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Priorities in the communication needs of adolescents with psychosocial problems and their parents

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ABSTRACT

Background: In patient-centred care, professionals should recognize their patient's needs and adapt their communication accordingly. Studies into patients' communication needs suggest priorities vary depending on sociodemographic characteristics, and type and severity of the complaints. However, evidence lacks on priorities in the communication needs of adolescents in psychosocial care and their parents.

Objective: To assess adolescents' and parents' importance ratings concerning affective communication, information provision, shared decision-making, interprofessional communication and the degree to which client and care characteristics determine these.

Methods: Adolescents aged 12–18 ($n = 403$) and one of their parents ($n = 403$) rated the importance of communication before the psychosocial care process started. Multivariable logistic regression analysis was applied to determine which characteristics were associated with the 25% lowest importance ratings for communication aspects.

Results: Adolescents and parents considered affective communication to be the most important, with shared decision-making the least important. For adolescents, lower importance ratings were associated with dissatisfaction with prior care (OR 1.8), negative expectations (ORs 1.9–2.4), emotional problems (ORs 0.2–0.5) and low prosocial behaviour skills (ORs 2.0). For parents, low education (ORs 1.7–1.8), negative expectations (OR 0.4), adolescent's hyperactivity/inattention (ORs 0.4–0.5) and low prosocial behavior skills (ORs 1.8–2.6) determined lower importance ratings.

Conclusions: Affective communication has highest priority for adolescents and their parents. Client and care characteristics are associated with client priorities in communication. Being attentive to clients' educational level, previous care experiences, current expectations and specific problem types might help professionals to adapt better to their clients' communication needs.

INTRODUCTION

In health care, a patient-centred approach has been shown to improve the quality of care.¹⁻³ A growing number of studies show aspects of patient-centred care, such as shared decision-making and enhancing patient participation, to be associated with positive outcomes such as patient satisfaction, treatment adherence, health status and quality of life.⁴⁻⁷ Patients have been shown to be more satisfied with consultations in which their ideas and concerns are addressed. However, this may not always be the priority of every patient.⁸ This has caused Stewart⁶ to state that truly patient-centred communication implies recognition of the style preferred by the patient. Care providers need to be aware of what really matters for the patient.

Individual patients' communication preferences are determined by sociodemographic, health- and care-related characteristics. In general, older, less educated, unemployed or male patients consider it less important to be fully informed and to be involved in decision-making than younger, more educated, employed and female patients.⁹⁻¹¹ Furthermore, the severity of the medical condition has been found to be related to the importance patients ascribe to communication. The more severe patients' medical conditions are, the less they want to be involved in their own care.^{9,12}

So far, studies on communication preferences in care have mainly focused on adult patients in somatic medical care settings such as general practice and oncology. Some studies concern mental health care, but these involve only adult patients. Studies on communication preferences in psychosocial care for adolescents' emotional and behavioural problems are lacking, even though these are likely to differ from the vast majority of medical settings due to the type of problems. These involve, for instance, preventive child health care, child and adolescent social care, and child and adolescent mental health care. Moreover, in terms of care for adolescents, professionals not only communicate with the adolescent, but in many cases, parents or other family members are also involved.

General theories about client-professional communication in health care have described various relevant communication functions, such as fostering relationships, providing information, and making decisions.^{13,14} In psychosocial care, studies have often focused on the client-professional relationship and clients' participation in decision-making.¹⁵⁻¹⁸ To be able to participate in decision-making processes, clients should be provided with sufficient information about their options. Finally, in this care setting, there is often more than one care professional involved in the care process, which makes the communication between various professionals highly relevant. We chose to assess how both adolescents and their parents rated the importance of four major aspects of

communication:¹³ (1) affective communication (i.e. care providers' empathy), (2) information provision, (3) shared decision-making and (4) interprofessional communication.

The aims of this study were to assess adolescents' and parents' importance ratings concerning affective communication, information provision, shared decision-making, interprofessional communication and the degree to which client and care characteristics determine these. Better insight into the importance adolescents and parents ascribe to different aspects of client-professional communication might help professionals to recognize and tune in to individual client's communication preferences.

