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Communication style in primary health care in Europe

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ABSTRACT

Purpose – This paper aims to investigate doctor-patient communication in consultations of newly qualified general practitioners (GPs) in a newly reorganised health care system and differences in consultation characteristics and communication patterns between new European Union (EU)-countries (Estonia, Poland and Romania) and the old West-European EU-countries. **Design/methodology/approach** – Observation of videotaped doctor-patient consultations by means of Roter's Interactional Analysis System; GP, patient and observer questionnaires. Data were collected from 92 GPs and 1,376 patients in Estonia, Poland and Romania and compared with known data from old EU countries. Main outcome measures were verbal and nonverbal communication of GPs and patients, as well as consultation characteristics. **Findings** – Differences were found in the communication patterns of the new EU-countries Estonia, Poland and Romania compared to the old EU-countries. For instance, the verbal contribution of the GPs in the new EU-countries was greater than in the old EU-countries. Differences were also found between the three new EU-countries. In Romania there was more psychosocial talk than in the two other new EU-countries, whereas in Poland and Estonia there was more biomedical talk. The Estonian communication was more affective, the Polish and Romanian more instrumental. In general, the differences were not found to be related to a “new-old” or “east-west” distinction. Clearly, cultural norms and values play an important role in doctor-patient communication. **Research limitations/implications** – The sampling method differed somewhat from one country to another. **Practical implications** – With the integration of Europe in progress, cross-cultural aspects should be addressed when doctors are being

trained in communication skills in their undergraduate and postgraduate education. **Originality/value** – This is the first study to investigate doctor-patient communication in newly reorganised health care systems and differences in doctor-patient communication between new and old EU-countries. **Article Type:** Research paper

Introduction

It is generally held that a good doctor-patient relationship and successful consultation outcomes depend on the consultation skill of the doctor, the organisation of the health care system, and the cultural background, including the ability for doctors and patients to communicate in a common language (van den Brink-Muinen *et al.*, 2003a). New health care systems, the development of medical and information technologies, multicultural medical staff and patients as well as other changes in society have influenced the doctor-patient relationship, and new consultation styles have emerged (Elwyn, 2004). Three health care system variables are considered important with regard to the role and the position of GPs, and are thought to influence doctor-patient communication. Firstly in terms of influence is the nature of the health care system in which GPs work as gatekeepers with registered patients as opposed to freely accessible medical care in a system where patients are not registered with one specific practice. GPs are the first physicians to have contact with health problems before patients are referred to medical specialists. Second in terms of influence is the employment status of GPs, i.e. salaried employment or self-employment. Third in terms of influence is the payment system, which may be: a fee-for-service system in which GPs are paid, which may be according to the medical interventions performed; a capitation system where they receive a fixed amount of money for every patient; or a mixed system of fee-for-service and capitation fee.

Since the reorganisation of the health care systems in Estonia, Poland and Romania in the early nineties most GPs now act as gatekeepers and nearly all GPs are self-employed. In Estonia and Poland, GPs are paid by capitation fee while in Romania there is a mixed system. Furthermore, European harmonisation will probably result in the integration of health care and health care policies that may stimulate cross-border health care provision in Europe (Ciheur, 2001).

Already we are seeing an exchange of medical professionals and patients between different European Union member states (van den Brink-Muinen *et al.*, 2003b). This tendency is particularly evident in new EU-countries such as Estonia and Poland, where a shift in the medical workforce to the other EU-countries has taken place. For example, in Estonia, a survey was carried out in late 2003 among representative samples of Estonian medical doctors, residency-programme doctors, final year medical students, dentists, nurses and midwives concerning their plans and reasons for migration. The survey was conducted for the purpose of making a prognosis on the mobility of health professionals within the EU. The results showed that about half (56 per cent) of Estonian health care professionals would like to work abroad, either permanently or temporarily, and around 5 per cent (about 700-800 health care workers) had definite plans to go. According to the researchers, the latter figure is most likely representative of the emigration that the Estonian health sector will have to face in the years ahead (Jesse *et al.*, 2004). This survey showed that consultations will more often be cross-cultural in the future, as the environment in which doctors work becomes more and more multicultural. Accordingly, it will become even more common for doctors and patients from different countries and cultures to meet in the consultation room.

