

Do Dutch doctors communicate differently with immigrant patients than with Dutch patients?

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Abstract

The aim of this study was to gain deeper insight into relational aspects of the medical communication pattern in intercultural consultations at GP practices in the Netherlands. We ask whether there are differences in the verbal interaction of Dutch GPs with immigrant and Dutch patients. Data were drawn from 144 adult patient interviews and video observations of consultations between the patients and 31 Dutch GPs. The patient group consisted of 61 non-Western immigrants (Turkish, Moroccan, Surinamese, Antillean, Cape Verdian) and 83 Dutch participants. Affective and instrumental aspects of verbal communication were assessed using Roter's Interaction Analysis System (RIAS). Patients' cultural background was assessed by ethnicity, language proficiency, level of education, religiosity and cultural views (in terms of being more traditional or more modern). Consultations with the non-Western immigrant patients (especially those from Turkey and Morocco) were well over 2 min shorter, and the power distance between GPs and these patients was greater when compared to the Dutch patients. Major differences in verbal interaction were observed on the affective behavior dimensions, but not on the instrumental dimensions. Doctors invested more in trying to understand the immigrant patients, while in the case of Dutch patients they showed more involvement and empathy. Dutch patients seemed to be more assertive in the medical conversation. The differences are discussed in terms of patients' ethnic background, cultural views (e.g. practicing a religion) and linguistic barriers. It is concluded that attention to cultural diversity does matter, as this leads to different medical communication patterns. A two-way strategy is recommended for improving medical communication, with implications for both doctor and patient behavior.

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Introduction

The present study focuses on ethnic minority patients, immigrants to the Netherlands, and the relational aspects of communicative interaction during medical visits to the practice of their general

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practitioners (GPs). Although the effect of doctor characteristics (like professional attitude, personal style and sex), specific health care organizational characteristics and patient characteristics (sex, age, education) on medical communication has been shown in many studies, few have explored the nature of cross-cultural medical communication in great detail (e.g. Kiesler & Auerbach, 2003). In the Netherlands, about 15% of the population is foreign-born; the largest groups (9%) are non-Western (e.g. Surinamese, Turkish and Moroccan), and about 6% of them were raised in other Western countries.

Studies performed so far have revealed more misunderstandings between doctors and ethnic minority patients than Dutch patients; among the consequences for medical care, studies report more inappropriate use of health services (particularly out-of-hours use), a greater risk of incorrect diagnoses, lower compliance with the advised treatment and less satisfaction (Luijten & Tjadens, 1995; van Wieringen, Harmsen, & Bruijnzeels, 2002). These results are confirmed elsewhere (e.g. van Ryn & Fu, 2003; Saha, Arbelaez, & Cooper, 2003). On the part of the doctor, studies show that the workload is higher with large numbers of ethnic minority patients because of different ways of communicating, different demands and a higher frequency of patient consultations (Cooper et al., 2003; Luijten & Tjadens, 1995; Schellevis, Westert, de Bakker, & Groenewegen, 2004). The consultations with these patients are emotionally demanding, and the patient's reasons for the visit are often unclear (Gerits, Uitenbroek, Dijkshoorn, & Verhoeff, 2001; Nierkens, Krumeich, de Ridder, & Dongen, 2002). These described difficulties are partly due to the expectations, norms, beliefs and perceptions about health and health care of ethnic minority patients, which are different than those of Dutch patients (Kleinman, 1980; van Wieringen et al., 2002).

Success and failure of treatment are highly dependent on bridging the differences in these expectations between patient and physician, among other things (Cooper et al., 2003; Harmsen, 2003; Harmsen, Bernsen, Meeuwesen, Pinto, & Bruijnzeels 2005; Van Wieringen et al., 2002). To bridge the gap, effective communicative interaction between physician and patient is crucial. Reasons for non-effective communication is numerous. For interethnic communication the main reasons include cultural differences, linguistic discordance and educational level (Flores, 2005; Lillie-Blanton & Laveist, 1996; Van Ryn & Burke, 2000). In multi-

cultural contexts, cultural differences may lead to differences and misunderstandings in discussing content and in framing the relational aspects of communication. Kirmayer, Groleau, Guzder, Blake, and Jarvis (2003) described the impact of cultural misunderstandings in terms of incomplete assessments, diagnoses and treatments for a multi-cultural urban population in Canada.

