowledged the presence of these problems when asked directly. The concept of parental problem recognition appears to distinguish between children with emotional or behavioural problems who are able to function adequately, and those requiring special attention.

Although child emotional and behavioural problems decreased significantly over the course of one year, this change was not associated with utilisation of professional or informal services.

Discussion

The results of this thesis confirm previous findings concerning the limited use of mental health care by children and adolescents with emotional and behavioural problems (Burns et al., 1995; Flischer et al., 1997; Ford et al., 2005; Leaf et al., 1996; Pavuluri et al., 1996; Saunders et al., 1994; Sourander et al., 2001; Verhulst and Van der Ende, 1997). Even in a sample selected for having emotional and behavioural problems, approximately 16 % of children and adolescents had used mental health services in the preceding year. This figure is only slightly higher than the 13 % mental health referral found in a Dutch general population sample for which data were obtained a decade ago (Verhulst and Van der Ende, 1997). Considering the fact that prevalence rates for child emotional and behavioural problems have not increased over a ten-year period (Achenbach et al., 2003; Sourander et al., 2004; Verhulst et al., 1997c), the absence of any change in Dutch child mental health care use is not surprising. It is also in line with findings by Achenbach et al. (2003), who

reported no change in rates of child mental health service utilisation from 1989 to 1999, either for a national American sample, or for children with deviant CBCL Total Problems scores.

A study conducted in Finland (Sourander et al., 2004), however, reported a considerable increase in service use for child emotional and behavioural problems between 1989 and 1999, even though no increase in child problems had taken place. This finding led the authors to conclude that parents' attitudes towards use of services for child mental health problems had changed positively. However, since service use rates in the study by Sourander et al. included school health services and social services for child emotional or behavioural problems, comparison between these figures and our rates of specialist mental health care is hampered.

Filters on the pathway to care

To increase our understanding of the limited number of disordered children and adolescents in mental health care, the present study investigated the process of help-seeking for child emotional and behavioural problems. By studying help-seeking as a process including various stages and service providers, several filters on the pathway to mental health care were detected. In the following sections, these filters are considered in terms of the Goldberg and Huxley model (1980; 1992).

Filter 1: Recognition of the impact of child emotional or behavioural problems

Goldberg and Huxley's first filter included problem recognition as well as the decision to consult a GP for child problems. In chapter 2, a distinction between these two aspects of the first filter was advocated, and this distinction is also applied here. Following Angold et al. (1998), we believe that it is not so much parents' recognition of the presence of child emotional or behavioural problems per se that leads them to use specialist mental health care, but rather their experience of burden associated with the presence of such problems. Although perceived burden was not directly assessed in the study described in this thesis, we believe that our measures of problem recognition and service need reflect to some degree the difficulties in the lives of parents and children caused by child emotional and behavioural problems. Because both indicators functioned as the link between parent and adolescent reports of the presence of child symptoms (CBCL or YSR problem scores in the deviant range) and service utilisation (chapters 4, 5, and 7), they appeared to

discriminate between parents and adolescents who do perceive the presence of child problems but consider themselves able to manage these problems without help, and those for whom the impact or burden of child problems is strong enough to require outside help. The acknowledgement of the burden of child emotional or behavioural problems therefore constitutes the first filter on the pathway to care.

The distinction between the mere presence of child symptoms and parents experiencing these symptoms as a burden was illustrated by the finding that less than half of the parents who reported CBCL Total Problems in the deviant range also acknowledged the presence of an emotional or behavioural problem in their child when asked directly (parental problem recognition; chapter 7). Moreover, in the sample of children aged 4 to 11 years, 67 % of those with deviant CBCL Total Problems scores were not regarded to be in need of services by their parents (chapter 4). This figure was even higher for adolescents with internalising problems in the deviant range, as more than 80 % of them were not regarded to have a need for care (chapter 5).

The importance of recognition of the severity of problems was also demonstrated in chapter 3, in which adolescents' perceptions of problems were taken into consideration. Mental health referral rates of adolescents who recognised the problematic nature of their emotions or behaviour were considerably lower than previous results in which parental problem recognition was taken into account (cf. Sourander et al., 2001; Verhulst and Van der Ende, 1997). This indicates that adolescents who recognise the presence of their problems are less likely than parents to translate these concerns into help-seeking actions. This may partly be ascribed by adolescents' limited ability to initiate service use without their parents' involvement, but it may also reflect adolescents' reluctance to seek help for emotional or behavioural problems.

Filter 2: Consulting the general practitioner for child emotional and behavioural problems

Results of this thesis confirm previous findings concerning the limited consultation of GPs in case of child emotional and behavioural problems (Foets et al., 1996; Ford et al., 2003). In chapter 6, contact registration data from a large general population sample of children and adolescents were used to investigate rates of GP consultation. About three quarters of the sample had been in contact with their GP during the year of assessment, whereas approximately 80 % of children and adolescents

with emotional or behavioural problems in the deviant range had contacted their GP. Although these consultation rates seem promisingly high, GP consultation appeared to have occurred primarily because of chronic physical disorders. The presence of emotional or behavioural problems increased the likelihood of GP consultation in children aged 4 to 11 years only.

The data presented in chapter 6 reflected GP consultation in general and could therefore not be used to draw firm conclusions about consultation rates for child emotional or behavioural problems in particular. This information was, however, available for the sample that was selected for the presence of these problems (chapters 4 and 5). Consultation rates for this selective sample were considerably lower than those found in the general population sample. Merely 13 % of children and 15 % of adolescents had visited their GP for emotional or behavioural problems in the year preceding assessment, which is even less than the 24 % primary health care consultation previously found for children with ICD 10 (World Health Organization, 1993) diagnoses of psychiatric disorders (Ford et al., 2003).

Because the Dutch GP is supposed to function as gatekeeper to mental health care, and disordered children and adolescents are supposed to enter mental health services only after referral by the GP, the limited GP consultation can be regarded as the next filter on the pathway to specialist care for children and adolescents with emotional and behavioural problems.

Filter 3: Identification of child emotional and behavioural problems in general practice

In chapter 6, merely one in seven children and one in eight adolescents who were considered to have emotional or behavioural problems by their parents or teachers, were diagnosed with psychological problems by their GP. Concordance between adolescent self-reports and GP diagnoses was somewhat higher, but still, 77 % of adolescents with self-reported problems in the deviant range did not receive a psychological diagnosis from their GP. These findings may be interpreted as limited recognition of child emotional and behavioural problems by GPs, but several alternative explanations can be noted. Parents' reluctance to explicitly mention their concerns regarding child mental health problems may, for instance, have decreased concordance between parents' and GPs' reports of the presence of such problems in the child. Furthermore, GPs' reluctance to diagnose

children with mental health problems because of fear of stigma or limited referral possibilities, parents consulting for physical concerns instead of psychological ones (Foyers et al., 1996; Garralda, 2002), GPs' difficulties in disentangling physical and psychological symptoms, and the possibility of children functioning adequately despite the presence of psychological problems, may be reasons for limited concordance. Still, since the data presented in this thesis confirm previous findings concerning the limited recognition of child emotional and behavioural problems in general practice (Costello et al., 1988; Dulcan et al., 1990; Kelleher et al., 1997; Sayal and Taylor, 2004), we believe this to be another filter on the pathway to specialist care.

Filter 4: The GP as gatekeeper in referral to mental health care

The limited consultation of GPs in case of child or adolescent psychopathology and the limited recognition of child problems by the GP restrict GPs' opportunities for referring disordered children and adolescents to mental health care, thereby creating a fourth obstacle on the pathway to specialist care.

For children aged 4 to 11 years, the Dutch GP was found to function less according to his formal role as gatekeeper to mental health care than was expected. This is in contrast with results from a recent study in the UK (Ford, 2004), in which contact with primary care was strongly related to contact with mental health services. One could question whether the limited gatekeeping role of the GP really constituted an obstacle on the pathway to care, since parents still managed to find their way into child mental health care, either by directly contacting these services or by entering these services with the help of other service providers. Nevertheless, mental health care utilisation rates continued to be low, as merely 15 % of children who were selected for having emotional or behavioural problems had used these services in the preceding year.

The GP's role in referring adolescents with internalising problems to mental health care was stronger than for younger children. Sixty-one percent of adolescents, opposed to 41 % of children aged 4 to 11 years, had entered mental health care after GP referral. The explanation for this difference is not entirely clear at this stage and requires further investigation. We hypothesised that the greater importance of GPs might be attributed to a higher prevalence of somatic problems among adolescents with internalising problems (Kramer and Garralda, 1998), which might increase GP consultation in general. The likelihood of

consultation in general practice was indeed shown to be elevated for children and adolescents with chronic somatic disorders and an association between the presence of psychological and physical problems was shown (chapter 6). Still, rates of GP consultation did not differ substantially between children and adolescents, neither when GP contact in general nor when contact specifically for child emotional or behavioural problems was considered. Elevated identification of adolescent mental health problems by the GP could neither account for the stronger gatekeeping role of the GP in case of adolescent internalising problems, as concordance between parents' or teachers' reports of the presence of emotional or behavioural problems and GP psychological diagnoses was as limited for adolescents as for young children.

The importance of informal care, particularly school-based services

The literature review (chapter 2) demonstrated the necessity of including informal sources of care for child emotional and behavioural problems in studies on help-seeking. The informal service providers included in the present study (teachers and friends or relatives) indeed proved to fulfil an important role in the process of help-seeking for child and adolescent psychopathology, as utilisation of these service providers was considerably more frequent than utilisation of more formal sources of care, such as the GP and mental health services (chapters 4 and 5). These findings are in line with previous studies (Burns et al., 1995; Cohen et al., 1991; Farmer et al., 2003; Ford et al., 2003; Leaf et al., 1996; Zahner and Daskalakis, 1997).

The specific significance of school-based service providers was also demonstrated in a recent Finnish study (Sourander et al., 2004). When parents were asked whom they would consult in case of future concerns about child emotional or behavioural problems, teachers were mentioned as second most preferred source of help, following the spouse. About 80 % of parents also mentioned other school-based service providers, such as school health professionals, school health nurses, school psychologists, and school physicians, as certain or most likely sources of consultation. Whereas these contacts with school-based services may partly occur because of the consequences of child psychopathology for the child's educational functioning (Ford et al., 2005), their frequent occurrence can probably also be attributed to the lower threshold for seeking help within the school system as opposed to general practice or mental health care.

Acknowledgement of the importance of the school was also reflected in a recent publication by the Dutch Education Council (Onderwijsraad, 2004), who recommended an increase in the role of schools in order to achieve a more coherent system of services for children and adolescents with psychosocial problems. According to the Council, schools should not only be involved in identifying and referring children with emotional and behavioural problems and in preventing their problems, but should also collaborate with outside professional service providers in providing care to these youngsters (Onderwijsraad, 2004).

Based on findings of the present study, however, a differentiation regarding the importance of the school in the process of help-seeking for child and adolescent emotional and behavioural problems could be made. School personnel played a considerable part in the help-seeking process for children aged 4 to 11 years, both in influencing service need, and in the provision of and the referral for help. As far as the function of gatekeeper to mental health care was concerned, the importance of school personnel even exceeded the role of the GP, since the majority of children, who were not referred to mental health services by their GP, had entered these services with the help of school-based service providers, such as school physicians, school psychologists or educational support services.

For adolescents aged 12 to 17 years, however, a rather different picture emerged, with teachers not influencing parents' or adolescents' need for services, and utilisation of teachers as service providers being less frequent than for younger children. This was accompanied by a stronger influence of the GP on the process of help-seeking for adolescents.

A comparable difference between the roles of schools in the processes of help-seeking for children and adolescents was found in a study by Ford et al. (2005), in which parents of younger children were more likely to have been in contact with teachers, even though psychiatric disorders were more common in older children. This finding can probably be ascribed to the fact that, in contrast with secondary school pupils, primary school children have one teacher, who may therefore have a greater opportunity to get well acquainted to his pupils. Moreover, primary school children are often taken to and from school, which facilitates informal contact between teachers and parents. We should, however, keep in mind that our results on adolescent help-seeking concerned adolescents with

internalising problems only. Teachers may play a more important part in help-seeking for adolescent externalising problems, because such problems cause more direct disturbance in the classroom and may therefore be more easily detected by high school teachers.

Factors influencing progress on the path way to care

The results of the present study provide confirmation for the model proposed by Brannan et al. (2003), who hypothesised that mental health service use is one of many possible ways in which parents respond to the stressors they face when having a child with emotional or behavioural problems. The mere presence of child symptoms can be a considerable source of stress, as was illustrated by the association between parents' and adolescents' reports of the presence of problems and their need for services and subsequent utilisation of services. The amount of stress caused by the presence of child problems appears to be independent from the specific type of problems. Both internalizing and externalizing problems were associated with adolescents' need for services (chapter 3). Previous research (Verhulst and Van der Ende, 1997) showed a comparable finding for parents' need for services for younger children's problems.

Parents may face additional stressors not directly related to child psychopathology. When these stressors pile up and exceed parents' ability to cope with problems, parents may decide they need outside help. The finding that additional stressors, such as having a child with chronic physical problems or school problems, or experiencing family stress (e.g. because of poor family functioning, single parenthood, or recent changes in family composition), were also associated with a need for care, confirmed this notion. Most of the additional stressors were also associated with utilisation of professional services, which implies that children and adolescents using these services are likely to come from families with multiple problems. The finding that poor family functioning was not associated with a greater likelihood of utilisation of services even though it did lead to an increased need for care – on the contrary, it decreased the chance of parents seeking advice from the child's teacher – is, however, in contrast with the latter statement.