It is reasonable to conclude that doctor-patient communication may be influenced by factors related to national (and cultural) differences, the training in consultation skills during GPs' speciality training, patient and GP characteristics and difficulties with language translation. In Estonia, in the early 1990s it was decided to reintroduce family practice as a specialty into the Estonian medical training system; since 1993, a three-year full time

residency programme has been available. Similarly, vocational training for GPs in Romania takes three years and was introduced in 1991. Health care in Poland is in a period of transition, and more and more GPs currently undergo vocational training.

It is not known how the newly introduced gatekeeping role for GPs as well as consultation skill training might influence consultations in the reformed primary health care systems of the new EU-countries. Therefore, the main aim of this study was to investigate firstly doctor-patient communication in consultations of newly qualified general practitioners in a newly reorganised health care system, and secondly differences in consultation characteristics and communication patterns between new and old EU-countries.

METHOD

Countries involved

This study was performed as part of the EU-project Eurocommunication Study II. Participating countries were Estonia, Poland, Romania and Sweden. Data from the three new European Union (EU) countries (Estonia, Poland and Romania) were compared with the old EU-country Sweden (taking part in Eurocommunication II) and with the six old EU-countries from the Eurocommunication Study I, namely The Netherlands, the UK, Spain, Belgium, Germany and Switzerland (van den Brink-Muinen *et al.*, 2003a).

Sample

The study was cross-sectional, and the sampling method differed from one country to another, on account of the varying willingness of GPs to participate, or for other practical reasons. The GPs were recruited by means of a random sampling strategy from large regions (300 GPs in Estonia), from two big cities and their surroundings (Poland), and from health centres (Romania). In Poland and Romania, doctors who completed and who did not complete vocational training to become GPs, were both included (Table I). In the old health care system of each country, before the vocational training was introduced, the doctors were trained as general internists rather than as GPs. Some of the GPs in each country had previously worked as general internist.

Patients consulting a participating GP on the day(s) of the data collection were approached randomly and informed consent for videotaping the respective consultation was requested beforehand. Both the GPs and the patients signed an informed consent form. The non-response rate of patients was 7.8 per cent. Non-response analysis showed that the representativeness was satisfying in nearly all respects.

GP characteristics

A total of 27 to 35 GPs per country were included; 70 per cent of them were women (Table I). The Estonian doctors were the youngest and had worked for a shorter time as a GP compared to the others. In Poland the GPs worked more often in solo practices (75 per cent); in Estonia 25 per cent did so, whereas nearly all Romanian GPs worked in health centres. Half of the Polish doctors practised in (inner) cities. In Estonia, about two thirds of the GPs were working in rural areas.

In order to know to what extent the GPs of the Eurocommunication Study II are representative of the entire GP population in each participating country, a comparison was made with the study population of the task profile study (TPS) (Boerma *et al.*, 1998). To ensure compatibility with earlier research, the same GP questionnaire was used to gather these demographic data. Estonian and Polish doctors were somewhat younger than the general population of GPs and, due to the sampling method, more Polish and Romanian doctors practise in an inner city compared to the TPS doctors.

[TABLE 1]

Patient characteristics

In total 1,376 patients (63 per cent female) were included in the present study (Table I). The patients in Estonia and Poland were younger than those in Romania. The Polish patients were less often living alone than the Estonians. The percentage of patients aged between 28 and 65 years who were employed was highest in Estonia and lowest in Poland. The patients' educational level differed especially between Romania and the other countries; the Romanian patients were more highly educated than the others.

Procedure

The data were gathered from 1999 to 2001. The data were derived from the observation of video consultations, analysis of patient and GP questionnaires and GP registration. The data collection was decentralised; the data collection was conducted satisfactorily and in good time.

The GPs completed a questionnaire on personal and practice characteristics on the day of the videotaping – or afterwards, in which case they returned the questionnaire by post. Patients completed a questionnaire before and after their consultation. In most cases, twenty consultations for each of the participating GPs in each country were videotaped. Of these consultations, 15 were rated for each GP; five extra consultations were videotaped for several reasons (anticipating subsequent withdrawal by patients; damage to videotape, etc.). In order to avoid bias because of adaptation to the video camera, the first consultations were skipped. Videotaped patients (not their companions) were registered on a registration form (log sheet) by the GP.

The instruments, the scale composition and the reliability of the measurements are described in detail elsewhere (van den Brink-Muinen *et al.*, 2003a, 1999, 2000). The instruments can be summarised as follows:

The questionnaires

In the GP questionnaire information was collected about subjects including demographic characteristics (sex, age), the GP's experience of general practice (number of years working as a GP), and practice characteristics (solo practice or not, practice location (urban/rural). The GPs filled in the questionnaire in their own language.