METHODS

Study design

This study was conducted within the context of C4Youth, the Collaborative Centre on Care for Children and Youth, which focuses on psychosocial problems.¹⁹ Within this framework, a large longitudinal prospective cohort study was designed to investigate the trajectories in and outcomes of care for youth with psychosocial problems in the Netherlands. It comprises a total of five measurements during a 3-year follow-up. The study reported here involves data from the first assessment wave which ran from April 2011 through May 2013. The study was approved by the local Medical Ethical Committee, and informed consent was obtained from all participating parents and adolescents.

Sample

During the 2-year period, adolescents (12–18 years old) in the province of Groningen who signed up for psychosocial care in an organization for preventive child health care, child and adolescent social care, or child and adolescent mental health care because of these adolescents' psychosocial problems (i.e. behavioural, emotional and social problems) were invited to participate in this study ($n = 837$), as well as one of their parents/guardians. In most cases, this was the biological parent of the adolescent, but non-biological guardians were also able to participate. Potential participants were excluded if they were older than 18, had severe mental retardation, were not living in one of the three northern Dutch provinces, did not speak Dutch or did not enrol in the care of the organization ultimately ($n = 29$). In some cases, families could not be contacted because we did not receive the right telephone number ($n = 53$). Of the eligible clients ($n = 755$), some declined ($n = 293$). The current study was restricted to those adolescents, for whom both adolescent and parent information was available ($n = 403$; 87%). The participants included in this sample did not differ significantly from the original sample with respect to demographic

characteristics (e.g., adolescents' gender, $p = 0.90$), social characteristics (e.g., family composition, $p = 0.12$), emotional and behavioural problems (e.g., adolescent-reported total difficulties, $p = 0.86$; parent-reported total difficulties, $p = 0.95$) and care-related characteristics (e.g., adolescents' expectations about care, $p = 0.79$; parents' expectations about care, $p = 0.91$).

Procedure

Immediately after adolescents were signed up for psychosocial care in one of the participating organizations, adolescents and their parents received a short introductory letter accompanied by a brochure with information explaining study goals, the selection procedure, confidentiality and assessment waves. Approximately 2 weeks later, they were invited to participate. If willing, participants then received an informed consent form and a questionnaire, the latter either by e-mail or on paper, depending on the preference of the participant. If needed, telephone interviews or home visits were arranged. Data were obtained before the actual care process started. Because we collected information regarding communication preferences before client–professional contact took place, it was still unknown how this care process would evolve. After the first contact clients could start treatment, be referred to another care organization, or not start any treatment at all.

Measurements

We obtained data about adolescents' and parents' ratings for the importance of four different aspects of communication. Furthermore, we assessed client characteristics (e.g., demographic, social and the adolescents' problem types) as well as care characteristics.

Adolescents' and parents' ratings for the importance of client–professional communication were assessed using an adaptation of the Consumer Quality Index (CQI).^{20–23} The CQI assesses both the importance of and experiences with different aspects of care, with versions available for various specific health-care settings. For this study, items concerning client–professional communication on the four domains were selected from three existing CQI questionnaires that are well established and have been used in preventive child health care,²³ outpatient mental health care^{21,22} and outpatient occupational therapy care.²⁰ The selected items represent the four communication aspects that are of interest in this study:

1. Affective communication (AFC) – 9 items
2. Information provision (INP) – 5 items
3. Shared decision-making (SDM) – 6 items
4. Interprofessional communication (IPC) – 3 items

All items were formulated as follows: 'I think care providers should. . .'. The answer categories were rank ordered (not important [1], of some importance [2], important [3], very important [4]). Mean importance scores were calculated for each communication aspect. In this study, we found Cronbach's α for AFC at 0.90 (adolescents) and 0.88 (parents), for INP at 0.86 (adolescents) and 0.84 (parents), for SDM at 0.73 (adolescents) and 0.80 (parents) and for IPC at 0.60 (adolescents) and 0.71 (parents).

Demographic characteristics involved age, gender and adolescent ethnicity. *Adolescent ethnicity* was defined as non-Dutch if the adolescent or at least one of his/her biological parents was born outside of the Netherlands.

Social characteristics concerned the relationship between the adolescent and the parental respondent, parental educational level, family composition and financial strain. *Parental educational level* tracked the highest diploma obtained. It was categorized as being (1) low (primary education, lower levels of secondary education), (2) medium (higher levels of secondary education) and (3) high (university of applied sciences and university). *Family composition* was assessed by asking the adolescent with whom he or she lived. It was categorized as (1) two-parent family (both parents live with the adolescent), (2) one-parent family (there is only one parent or the parents are separated), (3) foster family (also family members or friends) and (4) residential care. *Financial strain* was based on parents' self-report. The answer categories were the following: (1) no difficulties at all; (2) no difficulties, but I have to be aware of my expenditures; (3) yes, some difficulties; and (4) yes, major difficulties.