Another group at risk for not translating their concerns about their mental health into service use were adolescent girls. Despite their elevated need for care, these girls did not show an increased likelihood of mental health service utilisation, but they did report an unmet need for services. A

comparable risk was found for older adolescents and adolescents with internalising problems. Apparently, these adolescents face additional barriers on the pathway to care, which reduce their chance of getting the help they need.

Confirmation was found for the accessibility of Dutch health care in terms of financial and sociodemographic characteristics. Variables such as parental education level, family income, type of insurance, and parental occupation level were found not to influence the help-seeking process directly (chapters 3 and 4).

In addition to studying variables influencing service need and utilisation of professional and informal services, we also investigated factors associated with GP identification of child emotional and behavioural problems, because his formal gatekeeping role puts the Dutch GP in a crucial position along the pathway to specialist mental health care. Although children and adolescents appeared to visit their GP mainly because of chronic physical disorders, the presence of such disorders did not increase the chance of being diagnosed with psychological problems by the GP.

Children and adolescents who were perceived to have emotional or behavioural problems by their parents or teachers were more likely also to be identified as such by their GP. The specific types of problems associated with GP diagnoses showed a pattern that could be expected based on age-related differences in prevalence rates of the problem types: young children with externalising, and adolescents with internalising problems had better chances of being diagnosed by their GP.

The presence of additional stressors (e.g. for young children: school problems, for adolescents: negative health perceptions, and living in a single parent family) not only increased the likelihood of service need and utilisation, – as was described above – but was also associated with an increased chance of children and adolescents being diagnosed with psychological problems by their GP. Additionally, young boys were more likely to receive a psychological diagnosis.

Effectiveness of services

Efficacy of treatments for child emotional and behavioural problems has repeatedly been demonstrated (Weisz et al., 1995; Weisz and Jensen, 2001). However, the conditions under which these studies have been

conducted (i.e. in highly controlled settings, with groups of carefully selected individuals) bear little resemblance to the complex reality of service use, with a heterogeneous group of disordered children receiving less structured care, usually from both professional and informal caregivers, and limited availability of mental health care. Evidence for the effectiveness of clinical treatments in naturalistic settings is, nevertheless, limited (Weisz et al., 1995; Weisz and Jensen, 2001).

Studies as the one presented in this thesis can provide suggestions on how to increase rates of service utilisation for children and adolescents with emotional or behavioural problems (see Clinical implications). Policy decisions regarding such efforts could be strengthened when the effectiveness of these services was demonstrated. Even though utilisation of neither professional nor informal services was associated with change in child problems over a one-year period in the present study (chapter 7), methodological limitations prohibited us to automatically interpret these results as indication of the ineffectiveness of service use. Still, Angold et al. (2000) argued that effectiveness of out-patient mental health care in a naturalistic setting can be demonstrated, provided that the sample being studied is large enough, outcome measures include key symptoms that lead to referral for treatment, and differences in disorder trajectories between treated and untreated subjects are taken into account by including multiple data waves.

Limitations of the study and implications for future research

The present study has yielded a number of interesting results regarding the process of help-seeking for child and adolescent psychopathology. Future studies, preferably longitudinal ones, are needed to confirm our findings and establish causal directionality of the associations found. In the following section, some aspects of the study that warrant further attention are discussed in terms of recommendations for future research.

Characteristics of the Dutch health care system may limit generalisability of the results found in this study. First of all, utilisation of health care services in the Netherlands is largely independent from financial constraints, as in principle all Dutch children are covered by public or private health insurance. Almost all Dutch inhabitants are registered within general practices, which are accessible to all and close to the community. General practice is the formal point of entry into mental health care and the Dutch GP is supposed to function as gatekeeper. The findings and help-seeking models tested in this thesis may therefore not

be directly applicable to nations in which major financial constraints hamper the availability of care, or in which mental health care is accessible without referral. Nevertheless, the merits of using structural equation modelling as a means of investigating the help-seeking process as a whole – including multiple stages and actors – are not restricted to countries with comparable health care systems. This method is also useful as a more generic approach for clarifying the help-seeking processes in other countries.

International comparisons of help-seeking processes may be useful for understanding the consequences of certain health care policies. Investigation of causes for incongruence in findings from countries with comparable health care systems may also provide useful insights in this respect. For instance, the strong association between consultation in primary care and mental health care utilisation found in the UK (Ford, 2004) and the limited association found in the present study requires further investigation. Studying the causes of the increase in service use for child emotional and behavioural problems in Finland between 1989 and 1999 (Sourander et al., 2004), and the consequences of recent Finnish policy to give rather excessive resources to child psychiatric care (Sourander, personal communication) may also be informative for policy makers in other countries.

A second limitation of the present study is the fact that respondents from non-Western descent were underrepresented in the health interview survey (Westert et al., in press). Although the Second Dutch National Survey of General Practice included an additional health interview survey among non-native individuals from Turkey, Morocco, Surinam and the Dutch Antilles, this survey was conducted only among respondents aged 18 years and older. Ethnicity was therefore not taken into consideration in the present thesis, except in chapter 3, in which data from another sample were used. Results from a recent study showed that non-native children in the Netherlands are less likely to be treated for behavioural problems than natives, even when differences in problem behaviour and impairment are taken into account (Zwirs et al., 2004). This negative association between ethnic minority status and service utilisation was also found in previous studies (Barker and Adelman, 1994; Costello et al., 1997; Cuffe et al., 1995; Cunningham and Freiman, 1996; McMiller and Weisz, 1996; Wu et al., 2001; Zahner and Daskalakis, 1997), but seemed to disappear when socioeconomic variables were controlled for (Pumariega et al., 1998). In chapter 3, however, adolescents

from non-Caucasian or Mediterranean origin were found to be more likely to have received mental health care than their Caucasian peers. Considering these contrasting results, the effect of ethnicity on service utilisation in case of child and adolescent emotional and behavioural problems merits further investigation.

Service need was measured in a rather indirect way in this thesis. In chapter 3, it was operationalised as adolescents' reports of having problems that are more serious than other adolescents' problems, whereas chapters 4 and 5 used parents' and adolescents' reports of the presence of psychiatric symptoms and associated functional impairment as indicator of service need. Although the validity of these measures was demonstrated by their importance in the process of help-seeking, inclusion of a more direct evaluation of parents' and adolescents' need for care would be informative.

Service utilisation rates were mainly based on parent reports, which may have biased the results of this thesis. Although previous evidence suggests that parent reports are reasonably accurate compared to administrative records (Fendrich et al., 1999), parents may have difficulties discriminating among multiple service settings (Bean et al., 2000). In chapter 6, this problem was avoided because of the use of contact registration data concerning consultation in general practice. However, these data reflected GP consultation in general, and we were not able to deduct contact rates specifically for child emotional or behavioural problems, which hampered comparison between these figures and the ones obtained through parent report.

Another limitation of using parents' reports of service utilisation is that these reports may not adequately reflect adolescents' utilisation of services, particularly when informal service providers such as friends are concerned. Since seeking help from informal sources is regarded as important for adolescents as part of their increasing autonomy (cf. Rickwood and Braithwaite, 1994; Saunders et al., 1994), future studies should include adolescent reports of service use.

Help-seeking for child emotional and behavioural problems is a complex process, and although we tried to capture some of its key aspects in this thesis, many others would deserve attention in future research. Whereas the present study was primarily focused on stages, actors and determinants involved in the process of help-seeking, parents' and

adolescents' reasons for not seeking help were not directly assessed. Progress on the pathway to care can, for instance, also be hindered by characteristics of the health care system (e.g. waiting lists, availability of care) or by parents' or adolescents' perceptions of services or service providers (cf. Pavuluri et al., 1996). The conceptual model by Brannan et al. (2003), which focuses on these various aspects of the pathway to service utilisation, could be useful for planning future studies. Furthermore, instead of treating mental health service utilisation as an end point, future investigations should also focus on processes of help-seeking once children have entered mental health care. Information on continuity in care, sequencing of services, and amount of services used (cf. Brannan et al., 2003; Farmer et al., 2003) may also be valuable.

As was argued before, arguments for the implementation of measures to increase rates of child mental health service use could be strengthened when effectiveness of service use was demonstrated. Because of methodological limitations of this study (i.e. the limited time span between data waves, the impossibility of random assignment to conditions, inclusion of a broad range of treatments, and the presence of many possibly confounding factors), no firm conclusions concerning the effectiveness of services could be drawn. There is, however, a strong need for research on effectiveness in naturalistic settings, in which not merely effects on child mental health problems, but also possible side effects of service utilisation (e.g. parental satisfaction, parents' and children's sense of competence) should be taken into account.

Clinical implications

The findings presented in this thesis provide a number of suggestions on how to increase rates of mental health service utilisation for children and adolescents with emotional or behavioural problems, which are discussed in the following sections. Interventions to improve detection and referral of child mental health problems are only useful if services are sufficiently available to meet the demands of children. Mental health referral per se should not be perceived as the ultimate goal of interventions, however. It is essential also to consider help-seeking pathways of children once they have been referred to mental health care. Families often need additional assistance and guidance to ascertain their actual access into mental health care and their adherence to ongoing treatment (cf. Harrison et al., 2004).

In general, the results imply that interventions aimed at increasing service use should be adapted to the age range of the target population.

For children, efforts can best be focused on strengthening school personnel's abilities to detect problems and provide help, whereas for adolescents, efforts should be focused on the role of GPs in the detection and referral of mental health problems.

Because the results of this thesis confirmed adolescents' as well as parents' influence on the help-seeking process, interventions focused on increasing service use have to be directed at both. First, educating parents and adolescents about the nature and prevalence of child behavioural and emotional problems is essential to raise their awareness of the possible presence of such problems. Acknowledgement of the presence of problems is particularly salient, because, unless children's lives are severely threatened, children can be referred to specialist services only with their parents' consent. Moreover, previous research has shown the importance of parents' explicit request for referral in accessing specialist services (Ford et al., 2005; Sayal et al., 2002), which also underlines the importance of parents' acknowledgement of the presence of problems in their child.

Secondly, parents and adolescents who do feel a need for care which is not translated into service use, may be provided with information on the availability and accessibility of care. Adolescents with internalising problems, adolescent girls, older adolescents, and children from poorly functioning families were identified as particularly at risk for not effectuating the need for care into actual service utilisation. For these groups, a more actively outreaching approach may be useful to overcome barriers on the pathway to mental health care utilisation.

In general, the pathways into care have become more transparent with the recent changes in the Dutch system of youth welfare work, which made Youth Welfare Work Offices the only entrance points into all youth welfare services. Further research is needed to investigate whether these innovations indeed reduce the obstacles along the pathway to specialist care.

Since the need for and utilisation of services was not only associated with the mere presence of child psychopathology, but also with the presence of additional stressors, clinicians and others working with disordered children should try to assess whether parents' resources are sufficient to cope with the demands of having a disordered child. For some parents, reducing strain by offering assistance for some of the additional stressors

may be enough to avoid utilisation of more intensive and more specialised services for child problems.

Implications for general practitioners

A possible way to increase rates of child mental health service utilisation is the improvement of GPs' skills in detecting child mental health problems. In studies conducted in the UK and Finland (Cockburn and Bernard, 2004; Heikkinen et al., 2002), GPs rated many of their skills in handling children with psychiatric disorders as inadequate. Teaching GPs to use psychosocially oriented interview techniques, which facilitate parental disclosure of sensitive information concerning child mental health, and educating them to actively elicit parental concerns about child mental health problems may increase identification of these problems (cf. Sayal and Taylor, 2004; Wissow et al., 1994). Training may also be needed to acquire the special skills needed to elicit adolescents' concerns during consultation. In general, evaluations tend to show benefits of training by increasing skills and confidence (e.g. Gledhill et al., 2003; Luk et al., 2002), but trials have not been methodologically rigorous and need to be elaborated (Garralda, 2004). Identification of child and adolescent mental health problems may also be enhanced by the introduction of standardised screening measures in general practice (cf. Horwitz et al., 1992).

Parents consult their GP mainly because of child physical problems, and even if they do express their concerns about their child's behavioural or emotional problems, they generally do this in the context of medical problems, instead of directly relating to the actual problems (Foets et al., 1996; Garralda, 2002). Therefore, increasing GPs' awareness of the association between chronic physical illness and the risk for psychiatric disorders (Meltzer et al., 2000; Rutter et al., 1970) may also elevate identification of child mental health problems.

Because Dutch GPs' task conception regarding counselling in case of pedagogical/educational difficulties is limited (Van den Berg et al., 2004 b), efforts to increase GPs' identification of child mental health problems should be accompanied by good referral possibilities. In general, direct contact between GPs and mental health professionals facilitates referral and accelerates access to services (cf. Luk et al., 2002), because it provides the opportunity to directly discuss the availability of specialist care.

Direct contact between GPs and mental health care specialists should also be encouraged because of its consultative function. Although recent innovations in the Dutch health care system gave Dutch GPs the opportunity of consulting mental health professionals for information regarding mental health problems, this measure is predominantly used in the case of adult psychological problems (Verhaak et al., 2003).