For the patient questionnaires researchers from the participating countries translated the patient questionnaires from English to their own language. Afterwards, they were back-translated into English by professional translators. The questionnaires included items on demographic characteristics such as sex, age, living circumstances, employment, education.

Video observations: verbal behaviour

The video camera had a fixed position in the consultation room. The whole consultation was recorded in order to be able to register the total length of the consultation and physical examination. If possible, the camera was positioned in such a way that the GP's full face was shown and the patient from the side or from behind. The physical examination was performed out of the sight of the camera, but the doctor-patient communication during the physical examination was audio recorded.

Verbal (affective and instrumental) behaviour during the videotaped visits was measured by Roter's Interaction Analysis System (RIAS) (Roter, 2001). This observation system distinguishes between instrumental (task-focused) and affective (socio-emotional) verbal behaviour in both doctors and patients, reflecting the cure-care distinction. Utterances were assigned to the mutually exclusive RIAS categories.

Affective behaviour was categorised as including social talk: personal remarks (such as laughs, jokes, approval); signs of agreement or understanding, such as yes, hmmm; rapport building, i.e. showing empathy, legitimisation, support, concern, worry, (asking for) reassurance, encouragement, optimism; facilitation, i.e. paraphrasing, checking understanding, asking for clarification, opinion, or repetition; disagreement/criticism.

Instrumental behaviour was categorised as giving directions (orientation, instructions, transition); asking for clarification (asks for understanding, asks for opinion, bids for repetition). It included talk includes such as asking questions, giving information and counselling about medical and therapeutic issues (categorised as biomedical talk); and issues of lifestyle, social context, psychosocial problems and feelings (categorised as psychosocial talk).

Video observations: consultation characteristics

GPs' patient-directed gaze (non-verbal behaviour), consultation length and duration of physical examination and interruptions were measured. GPs' speaking time was calculated by dividing the GP's total number of utterances by the total sum of the patient's and GPs' utterances.

Interrater reliability

In each country, two or more observers (native speakers) were trained in rating-techniques by the same person, following the RIAS protocol. Difficulties and problems arising during the evaluation of the videotaped consultations were discussed by e-mail weekly or more often, if necessary. In each country, the observers rated an identical set of 20 consultations in order to calculate the interrater reliability (IRR) for that country. It appeared that 79 per cent of the IRRs were quite good (0.7 or higher); 15 per cent were between 0.5 and 0.7; and 6 per cent were too low (<0.5, mainly the categories "other" and "unintelligible utterances"). The categories yielding rating problems (low IRRs) were similar in content, and were therefore combined afterwards.

Data analysis

For the description of doctor-patient communication, communication categories were expressed as percentages of the totals of utterances. Differences between the countries were analysed using one-way variance analysis (post hoc Bonferroni test). Pearson's correlation coefficient was used to calculate the IRRs of the RIAS scores.

Ethical aspects

All recordings and questionnaires were only identifiable by corresponding codes. The videotapes were rated in the countries themselves, and thus the privacy regulations of the separate countries were adhered to. No restrictions were imposed by ethical committees. All doctors and patients signed an informed consent form.

Methodological issues

The Eurocommunication Studies I and II are the first to compare differences between several countries in a micro-analytical way. Moreover, the relationship between doctor-patient communication and health care system characteristics has not been studied previously. Besides, Eurocommunication II was the first study of this type to be conducted in the new EU countries.

The decentralised data collection based on observation of videotaped consultations, patient and GP questionnaires and GP registration forms was complicated, but was carried out successfully. Problems with ethical committees were duly resolved. Uniform measurement methods were used to facilitate reliable comparisons between countries. All observers were native speakers and trained in coding the videotaped consultations in the same way by the same person, in order to reach the highest reliability level possible. Interrater reliability was generally satisfactory (80 per cent >0.70). The observation system (RIAS) is a widely used and internationally accepted method, although some difficulties with this instrument have been reported (Sandvik *et al.*, 2002).

RESULTS

The affective communication of GPs and patients

The GPs in Estonia showed more affective behaviour than the Polish and Romanian GPs (Table II). This difference was in the greater number of signs of agreement among the Estonian GPs. Social talk was most common in Poland and Romania; and rapport building, especially showing empathy and support, was most often shown by the Romanian GPs.