Adolescents' problem types were measured using the Dutch version of the Strengths and Difficulties Questionnaire (SDQ).^{24,25} The SDQ involves 25 items describing positive and negative attributes of children and adolescents. It has a parent-report version covering ages 4–18 and a self-report version covering ages 11–18 years which contains the same items worded slightly differently. The items are scored as follows: 0 = not true, 1 = somewhat true and 2 = certainly true, on the basis of the preceding 6 months. The SDQ consists of five scales of five items each: emotional symptoms, conduct problems, hyperactivity/inattention, peer problems and prosocial behaviour. Scores for the first four scales add up to a total difficulties score (TDS). Approximately 10% of a community sample scores in the abnormal range (clinical problems), 10% scores in the borderline range (considerable problems) and 80% scores in the normal range. For the analysis, the SDQ was dichotomized using the UK cut-off points.^{26,27}

Care characteristics concerned satisfaction with prior care for adolescents' psychosocial problems and expectations regarding upcoming care. *Satisfaction with prior care* was measured using an adapted version of the second part of the Dutch 'Questionnaire Intensive Youth Care – Care use and production loss'.^{28,29} Respondents were asked to name the health-care professionals they contacted during the last six

months and whether they were satisfied with their care. *Expectations about care* were measured using a question designed by Moser in a study concerning outpatient child and youth care,³⁰ which we adapted to this particular setting. Adolescents and parents were asked whether their expectations regarding upcoming care or treatment were (1) positive (very or slightly), (2) negative (very or slightly) or (3) uncertain or no expectations.

Analyses

First, we described sample characteristics. Second, we assessed means (M) and standard deviations (SD) for importance scores of the four communication aspects. This was done for adolescents and parents separately and for the differences within adolescent–parent pairs. Difference scores were calculated by subtracting the adolescent score from the parent score. We assessed the statistical significance of differences between the four communication aspects using non-parametric tests (Friedman’s ANOVA), because the distributions of the outcome variables were skewed to the left and could not be transformed to Gaussian ones. Differences between adolescent and parental scores were calculated using the Mann–Whitney *U*-test.

Third, we performed univariable and multivariable logistic regression analyses to assess which client and care characteristics determined adolescent-rated and parent-rated importance of the four communication aspects, leading to odds ratios (OR) and 95% confidence intervals (95%-CI). Outcome variables were dichotomized as either unimportant (lowest 25%) or important. Multivariable backward logistic regression analyses were used to obtain the most accurate association models, in which the probability for a variable removal was set on 0.1. ORs with a P-value below 0.05 were considered statistically significant. The predictive performance of the logistic models was assessed by means of the Hosmer–Lemeshow test (goodness of fit test). All statistical analyses were performed using SPSS for Windows (SPSS Inc., Chicago, IL, USA, version 20.0).

Table 1 Participant characteristics ($n = 403^1$)

		Adolescent	Parent
Demographic characteristics		M (SD)	M (SD)
Age		14.9 (1.7)	45.1 (5.7)
		<i>n</i> (%)	<i>n</i> (%)
Gender	Male	185 (45.9)	49 (12.2)
	Female	218 (54.1)	352 (87.8)
Ethnicity	Dutch	355 (88.1)	
	Non-Dutch	48 (11.9)	
Social characteristics		<i>n</i> (%)	<i>n</i> (%)
Relation of parental respondent to adolescent	Biological parent		366 (90.8)
	Non-biological parent		32 (9.2)
Educational level	Low		182 (45.9)
	Medium		142 (35.9)
	High		72 (18.2)
Family composition	Two-parent family	236 (58.7)	
	One-parent family, parents separated	129 (32.1)	
	Foster family, relatives, friends	30 (7.4)	
	Residential care	7 (1.7)	
Financial strain	No difficulties		262 (65.7)
	Difficulties		137 (34.3)
Adolescents' problem types (SDQ)		M (SD)	M (SD)
Difficulties	Emotional symptoms score	4.2 (2.7)	4.7 (2.6)
	Conduct problems score	2.6 (1.8)	2.7 (2.3)
	Hyperactivity/inattention score	5.3 (2.5)	5.1 (2.8)
	Peer-relationship problems score	2.5 (2.0)	3.1 (2.2)
	Total difficulties score (TDS)	14.5 (5.7)	15.7 (6.4)
Strengths ²	Prosocial behavior score	7.8 (1.8)	7.1 (2.3)
Care-related characteristics		<i>n</i> (%)	<i>n</i> (%)
Satisfaction with prior adolescents' care	No prior care	67 (16.7)	71 (17.6)
	Prior care and satisfied	257 (63.9)	261 (64.8)
	Prior care and dissatisfied	71 (17.7)	63 (15.6)
	Prior care and satisfaction unknown	7 (1.7)	8 (2.0)
Expectations about adolescents' care	Very or slightly positive	265 (66.2)	293 (73.8)
	Very or slightly negative	15 (3.8)	19 (4.8)
	Uncertain or no expectations	120 (30.0)	85 (21.4)