An obvious hindrance to intercultural communication is the frequent lack of linguistic understanding between doctors and patients belonging to different ethnic/cultural groups (for extensive reviews of the literature on this topic, see Ferguson & Candib, 2002; Flores, 2005; Jacobs, Agger-Gupta, Chen, Piotrowski, & Hardt, 2003). Linguistic barriers may lead to a number of negative consequences, such as increased chances of non-compliance, feelings of fear and despair, and problems in achieving rapport (Ferguson & Candib, 2002; Ramirez, 2003). The distinction between culture and language is an important one: in many studies which focus on African-Americans and Caucasian Americans—all English speakers—substantial cultural differences appeared. Other research has dealt with cultural as well as linguistic barriers, such as studies on Hispanic and Asian immigrants in the USA. In the present study, both aspects may play a role.

While research on intercultural communication problems in health care has been given attention in the United States and Australia, it has only recently entered the agenda in the Netherlands (van den Brink-Muinen, Bensing, van Dulmen, & Schellevis, 2004; Van Wieringen et al., 2002). The present study on intercultural medical communication was initiated to contribute to a better understanding of the underlying mechanisms crucial to improving intercultural communication in health care.

The aim of this study is to gain insight into the specific communicational characteristics of intercultural consultations at GP practices in the Netherlands. The emphasis will lie on the relational aspects of communication and not on the content. The research question to be discussed is: *Are there differences in the medical interaction patterns between Dutch doctors and immigrant patients compared to Dutch patients?*

Interethnic medical communication

Among the studies on the communicative interaction of ethnic minority patients and Dutch

physicians, Van Wieringen et al. (2002) showed that these contacts (compared to contacts with Dutch patients) were characterized by less social talk, physicians being less friendly and concerned, and patients showing less warmth and friendliness. In an American study among African-American and Caucasian patients, Cooper et al. (2003) revealed that race-concordant visits lasted longer and patients showed more positive affect compared to race-discordant contacts. In race-concordant meetings the speech rate was also slower in the dialogue of both patient and physician, and patients were more participative. A recent American study confirmed these lower levels of positive affect in the case of African-American patients and white doctors, as well as greater verbal dominance of the doctors and lower levels of patient-centeredness (Johnson, Roter, Powe, & Cooper, 2004). Several other studies confirmed that African-American patients were less involved in medical decisions, built less of a partnership with physicians, had lower levels of trust in physicians and had lower levels of satisfaction with health care (Cooper-Patrick et al., 1999; Doescher, Saver, Franks, & Fiscella, 2000; Saha, Komaromy, Koepsell & Bindman, 1999). In all these studies, the doctors were Western and white.

Sociolinguistic studies in general have revealed that inhabitants of non-Western countries communicate more indirectly compared to those of Western-oriented countries, and that the accepted power distance is greater (Gudykunst, 1994; Hofstede, 1991). They have a more collectivistic orientation, i.e. they focused more on group concerns than individual concerns, the latter being a feature of more individualistic-oriented societies (Hofstede, 1991; Phinney, 1996; Triandis, 1995). The more collectivistic the orientation, the greater the accepted power distances are, and the less egalitarian relations are sought. Another aspect is that greater power distances do correlate with practicing a religion (Hofstede, 2001).

Applied to medical communication, there is some evidence that members of certain minority groups are less used to being assertive and controlling with physicians (Young & Klinge, 1996). Studies focusing on personal views show that patients differ in the degree of their preferences about the extent to which the doctor should control their health. Adults with a greater belief that powerful others (such as doctors) should control their health are less eager to receive information or to make health decisions themselves, while assertive adults are more likely to

expect comprehensive information (Braman & Gomez, 2004). This indicates that maybe it is not ethnicity per se, but patients' individual views and attitudes that account for variance in communication patterns.

Medical communication in Western-oriented countries is dominated by concepts like shared decision-making and patient autonomy, and the conversation will often take the character of a negotiation (Edwards, Evans, & Elwyn, 2003). In ethnic-discordant interactions, these behavioral patterns rarely seem to be achieved. The doctor tends to steer the conversation firmly, and patients often act politely, e.g. saying "yes" when they mean "no" (Cass et al., 2002), which may be interpreted as saving the other's face.