Implications for schools

Considering the results of this study, strengthening the role of school personnel in the process of help-seeking for child emotional and behavioural problems appears to be a fruitful way to make sure that a greater number of disordered children receive care. This is particularly salient for elementary school children. In this respect, we follow the suggestions of the Dutch Education Council (Onderwijsraad, 2004), which advocates a continuum of care for children and adolescents with psychosocial problems, in which schools should be equipped to provide care to these youngsters as long as possible. To accomplish this, schools are recommended to liaise with external agencies in so-called operational teams, in which a broad range of external professionals (e.g. mental health care providers, youth health care workers, police) participate. These teams should gather on a regular and structured basis to discuss child problems and exchange expertise. By doing this, teachers' skills in detecting and handling child emotional and behavioural problems may be ameliorated. In addition to this, the professionals in the operational teams could assist in the provision of less intensive forms of care within schools. The school setting probably offers a sense of familiarity, accessibility and acceptability to children and parents, which may be harder to achieve in an out-patient mental health clinic. When school-based care is not sufficient to manage child problems, the direct contact between schools and mental health care professionals shortens the pathway to specialist care and is expected to facilitate referral.

Another way to detect and refer disordered children is the routine screening for physical and psychosocial problems provided by Dutch child health care. The finding that a considerable number of elementary school children entered mental health care with the help of school-based service providers instead of the GP suggests the importance of this type of screening. Due to financial cutbacks, however, the frequency of screening is heavily debated. This is remarkable, considering the fact that child health care is able to reach the majority of children living in the Netherlands, thereby providing an excellent opportunity for detecting

child problems and increasing mental health service use for children in need. The Rotterdam Youth Monitor, which is an initiative of the Rotterdam Municipal Health Service, is an example of the way in which routine screening for child physical and psychosocial problems can be used to detect children who need further assistance (GGD Rotterdam en omstreken, 2005).

Integrated care

The multitude of services available for youth in general and youngsters with emotional or behavioural problems in particular create the risk of a fragmented system of care, in which families have to deal with a wide variety of services, each with their own rules, staff, procedures etc. Because the majority of children and adolescents with emotional or behavioural problems use a combination of services (Farmer et al., 2003; Ford et al., 2005), inter-agency collaboration among the education sector, primary health care, and specialty mental health services is crucial. By the introduction of family coaches, who are commissioned to keep an overview over the various services provided to children and to ensure adequate matching between these services, the new Law on Youth Welfare Work (Ministerie van Volksgezondheid, Welzijn en Sport, Ministerie van Justitie, 2004) aims to accomplish this. Another initiative in this respect is Operation Young (Ministerie van BZK et al., 2004), which is aimed at, among other things, achieving linked chains of the wide array of services available for Dutch youths, and at identifying and resolving obstacles within these chains. Future studies are required to evaluate whether these recent initiatives succeed in producing an integrated system of care for youth with emotional and behavioural problems.

9 Samenvatting

Samenvatting

In dit proefschrift wordt een nadere beschouwing gegeven van het proces dat ertoe leidt dat ouders hulp zoeken en voor emotionele problemen of gedragsproblemen van hun kinderen. Ook de rol die jongeren zelf spelen in dit proces komt aan bod. Er wordt aandacht besteed aan het zoeken van hulp in zowel professionele als meer informele settings en aan variabelen die het hulpzoekproces beïnvloeden. Dit hoofdstuk bevat een Nederlandstalige samenvatting van de opzet en hoofdvragen van het onderzoek en gaat in op de belangrijkste onderzoeksresultaten.

Achtergrond, onderzoeksvragen en methode (hoofdstuk 1)

Een aanzienlijk aantal jeugdigen vertoont emotionele problemen of gedragsproblemen. Ondanks het feit dat deze problemen een ernstige belemmering kunnen vormen voor het dagelijks functioneren, worden zij zelden en onder de aandacht gebracht van huisartsen of hulpverleners in de geestelijke gezondheidszorg (GGZ). Vroege identificatie en behandeling van de problemen kunnen het voortbestaan ervan in de late adolescentie en volwassenheid mogelijk voorkomen. Het is daarom van groot belang om inzicht te verkrijgen in het proces dat leidt tot het zoeken van hulp voor dergelijke problemen en in mogelijke obstakels die ouders en jeugdigen tegenkomen op hun weg naar de zorg.

Het Nederlandse gezondheidszorgsysteem wordt gekenmerkt door toegankelijkheid en bereikbaarheid. Vrijwel alle Nederlanders zijn geregistreerd in een huisartspraktijk en in principe heeft elke Nederlander een ziektekostenverzekering. Hierdoor hangt de toegankelijkheid van de gezondheidszorg niet sterk af van financiële middelen, zoals bijvoorbeeld in de Verenigde Staten het geval is. Formeel gezien fungeert de huisarts als poortwachter van de GGZ. Momenteel vinden er echter veranderingen plaats in het Nederlandse jeugdzorgsysteem als gevolg van de nieuwe Wet op de Jeugdzorg, die in werking trad op 1 januari 2005. Vanaf die datum zijn de Bureaus Jeugdzorg de enige toegang tot alle voorzieningen van jeugdzorg. Huisartsen verliezen hiermee in principe hun poortwachtersfunctie bij het verwijzen van kinderen en jongeren met psychische problemen. Omdat het onderzoek dat in dit proefschrift wordt beschreven plaatsvond voordat de nieuwe wet in werking trad, is nog niet duidelijk welke gevolgen deze vrij drastische veranderingen in de structuur van de jeugdzorg zullen hebben voor het hulpzoekproces.

Het theoretische kader van dit proefschrift wordt gevormd door Goldberg en Huxley's (1980; 1992) algemene model van het hulpzoekproces en

recen te aanpassen aan dit model (Costello et al., 1998; Logan en King, 2001; Verhulst en Koot, 1992). Deze modellen beschrijven het hulpzoekproces als een opeenvolging van fasen met steeds intensievere vormen van zorg voor psychische problemen, variërend van psychische problemen in de algemene populatie waarvoor geen speciale zorg wordt geboden, via consultatie van een probleemherkenning door de huisarts, naar behandeling in residentiële GGZ-instellingen. De fasen worden van elkaar gescheiden door filters. Deze filters representeren een selectieproces, waardoor sommige personen doorgaan naar een volgende fase in het hulpzoekproces, terwijl anderen achterblijven in de voorgaande fase. Voortgang in dit proces wordt beïnvloed door kenmerken van het kind, zijn of haar ouders, het gezin en de bredere sociale context.

In dit proefschrift is onderzocht wat de invloed is van verscheidene kenmerken van kind, gezin en bredere sociale context op (1) de behoefte van ouders aan hulp voor emotionele problemen en gedragsproblemen van hun kind, (2) het zoeken van hulp voor deze problemen in de huisartspraktijk, (3) herkenning van emotionele problemen en gedragsproblemen van kinderen door de huisarts, (4) het zoeken van hulp voor deze problemen in de GGZ en (5) het zoeken van hulp van informele hulpbronnen (leerkrachten, familieleden of vrienden). Verder is nagegaan in hoeverre de aanwezigheid van emotionele problemen en gedragsproblemen verandert over de periode van een jaar en in welke mate deze verandering in verband staat met probleemherkenning door de ouders, het gebruik van professionele en informele hulp en sociodemografische variabelen.

Het onderzoek bestond uit drie fasen. In de eerste fase, die deel uitmaakte van de Tweede Nationale Studie naar ziekten en verrichtingen in de huisartspraktijk, werd gedurende een kalenderjaar in 104 Nederlandse huisartspraktijken alle contacten van ingeschreven patiënten met hun huisarts en aan de huisarts gepresenteerde gezondheidsproblemen en geregistreerd. In een gerandomiseerde steekproef van 2431 kinderen en adolescenten van 4 tot en met 17 jaar oud werd een uitgebreid gezondheidsinterview afgenomen. Bij respondenten van 4 tot en met 11 jaar werd het interview afgenomen bij een van de ouders, terwijl adolescenten van 12 tot en met 17 jaar oud zelf geïnterviewd werden. Het interview bevatte vragen over sociodemografische kenmerken, gezondheidsindicatoren, gebruik van zorgvoorzieningen, levensstijl, kenmerken van de sociale context en meningen over de gezondheidszorg.

Tevens werden kinderen en jongeren tijdens dit interview gescreend op de aanwezigheid van emotionele problemen en gedragsproblemen.

Kinderen en jongeren bij wie de screening wees op de aanwezigheid van emotionele problemen of gedragsproblemen werden vervolgens geselecteerd voor deelname aan de tweede onderzoeksfase. Van de 553 geselecteerde kinderen en jongeren deden er in totaal 360 mee aan de tweede fase (respons: 65,1 %). Met behulp van een gestandaardiseerd psychiatrisch interview, afgenomen bij een van de ouders (voor de hele onderzoeksgroep) en bij de adolescent zelf (voor jongeren van 12 tot en met 17 jaar oud) werden psychiatrische diagnoses voor de deelnemende kinderen en jongeren bepaald. Hiernaast werden in een interview met de ouder verscheidene kenmerken van het kind en het gezin, probleemherkenning door de ouder en zorggebruik voor de emotionele problemen en gedragsproblemen van het kind in de afgelopen 12 maanden vastgesteld.

Een jaar na deze dataverzameling werden deelnemers voor een derde keer benaderd, deze keer per post. Ouders kregen vragen voorgelegd over de aanwezigheid van emotionele problemen en gedragsproblemen bij hun kind en het zorggebruik voor deze problemen in het voorgaande jaar. Adolescenten van 12 jaar en ouder kregen ook zelf vragen over de aanwezigheid van emotionele problemen en gedragsproblemen voorgelegd. De onderzoeksgroep bestond uit 317 respondenten (88,1 % van de oorspronkelijke groep).

Het zoeken van hulp voor emotionele problemen en gedragsproblemen van jeugdigen: een overzicht van recente onderzoeksresultaten (hoofd stuk 2)

Om een beeld te krijgen van recente bevindingen over het hulpzoekproces voor emotionele problemen en gedragsproblemen van kinderen en jongeren werd een literatuurstudie uitgevoerd. Daarbij werd vooral aandacht besteed aan recente onderzoeksresultaten over determinanten van probleemherkenning en het zoeken van hulp door ouders en adolescenten, en determinanten van probleemherkenning door de huisarts. De literatuurstanden Psychlit en Medline werden doorzocht op empirische studies die gepubliceerd waren tussen 1992 en 2001. Dit resulteerde in een totaal van 47 relevante publicaties.

De literatuurstudie leverde verscheidene nieuwe inzichten op over de determinanten van probleemherkenning en het zoeken van hulp. Ten

eerste werd een aantal nieuwe variabelen aan het licht gebracht die van invloed bleken te zijn op probleemherkenning en/of hulpzoeken door ouders of adolescenten. Verschillende kindkenmerken (leeftijd, de aanwezigheid van medische problemen of schoolproblemen, en het zoeken van informele hulp door adolescenten) en kenmerken van ouders en gezin (eerder gebruik van GGZ-voorzieningen door ouders of andere familieleden, gezinsgrootte en type kindermishandeling) bleken in dit opzicht van invloed te zijn. Daarnaast kon kennis over de effecten van al bekende determinanten (type psychopathologie en geslacht van het kind, attitudes en persoonlijkheid van de adolescent, psychopathologie van de ouder, sociale steun en sociodemografische variabelen) op probleemherkenning en het zoeken van hulp aangescherpt worden met behulp van de bevindingen uit de literatuurstudie.

Probleemherkenning door de huisarts bleek te worden beïnvloed door de kindvariabelen geslacht, leeftijd, eerdere behandeling voor psychosociale problemen en de aanwezigheid van schoolproblemen. Ook de gezinssamenstelling, belangrijke levensgebeurtenissen, het type huisartsbezoek en de bekendheid van de huisarts met het kind bleken van invloed op de probleemherkenning door de huisarts.

Uit de literatuurstudie kwam naar voren dat de aandacht van onderzoekers vooral uitgegaan is naar determinanten van probleemherkenning en het zoeken van hulp door ouders of adolescenten, terwijl er relatief weinig bekend is over determinanten van probleemherkenning door huisartsen. Dit is opmerkelijk, gezien de belangrijke rol van de huisarts in het hulpzoekproces. De resultaten van de literatuurstudie tonen daarom aan dat nader onderzoek naar probleemherkenning door de huisarts nodig is. Ook de rol van schoolpersoneel in de opsporing en verwijzing van jeugdigen met emotionele problemen en gedragsproblemen en in het bieden van hulp aan deze jeugdigen dient nader onderzocht te worden. Daarnaast werd de noodzaak aangetoond van een differentiatie tussen professionele en informele hulp in toekomstig onderzoek.