¹ Numbers do not always add up to $n = 403$ due to missing data.² For 'strengths'; higher scores indicate fewer problems in this area.

RESULTS

Sample characteristics

Demographic, social, adolescents’ problem types and care-related information are displayed in Table 1. In most cases, the biological mother of the participating adolescent filled in the questionnaire. Regarding psychosocial strengths and difficulties, adolescents rated their problems as lower and their strengths as higher than their parents did.

Regarding affective communication, for adolescents, the ‘unimportant’ range was 1.0–3.0, and for parents 2.0–3.0. Regarding information provision, the ‘unimportant’ range for adolescents was 1.0–2.4, and for parents 1.6–3.0. Regarding shared decision-making, the ‘unimportant’ range for adolescents was 1.0–2.5, and for parents 1.5–2.7. Regarding interprofessional communication, the ‘unimportant’ range for adolescents was 1.0–2.7, and for parents 1.3–3.0.

The importance of communication aspects according to adolescents and their parents

Mean importance scores and standard deviations for affective communication, information provision, shared decision-making and interprofessional communication are presented in Table 2. Statistically significant differences were found between importance scores on the four communication aspects. Both adolescents and parents rated the importance of affective communication highest and shared decision-making lowest. For all communication aspects, the mean importance scores of parents were higher than those of adolescents, and significant differences were found for information provision, shared decision-making and interprofessional communication. Mean difference scores were all above 0, also indicating overall higher ratings of parents than adolescents. When differences occurred, in 54% (AFC) to 70% (INP) of the cases, the parent attached more importance to the communication aspect than the adolescent.

Table 2 Adolescent-rated and parent-rated importance of four communication aspects

	Adolescents (n = 403)	Parents (n = 403)	Difference scores
Affective communication, M (SD)	3.39 (0.55)	3.46 (0.49)	0.07 (0.67)
Information provision, M (SD)	2.98 (0.69)***	3.34 (0.52)	0.36 (0.80)
Shared decision-making, M (SD)	2.93 (0.56)***	3.13 (0.57)	0.20 (0.77)
Interprofessional communication, M (SD)	3.24 (0.67)***	3.42 (0.59)	0.18 (0.82)
Differences between communication aspects, <i>p</i> -value	< 0.001	< 0.001	< 0.001

***Significant differences at $p < 0.001$ between adolescents and parents.

Determinants of importance ratings for the four communication aspects

Results regarding characteristics associated with adolescent-rated and parent-rated importance are presented in Tables 3 and 4.

Regarding adolescent-rated importance (Table 3), no sociodemographic characteristics were associated with the importance ratings of communication aspects, whereas most care and problem-type characteristics were associated with these. Multivariable logistic regression analysis revealed that dissatisfaction with prior care was independently associated with low importance ratings for affective communication. Furthermore, adolescents with negative expectations or who lacked expectations about upcoming care were more likely to give a low importance rating to affective communication, information provision and shared decision-making. Adolescents reporting more emotional symptoms were less likely to rate the importance of all four communication aspects low, whereas adolescents reporting less prosocial behaviour were more likely to be low on information provision and shared decision-making. All four models were a good fit for the data.