Based on these interdisciplinary studies, dyads of white doctors and ethnic-minority patients are expected to be characterized by shorter consultations, greater verbal asymmetry between GP and patient, less friendliness, less partnership-building, and a more impersonal conversational atmosphere (Schouten & Meeuwesen, 2006). In general, patients will behave less assertively. It is expected that main differences in communication patterns are associated with patients' cultural background and views, and language barriers between doctor and patient.

Method

Subjects and procedures

To answer the research question about differences in relational aspects of medical communication, data of the Rotterdam Intercultural Communication in Medical Settings (RICIM) study were used, an intervention project in which patients of general practices with a mixed multi-ethnic population in Rotterdam (the Netherlands) were asked to participate (Harmsen, Bernsen, Meeuwesen, Thomas et al., 2005). Nearly 1000 patients participated in this study. Dutch GPs have a gate-keeping function; each doctor takes care of approximately 2500 patients. Specialists are only visited after referral by a GP. All GPs working in multi-ethnic Rotterdam neighborhoods, and at least 25% ethnic minority patients in their practice (a total of 178), received a mailed invitation to participate in the study; those interested received extensive information; 38 agreed to participate. These GPs asked 2407 patients permission to participate by informed consent; 1005 (42%) agreed. The response rate

was 51% for Dutch patients and 34% for patients from an ethnic minority. The final study group of 986 patients consisted of 429 (44%) patients from an ethnic minority and 557 (56%) Dutch patients. For practical and financial reasons, video registration of doctor–patient communication was realized for 25% of the patient group, randomly chosen. Since the intervention could influence the communication pattern, only data from patients who were not exposed to the intervention in this study were used. The number of immigrant patients from Western countries was too small to include. This resulted in a data set of 144 adult patients (61 patients of non-Western ethnic-minority groups and 83 Dutch patients) and 31 general practitioners. Of the GPs, 22 were male and 9 female; most were between ages 40 and 55. The GPs had a minimum professional work experience of 5 years, the majority more than 10 years. Two GPs were born in another European country; they were practicing for over 15 years in the Netherlands and were regarded mainly as Western-oriented. In 10

medical interviews, the patient was accompanied by a family member who did the interpreting (because of language barriers). A description of the patient sample (age, sex, education, ethnicity, language proficiency, religion and cultural views) is given in Table 1. The distribution of patient demographics resembled that of the original group (cf. Harmsen, Bernsen, Meeuwesen, Thomas et al., 2005). The seven most common symptoms presented concerned the musculoskeletal system (back pain, pain in shoulders or muscle pain), the respiratory system (colds), digestive system and endocrine glands (abdominal pain), skin and subcutaneous tissue, genital organs, circulatory system (blood pressure), and general (fatigue, accident). The two groups did not differ, except for symptoms of the musculoskeletal system, which were somewhat more present in Dutch patients. These ‘top seven’ symptoms are comparable with other studies on medical interaction in general practice (e.g. Meeuwesen, Schaap, & van der Staak, 1991).

Table 1
Patient sample ($n = 144$)

	Ethnic minority ($n = 61$)	Dutch ($n = 83$)	Total
Mean age ^a	38 (s.d. = 11.7)	54 (s.d. = 15.6)	47 (s.d. = 16.1)
Sex			
Male	41%	39%	40%
Female	59%	61%	60%
Education			
Lower	34%	40%	37%
Secondary	40%	42%	41%
Higher	26%	18%	22%
Ethnicity			
Dutch ($n = 83$)		100%	57%
Turkish/Moroccan ($n = 27$)	44%		19%
Surinamese/Antillean ($n = 20$)	33%		14%
Other non-Western ($n = 14$)	23%		10%
Proficiency in Dutch ^a			
Poor	22%	3%	11%
Average	34%	1%	16%
Good	44%	96%	73%
Religion ^a			
Yes, practicing	70%	20%	41%
Yes, not practicing	20%	13%	16%
No religion	10%	67%	43%
Patient's cultural views (PCB) ^a			
Mean score ^b	5.21 (s.d. = 1.58)	6.78 (s.d. = 1.65)	6.13 (s.d. = 1.79)

^aEthnic minority and Dutch differ regarding this variable.