Factoren die samenhangen met GGZ-gebruik, ervaren hulpbehoefte en onvervulde hulpbehoefte van adolescenten (hoofdstuk 3)

Wanneer jonge kinderen emotionele problemen of gedragsproblemen vertonen, zijn het meestal de ouders die het initiatief nemen tot het zoeken van hulp. Wanneer adolescenten dergelijke problemen vertonen, zijn zij ook zelf actiever betrokken bij het hulpzoekproces. Hoofdstuk 3 is

specifiek gericht op het hulpzoekproces van adolescenten. In dit hoofdstuk werd in een steekproef van 1120 jongeren (11-18 jaar oud) uit de algemene Nederlandse bevolking onderzocht in hoeverre verscheidene kenmerken van ouders, gezin en adolescent gerelateerd waren aan het gebruik van GGZ-voorzieningen, de ervaren hulpbehoefte en de onvervulde hulpbehoefte van jongeren. De data voor dit deel van het onderzoek waren afkomstig uit een eerder onderzoek naar psychopathologie en het gebruik van de GGZ, dat werd uitgevoerd door de Afdeling Kinder- en Jeugdpsychiatrie van het Erasmus MC - Sophia Kinderziekenhuis in Rotterdam.

Ongeveer 3 % van de jongeren in deze onderzoeksgroep was verwezen naar de GGZ, terwijl bijna 4 % van de adolescenten aangaf dat hun behoefte aan gespecialiseerde hulp niet vervuld was. Zelfgerapporteerde problemen en indicatoren van gezinsstress (zoals het leven in een eenoudergezin en wijzigingen in de gezinssamenstelling) waren het sterkst gerelateerd aan gebruik van de GGZ en de ervaren hulpbehoefte van adolescenten. Jongeren met een laag opleidingsniveau, slechte competentie in activiteiten en goede schoolresultaten en jongeren van allochtone afkomst hadden meer kans om verwezen te zijn naar de gespecialiseerde GGZ. Meisjes, oudere adolescenten en adolescenten met een ouder met psychiatrische problemen liepen meer kans om een behoefte aan hulp te rapporteren, terwijl een onvervulde hulpbehoefte significant samenhang met door de adolescenten zelf gerapporteerde problemen, vrouwelijke sekse en een laag opleidingsniveau.

Uit het onderzoek bleek dat jongeren een bepaalde weerstand hebben tegen het zoeken van hulp bij de GGZ, zelfs als zij wel degelijk zelf erkennen emotionele problemen of gedragsproblemen te hebben. Vooral adolescente meisjes, jongeren met internaliserende problemen en oudere adolescenten lopen het risico hun zorgen omtrent dergelijke problemen niet om te zetten in gebruik van de GGZ.

Het hulpzoekproces voor kinderen van 4-11 jaar oud (hoofdstuk 4)

Eerdere onderzoeken naar het zoeken van hulp voor emotionele problemen en gedragsproblemen van kinderen hebben zich vooral gericht op afzonderlijke fasen in het hulpzoekproces, zonder expliciet aandacht te besteden aan het hulpzoekproces als geheel. Een goed inzicht in de complexiteit van het hulpzoekproces kan echter alleen verkregen worden als er tegelijkertijd aandacht wordt besteed aan verscheidene fasen in dit proces, aan het hulpaanbod van zowel professionele als informele

hulpverleners en aan verschillende kenmerken van kind, gezin en context als mogelijke determinanten van het proces. Daarom werd gebruik gemaakt van de techniek van structureel modelleren om een uitgebreid model van het hulpzoekproces voor emotionele problemen en gedragsproblemen van kinderen te toetsen. Dit model werd getoetst in een steekproef van 246 kinderen van 4 tot en met 11 jaar, die geselecteerd waren op de aanwezigheid van emotionele problemen en gedragsproblemen.

Resultaten van dit onderzoek wezen uit dat de Nederlandse huisarts slechts een beperkte rol speelde in het hulpzoekproces van deze kinderen; zijn rol als hulpverlener en poortwachter van de GGZ was gering. Hoewel de GGZ in principe alleen toegankelijk is na verwijzing door de huisarts, bleken veel kinderen hier op andere manieren terechtgekomen te zijn. Sommigen kregen direct, zonder tussenkomst van de huisarts, toegang tot de GGZ, terwijl anderen de GGZ bereikten door tussenkomst van andere hulpverleners. Vooral aan school gerelateerde hulpverleners zoals schoolartsen, schoolpsychologen en medewerkers van schoolbegeleidingsdiensten bleken hierbij een belangrijke rol te spelen. Het belang van de school in het hulpzoekproces van kinderen werd daarnaast nog geïllustreerd door het feit dat leerkrachten vaak gebruikt werden als hulpverleners. Ouders schakelden ook vaak de hulp van vrienden en familieleden en in voor de emotionele problemen of gedragsproblemen van hun kind.

Kindkenmerken bleken slechts een geringe invloed te hebben op het hulpzoekproces. Alleen wanneer kinderen naast emotionele problemen of gedragsproblemen ook chronische lichamelijke problemen vertoonden, had dit een directe invloed op het hulpzoekproces, omdat bij deze kinderen vaker een behoefte aan hulp gerapporteerd werd. Het geslacht van het kind en de aanwezigheid van schoolproblemen beïnvloedden het beeld dat de leerkracht had van de aanwezigheid van emotionele problemen of gedragsproblemen in een kind. Deze variabelen waren daardoor alleen op indirecte wijze van invloed op het hulpzoekproces. De leeftijd van het kind had in het geheel geen invloed op de hulpbehoefte of het zoeken van hulp.

Kenmerken van het gezin bleken het hulpzoekproces in een sterkere mate te beïnvloeden. Het functioneren van het gezin, wijzigingen in de gezinssamenstelling en het kennen van een familielid dat eerder GGZ

gebruikt had, hadden invloed op verschillende aspecten van het hulpzoekproces.

Het beeld dat de leerkracht had van de aanwezigheid van emotionele problemen en of gedragsproblemen in een kind bleek een belangrijke contextfactor die van invloed was op het hulpzoekproces. Deze variabele had een even sterke invloed op de hulpbehoefte als het beeld dat ouders zelf hadden van de aanwezigheid van dergelijke problemen in hun kind. De afwezigheid van effecten van sociodemografische contextfactoren (het opleidingsniveau van ouders, het gezinsinkomen en de verzekeringsvorm) op het hulpzoekproces kan waarschijnlijk toegeschreven worden aan de aard van het Nederlandse gezondheidszorgsysteem.

Het hulpzoekproces voor adolescenten met internaliserende problemen (hoofdstuk 5)

Omdat de weg naar de zorg voor jongeren met internaliserende problemen bepaalde barrières bleek te bevatten (hoofdstuk 3), werd in hoofdstuk 5 specifiek aandacht besteed aan het hulpzoekproces van deze groep jongeren. In dit hoofdstuk werd een padmodel van het hulpzoekproces empirisch getoetst. Naast verschillende fasen in het hulpzoekproces bevatte dit model het hulpaanbod van zowel professionele als informele hulpverleners. Wat dat betreft was het model vergelijkbaar met het hulpzoekmodel dat in hoofdstuk 4 gebruikt werd voor jongere kinderen. Vanwege de beperkte steekproefgrootte in dit deel van het onderzoek konden echter – in tegenstelling tot in het model voor jonge kinderen – geen mogelijke determinanten van het hulpzoekproces opgenomen worden in het model voor jongeren met internaliserende problemen.

Omdat verwacht werd dat adolescenten een toenemende invloed uitoefenen op het hulpzoekproces, bevatte het model in hoofdstuk 5 niet alleen de percepties van ouders en leerkrachten wat betreft de aanwezigheid van problemen bij deze adolescenten, maar werden ook het beeld dat adolescenten zelf hadden van de aanwezigheid van problemen en hun hulpbehoefte opgenomen in het model. Analyses werden uitgevoerd in een steekproef van 114 adolescenten van 12 tot en met 17 jaar oud, die geselecteerd waren op de aanwezigheid van emotionele problemen en gedragsproblemen.

Hoe wel adolescenten meisjes meer internaliserende problemen rapporteerden dan jongens, bleken de hulpzoekprocessen voor beide

seks en vergelijkbaar te zijn. Toetsing van het theoretische model bevestigde de toegenomen rol van adolescenten in het hulpzoekproces, maar liet ook zien dat ouders een invloedrijke rol blijven spelen bij het zoeken van hulp.

Een eers te obstakel op weg naar de zorg bleek de erkenning van een hulpbehoefte of van de noodzaak tot het zoeken van hulp. Zelfs voor jongeren die een aanzienlijke mate van internaliserende problemen vertoonden (een score in het klinische gebied of grensgebied in vergelijking met scores van Nederlandse normgroepen), werd slechts zelden ook een hulpbehoefte gerapporteerd.

Het inzetten van leerkrachten om ouders en jongeren meer bewust te maken van de noodzaak tot het zoeken van hulp bleek echter niet de meest geëigende strategie te zijn. In tegenstelling tot wat gevonden werd voor jongere kinderen (hoofdstuk 4), bleek de hulpbehoefte van ouders en jongeren niet beïnvloed te worden door het beeld dat de leerkracht had van de aanwezigheid van emotionele problemen of gedragsproblemen. Deze minder uitgesproken rol van de leerkracht in het hulpzoekproces van jongeren met internaliserende problemen ging gepaard met een belangrijker functie van de huisarts. In vergelijking met zijn rol in het hulpzoekproces voor jongere kinderen funktioneerde de huisarts voor deze jongeren meer in overeenstemming met zijn formele rol als poortwachter in het hulpzoekproces.

De rol van de huisarts in het hulpzoekproces (hoofdstuk 6)

Vanwege de gevonden verschillen in het belang van de huisarts in de hulpzoekprocessen van kinderen en jongeren (hoofdstukken 4 en 5), werd in hoofdstuk 6 meer aandacht besteed aan de rol van de huisarts. De relatie tussen huisartsbezoek en verschijnselen kenmerkend van het kind en het gezin werd onderzocht. Daarnaast werd nagegaan in hoeverre deze kenmerken gerelateerd waren aan het krijgen van een psychologische diagnose van de huisarts. Voor dit deel van het onderzoek werd een steekproef gebruikt van 2449 kinderen en jongeren (4 tot en met 17 jaar oud) en hun ouders.

Hoewel ongeveer 80 % van de kinderen en jongeren met emotionele problemen of gedragsproblemen in het onderzochte jaar contact had met de huisarts, bleken deze contacten vooral plaatsgevonden te hebben vanwege chronische lichamelijke problemen. Er was een geringe overeenstemming tussen de oordelen van ouders, leerkrachten, jongeren

zelf en huisartsen over de aanwezigheid van psychologische problemen in het kind. Kinderen en jongeren bij wie ouders, leerkrachten of adolescenten de aanwezigheid van psychologische problemen rapporteerden, kregen zelden ook een psychologische diagnose van de huisarts. De kans op het krijgen van een dergelijke diagnose was wel groter wanneer ouders en leerkrachten de aanwezigheid van psychologische problemen rapporteerden. Ook kinderen met schoolproblemen, jonge jongetjes, adolescenten met een negatief beeld van hun eigen gezondheid en adolescenten die afkomstig waren uit eenoudergezinnen liepen meer kans een psychologische diagnose te krijgen van hun huisarts.

Hoewel niet alle kinderen en adolescenten met psychologische problemen gespecialiseerde hulp nodig hebben, kan zowel het feit dat de huisarts zelden geconsulteerd wordt voor psychologische problemen, als de beperkte herkenning van dergelijke problemen in de huisartspraktijk het krijgen van gepaste hulp voor degenen die deze hulp wel nodig hebben vertragen of zelfs verhinderen.

Factoren ge relateerd aan veranderingen in emotionele problemen en gedragsproblemen van jeugdigen over een periode van een jaar (hoofdstuk 7)

Hoe wel de aanwezigheid van emotionele problemen en gedragsproblemen in de kindertijd en adolescentie een verhoogd risico oplevert op het bestaan van dergelijke problemen in de volwassenheid, is er weinig bekend over factoren die gerelateerd zijn aan het voortbestaan en de verandering van deze problemen als ze eenmaal bestaan. In hoofdstuk 7 werd onderzocht in hoeverre de aanwezigheid van emotionele problemen en gedragsproblemen verandert over de periode van een jaar en in welke mate deze verandering in verband staat met probleemherkenning door de ouders, het gebruik van professionele en informele hulp en sociodemografische variabelen (geslacht en leeftijdsgroep van het kind en opleidingsniveau van de ouders). Dit werd onderzocht in een steekproef van 360 kinderen en jongeren die geselecteerd waren op de aanwezigheid van emotionele problemen en gedragsproblemen.

Kinderen (4-11 jaar oud) bleken over het algemeen meer problemen te hebben dan adolescenten (12-17 jaar oud). Verder werden op beide meetmomenten hogere probleemniveaus gevonden voor jongens en voor kinderen van ouders met een laag opleidingsniveau. Het feit dat kinderen

en jongeren die hulp van de huisarts of van de GGZ gekregen hadden over het algemeen ook hogere probleem scores vertoonden, suggereert dat degenen die het het meest nodig hebben ook daadwerkelijk in de zorg terecht komen.

Ouders werden niet alleen gevraagd om op een vragenlijst aan te geven welke problematische gedragingen en emoties hun kind vertoonde, maar hen werd ook direct gevraagd of zij vonden dat het kind een emotioneel probleem of gedragsprobleem had (probleemherkenning). Minder dan de helft van de ouders die een aanzienlijk aantal problematische gedragingen en emoties rapporteerde op de vragenlijst (scores in het klinische gebied of grensgebied), was ook van mening dat hun kind een emotioneel probleem of gedragsprobleem vertoonde als hier direct naar gevraagd werd.