Regarding parent-rated importance (Table 4), analyses revealed that low parental educational level was associated with low importance ratings for affective communication and shared decision-making. Adolescents' care characteristics and problem types also determined parents' importance ratings. In contrast to findings for adolescents, parents with negative expectations or lack of expectations about care were less likely to attribute low importance to shared decision-making. Associations between lower prosocial behaviour and importance ratings of communication were similar for parents and adolescents. Furthermore, parents reporting more child hyperactivity/inattention problems were less likely to rate most communication aspects low. Statistically significant associations were found except for information provision. The two multivariable models were a good fit for the data.

Table 3 Univariable and multivariable logistic regression analysis on determinants for adolescents' low importance scores on four communication aspects

	Low importance score ¹ on affective communication		Low importance score ¹ on information provision		Low importance score ¹ on shared decision-making		Low importance score ¹ on inter-professional communication	
	Univariable	Multivariable	Univariable	Multivariable	Univariable	Multivariable	Univariable	Multivariable
Adolescents' ratings (n = 403)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
Adolescent sociodemographic characteristics								
Age (12-15 = 0, 16-18 = 1)	0.9 (0.6, 1.5)		0.8 (0.4, 1.3)		0.6 (0.3, 1.0)		0.8 (0.4, 1.3)	
Gender (male = 0, female = 1)	0.5 (0.3, 0.8)**		0.6 (0.4, 1.0)		0.8 (0.5, 1.3)		0.7 (0.5, 1.2)	
Ethnicity (Dutch = 0, non-Dutch = 1)	1.5 (0.8, 2.9)		1.3 (0.6, 2.6)		1.4 (0.7, 2.6)		1.5 (0.8, 3.0)	
Parent and family sociodemographic characteristics								
Gender (male = 0, female = 1)	1.2 (0.6, 2.4)		0.8 (0.4, 1.7)		1.6 (0.8, 3.5)		0.8 (0.4, 1.5)	
Educational level (medium/high = 0, low = 1)	1.4 (0.9, 2.1)		1.5 (0.9, 2.4)		1.5 (0.9, 2.3)		1.1 (0.7, 1.8)	
Family composition (two-parent family = 0, other = 1)	1.3 (0.8, 2.0)		1.2 (0.8, 2.0)		1.0 (0.6, 1.6)		0.9 (0.6, 1.5)	
Financial difficulties (no = 0, yes = 1)	1.4 (0.9, 2.1)		1.0 (0.6, 1.6)		1.4 (0.8, 2.2)		1.3 (0.8, 2.2)	
Characteristics regarding adolescent care and problem types								
Satisfaction with prior care (none/satisfied = 0, dissatisfied = 1)	1.7 (1.0, 2.9)	1.8 (1.0, 3.3)*	1.4 (0.8, 2.6)		1.0 (0.5, 1.8)		0.8 (0.4, 1.6)	
Expectations about care (positive = 0, not positive = 1)	1.9 (1.2, 2.9)**	1.9 (1.2, 3.1)**	2.5 (1.5, 4.0)***	2.4 (1.4, 4.1)***	1.8 (1.1, 2.8)*	1.6 (1.0, 2.6)	1.0 (0.6, 1.6)	
Emotional symptoms ²	0.3 (0.2, 0.5)***	0.4 (0.2, 0.6)***	0.3 (0.2, 0.6)***	0.2 (0.1, 0.4)***	0.5 (0.3, 0.8)**	0.5 (0.3, 0.8)**	0.5 (0.3, 0.8)**	0.5 (0.3, 0.8)**
Conduct problems ²	0.9 (0.6, 1.5)		1.3 (0.8, 2.2)		0.8 (0.5, 1.3)		1.1 (0.6, 1.8)	
Hyperactivity/inattention ²	0.7 (0.4, 1.1)		0.7 (0.5, 1.2)		1.0 (0.6, 1.6)		0.6 (0.4, 1.0)	0.6 (0.4, 1.1)
Peer relationship problems ²	0.9 (0.5, 1.5)		0.7 (0.4, 1.2)		1.2 (0.7, 2.0)		0.8 (0.5, 1.4)	
Prosocial behavior ²	1.5 (0.8, 2.7)		2.2 (1.2, 4.1)*	2.0 (1.0, 3.9)*	1.8 (1.0, 3.3)	2.0 (1.4, 3.7)*	1.5 (0.8, 2.9)	
Hosmer and Lemeshow Test (p-value)		0.93		0.47		0.97		0.52

¹ 75% highest importance scores = 0; 25% lowest importance scores = 1. ² normal = 0; borderline or abnormal = 1. * p < 0.05, ** p < 0.01, *** p < 0.001.