^bThe scores on the Patient's Cultural Background Scale (PCB) lie between 0 (most traditional views) and 9 (most modern views).

Measures: independent variables

The independent variables used in this study were patient ethnicity, language proficiency, education, religiosity, cultural views, and sex of GP and patient. The information was gathered by an interview at the patient's home, undertaken in the patient's mother tongue.

Ethnicity: To assess ethnic background, patients were classified according to their country of birth and their parents' (ISEO, 1987) into either a non-Western ethnic minority group or a Dutch group. Most immigrants were from Turkey, Morocco, Surinam, the Antilles and Cape Verde.

Language proficiency: This was based on patients' self-evaluation of perceived proficiency (good, moderate or poor). These scores were highly comparable with the interviewers' ($r = .82$) and the GPs' assessments ($r = .70$).

Education: The educational level of patients was determined in the home interview by asking about the highest education completed either in the Netherlands or, if applicable, in their country of birth, and grouped into three categories: (1) primary school completed/incomplete (lower), (2) lower vocational or secondary education (secondary), and (3) vocational or university (higher).

Religiosity: This indicator refers to the practicing of a religion. Patients' degree of religiosity was asked by indicating possibilities: (1) religious, actively practicing, (2) religious, not actively practicing, and (3) not religious.

Cultural views: These views were assessed with a 20-item questionnaire, the Patient's Cultural Background scale (PCB), which is validated for ethnic minority groups (Harmsen, 2003; Harmsen et al., 2006). The Cultural Background scale distributes patients according to more traditional and more modern views, a lower score indicating more traditional views (range 1–9). The scale was based on the following dimensions: masculine–feminine role pattern, secularization–religiosity, individualism–collectivism. From a list of 36 questions (which included 12 self-developed questions concerning the field of health care), non-contributing and non-consistent questions were deleted, and from the remaining questions the scale was constructed. A comparison of several methods of scale construction revealed that a one-dimensional scale was as good as a four-dimensional one (see for details Harmsen et al., 2006).

Outcome measures: verbal behavior (RIAS) and speaking time

Analysis of the relational aspects of verbal behavior was based on videos of doctor–patient consultations, by using Roter's Interaction Analysis System (RIAS) (Roter, 1993). This widely used system distinguishes affective (socio-emotional) versus instrumental (task-focused) verbal behavior in doctors and patients, reflecting the care-cure dimension. The unit of analysis is the utterance or smallest meaningful string of words. All verbal behavior is merged into 16 mutually exclusive categories, identical for doctor and patient. The affective dimension includes social behavior, agreement, paraphrasing, showing concern, reassurance, reflection and disagreement. The instrumental dimension encompasses giving directions, asking for clarification, asking medical/therapeutic questions, asking lifestyle/feelings-related questions, giving medical/therapeutic information, giving lifestyle/feelings-related information, medical/therapeutic counseling, lifestyle/feelings-related counseling, and other. The consultations were rated by two trained observers using a computerized rating method called CAMERA (van der Vlugt, Kruk, van Erp, & Geuze, 1992). Interrater reliability was assessed as interclass correlations for each affective and instrumental behavior category, and is given in three categories: good ($ICC > 0.60$), doubtful ($0.40 < ICC < 0.60$) and poor ($ICC < 0.40$). The categories with the lowest frequency had the poorest interrater reliability. Fifty-eight percent of the patients' and 69% of the GPs' categories received good reliability scores (for details, see Tables 3 and 4).

Speaking time: Speaking time was noted in terms of consultation length (minutes and seconds) and number of utterances of doctor and patient relative to the total count of utterances. Additionally, an (a)symmetry index (GP utterances minus patient utterances) was calculated (Linell & Luckmann, 1991). If positive, the GP was verbally dominant.