Kinderen en jongeren met emotionele problemen en gedragsproblemen in het klinische gebied of grensgebied bleken vaker gebruik gemaakt te hebben van hulpvoorzieningen. Als ouders daar naast ook expliciet het bestaan van de problemen erkend en als hen hiernaar direct gevraagd werd, bleek dit de kans op hulpgebruik verder te vergroten. Kennelijk kan op basis van de directe probleemherkenning van ouders een onderscheid gemaakt worden tussen kinderen met emotionele problemen en gedragsproblemen die daarvan geen beperkingen ervaren in hun functioneren, en kinderen die wel extra zorg nodig hebben.

Hoe wel de emotionele problemen en gedragsproblemen van kinderen en jongeren significant afnamen over de duur van een jaar, bleek deze afname niet gerelateerd te zijn aan het gebruik van informele of professionele zorg. Vanwege methodologische beperkingen van dit deel van het onderzoek kon deze bevinding echter niet automatisch opgevat worden als een indicatie van de ineffectiviteit van de zorg.

Discussie (hoofdstuk 8)

In hoofdstuk 8 werd een samenvatting gegeven van de belangrijkste resultaten van dit onderzoek en werden deze resultaten besproken in het licht van eerder onderzoek en de gehanteerde theoretische modellen. Eerdere bevindingen wat betreft het beperkte gebruik van de GGZ door kinderen en jongeren met emotionele problemen en gedragsproblemen werden bevestigd. Zelfs in een steekproef van jeugdigen die geselecteerd waren op de aanwezigheid van dergelijke problemen, had slechts 16 % in het voorafgaande jaar gebruik gemaakt van GGZ-voorzieningen.

Door het hulpzoekproces te beschouwen als een opeenvolging van verscheidene fasen, waarin verschillende soorten hulpverleners en determinanten een rol spelen, werden verscheidene filters of obstakels op de weg naar de zorg ontdekt.

Ten eerste werd aangetoond dat de aanleiding tot het zoeken van hulp niet zozeer ligt in de aanwezigheid van emotionele problemen of gedragsproblemen op zich, maar meer in de belasting die de aanwezigheid van deze problemen oplevert. Sommige ouders en adolescenten zijn zich wel degelijk bewust van het bestaan van emotionele problemen en gedragsproblemen, maar voelen zich goed in staat om deze problemen het hoofd te bieden zonder hulp van buitenaf. Op andere ouders en adolescenten heeft de aanwezigheid van de problematiek een zodanig grote invloed dat zij wel hulp van anderen nodig hebben. Het al of niet ervaren van een belasting als gevolg van de problematiek van het kind kan daarom gezien worden als een eerste filter op weg naar de zorg.

Een tweede filter op weg naar de gespecialiseerde GGZ heeft betrekking op het feit dat de huisarts zelden geconsulteerd wordt voor emotionele problemen en gedragsproblemen van jeugdigen. Hoewel ongeveer 80 % van de kinderen en jongeren met deze problemen in het afgelopen jaar in contact was geweest met hun huisarts, bleken deze contacten vooral te hebben plaatsgevonden vanwege chronische lichamelijke problemen. Als specifiek gekken werd naar huisartscontacten voor emotionele problemen en gedragsproblemen, bleek slechts 13 % van de kinderen en 15 % van de jongeren met dergelijke problemen hiervoor in het voorgaande jaar contact met hun huisarts te hebben gehad.

Slechts een op de zeven kinderen en een op de acht adolescenten bij wie ouders of leerkrachten de aanwezigheid van emotionele problemen of gedragsproblemen rapporteerden, kreeg ook een psychologische diagnose van de huisarts. Van de adolescenten die zelf het bestaan van problemen rapporteerden, kreeg 77 % geen psychologische diagnose van de huisarts. Deze resultaten kunnen erop wijzen dat emotionele problemen en gedragsproblemen van jeugdigen in beperkte mate als zodanig herkend worden door de huisarts. Er kunnen echter verschillende alternatieven verklaard worden voor de geringe overeenstemming, zoals het feit dat ouders hun bezorgdheid over psychische problemen van hun kind niet graag expliciet uiten tegenover de huisarts, of een aarzeling van

de kant van de huis arts om een psychologische diagnose te stellen uit angst voor stigmatisering of vanwege beperkte verwijzingsmogelijkheden. Omdat de gegevens van dit onderzoek echter in overeenstemming zijn met eerdere onderzoeksresultaten wat betreft de beperkte herkenning van emotionele en gedragsmatige problematiek door de huis arts, beschouwen wij dit als een derde filter op de weg naar de gespecialiseerde GGZ.

Nederlandse kinderen en jongeren met emotionele problemen en gedragsproblemen hebben formeel gezien alleen toegang hebben tot de GGZ na verwijzing door de huisarts. Het feit dat huisartsen zelden geconsulteerd worden voor emotionele problemen en gedragsproblemen van jeugdigen en hun geringe herkenning van deze problemen beperken tegelijkertijd de mogelijkheden van huisarts en om te verwijzen naar de gespecialiseerde GGZ. Dit kan gezien worden als het vierde filter op de weg naar de gespecialiseerde zorg. De resultaten van dit onderzoek wezen indertijd uit dat de Nederlandse huis arts slechts in beperkte mate fungeert als poortwachter van de GGZ voor kinderen met emotionele problemen en gedragsproblemen. Deze rol was iets geprononcerder voor adolescenten met internaliserende problemen.

Dit onderzoek toonde het belang aan van informele hulpverleners, zoals leerkrachten, familieleden en vrienden. Ouders schakelen vaker de hulp van deze informele bronnen in dan de hulp van meer formele hulpverleners, zoals de huisarts en de GGZ. De rol van de school in het hulp zoekproces bleek afhankelijk van de leeftijd van het kind. Terwijl schoolgerelateerde hulpverleners van groot belang bleken te zijn in het hulp zoekproces van kinderen van 4 tot en met 11 jaar, was hun rol aanzienlijk minder groot in het hulpzoekproces van jongeren met internaliserende problemen.

Het ervaren van een hulpbehoefte en het zoeken van hulp kunnen beschouwd worden als het resultaat van een opeenvolgende opbouw van stressoren in het leven van ouders en kinderen. Wanneer de aanwezigheid van emotionele of gedragsmatige problematiek samengaat met allerlei andere stressoren die niet direct gerelateerd zijn aan de stoornis van het kind (zo als chronische lichamelijke problemen of schoolproblemen van het kind, wijzigingen in gezinssamenstelling of het leven in een eenoudergezin), kan dit de copingmogelijkheden van ouders te boven gaan en hen ertoe aanzetten hulp te zoeken. De aanwezigheid van dergelijke stressoren bleek niet alleen gerelateerd te zijn aan

hulpbehoefte en hulpgebruik, maar vergrootte ook de kans op het krijgen van een psychologische diagnose van de huisarts.

De toegankelijkheid van de Nederlandse gezondheidszorg in termen van financiële en sociodemografische kenmerken werd in dit onderzoek bevestigd. Variabelen zoals het opleidings- en beroepsniveau van de ouders, het gezinsinkomen en de verzekeringsvorm bleken geen directe invloed uit te oefenen op het hulpzoekproces.

Aanbevelingen voor toekomstig onderzoek

Aan de hand van een reflectie op de methode van het onderzoek werden in hoofdstuk 8 vervolgens enkele aanbevelingen voor toekomstig onderzoek geformuleerd. Internationaal vergelijkend onderzoek zou belangrijke inzichten kunnen opleveren over de gevolgen van bepaalde beleidsmaatregelen op het gebruik van zorgvoorzieningen. Hiernaast zouden beleidsbeslissingen over eventuele pogingen om het GGZ-gebruik door jongeren met emotionele en gedragsmatige problematiek te stimuleren onderbouwd kunnen worden op grond van onderzoek naar de effectiviteit van zorg in naturalistische settings. Aandacht voor het effect van etniciteit op het hulpzoekproces, een directere beoordeling van de hulpbehoefte, het gebruik van jongeren zelf als informanten over hun hulpgebruik, aandacht voor de redenen die ouders en adolescenten hebben voor het afzien van het zoeken van hulp en aandacht voor processen die plaatsvinden zodra kinderen toegang hebben tot de GGZ kunnen verder bijdragen aan het inzicht in de complexiteit van het hulpzoekproces.

Aanbevelingen voor de praktijk

Op grond van de resultaten van het onderzoek werd een aantal suggesties gedaan om het gebruik van GGZ-voorzieningen door jongeren met emotionele problemen en gedragsproblemen te bevorderen. Interventies die bedoeld zijn om meer jongeren met emotionele problemen en gedragsproblemen op te sporen en te verwijzen zijn echter alleen zinvol als er voldoende plaatsen voor deze jongeren beschikbaar zijn in de hulpverlening. Dergelijke interventies dienen aangepast te worden aan de leeftijd van de doelgroep. Voor kinderen in de basisschoolleeftijd liggen de mogelijkheden vooral in het versterken van de rol van de school en van aan de school gerelateerde hulpverleners bij het opsporen van problemen en het bieden van hulp. Interventies voor adolescenten kunnen zich daarentegen beter richten op de huisarts.

Wat betreft het versterken van de rol van de school in het hulpzoekproces volgen wij het advies van de Onderwijsraad, die een continuüm van zorg voor kinderen en jongeren met psychosociale problemen voorschiet, waarin scholen uitgerust moeten worden om deze jeugdigen zo lang mogelijk van zorg te voorzien. Dit kan bewerkstelligd worden door samenwerking met externe professionals, die advies, bijscholing en minder intensieve vormen van hulp kunnen bieden. Het directe contact tussen de school en professionals uit de hulpverlening verkort bovendien de weg naar meer gespecialiseerde hulp als de minder intensieve hulp niet voldoet.

Een andere mogelijkheid om kinderen en jongeren met emotionele problemen en gedragsproblemen op te sporen en te verwijzen is de routinematige screening die wordt uitgevoerd door de jeugdgezondheidszorg.

Verbetering in de herkenning van emotionele problemen en gedragsproblemen door huisartsen kan bewerkstelligd worden door bijscholing in het gebruik van meer psychosociaal georiënteerde interviewtechnieken en technieken die ouders en adolescenten de gelegenheid bieden hun zorgen over de geestelijke gezondheid te uiten. Ook de introductie van gestandaardiseerde screeningsinstrumenten in de huisartspraktijk zou de herkenning van emotionele en gedragsmatige problematiek van kinderen en jongeren kunnen bevorderen. Hiernaast zou men huisartsen meer bewust moeten maken van het verband tussen chronische lichamelijke ziektes en het risico op psychiatrische stoornissen.

Omdat de Nederlandse huisarts het bieden van hulp bij opvoedingsmoeilijkheden steeds minder tot zijn takenpakket rekent, is het noodzakelijk om pogingen om de herkenning van emotionele en gedragsmatige problematiek door de huisarts te verbeteren te combineren met goede verwijsmogelijkheden. Direct contact tussen huisartsen en hulpverleners in de GGZ kan verwijzing vergemakkelijken en toegang tot voorzieningen versnellen. Daarnaast kan dit directe contact een consultatieve functie hebben.

Omdat uit het onderzoek naar voren kwam dat zowel ouders als adolescenten een rol spelen in het hulpzoekproces, is het van belang dat interventies zich richten op beide groepen. Het voorlichten van ouders en adolescenten over de aard en de prevalentie van emotionele problemen

en gedragsproblemen is belangrijk om hen meer bewust te maken van de mogelijke aanwezigheid van deze problemen. Hiernaast zouden ouders en adolescenten van wie de behoefte aan hulp zich niet vertaalt in hulpgebruik gebaat kunnen zijn bij het krijgen van informatie over de beschikbaarheid en toegankelijkheid van zorg. Bepaal de groepen die ondanks hun hulpbehoefte het risico lopen om niet in de GGZ terecht te komen (kinderen uit slecht functionerende gezinnen, adolescente meisjes, oudere adolescenten en adolescenten met internerisende problemen) moeten mogelijk op een actievere manier gestimuleerd worden om bepaalde drempels op de weg naar de zorg te overwinnen. Clinici en anderen die betrokken zijn bij de zorg voor jeugdigen zouden bovendien na moeten gaan in hoeverre ouders zelf de belasting van de zorg voor een problematisch kind aankunnen. Voor sommige ouders kan het krijgen van hulp bij een aantal andere stressoren voldoende zijn om het gebruik van intensievere en gespecialiserdere hulp te voorkomen.

Tot slot is samenwerking tussen de verschillende instanties die betrokken zijn bij de zorg voor kinderen en jongeren met emotionele problemen en gedragsproblemen (de onderwijssector, eerstelijns gezondheidszorg en gespecialiseerde GGZ) van groot belang om versnippering van het hulpaanbod te voorkomen en zorg op elkaar af te stemmen.