Table 4 Univariable and multivariable logistic regression analysis on determinants for parents' low importance scores on four communication aspects

	Low importance score ¹ on affective communication		Low importance score ¹ on information provision		Low importance score ¹ on shared decision-making		Low importance score ¹ on inter-professional communication	
	Univariable	Multivariable	Univariable	Multivariable	Univariable	Multivariable	Univariable	Multivariable
Adolescents' ratings (n = 403)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
Adolescent sociodemographic characteristics								
Age (12-15 = 0, 16-18 = 1)	1.1 (0.7, 1.8)		1.2 (0.8, 1.8)		1.5 (0.9, 2.5)		1.3 (0.8, 2.0)	
Gender (male = 0, female = 1)	0.8 (0.5, 1.3)		0.8 (0.5, 1.2)		1.3 (0.8, 2.1)		1.0 (0.7, 1.5)	
Ethnicity (Dutch = 0, non-Dutch = 1)	1.3 (0.7, 2.4)		0.7 (0.4, 1.3)		1.9 (1.0, 3.6)		1.1 (0.6, 2.0)	
Parent and family sociodemographic characteristics								
Gender (male = 0, female = 1)	1.1 (0.6, 2.3)		0.8 (0.5, 1.5)		0.7 (0.4, 1.3)		0.7 (0.4, 1.3)	
Educational level (medium/high = 0, low = 1)	1.6 (1.0, 2.5)*	1.7 (1.1, 2.7)*	1.3 (0.8, 1.9)		1.5 (0.9, 2.4)	1.8 (1.1, 3.9)*	1.0 (0.6, 1.5)	
Family composition (two-parent family = 0, other = 1)	1.2 (0.7, 1.8)		1.1 (0.7, 1.6)		1.0 (0.6, 1.6)		1.0 (0.7, 1.5)	
Financial difficulties (no = 0, yes = 1)	1.1 (0.7, 1.7)		1.0 (0.7, 1.6)		0.8 (0.5, 1.4)		0.9 (0.6, 1.3)	
Characteristics regarding adolescent care and problem types								
Satisfaction with prior care (none/satisfied = 0, dissatisfied = 1)	0.8 (0.4, 1.5)		0.8 (0.4, 1.4)		0.9 (0.5, 1.7)		1.2 (0.7, 2.1)	
Expectations about care (positive = 0, not positive = 1)	1.1 (0.6, 1.8)		0.9 (0.6, 1.5)		0.5 (0.3, 0.9)*	0.4 (0.2, 0.8)**	0.7 (0.4, 1.2)	
Emotional symptoms ²	0.7 (0.5, 1.2)		0.8 (0.5, 1.2)		0.7 (0.4, 1.1)	0.6 (0.4, 1.0)	0.9 (0.6, 1.5)	
Conduct problems ²	1.1 (0.7, 1.7)		0.9 (0.6, 1.4)		0.7 (0.4, 1.1)		0.8 (0.5, 1.1)	
Hyperactivity/inattention ²	0.6 (0.4, 0.9)*	0.5 (0.3, 0.8)**	0.8 (0.6, 1.2)		0.5 (0.3, 0.8)**	0.4 (0.2, 0.7)***	0.5 (0.3, 0.8)**	0.5 (0.3, 0.8)**
Peer relationship problems ²	1.3 (0.8, 2.0)		1.3 (0.9, 1.9)		1.2 (0.7, 1.9)		1.0 (0.7, 1.6)	
Prosocial behavior ²	1.6 (1.0, 2.6)	1.8 (1.1, 3.1)*	1.1 (0.7, 1.8)		2.0 (1.2, 3.3)**	2.6 (1.5, 4.6)***	1.2 (0.7, 1.9)	
Hosmer and Lemeshow Test (p-value)	0.42		0.57					

¹ 75% highest importance scores = 0; 25% lowest importance scores = 1. ² normal = 0; borderline or abnormal = 1. * p < 0.05, ** p < 0.01, *** p < 0.001.

DISCUSSION AND CONCLUSION

Our study on care for adolescents' psychosocial problems showed that adolescents and their parents attribute high importance to all communication aspects, with the highest for affective communication and lowest for shared decision-making. Especially health- and care-related aspects, such as satisfaction with prior care, expectations about upcoming care and problem types, were found to be determinants of adolescent-rated and parent-rated importance for different aspects of communication. Moreover, parental educational level was an important determinant for the importance parents ascribed to affective communication and shared decision-making.