Statistical analyses

1. *Consultation characteristics:* The difference between consultations of ethnic and Dutch patients as to interview length, number of utterances of patient and GP, and (a)symmetry index, was tested using multilevel linear regression, both in a univariate and a multivariate model. In the

multivariate model adjustments were made for sex of GP, and the patient factors of age, sex, education, language proficiency, religiosity and cultural views. The methods take the multilevel structure of the data into account (level 1: patients, level 2: GPs). Results were presented as regression coefficients (β). The meaning for β is, for instance (if the dependent variable is interview length and the independent variable is ethnicity), the estimated difference in interview length between the two groups.

2. The *RIAS* categories were analyzed separately for both GPs and patients as percentages of all utterances, and the affective/instrumental utterances ratios were calculated. Absolute frequencies were calculated for the patients too. A factor analysis (with varimax rotation) resulted in five meaningful factors for verbal behavior of GPs: (1) attentive understanding, (2) empathy, (3) involvement, (4) exchange of medical and therapeutic information, and (5) exchange of information on lifestyle and feelings (see results). Regarding patient behavior, it was not possible to identify meaningful factors using factor analysis. To compare ethnic and Dutch consultations as to patient and GP verbal behavior, the same univariate and multivariate multilevel analyses were performed as described above.

The results are presented mainly as differences between the two patient groups. Differences within the ethnic-minority patient group will be reported only if they are significant.

Results

Patient characteristics

Patient characteristics are given in Table 1, separately for the ethnic minority and the Dutch groups. The immigrant group comprises three main groups: (1) Turkish/Moroccan ($n = 27$), (2) Surinamese/Antillean ($n = 20$), and (3) others ($n = 14$) (such as Cape Verdian). The ethnic minority group was younger compared to the Dutch group, had nonsignificantly higher education, lower proficiency in Dutch, and were more likely to practice their religion. The three immigrant groups together were more traditional in their views compared to the Dutch group. Most of the practices were located in somewhat socially deprived neighborhoods.

Consultation characteristics

The mean duration of the medical interview was 8 min and 48 s. Interviews with the Dutch patients were longer compared to interviews with the immigrant patients (respectively $M = 9'31''$ and $M = 7'51''$, $\beta = -1.870$, $p < .01$). The interviews with Turkish/Moroccan patients ($M = 7'19''$) and Surinamese/Antillean patients ($M = 7'40''$) were the shortest; other immigrants were in-between ($M = 8'35''$).

Multivariate multilevel regression analysis showed a significant relation between interview length and religion ($\beta = 1.185$, $p < .01$). Interviews of patients practicing a religion lasted nearly 8 min, compared to nearly 10 min for nonreligious patients. The interviews of the passive religious group lasted about 8.5 min. The relation between interview length and the other independent variables was not significant.

Fig. 1 contains the number of utterances of both participant groups. The GP utterances differed for the two groups, but not significantly ($\beta = 4.925$, ns). There was a relation with religion ($\beta = 10.416$, $p < 0.01$) and sex of the patient ($\beta = 15.349$, $p < 0.05$): the less religious the patient, the more the doctor talked; doctors also talked more in interviews with female patients than male patients. Dutch patients talked nearly 30% more than ethnic minority patients ($\beta = 12.534$, $p < 0.01$). Again, the factors of patient's religion ($\beta = 20.866$, $p < 0.001$) and sex ($\beta = 23.739$, $p < 0.05$) were related to patients' utterances: the less religious patients were, the more they talked, and female patients talked more than male patients. None of the other variables contributed significantly to the model.

The (a)symmetry index (number of GP utterances minus patient utterances) of the two groups differed

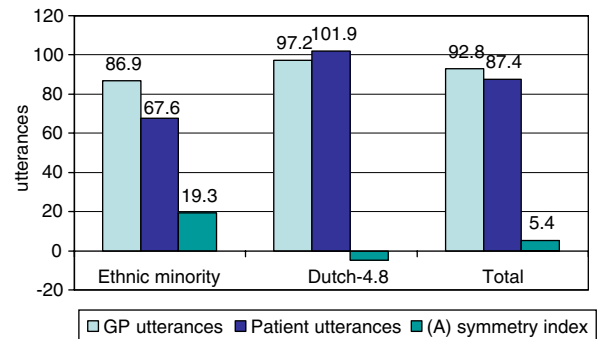


Fig. 1. Mean number of utterances of GP and patient, and (a)symmetry index.

from each other ($\beta = -7.403$, $p < 0.01$). Especially in the Turkish/Moroccan and other immigrant groups, the GP was the verbally dominant partner; in the Dutch and Surinamese/Antillean groups there was verbal symmetry between doctor and patient. Multivariate regression showed a relation of the (a)symmetry index with language proficiency ($\beta = -10.366$, $p < 0.05$) and religion ($\beta = -7.805$, $p < 0.05$): the more poorly patients perceived their language proficiency, and the more religious they were, the more verbally dominant the doctor was.