On the patients' side, there was more affective behaviour in Estonia and Poland than in Romania where patients particularly engaged in less social talk and agreement than in the other two countries (Table III). The Polish patients voiced less concerns and worries, while the Estonian patients were less inclined to paraphrase and check the information received.

[TABLE 2]

The instrumental communication of GPs and patients

The instrumental behaviour of the Estonian and Polish GPs showed a more biomedical than psychosocial orientation, while in Romania, it was the other way around (Table II). Romanian GPs gave less information and advice about medical and therapeutic issues, but more about psychosocial and lifestyle matters. The Polish doctors gave somewhat more instructions, while in Romania the doctors more often asked their patients for clarification. Asking questions was equally common.

The Romanian patients reflected the communicative behaviour of their doctors in showing more psychosocial talk and asking for clarification (Table III) than patients in the other countries. The Estonian and Polish patients asked more (biomedical) questions, but they gave less information than the Romanians.

[TABLE 3]

Consultation characteristics

The average consultation length was the same in the three countries (Table IV). The Polish doctors looked less at their patients than their Estonian and Romanian colleagues. There was more time spent on physical examination in Romania than in Estonia and Poland. There was more speaking time for the GP in Estonia, so their patients had less time to tell their story than the other patients.

Differences between new and old EU countries

A comparison of doctor-patient communication styles between the ten participating countries (Tables V and VI) showed differences between and within the old and new EU-countries. Affective behaviour, such as showing empathy, concern, signs of agreement and giving reassurance, were more common in English, German and Swiss consultations, whereas in Belgium, Sweden, Poland and Romania, doctors and patients communicated in a less affective way with each other.

Asking questions (instrumental behaviour) was most frequent among GPs and their patients in Sweden and Romania. A good deal of information and advice was given in Sweden as well as in The Netherlands and Belgium. The ratios of instrumental versus affective behaviour largely reflect the findings mentioned above. Asking questions and giving information and advice was divided into biomedical and psychosocial issues. A comparison of these two issues showed that communication in The Netherlands, Germany, Sweden, Estonia and Poland was more biomedical than psychosocially-oriented compared to the other countries where psychosocial talk was more common.

A comparison of consultation characteristics (Table VII) revealed many differences, both between and within the old and new EU-countries. In Belgium, Switzerland and Sweden the consultations lasted longest, whereas the Spanish and German GPs had the shortest

consultations. In the new EU-countries the consultations were of average duration (nine to ten minutes), as was the case in The Netherlands and the UK.

Eye contact (GP's patient-directed gaze) was relatively longer in the UK and Sweden and shorter in Spain, Belgium and Poland.

There was a striking difference in the speaking time of the doctors (and therefore of the patients) between the new and old EU-countries. In Estonia, Poland and Romania, the GPs gave their patients less room to tell their story or to ask questions or advice, especially in Estonia, compared to the old EU-countries.

[TABLE 4]

[TABLE.5]

[TABLE 6]

DISCUSSION

The communication patterns in the new EU-countries Estonia, Poland and Romania partly differed from the old EU-countries, but also from each other. In other words, most differences did not occur along a new-old or east-west divide. It appears that the new EU-member states cannot be considered to constitute a group of countries with similar communication patterns, although their health care systems are rather similar and are in a process of transition from centralised state systems (Semashko model) to a western model.

A number of differences between the new EU countries were found. For instance, in Romania the communication style was more psychosocially oriented, whereas in Poland and Estonia the orientation was more biomedical. Additionally, in Estonia the communication was more affective (empathy, concern, reassurance) than in Poland and Romania. However, in the old EU-countries of the UK, Germany and Switzerland communication was even more affectively oriented.

One striking difference emerged between the old and the new EU countries emerged – the GPs in the new EU countries took more speaking time than their colleagues of the old EU-countries. Therefore, their patients got (or took) less time to tell their story. This difference may possibly be due to the only recent and not yet fully completed transition to the gate-keeping system at the time of data collection. Patients in new EU countries may not yet be used to discussing problems (especially those of a psychosocial nature) with their GP. Another reason could be that in the new EU countries the hierarchical distance between doctors and patients is greater than in Western European countries. Such an explanation refers to differences in cultural norms and values that may influence the communication patterns.