Discussion

The importance of communication

Both adolescents and parents give highest priority to affective communication and lowest priority to shared decision-making. This aligns with findings where adolescents with chronic pain rated aspects of interpersonal care (especially honesty, attention and respect) most highly, when assessing the quality of care.³¹ The relative value of the different communication aspects in our study also corresponds with the findings of Vick and Scott.³² They adopted a study design in which adult general practice patients were presented with hypothetical scenarios that differed with respect to the attributes of the consultation. Respondents were asked to make discrete choices between pairwise combinations of scenarios. Results showed that 'Being able to talk to the doctor' (an aspect of affective communication) was considered to be the most important attribute of the consultation, while 'Who chooses your treatment?' (an aspect of shared decision-making) was the least important. Although the study design was different and therefore findings were not directly comparable, this suggests that patients' or clients' views on the relative importance of different communication aspects are similar in psychosocial care and somatic health care.

Parents rated the importance of all communication aspects higher than their children. An explanation might be that adolescents are more uncertain or less active about communicating with a care professional before the start of a care process in which their personal problems are being addressed. Parents may be more assertive, and they may well be the ones who stimulated their son or daughter to seek help.³³ Interestingly, differences regarding affective communication were small. This indicates the high importance adolescents attach to this specific aspect of client–professional communication.

We found that being involved in decision-making was not a high priority for adolescents and parents at the start of a care process for adolescents' psychosocial problems. Adolescents especially attributed relatively low importance to this communication aspect. This may be interpreted as that they preferred a more passive role, with the professional making decisions instead of they themselves, when it came to their own care process. This finding aligns with the outcomes of a recent systematic review of Chewing and colleagues³⁴ in which they included studies on adult cancer patients, invasive procedure patients, patients with other chronic conditions and general populations (unspecified reasons for visit or community population samples). Those authors concluded that there was a subgroup of patients who wanted to delegate decisions, even though a majority of patients wanted to participate in decision-making. However, in policy and research, it is suggested that shared decision-making has a positive effect on outcomes of care, such as client participation, satisfaction, quality of life and health.^{18,35} The relatively low importance clients attached to shared decision-making may be due to the unequal power and knowledge base of professionals and laymen. Adolescents and their parents may feel they cannot contribute much to decision-making processes, whereas it might actually be beneficial for the success of the treatment if they did. Therefore, professionals should not just accept that involvement in decision-making processes has a low priority, but may address these preferences and adapt their communication style if necessary.

Client and care-related determinants

Our study revealed that client and care characteristics determined both adolescent-rated and parent-rated importance for various communication aspects.

In contrast to other studies into patients' communication preferences,^{9-11,31} we did not find associations with *demographic characteristics* such as age and gender. One explanation might be that most of the studies that did find these associations involved adult patients spanning a wide age range. Although studies into adolescent preferences are scarce, the results from one study show that female adolescents with chronic pain viewed power and control as more important than did male subjects.³¹ The same study found an association between older age and a preference for more direct communication. These deviating findings might be explained either by variation in care settings (somatic vs. psychosocial) or by the definition and measurement of communication aspects. We found an association between parent-rated importance of communication and only one *social characteristic*: parental education. Low parental educational level determined a lower parent-rated importance for affective communication and shared decision-making. This finding is in concordance with other studies,⁹⁻¹¹ in which low educational level was associated with lower importance scores for shared decision-making. However, we are the

first to find this association for affective communication. Lower-educated people may be less inclined to communicate actively and to elicit information from their doctor. This may be due to differences in language and cultural values resulting in different communication styles and health perspectives that do not always match those of the professional. Moreover, because health-care providers' communicative style is influenced by the way patients communicate, patients with lower education may be disadvantaged due to the provider's misperception of their desire and need for information, and their ability to take part in the care process.³⁶ Rather than accepting that low educated people are less active, professionals could empower them to be more involved in the care process and could adapt their communication style.

We found that *adolescents' problem types* are associated with adolescent-rated and parent-rated importance of various communication aspects. Adolescents who reported emotional symptoms were more likely to ascribe a high importance to all communication aspects. This might be because they *themselves* suffer from these problems and therefore are motivated to get treatment for them.³⁷ Moreover, they may be more socially sensitive in communication as well.³⁸ Because of this, they might value a positive interpersonal relationship with the care professional at all levels of communication.