Verbal behavior of patients

Most patient utterances concerned giving medical and lifestyle information (51.1%), followed by agreeing (23.7%). There was some social behavior (7.4%) and limited question-asking (4.8%). Immigrant patients showed proportionally more agreement or acknowledgement (“hm-hm”) compared to Dutch patients. Dutch patients disagreed more with their GP, and exchanged more information about lifestyle and psychosocial issues (Table 2).

Ethnic minority patients talked less (about 30% less utterances) than Dutch patients, and had significantly less absolute frequencies on almost all categories (data not shown): there was less more

exchange of medical and lifestyle information, and less affective exchange of behavior like social talk, reflections of feelings, showing concern, showing disagreement and giving reassurance.

Verbal behavior of doctors

As Table 3 shows, most verbal behavior of the GPs referred to the instrumental dimension, like giving information, asking questions and giving directions; on the affective dimension most utterances referred to agreement (acknowledgements), paraphrasing and social behavior. There emerged some interesting differences between the ethnic-minority groups and the Dutch group.

In the case of ethnic minority patients, GPs paraphrased more, asked more for clarification and gave more medical advice (counseling). Toward Dutch patients, they showed more agreement, gave more acknowledgements and reflected patients’ feelings better. Analysis of the absolute frequencies revealed similar patterns. Factor analysis of the RIAS categories of GP revealed five clusters, three affective and two instrumental. The affective factors were *attentive understanding* (paraphrasing, reassurance, disagreement), *empathy* (reflections, showing concern), and *involvement* (agreement, social beha-

Table 2
Univariate multilevel regression analysis on patients’ affective and instrumental behavior, mean percentages ($n = 144$)

Behaviour category	Ethnic minority (75)	Dutch (83)	β	p -value	Total	ICC G–D–P
Affective behavior						
Social behavior	7.01	7.63	−0.68	ns	7.37	G
Agreement	26.46	21.70	4.71	.017	23.72	D
Paraphrase	2.23	1.79	0.42	ns	1.98	G
Showing concern	1.26	2.01	−0.75	ns	1.69	G
Reassurance	0.35	0.56	−0.21	.ns	0.47	P
Disagreement	0.37	0.97	−0.59	.032	0.72	P
Reflect feelings	0.25	0.56	−0.31	ns	0.43	G
Total affective behavior	37.93	35.23	2.61	ns	36.37	
Instrumental behavior						
Giving directions	0.78	0.92	−0.11	ns	0.86	D
Asking clarification	1.16	1.24	−0.08	ns	1.21	G
Asking questions						
Medical/therapeutical	4.22	4.38	−0.12	ns	4.31	G
Lifestyle/psychosocial	0.81	0.28	0.47	ns	0.50	P
Gives information						
Medical/therapeutical	40.03	37.06	2.98	ns	38.32	G
Lifestyle/Psychosocial	9.70	14.97	−5.28	.012	12.74	D
Other utterances	5.30	5.84	−0.54	ns	5.61	G
Total instrumental behaviour	62.07	64.77	−2.61	ns	63.63	

Categories on counseling (0.09%) not included. ICC: intraclass correlations, G: good intraclass correlations ($ICC \geq 0.60$) (58%), D: doubtful intraclass correlations ($0.40 \leq ICC < 0.60$) (21%), P: poor intraclass correlations ($ICC < 0.40$) (21%).