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Appendix 1

Gedragsvragenlijsten

De informatie in appendix 1 is gebaseerd op de volgende bronnen:

Achenbach TM (1991), *Manual for the Child Behavior Checklist/4-18 and 1991 Profiles*. Burlington: University of Vermont Department of Psychiatry

Achenbach TM (1991), *Manual for the Teacher's Report Form and 1991 Profiles*. Burlington: University of Vermont Department of Psychiatry

Achenbach TM (1991), *Manual for the Youth Self-Report and 1991 Profiles*. Burlington: University of Vermont Department of Psychiatry

Verhulst FC, Van der Ende J, Koot HM (1996), *Handleiding voor de CBCL/4-18 [Manual for the CBCL/4-18]*. Rotterdam: Afdeling Kinder- en Jeugdpsychiatrie, Sophia Kinderziekenhuis/Academisch Ziekenhuis Rotterdam/Erasmus Universiteit Rotterdam

Verhulst FC, Van der Ende J, Koot HM (1997), *Handleiding voor de Teacher's Report Form (TRF) [Manual for the Teacher's Report Form (TRF)]*. Rotterdam: Afdeling Kinder- en Jeugdpsychiatrie, Sophia Kinderziekenhuis/ Academisch Ziekenhuis Rotterdam/ Erasmus Universiteit Rotterdam

Verhulst FC, Van der Ende J, Koot HM (1997), *Handleiding voor de Youth Self-Report (YSR) [Manual for the Youth Self-Report (YSR)]*. Rotterdam: Afdeling Kinder- en Jeugdpsychiatrie, Sophia Kinderziekenhuis/ Academisch Ziekenhuis Rotterdam/ Erasmus Universiteit Rotterdam

Child Behavior Checklist: schalen en bijbehorende items

Probleemschalen

Teruggetrokken:	42, 65, 69, 75, 80, 88, 102, 103, 111
Lichamelijke klachten:	51, 54, 56a, 56b, 56c, 56d, 56e, 56f, 56g
Angstig/Depressief:	12, 14, 31, 32, 33, 34, 35, 45, 50, 52, 71, 89, 103, 112
Sociale Problemen:	1, 11, 25, 38, 48, 55, 62, 64
Denkproblemen:	9, 40, 66, 70, 80, 84, 85
Aandachtsproblemen:	1, 8, 10, 13, 17, 41, 45, 46, 61, 62, 80
Delinquent Gedrag:	26, 39, 43, 63, 67, 72, 81, 82, 90, 96, 101, 105, 106
Agressief Gedrag:	3, 7, 16, 19, 20, 21, 22, 23, 27, 37, 57, 68, 74, 86, 87, 93, 94, 95, 97, 104
Internaliseren:	12, 14, 31, 32, 33, 34, 35, 42, 45, 50, 51, 52, 54, 56a, 56b, 56c, 56d, 56e, 56f, 56g, 65, 69, 71, 75, 80, 88, 89, 102, 103, 111, 112
Externaliseren:	3, 7, 16, 19, 20, 21, 22, 23, 26, 27, 37, 39, 43, 57, 63, 67, 68, 72, 74, 81, 82, 86, 87, 90, 93, 94, 95, 96, 97, 101, 104, 105, 106
Totale Probleemscore:	1, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56a, 56b, 56c, 56d, 56e, 56f, 56g, 56h, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113

GEDRAGSVRAGENLIJST VOOR KINDEREN VAN 4-18 JAAR

0=HELEMAAL NIET VAN TOEPASSING (voor zover u weet) 1=EEN BEETJE OF SOMS VAN TOEPASSING 2=DUIDELIJK OF VAAK VAN TOEPASSING

- 0 0 0 57. Valt anderen lichamelijk aan.
- 0 0 0 58. Neuspeuteren, pulkt of trekt veel aan huid of aan andere lichaamsdelen (geef aan): _____
- 0 0 0 59. Speelt met eigen geslachtsdelen in het openbaar.
- 0 0 0 60. Speelt te veel met eigen geslachtsdelen.
- 0 0 0 61. Slechte schoolresultaten.
- 0 0 0 62. Onhandige of slechte coördinatie.
- 0 0 6 63. Is liever samen met oudere jongens/meisjes.
- 0 0 0 64. Is liever samen met jongere jongens/meisjes.
- 0 0 0 65. Weigert om te praten.
- 0 0 0 66. Herhaalt alsmaar bepaalde handelingen, dwanghandelingen (geef aan): _____
- 0 0 0 67. Loopt weg van huis.
- 0 0 0 68. Schreeuwt of gillt veel.
- 0 0 0 69. Gesloten, andere mensen niet goed wat erin hem/haar omgaat
- 0 0 0 70. Ziet dingen die er niet zijn (geef aan): _____
- 0 0 2 71. Schaamt of geneert zich gauw.
- 0 0 0 72. Brandstichten.
- 0 0 0 73. Seksuele problemen (geef aan welke): _____
- 0 0 0 74. Raar of 'gek' doen om de aandacht te trekken.
- 0 0 2 75. Verlegen of schuchter.
- 0 0 0 76. Slaapt minder dan de meeste leeftijdgenoten.
- 0 0 2 77. Slaapt meer dan de meeste leeftijdgenoten overdag en/of 's nachts (geef aan): _____
- 0 0 0 78. Smeertop speelt met deontlasting.
- 0 0 0 79. Spraakproblemen (geef aan): _____
- 0 0 0 80. Kijkt met een lege of 'wezenloze' blik.
- 0 0 0 81. Steelt van huis.
- 0 0 0 82. Steelt buitenshuis.
- 0 0 0 83. Opsparen van dingen die hij/zij niet nodig heeft (geef aan welke): _____
- 0 0 0 84. Vreedzaam of raar gedrag (geef aan): _____

- 0 0 1 85. Vreemde of rare gedachten (geef aan): _____
- 0 0 0 86. Koppig, stuurs of prikkelbaar.
- 0 0 0 87. Veerachtige of plotse lings van stemming.
- 0 0 0 88. Mokken, prullen.
- 0 0 0 89. Achterdochtig.
- 0 0 0 90. Vloeken, schuttingtaal.
- 0 0 0 91. Praat erover dat hij/zij zichzelf zou willen doden.
- 0 0 0 92. Slaapwandelen of hardop praten in de slaap (geef aan): _____
- 0 0 0 93. Praat te veel.
- 0 0 0 94. Plaagt veel.
- 0 0 0 95. Driftbuien of snel driftig.
- 0 0 0 96. Denkt te veel aan seks.
- 0 0 0 97. Bedreigt andere mensen.
- 0 0 0 98. Duimzuigen of zuigen op vingers.
- 0 0 0 99. Is te veel bezig met netjesen schoonzijn
- 0 0 0 100. Slaapproblemen (geef aan): _____
- 0 0 0 101. Spijbelen, schoolverzuim.
- 0 0 0 102. Te weinig actief, beweegt zich langzaam, of gebrek aan energie.
- 0 0 0 103. Ongelukkig, verdrietig, gedeprimeerd.
- 0 0 0 104. Is erg luidruchtig.
- 0 0 0 105. Gebruikt alcohol of drugs (geef aan): _____
- 0 0 0 106. Abnorie**
- 0 0 0 107. Broekplassen overdag.
- 0 0 0 108. Bedplassen.
- 0 0 0 109. Dreigen, jengelig.
- 0 0 0 110. Wil graag van het andere geslacht zijn.
- 0 0 0 111. Teruggetrokken, komt niet tot contact met anderen.
- 0 0 0 112. Maakt zich zorgen.
- 0 0 0 113. Geeft u a.u.b. verder nog aan ieder ander probleem dat hierboven nog niet aan de orde is geweest: _____
- 0 0 0 114. _____
- 0 0 0 115. _____

Wilt u a.u.b. controleren of u bij iedere vraag één rondje zwart heeft gemaakt?

Teacher's Report Form: schalen en bijbehorende items

Probleemschalen

Teruggetrokken:	42, 65, 69, 75, 80, 88, 102, 103, 111
Lichamelijke klachten:	51, 54, 56a, 56b, 56c, 56d, 56e, 56f, 56g
Angstig/Depressief:	12, 14, 31, 32, 33, 34, 35, 45, 47, 50, 52, 71, 81, 89, 103, 106, 108, 112
Sociale Problemen:	1, 11, 12, 14, 25, 33, 34, 35, 36, 38, 48, 62, 64
Denkproblemen:	9, 18, 29, 40, 66, 70, 84, 85
Aandachtsproblemen:	1, 2, 4, 8, 10, 13, 15, 17, 22, 41, 45, 49, 60, 61, 62, 72, 78, 80, 92, 100
Delinquent Gedrag:	26, 39, 43, 63, 82, 90, 98, 101, 105
Agressief Gedrag:	3, 6, 7, 16, 19, 20, 21, 23, 24, 27, 37, 53, 57, 67, 68, 74, 76, 77, 86, 87, 93, 94, 95, 97, 104
Internaliseren:	12, 14, 31, 32, 33, 34, 35, 42, 45, 47, 50, 51, 52, 54, 56a, 56b, 56c, 56d, 56e, 56f, 56g, 65, 69, 71, 75, 80, 81, 88, 89, 102, 103, 106, 108, 111, 112
Externaliseren:	3, 6, 7, 16, 19, 20, 21, 23, 24, 26, 27, 37, 39, 43, 53, 57, 63, 67, 68, 74, 76, 77, 82, 86, 87, 90, 93, 94, 95, 97, 98, 101, 104, 105
Totale Probleemscore:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56a, 56b, 56c, 56d, 56e, 56f, 56g, 56h, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113

GEDRAGSVRAG ENLI JST VOO R KINDEREN VAN 4-18 JAAR
INFORMATIE LEERKRACH T

0 =HELEMAAL NIET VAN TOEPASSING 1 =EEN BEETJE OF SOMS VAN TOEPASSING 2 =DUIDELIJK OF VAAK VAN TOEPASSING

<p>0 0 0 57. Valt anderen lichamelijk aan. 000 58. Neuspulkt of trekt veel aan huid of aan andere lichaamsdelen(geef aan): _____</p> <p>0 1 2 0 0 0 59. Slaapt tijdens de les. 0 0 0 60. Onverschillig, lusteloos of ongemotiveerd. 0 0 0 61. Slechte schoolresultaten. 0 0 0 62. Onhandig of slechte coördinatie. 0 0 0 63. Is liever samen met oudere jongens/meisjes. 0 0 0 64. Is liever samen met jongere kinderen. 0 0 0 65. Weigert om te praten. 0 0 0 66. Herhaalt alsmear bepaalde handelingen. dwanghandelingen (geef aan): _____</p> <p>0 0 0 67. Veroorzaakt onrust in de klas. 0 0 0 68. Schreeuwt of giit veel. 0 0 0 69. Gesloten, anderen weten niet goed wat er in hem/haar omgaat. 0 0 0 70. Ziet dingen die er niet zijn (geef aan): _____</p> <p>0 0 0 71. Schaamt of geneert zich gauw. 0 0 0 72. Werkt slordig. 0 0 0 73. Gedraag zich onverantwoordelijk (geef aan) _____</p> <p>0 0 0 74. Raar of 'gek' doen om de aandacht te trekken. 0 0 0 75. Te veel en onverschillenbaar gedrag. 0 0 0 77. Wensen moeten onmiddellijk ingewilligd worden, snel gefrustreerd. 0 0 0 78. Onoplettend, makkelijk afgeleid. 0 0 0 79. Spraakproblemen (geef aan): _____</p> <p>0 0 0 80. Kijkt met een lege of 'wezenloze' blik 0 0 0 81. Kanniet tegen kritiek. 0 0 0 82. Steelt. 0 0 0 83. Opsparen van dingen die hij/zij niet nodig heeft (geef aan welke): _____</p>	<p>0 0 0 84. Vreemd of raar gedrag (geef aan): _____</p> <p>0 1 2 0 0 0 85. Vreemde of rare gedachten (geefaan): _____</p> <p>0 1 2 0 0 0 86. Koppig, stuurs of prikkelbaar. 0 0 0 87. Verandert plotseling van stemming. 0 0 0 88. Mokken, prullen. 0 0 0 89. Achterdochtig. 0 0 0 90. Vloeken, schuttingtaal. 0 0 0 91. Praat erover dat hiVzj zichze lf zou wi llen doden. 0 0 0 92. Presteert beneden eigenniveau. 0 0 0 93. Praat te veel. 0 0 0 94. Plaagt veel. 0 0 0 95. Driftbuien of snel driftig. 0 0 0 96. Denkt te veel aan seks. 0 0 0 97. Bedreigt andere mensen. 0 0 0 98. Komt te laat op school of in de les. 0 0 0 99. Is teveel bezig met netjes of schoon zijn. 0 0 0 100. Voert opgedragen taken niet uit. 0 0 0 101. Spijbelen. schooiverzuim zonder opgaaf van reden. 0 0 0 102. Te weinig actief, beweegt zich langzaam, of gebrek aan energie. 0 0 0 103. Ongelukkig, verdrietig, gedepimeerd. 0 0 0 104. Is erg luidruchtig. 0 0 0 105. Gebruikt aloohol of drugs(geef aan): _____</p> <p>0 1 2 0 0 0 106. Wi l te graag het de ander naar de zin maken. 0 0 0 107. Heeft een hekelaan school. 0 0 0 108. Is bang om fouten te maken. 0 0 0 109. Dreinerig, jengelig. 0 0 0 110. Onverzorgd uiterlijk. 0 0 0 111. Teruggetrokken, komt niet tot contact met anderen. 0 0 0 112. Maakt zichzorgen. 0 0 0 113. Geeft u a.u.b. verder nogaan ieder ander probleem dat hierbovennog niet aan de orde is geweest: _____</p>
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NB: Wilt U a.u.b. controleren of U bij IEDERE vraag ÉÉN rondje zwart heeft gemaakt?