Regarding parent-rated importance, adolescents' hyperactivity and attention problems led to higher ratings of importance for various communication aspects. Here, it would seem to be the parents who suffer more from the problems and therefore are motivated to seek treatment for their child; suffering from severe behaviour problems predicts help-seeking among parents.³⁹ These findings suggest that motivation to receive treatment might be an underlying factor for the importance clients ascribe to communication. Because we did not take motivation into account in this study, more research is needed to assess this relationship.

If adolescents' prosocial behaviour skills were indicated as being low, both adolescents and parents were more likely to ascribe low importance to shared decision-making, information provision (adolescents) or affective communication (parents). One possible explanation for this finding is that adolescents with problems in this area have difficulties in interacting with other people.⁴⁰ Therefore, it does not seem strange that these clients especially rate the importance of interpersonal communication aspects as low. Affective communication requires social skills, and in shared decision-making, they need to be actively involved in interaction. These are skills they have difficulties with, so they might well want to avoid these situations as much as possible.

With regard to *care-related characteristics*, adolescents who reported dissatisfaction with prior care were more likely to ascribe low importance to affective

communication. Unsatisfying experiences with care providers in the past may cause adolescents to be more skeptical about new care processes and the relationship with other professionals.⁴¹

Negative expectations or a lack of expectations about care was another care-related factor that was positively associated with low adolescent-rated importance for affective communication and also shared decision-making. Here, we can follow the same line of reasoning. When adolescents do not expect care to be positive for them, why would they care about communication with care professionals? On the contrary, parents with negative expectations or a lack of expectations were less likely to attribute low importance to shared decision-making. This is a good example of how adolescents and parents may have completely different views about communication. One possible explanation for this difference again concerns different motivations. Adolescents may not always see the relevance of treatment, whereas their parents do. We see this also reflected in parents' higher mean importance ratings for all communication aspects in comparison with adolescents.

Strengths and limitations

Our study has considerable strengths. We took into account the views of both adolescents and parents, and they assessed their expectations and needs before treatment (and communication) actually started. We assessed both adolescent and parental views, because adolescents and their parents/families are often both involved in the care process, but their needs and priorities may be completely different. Clients' initial views on communication are most validly ascertained when these views are obtained before the client's first visit with the health-care provider, as this prevents recall bias.⁴²

One limitation of this study is that we did not collect data from both parents. This may have caused some information bias, because only the most involved parent may have responded. Moreover, mothers were overrepresented, and women have been shown to be more active in seeking care and asking questions, and to have higher preferences for being involved in decision-making than men. However, this overrepresentation of women probably reflects reality; in other words, professionals in care for adolescents with psychosocial problems are more often confronted with mothers than with fathers.⁴³

Conclusion

This first study on both adolescents' and parents' views on communication in care for adolescents with psychosocial problems shows that both attribute the highest importance to affective communication and the lowest importance to shared decision-making. Furthermore, especially health and care-related features such as satisfaction with care received in the past, expectations about upcoming care and problem types seem to

predict adolescent-rated and parent-rated importance for different aspects of communication, along with parental educational level.

Practice implications

Usually both adolescents and their parents are involved in the care for adolescents with psychosocial problems, and our findings imply that it is of utmost importance to involve both parties actively, as they have different communication needs. In general, professionals should pay special attention to affective aspects of communication. In our view, this does not mean that adolescents should not be involved in decision-making concerning their own care, but that professionals should be aware of the fact that this does not always have the highest priority for them at the start of the care process. Professionals might need first to assess adolescents' experiences with care received in the past and expectations about present care, because these are associated with importance ratings for almost all communication aspects. If adolescents are not open to communicating with the professional, treatment is less likely to be effective.⁴⁴ Professionals' awareness of their individual clients' preferences is a first step in moving to client-centred care, which in turn may have positive effects on clients' participation, adherence and other treatment outcomes.

In future research on this topic, both parents should be involved, or at least more fathers. Moreover, experiences with communication also ought to be measured after the start of treatment to see whether professionals in these types of care are indeed adapting their communication to the priorities of their clients. Finally, future research could focus on other aspects of client–professional communication such as non-verbal communication and the sequential patterns in naturally occurring client–professional interaction. These topics may well be assessed by adopting qualitative research designs using, for example, interview data and video recordings.

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