Table 3

Univariate multilevel regression analysis on GP's affective and instrumental behavior, mean percentages ($n = 144$)

Behaviour category	Ethnic minority (75)	Dutch (83)	β	p -value	Total	ICC G–D–P
Affective behavior						
Social behavior	6.60	7.60	−1.08	ns	7.18	G
Agreement	16.86	19.99	−3.43	0.009	18.66	G
Paraphrase	10.85	7.40	3.35	0.001	8.86	G
Showing concern	0.40	0.49	−0.10	ns	0.45	G
Reassurance	2.02	2.03	−0.01	ns	2.02	G
Disagreement	0.43	0.35	0.09	ns	0.38	P
Reflect feelings	0.86	1.59	−0.78	0.018	1.28	P
Total affective behavior	38.02	39.45	−2.00	ns	38.84	
Instrumental behavior						
Giving directions	8.32	8.09	0.27	ns	8.19	G
Asking clarification	4.17	2.82	1.37	0.010	3.39	D
Asking questions						
Medical/therapeutic	9.68	8.83	0.91	ns	9.19	G
Lifestyle/psychosocial	3.32	2.74	0.58	0.245	2.98	G
Gives information						
Medical/therapeutic	23.19	23.85	−0.79	0.669	23.57	D
Lifestyle/psychosocial	1.64	2.80	−1.15	0.133	2.31	P
Counsels						
Medical/therapeutic	5.28	3.95	1.46	0.026	4.51	G
Lifestyle/psychosocial	1.05	0.94	0.10	0.764	0.99	G
Other utterances	5.32	6.52	−1.31	0.180	6.02	G
Total instrumental behavior	61.98	60.55	2.00	0.238	61.16	

ICC: intraclass correlations, G: good intraclass correlations ($ICC \geq 0.60$) (69%), D: doubtful intraclass correlations ($0.40 \leq ICC < 0.60$) (12%), P: poor intraclass correlations ($ICC < 0.40$) (19%).

behavior). The instrumental ones were *medical* (question-asking, giving information, counseling on medical issues, asking for clarification, giving orientation), and *lifestyle and feelings* (question-asking, giving information, counseling on lifestyle issues and feelings).

Table 4 shows that the GPs' instrumental behavior was similar in both groups, but differences manifested themselves on the three affective dimensions. For the ethnic minority groups, GPs invested more in attentive listening, in trying to understand (by paraphrasing, asking for clarification). Furthermore, the GPs were more empathic and more involved (by showing social behavior, verbal attention) toward the Dutch patient group.

Table 5 confirms the relation between patients' immigrant status and the three affective factors. In addition, it emerged that doctors were more understanding toward male patients than toward female patients, especially in the immigrant group. Further, the more traditional views patients had (especially the Dutch who were older), the more information on lifestyle issues was exchanged ($\beta = -1.351$, $p = 0.045$).

Table 4

Univariate multilevel regression on five RIAS factors of GPs' behavior, relative

	Ethnic minority (%)	Dutch	β coefficient	p -value
Affective				
Partnership building	13.30	9.78	3.325	<.001
Empathy	1.25	2.08	−0.852	0.041
Involvement	23.46	27.60	−4.501	0.002
Instrumental				
Medical therapeutic	50.64	47.54	2.615	0.239
Lifestyle/feelings	5.33	7.89	−3.160	0.186

'Other utterances' category not included. Independent variables 'ethnicity of patient'; dependent variables are five RIAS factors of GP behavior.

Discussion

This study revealed relevant differences in medical interaction patterns between the two groups. The medical interviews of ethnic minority patients,

Table 5
Regression effects on five RIAS factors of GP's behavior^a

	Effects	β coefficient	<i>p</i> -value
Affective factors			
Partnership building	Ethnicity	3.250	<.001
	Sex of patient	−1.880	0.028
Empathy	Ethnicity	−0.852	0.041
Involvement	Ethnicity	−4.501	0.002
Instrumental factors			
Medical/therapeutic	No effects		
Lifestyle/feelings	Cultural views	−1.351	0.045

^aMultivariate multilevel linear regression included independent variables: sex of doctor; patient: age, sex, education, language proficiency, religion, ethnicity and cultural views.

especially Turkish and Moroccan, were shorter than those of Dutch patients. With ethnic-minority patients the GP was the verbally dominant partner, while with Dutch and Surinamese/Antillean patients there was verbal symmetry between doctor and patient. In the group of ethnic-minority patients, especially Turkish and Moroccan, GPs invested more in trying to understand patients' concerns (through paraphrasing and asking for clarification) and in counseling them. Ethnic minority patients agreed with the GP more and argued less. In contrast Dutch patients were more assertive toward their doctor, and there was more disagreement; GPs showed more empathy (reflection of feelings) and involvement (agreeing, social behavior), which stimulated the flow of conversation.