Youth Self-Report: schalen en bijbehorende items

Competentieschalen

Activiteiten:	I, II, IV
Sociaal:	III, V, VI
School:	VI
Totale Competentiescore:	I, II, III, IV, V, VI, VII

Probleemschalen

Teruggetrokken:	42, 65, 69, 75, 102, 103, 111
Lichamelijke klachten:	51, 54, 56a, 56b, 56c, 56d, 56e, 56f, 56g
Angstig/Depressief:	12, 14, 18, 31, 32, 33, 34, 35, 45, 50, 52, 71, 89, 91, 103, 112
Sociale Problemen:	1, 11, 25, 38, 48, 62, 64, 111
Denkproblemen:	9, 40, 66, 70, 83, 84, 85
Aandachtsproblemen:	1, 8, 10, 13, 17, 41, 45, 61, 62
Delinquent Gedrag:	26, 39, 43, 63, 67, 72, 81, 82, 90, 101, 105
Agressief Gedrag:	3, 7, 16, 19, 20, 21, 23, 27, 37, 57, 68, 74, 86, 87, 93, 94, 95, 97, 104
Internaliseren:	12, 14, 18, 31, 32, 33, 34, 35, 42, 45, 50, 52, 51, 54, 56a, 56b, 56c, 56d, 56e, 56f, 56g, 65, 69, 71, 75, 89, 91, 102, 103, 111, 112
Externaliseren:	3, 7, 16, 19, 20, 21, 23, 26, 27, 37, 39, 43, 57, 63, 67, 68, 72, 74, 81, 82, 86, 87, 90, 93, 94, 95, 97, 101, 104, 105
Totale Probleemscore:	1, 3, 5, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 50, 51, 52, 53, 54, 55, 56a, 56b, 56c, 56d, 56e, 56f, 56g, 56h, 57, 58, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 74, 75, 76, 77, 79, 81, 82, 83, 84, 85, 86, 87, 89, 90, 91, 93, 94, 95, 96, 97, 99, 100, 101, 102, 103, 104, 105, 110, 111, 112

ZELF IN TE VULLEN VRAGENLIJST VOOR MEISJES EN JONGENS VAN 11 -18 JAAR

VOORNAAM		ACHTERNAAM		SOORT WERK VAN DE OUDERS <small>(a. u. b. zo duidelijk mogelijk - bijvoorbeeld automonteur, onderwijzer, metaalarbeider, schoenverkoper enz., ook al woon je niet bij je ouders)</small>
GESLACHT <input type="checkbox"/> Jongen <input type="checkbox"/> Meisje	LEEFTIJD	NATIONALITEIT: LAND VAN HERKOMST:		SOORT WERK VAN VADER: _____
DATUM VAN INVULLEN: Dag ___ Maand ___ Jaar _____		GEBORTE DATUM: Dag ___ Maand ___ Jaar _____		SOORT WERK VAN MOEDER: _____
SCHOOL OF OPLEIDING WELKE KLAS <input type="checkbox"/> IK ZIT NIET OP SCHOOL OF VOLG GEEN OPLEIDING		EVENTUEEL SOORT WERK VAN JEZELF:		Graag dit formulier invullen en zolang als jij de dingen ziet ook al zijn anderen het daar niet mee eens. Je kunt gerust naast de vragen op bladzijde 2 en 4 dingen die je belangrijk vindt opschrijven.

A. u. b. aankruisen wat van toepassing is.

I. Vermeld hier de sporten die je beoefent. Bijvoorbeeld: voetballen, zwemmen, fietsen, rolschaatsen, vissen, paardrijden enz.	Vergeleken met leeftijdgenoten, hoeveel tijdbesteed je aan elk van deze sporten?	Vergeleken met leeftijdgenoten, hoe goed ben je in elk van deze sporten?
<input type="checkbox"/> geen a. _____ b. _____ c. _____	Minder dan gemiddeld Meer dan gemiddeld <input type="checkbox"/> <input type="checkbox"/>	Minder dan gemiddeld Beter dan gemiddeld <input type="checkbox"/> <input type="checkbox"/>

II. Vermeld hier je favoriete hobby's of bezigheden (behalve sport). Bijvoorbeeld: postzegels, kaarten, piano, boeken, handarbeid enz. (uitgezonderd radio en tv).	Vergeleken met leeftijdgenoten, hoeveel tijdbesteed je aan elk van deze hobby's of bezigheden?	Vergeleken met leeftijdgenoten, hoe goed ben je daarin?
<input type="checkbox"/> geen a. _____ b. _____ c. _____	Minder dan gemiddeld Meer dan gemiddeld <input type="checkbox"/> <input type="checkbox"/>	Minder dan gemiddeld Beter dan gemiddeld <input type="checkbox"/> <input type="checkbox"/>

III. Geef hier aan de clubs, verenigingen (of andere organisaties) waar je lid van bent of toe behoort.	Lijftijden actief ben je in elk van deze clubs of verenigingen?
<input type="checkbox"/> geen a. _____ b. _____ c. _____	Minder dan gemiddeld Meer dan gemiddeld <input type="checkbox"/> <input type="checkbox"/>

IV. Vermeld hier de baantjes en (huishoudelijke) karweitjes die je hebt of doet. Bijvoorbeeld: krantenwijken, auto's wassen, bed opmaken, in winkel werken, enz. (Het gaat hierom zowel betaalde als onbetaalde baantjes of karweitjes).	Vergeleken met leeftijdgenoten, hoe goed doe je dit werk of karweitje?
<input type="checkbox"/> geen a. _____ b. _____ c. _____	Minder dan gemiddeld Beter dan gemiddeld <input type="checkbox"/> <input type="checkbox"/>

- V. 1. Ho evel l goede, echte vrienden en/of vriendinnen heb Je? (broers en zussen niet meegerekend) geen Zof 3 4 of meer
2. Hoeveel keren per week doe je iets met vrienden en/of vriendinnen bullen normale schooltijden? (broers en zussen niet meegerekend) minder dan 1 3 of meer

- VI. Vergeleken met leeftijdgenoten , hoe goed:
- | | minder goed | ongeveer hetzelfde | beter | |
|---|--------------------------|--------------------------|--------------------------|---|
| a. kan je opschieter met je broers en zussen? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> ik heb geen broers of zussen |
| b. kan je opschieter met andere jongens en meisjes van je leeftijd? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| c. kan je met je ouders opschieter? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| d. kan je in je eentje bezig zijn met iets? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

VII. Huidige schoolresultaten
 Ik zit niet op school omdat - - - - -

	onvoldoende	zwak	voldoende	goed
a. Taal of Nederlands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Geschiedenis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Rekenen of Wiskunde	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Wereldori ntatie of Aar drijk skunde	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Andere vakken, zoals: e. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
natuurkunde vreemde talen , bi ologie. GEEN f. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vakkenzoals gym. muziek, tekenen enz. g. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Heb Je een llchamelJke ziekte of handicap? Nee Ja (geef aan):

Beschrijf hier Je eventuele zorgen of problemen die Je hebt wat betreft school:

Beschrijf hier eventuele andere zorgen die Je hebt:

Beschrijf hier datgene van Jezelf waarover Je het meest tevreden bent:

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Hieronder staat een lijst met vragen die slaan op hoe je nu bent of ooit binnende afgelopen 6 maanden bent geweest. Wil je iedere vraag goed lezen en iedere vraag beantwoorden? Wil je dan bij iedere vraag het rondje onder de 0, 1 of 2 zwart maken en wel: de 2 als je vindt dat de vraag duidelijk of vaak op jou van toepassing is. Het rondje onder de 1 maak je zwart als de vraag een beetje of soms van toepassing is. Als de vraag helemaal niet op jou van toepassing is, maak dan het rondje onder de 0 zwart. Bij iedere vraag steeds één rondje zwart maken.

0=helemaal niet van toepassing	1=een beetje of soms van toepassing	2=duidelijk of vaak van toepassing
<p>^{0 1 2} 0 0 0 1. Ik gedraag me te jong voor mijn leeftijd.</p> <p>^{0 1 2} 0 0 0 2. Ik heb een allergie (geef aan): _____</p> <p>^{0 1 2} 0 0 0 3. Ik maak veel ruzie.</p> <p>^{0 1 2} 0 0 0 4. Ik heb astma.</p> <p>^{0 1 2} 0 0 0 5. Ik gedraag me als iemand van het andere geslacht</p> <p>^{0 1 2} 0 0 0 6. Ik houd van dieren.</p> <p>^{0 1 2} 0 0 0 7. Ik schep op of doe stoer.</p> <p>^{0 1 2} 0 0 0 8. Ik heb moeite me te concentreren, of om lang mijn aandacht bij iets te houden.</p> <p>^{0 1 2} 0 0 0 9. Ik kan bepaalde gedachten maar niet uit mijn hoofd zetten (geef aan): _____</p> <p>^{0 1 2} 0 0 0 10. Ik heb moeite om te slapen.</p> <p>^{0 1 2} 0 0 0 11. Ik ben afhankelijk van mijn vrienden.</p> <p>^{0 1 2} 0 0 0 12. Ik ben bang om te spreken in een groep.</p> <p>^{0 1 2} 0 0 0 13. Ik huil veel.</p> <p>^{0 1 2} 0 0 0 14. Ik ben nogal eerlijk.</p> <p>^{0 1 2} 0 0 0 15. Ik ben gemeen voor anderen.</p> <p>^{0 1 2} 0 0 0 16. Ik ben vaak droef.</p> <p>^{0 1 2} 0 0 0 17. Ik dagdream veel.</p> <p>^{0 1 2} 0 0 0 18. Ik probeer mezelf opzettelijk te verwonden of doe zelfmoordpogingen.</p> <p>^{0 1 2} 0 0 0 19. Ik probeer veel aandacht te krijgen.</p> <p>^{0 1 2} 0 0 0 20. Ik verniel mijn eigen spullen.</p> <p>^{0 1 2} 0 0 0 21. Ik verniel de spullen van anderen.</p> <p>^{0 1 2} 0 0 0 22. Ik ben ongehoorzaam aan mijn ouders.</p> <p>^{0 1 2} 0 0 0 23. Ik ben ongehoorzaam op school.</p> <p>^{0 1 2} 0 0 0 24. Ik eet niet zo goed als zou moeten.</p> <p>^{0 1 2} 0 0 0 25. Ik kan niet met andere jongens en meisjes omgaan.</p> <p>^{0 1 2} 0 0 0 26. Ik voel mij nietschuldig als ik iets gedaan heb wat ik eigenlijk niet had moeten doen.</p> <p>^{0 1 2} 0 0 0 27. Ik ben jaloers op anderen.</p> <p>^{0 1 2} 0 0 0 28. Ik ben bereid anderen te helpen wanneer zij hulp nodig hebben.</p> <p>^{0 1 2} 0 0 0 29. Ik ben bang voor bepaalde dieren, situaties of plaatsen, uitgezonderd de school (geef aan): _____</p> <p>^{0 1 2} 0 0 0 30. Ik ben bang om naar school te gaan.</p> <p>^{0 1 2} 0 0 0 31. Ik ben bang dat ik misschien slechts zou kunnen doen of denken.</p>	<p>^{0 1 2} 0 0 0 32. Ik vind dat ik perfect moet zijn.</p> <p>^{0 1 2} 0 0 0 33. Ik heb het gevoel dat niemand van mij houdt.</p> <p>^{0 1 2} 0 0 0 34. Ik heb het gevoel dat anderen de pik op mij hebben, het op mij gemunt hebben.</p> <p>^{0 1 2} 0 0 0 35. Ik voel me waardeloos of minderwaardig.</p> <p>^{0 1 2} 0 0 0 36. Ik raak vaak per ongeluk gekwetst.</p> <p>^{0 1 2} 0 0 0 37. Ik vecht veel.</p> <p>^{0 1 2} 0 0 0 38. Ik vind het moeilijk te leren.</p> <p>^{0 1 2} 0 0 0 39. Ik ga om met jongens en meisjes die in moeilijkheden raken.</p> <p>^{0 1 2} 0 0 0 40. Ik hoor geluiden of stemmen die er volgens andere mensen niet zijn (geef aan): _____</p> <p>^{0 1 2} 0 0 0 41. Ik doe zomaar iets zonder er bij na te denken.</p> <p>^{0 1 2} 0 0 0 42. Ik ben liever alleen dan met anderen.</p> <p>^{0 1 2} 0 0 0 43. Ik lieg of bedrieg.</p> <p>^{0 1 2} 0 0 0 44. Ik bijt op mijn nagels.</p> <p>^{0 1 2} 0 0 0 45. Ik ben zenuwachtig of gespannen.</p> <p>^{0 1 2} 0 0 0 46. Ik heb trekkingen of zenuwachtige bewegingen in delen van mijn lichaam (geef aan): _____</p> <p>^{0 1 2} 0 0 0 47. Ik heb moeite om te slapen.</p> <p>^{0 1 2} 0 0 0 48. Ik heb moeite om te leren.</p> <p>^{0 1 2} 0 0 0 49. Ik doe sommige dingen beter dan de meeste van mijn leeftijdsgenoten.</p> <p>^{0 1 2} 0 0 0 50. Ik ben bang voor angstige mensen.</p> <p>^{0 1 2} 0 0 0 51. Ik heb last van duizeligheid.</p> <p>^{0 1 2} 0 0 0 52. Ik heb te veel last van schuldgevoel.</p> <p>^{0 1 2} 0 0 0 53. Ik eet te veel.</p> <p>^{0 1 2} 0 0 0 54. Ik voel me oververmoeid.</p> <p>^{0 1 2} 0 0 0 55. Ik ben te dik.</p> <p>^{0 1 2} 0 0 0 56. Lichamelijke problemen zonder bekende medische oorzaak: a. pijn (geen hoofdpijn) b. hoofdpijn c. misselijkheid d. oogproblemen (geef aan): _____</p> <p>^{0 1 2} 0 0 0 e. uitslag of andere huidaandoeningen 0 0 0 f. maagpijn, buikpijn of buikkrampen 0 0 0 g. overgeven 0 0 0 h. andere problemen (geef aan): _____</p>	