A different cultural background may also be apparent in the more psychosocial orientation in Romanian consultations compared to Poland and Sweden, or in the relatively small amount of social talk about non-medical matters between Swedish GPs and patients in comparison with Belgian doctors and patients. Likewise, in the UK giving signs of agreement was more common than in other countries and cultures.

A particular type of affective behaviour may be more likely to reflect the prevailing norms in one country or culture than in another. In Sweden, for instance, rapport building may be more usual than social talk. And in the Netherlands, showing agreement may be more usual than rapport building.

The communication styles in The Netherlands, Germany, Sweden, Estonia and Poland were more biomedical than psychosocially oriented compared to the other countries where psychosocial talk was more common. This may indicate a north-south division of European countries rather than a division between new and old EU countries. The southern

temperament of people in Romania, Spain, Switzerland and (French-speaking) Belgium may be related to more emotional talk. This is one of the cultural aspects that might cause problems when comparing communication between countries, just like the possibly more hierarchical doctor-patient relations in Eastern European countries as opposed to Western European countries. Interestingly, consultation length is longer in the non-gatekeeping countries (Belgium, Germany, Switzerland and Sweden) than in the countries where the GPs act as gatekeepers. Based on the results of the Eurocommunication Study I, it was found that patient characteristics have as much effect on consultation length as the characteristics of countries and GPs combined (Deveugele *et al.*, 2002). Apparently, the relationship between the organisation of health care systems and consultation length deserves further exploration because the length of consultation definitely has an important impact on health care costs (Boerma and Fleming, 1998).

These are some examples of how cultural differences may affect communication and therefore, the quality of health care and the patients' health. It is a challenge for future research to determine which cultural characteristics are reflected in the communication styles between doctors and patients. Besides differences in language, differences in health attitudes and health beliefs may also play a role in (mis)communication between doctors and patients (Waitzkin and Britt, 1989; Payer, 1989; Hofstede and Hofstede, 2005; Tähepõld *et al.*, 2006). Differences in communication patterns in intercultural medical encounters and their effect on patient outcomes are thus an important field of research in the future.

Limitations of the study

Attention needs to be paid to certain limitations of the study. The sampling method differed from one country to another because of differences, such as the willingness of GPs to participate, or for other practical reasons. A consequence of the difference between the sampling methods is that the doctors may not be representative of the general population of GPs in their respective country, so that comparisons between countries may be biased. On the patients' side, there appeared to be hardly any bias caused by patients' refusal.

In spite of the limitations mentioned above, these first cross-national studies on doctor-patient communication have produced interesting results for discussion; they also yield certain recommendations for health care policy makers and the education of GPs.

Future research

In view of the ongoing integration of the European Union, and because strengthening the role of primary health care is one of the aims of health care policy in the EU (Maynard, 1999) it would be useful to investigate further the influence of cultural and contextual factors on the communication process. Translating cultural norms and values into applicable measurement instruments would be the first step to such research.

Another approach to studying the communication problems based on cross-cultural information would involve cases where a doctor has left his native country and sees patients in the new country, as opposed to the patient who sees a doctor in her or his new country. After all, you cannot be sure that the relocated doctor will communicate in the same way in the host country as in the country of origin. Adaptation to the new country will probably happen, both to doctors and patients.

Educational issues

Different communication styles among the participating countries, which have been found in the Eurocommunication Studies, should, and will, certainly provoke reflection about the role of communication training in medical curricula. Vocational training programmes in general practice and continuous medical education schemes have been developed (and are still being developed), and the acquisition of communication skills by students is a major aspect. Again, this is all the more true in the new EU countries. Methods and experiences of vocational training centres in the Western-European countries can be exchanged with the new EU countries, and can be adapted on the basis of the results of the two studies. One

example may be to allow the patients more time to tell their problem and give information to their GP.

Traditional beliefs as well as differences in understanding health problems and treatment are some of the interrelated factors that may generate differences between cultures. Cultural aspects should be addressed in the professional and postgraduate education and training of doctors' communication skills. With the integration of Europe now in progress, cross-cultural health care will surely become more commonplace in the near future.