In concordance with other observation studies, the main differences are manifested in the affective dimension: doctors showed less affective behavior toward ethnic-minority patients compared to Dutch patients (Cooper et al., 2003; Rivadeneyra, Elderkin-Thompson, Cohen Silver, & Waitzkin, 2000; Schouten & Meeuwesen, 2006; Sleath, Rubin, & Wurst, 2003; Van Wieringen et al., 2002), as expressed in their higher empathy for and involvement with Dutch patients. There was also more exchange of information on lifestyle issues and feelings in the case of Dutch patients; this was found in another recent Dutch study too (van den Brink-Muinen et al., 2004).

The main effects are associated mostly with ethnicity, which is highly associated with cultural views, religion and language proficiency. The results of the present study may partly be understood by the fact that the participating ethnic-minority

patients hold traditional views about power distance. For example, the verbal asymmetry between Turkish and Moroccan patients and Dutch GPs could be interpreted in terms of a greater acceptance of power differences in these groups; this is consistent with other studies conducted in the USA (Cooper et al., 2003; Johnson et al., 2004) and Australia (Cass et al., 2002). Hofstede (2001), for example, noted greater power distance in Turkey, in association with a focus on collectivistic instead of individualistic values, as well as with religion. The greater similarities between Surinamese, Antillean and Dutch patients may be understood in terms of the different migration histories of Turkish/Moroccan patients and Surinamese/Antillean patients (e.g. the colonial history of the Dutch in Surinam and the Antilles).

Another relevant factor is the linguistic barrier between Dutch doctors and ethnic-minority patients, which seems to hinder building up a good relationship (Ferguson & Candib, 2002; Flores, 2005). Acknowledgement of the language barrier may explain why GPs invested relatively more communication trying to understand ethnic-minority patients through paraphrasing and asking for clarification. Especially in the case of Turkish and Moroccan patients, the chances of miscommunication is greater because of language differences (Gass & Varonis, 1991). In contrast, most of the Surinamese and Antillean patients speak Dutch.

In interpreting the results in a balanced way, some methodological issues have to be taken into account. First, in the ideal situation a test for significant interaction effects is preferred (e.g. ethnicity and cultural views), which is not possible because the sample size becomes too small to have any power. Second, as has mostly been the case in these studies up to now, the research design is one-sided, since only Western GPs are included. More information is needed about ethnic concordance in terms of ethnic-minority doctors and ethnic-minority patients (such as both doctor and patient being African-American or Hispanic in American studies, both Aboriginal in Australian studies, both from Turkish or Moroccan origin in Dutch and Turkish studies). Theoretical explanations such as that offered by Hofstede (2001) may be more useful than a solely empirical approach comparing multiple immigrant and non-immigrant groups.

Despite the methodological and theoretical precautions discussed here, this study shows that paying attention to ethnic diversity matters. Again,

there are reasons to believe that differences in cultural background and linguistic discordance seem to make building up a good relationship between ethnic majority GPs and ethnic minority patients more difficult.

Some practice implications are worth considering. In reducing cultural and linguistic barriers between patients and physicians, a two-way strategy is preferred (Saha et al., 2003). When patients indicate poor or moderate proficiency in Dutch, the need for a formal interpreter may be necessary. An interpreter can improve the quality of consultations and is valued by patients (Bot, 2005; Leman, 1997). Doctors also need training in intercultural and bilingual competences (Saha et al., 2003; Seeleman, Suurmond & Stronks, 2005). In the case of complex medical or psychiatric problems, a cultural consultation service is advisable; this may help improve diagnostic assessment and treatment for a culturally diverse population (Kirmayer et al., 2003). Applying a culturally sensitive two-way strategy (both doctor and patient) is recommended to overcome cultural as well as linguistic barriers in health care communication.

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