Geslacht: Jongen Meisje

5002

Leeftijd:

Nummer (op beide bladzijden invullen): 1111111111

ZELF IN TE VULLEN VRAGENLIJST VOOR MEISJES EN JONGENS VAN 11-18 JAAR

0=helemaal niet van toepassing 1=een beetje of soms van toepassing 2=duidelijk of vaak van toepassing

<p>^{0 1 2} 0 0 0 57. Ik val anderen lichamelijk aan.</p> <p>^{0 1 2} 0 0 0 58. Ik peuter veel in mijn neus, of pulk of trek veel aan mijn huid of aan andere lichaamsdelen (geef aan): _____</p> <p>^{0 1 2} 0 0 0 59. Ik kan best aardig zijn.</p> <p>^{0 1 2} 0 0 0 60. Ik vind het leuk om nieuwdingen te proberen.</p> <p>^{0 1 2} 0 0 0 61. Mijn schoolresultaten zijn slecht.</p> <p>^{0 1 2} 0 0 0 62. Ik ben onhandig.</p> <p>^{0 1 2} 0 0 0 63. Ik ben liever samen met oudere jongens of meisjes dan met leeftijdgenoten.</p> <p>^{0 1 2} 0 0 0 64. Ik ben liever samen met jongere jongens of meisjes dan met leeftijdgenoten.</p> <p>^{0 1 2} 0 0 0 65. Ik voel eier om te praten.</p> <p>^{0 1 2} 0 0 0 66. Ik heb als mijn bepaalde handelingen (geef aan): _____</p> <p>^{0 1 2} 0 0 0 67. Ik loop van huis weg.</p> <p>^{0 1 2} 0 0 0 68. Ik schreeuw of gil veel.</p> <p>^{0 1 2} 0 0 0 69. Ik ben gesloten; anderen welen niet goed wat er in me omgaat.</p> <p>^{0 1 2} 0 0 0 70. Ik zie dingen waarvan anderen denken dat ze er niet zijn (geef aan): _____</p> <p>^{0 1 2} 0 0 0 71. Ik schaam me gauw, voel me gauw opgelaten.</p> <p>^{0 1 2} 0 0 0 72. Ik sticht brandjes.</p> <p>^{0 1 2} 0 0 0 73. Ik heb een beetje...</p> <p>^{0 1 2} 0 0 0 74. Ik doe raar of "gek" om de aandacht te trekken.</p> <p>^{0 1 2} 0 0 0 75. Ik ben verlegen.</p> <p>^{0 1 2} 0 0 0 76. Ik slaap minder dan de meeste van mijn leeftijdgenoten.</p> <p>^{0 1 2} 0 0 0 77. Ik slaap meer dan de meeste van mijn leeftijdgenoten overdagen/of 's nachts (geef aan): _____</p> <p>^{0 1 2} 0 0 0 78. Ik heb een goede fantasie.</p> <p>^{0 1 2} 0 0 0 79. Ik heb een spraakprobleem (geef aan): _____</p> <p>^{0 1 2} 0 0 0 80. Ik kom voor mi jzelf op.</p> <p>^{0 1 2} 0 0 0 81. Ik steel van huis.</p> <p>^{0 1 2} 0 0 0 82. Ik steel buitenshuis.</p> <p>^{0 1 2} 0 0 0 83. Ik spaar dingen op die ik niet nodig heb (geef aan): _____</p>	<p>^{0 1 2} 0 0 0 84. Ik doe dingen die andere mensen vreemd of 'gek' vinden (geef aan): _____</p> <p>^{0 1 2} 0 0 0 85. Ik heb gedachten die andere mensen vreemd of 'gek' zouden vinden (geef aan): _____</p> <p>^{0 1 2} 0 0 0 86. Ik ben koppig.</p> <p>^{0 1 2} 0 0 0 87. Mijn stemming of gevoelens veranderen plotseling.</p> <p>^{0 1 2} 0 0 0 88. Ik vind het leuk om samen met anderen te zijn.</p> <p>^{0 1 2} 0 0 0 89. Ik ben achterdochtig.</p> <p>^{0 1 2} 0 0 0 90. Ik vloek of gebruik schuttingtaal.</p> <p>^{0 1 2} 0 0 0 91. Ik denk erover een eind aan mijn leven te maken.</p> <p>^{0 1 2} 0 0 0 92. Ik vind het leuk anderen aan het lachen te maken.</p> <p>^{0 1 2} 0 0 0 93. Ik praat te veel.</p> <p>^{0 1 2} 0 0 0 94. Ik plaag anderen veel.</p> <p>^{0 1 2} 0 0 0 95. Ik ben snel driftig.</p> <p>^{0 1 2} 0 0 0 96. Ik denk te veel aan seks.</p> <p>^{0 1 2} 0 0 0 97. Ik dreig andere mensen pijn te doen.</p> <p>^{0 1 2} 0 0 0 98. Ik vind het fijn anderen te helpen.</p> <p>^{0 1 2} 0 0 0 99. Ik maak me teveel zorgen of ik netjes of schoon ben.</p> <p>^{0 1 2} 0 0 0 100. Ik heb problemen met slapen (geef aan): _____</p> <p>^{0 1 2} 0 0 0 101. Ik spijbel.</p> <p>^{0 1 2} 0 0 0 102. Ik heb niet veel spierkracht.</p> <p>^{0 1 2} 0 0 0 103. Ik ben ongelukkig, verdrietig of gedeprimeerd.</p> <p>^{0 1 2} 0 0 0 104. Ik maak meer lawaai dan andere jongens of meisjes.</p> <p>^{0 1 2} 0 0 0 105. Ik gebruik alcohol of drugs (geef aan wat en hoeveel): _____</p> <p>^{0 1 2} 0 0 0 106. Ik probeer te zijn tegenover anderen.</p> <p>^{0 1 2} 0 0 0 107. Ik hou van een goede grap.</p> <p>^{0 1 2} 0 0 0 108. Ik hou van een plezierig en makkelijk leven.</p> <p>^{0 1 2} 0 0 0 109. Ik probeer andere mensen te helpen.</p> <p>^{0 1 2} 0 0 0 110. Ik ben liever van het andere geslacht.</p> <p>^{0 1 2} 0 0 0 111. Ik probeer zo weinig mogelijk met anderen te maken te hebben.</p> <p>^{0 1 2} 0 0 0 112. Ik pieker veel, maak me veel zorgen.</p>
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KIJK NOG EENS GOED NA OF JE ALLE VRAGEN HEBT BEANTWOORD.

Appendix 2

Vragenlijsten voor gezinsfunctioneren en geestelijke
gezondheid van de ouder

De informatie in appendix 2 is gebaseerd op de volgende bronnen:

Epstein NB, Baldwin LM, Bishop DS (1983), The McMaster Family
Assessment Device. *J Marital Fam Ther* 9:171-180

Goldberg DP (1972), *The Detection of Psychiatric Illness by
Questionnaire*. London: Oxford University Press

The McMaster Family Assessment Device – General Functioning

Hieronder staan twaalf beweringen over gezinnen. Wilt u een rondje zetten om het cijfer dat aangeeft in welke mate u het eens of oneens bent met iedere bewering? Neem daarbij uw eigen gezin in gedachten.

	Helemaal mee eens	Mee eens	Niet mee eens	Helemaal niet mee eens
1. Plannen maken om iets met het gezin te gaan doen is moeilijk omdat we elkaar verkeerd begrijpen	-1-	-2-	-3-	-4-
2. Wanneer er moeilijkheden zijn kunnen we op elkaars steun rekenen	-1-	-2-	-3-	-4-
3. We kunnen niet met elkaar praten over het verdriet dat we voelen	-1-	-2-	-3-	-4-
4. Anderen worden geaccepteerd zoals ze zijn	-1-	-2-	-3-	-4-
5. Wij vermijden het om over onze angsten en zorgen te praten	-1-	-2-	-3-	-4-
6. Wij kunnen gevoelens naar elkaar toe uiten	-1-	-2-	-3-	-4-
7. Er zijn heel wat nare, pijnlijke gevoelens in het gezin	-1-	-2-	-3-	-4-
8. Wij voelen ons geaccepteerd zoals wij zijn	-1-	-2-	-3-	-4-
9. Beslissen is een probleem voor ons gezin	-1-	-2-	-3-	-4-
10. Wij kunnen beslissingen nemen over hoe we problemen moeten oplossen	-1-	-2-	-3-	-4-
11. Wij kunnen niet goed met elkaar opschieten	-1-	-2-	-3-	-4-
12. Wij vertrouwen op elkaar	-1-	-2-	-3-	-4-

General Health Questionnaire, 12-item versie

1. Bent u de laatste tijd door zorgen veel slaap tekort gekomen?
 helemaal niet
 niet meer dan gewoonlijk
 iets meer dan gewoonlijk
 veel meer dan gewoonlijk

2. Heeft u de laatste tijd het gevoel gehad dat u voortdurend onder druk stond?
 helemaal niet
 niet meer dan gewoonlijk
 iets meer dan gewoonlijk
 veel meer dan gewoonlijk

3. Heeft u zich de laatste tijd kunnen concentreren op uw bezigheden?
 beter dan gewoonlijk
 net zo goed als gewoonlijk
 slechter dan gewoonlijk
 veel slechter dan gewoonlijk

4. Heeft u de laatste tijd het gevoel gehad zinvol bezig te zijn?
 zinvoller dan gewoonlijk
 net zo zinvol als gewoonlijk
 minder zinvol dan gewoonlijk
 veel minder zinvol dan gewoonlijk

5. Bent u de laatste tijd in staat geweest uw problemen onder ogen te zien?
 beter (in staat) dan gewoonlijk
 net zo goed (in staat) als gewoonlijk
 iets minder goed (in staat) dan gewoonlijk
 veel minder goed (in staat) dan gewoonlijk

6. Voelde u zich de laatste tijd in staat om beslissingen (over dingen) te nemen?
 beter in staat dan gewoonlijk
 net zo goed in staat als gewoonlijk
 iets minder goed in staat dan gewoonlijk
 veel minder goed in staat dan gewoonlijk

7. Heeft u de laatste tijd het gevoel gehad dat u uw moeilijkheden niet de baas kon?

- nee, ik had dat gevoel helemaal niet
- niet minder de baas dan gewoonlijk
- iets minder de baas dan gewoonlijk
- veel minder de baas dan gewoonlijk

8. Heeft u zich de laatste tijd alles bij elkaar redelijk gelukkig gevoeld?

- gelukkiger dan gewoonlijk
- even gelukkig als gewoonlijk
- minder gelukkig dan gewoonlijk
- veel minder gelukkig dan gewoonlijk

9. Heeft u de laatste tijd plezier kunnen beleven aan uw gewone, dagelijkse bezigheden?

- meer dan gewoonlijk
- evenveel als gewoonlijk
- iets minder dan gewoonlijk
- veel minder dan gewoonlijk

10. Heeft u zich de laatste tijd ongelukkig en neerslachtig gevoeld?

- helemaal niet
- niet meer dan gewoonlijk
- iets meer dan gewoonlijk
- veel meer dan gewoonlijk

11. Bent u de laatste tijd het vertrouwen in uzelf kwijtgeraakt?

- helemaal niet
- niet meer dan gewoonlijk
- iets meer dan gewoonlijk
- veel meer dan gewoonlijk

12. Heeft u zich de laatste tijd als een waardeloos iemand beschouwd?

- helemaal niet
- niet meer dan gewoonlijk
- iets meer dan gewoonlijk
- veel meer dan gewoonlijk

Dankwoord

Er zijn in de loop van mijn promotie tijd al verschillende versies van een dankwoord over mijn computerscherm gegaan. Het blijkt moeilijk om goed in woorden uit te drukken wat alle mensen die mij hebben geholpen bij de totstandkoming van dit proefschrift voor me betekenen zonder in clichés te vervallen.

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Curriculum Vitae

Marieke Zwaanswijk was born in Egmond aan Zee, the Netherlands, on July the 16th, 1974. She followed her secondary education (VWO) at the Petrus Canisius College in Alkmaar, from which she graduated in 1992. She subsequently studied Educational Sciences at Utrecht University, with majors in 'Child psychosocial problems' and 'Adoption/ non-genetic parenthood', and graduated with honours in 1997. From 1998 to 2000, she worked at the University of Amsterdam, conducting a study on influences of non-shared environment on similarities and differences in the development of young siblings. Since 2001 she has been employed at the Netherlands Institute for Health Services Research (NIVEL), conducting the study on help-seeking for child and adolescent emotional and behavioural problems, which is reported in this thesis. At present, she is involved in a study on communication and role delineation in paediatric oncology at the NIVEL Institute.