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TABLES

Table 1: GPs' and patients' characteristics per country

| | 1 Estonia | 2 Poland | 3 Romania |
|-----------------------------|--------------------------|--------------------------|----------------------------|
| <i>GPs</i> | (n = 27) | (n = 35) | (n = 30) |
| Male (%) | 11.1 ^b | 45.7 ^a | 30.0 |
| Age (mean, SD) | 38.6 (5.5) | 41.3 (7.1) | 43.3 (8.9) |
| No. of years GP: (mean, SD) | 5.8 ^{b,c} (4.8) | 11.8 ^a (8.7) | 14.0 ^a (10.3) |
| Solo practice (%) | 25.9 ^{b,c} | 76.5 ^{a,c} | 7.1 ^{a,b} |
| Practice location: | | | |
| Inner city (%) | 0.0 ^{b,c} | 47.1 ^a | 70.4 ^a |
| Urban (%) | 29.6 ^b | 2.9 ^{a,c} | 29.6 ^b |
| Suburban (%) | 0.0 | 2.9 | 0.0 |
| Urban/rural (%) | 33.3 ^{b,c} | 17.6 ^{a,c} | 0.0 ^{a,b} |
| Rural (%) | 37.0 ^b | 29.4 ^b | 0.0 ^{a,b} |
| <i>Patients</i> | (n = 401) | (n = 525) | (n = 450) |
| Male (%) | 37.6 | 39.5 ^c | 33.5 ^b |
| Age (mean, SD) | 40.4 ^c (24.4) | 42.6 ^c (24.0) | 48.3 ^{a,b} (22.3) |
| Living alone (%) | 16.8 ^b | 11.4 ^a | 12.7 |
| Employed (18-65 yrs) (%) | 56.9 ^{b,c} | 43.1 ^{a,c} | 52.9 ^{a,b} |
| Educ. level (≥ 18 yrs) (%): | | | |
| – low | 46.4 ^{b,c} | 40.6 ^{a,c} | 29.4 ^{a,b} |
| – middle | 26.5 ^{b,c} | 49.6 ^{a,c} | 33.6 ^{a,b} |
| – high | 27.1 ^{b,c} | 9.7 ^{a,c} | 37.0 ^{a,b} |

Notes: $p \leq 0.05$; ^aScore differs significantly from score of country 1 (Estonia); ^bScore differs significantly from score of country 2 (Poland); ^cScore differs significantly from score of country 3 (Romania)

Table 2: Affective and instrumental behaviour of GPs (%) per country

| | 1 Estonia (<i>n</i> = 401) | 2 Poland (<i>n</i> = 525) | 3 Romania (<i>n</i> = 450) |
|-------------------------------|-----------------------------|----------------------------|-----------------------------|
| <i>Affective behaviour</i> | | | |
| Personal remarks | 7.1 ^{b,c} | 9.1 ^a | 8.8 ^a |
| Agreement | 14.1 ^{b,c} | 8.8 ^{a,c} | 4.4 ^{a,b} |
| <i>Rapport building</i> | | | |
| Verbal attention | 5.4 ^{b,c} | 4.2 ^{a,c} | 7.1 ^{a,b} |
| Showing concern | 2.7 ^{b,c} | 1.0 ^{a,c} | 3.3 ^{a,b} |
| Reassurance | 0.8 | 0.9 | 1.0 |
| Facilitation | 1.9 ^c | 2.3 ^c | 2.8 ^{a,b} |
| Disagreement | 4.0 ^{b,c} | 5.0 ^a | 4.9 ^a |
| Total affective beh. | 0.1 ^{b,c} | 1.0 ^a | 0.9 ^a |
| | 30.7 ^{b,c} | 28.1 ^a | 26.2 ^a |
| <i>Instrumental behaviour</i> | | | |
| Giving directions | 10.8 ^b | 12.7 ^a | 11.9 |
| Asking for clarification | 3.8 ^{b,c} | 5.6 ^{a,c} | 8.0 ^{a,b} |
| <i>Asking questions</i> | | | |
| Medical/therapeutic | 17.7 | 17.7 | 19.2 |
| Lifestyle/psychosocial | 14.2 | 14.5 | 14.1 |
| | 3.5 ^c | 3.2 ^c | 5.1 ^{a,b} |
| <i>Giving info/advice</i> | | | |
| Medical/therapeutic | 33.5 ^c | 31.2 ^c | 27.0 ^{a,b} |
| Lifestyle/psychosocial | 29.3 ^c | 28.0 ^c | 21.5 ^{a,b} |
| Biomedical talk | 4.4 | 3.3 ^c | 5.6 ^b |
| Psychosocial talk | 43.5 ^c | 41.8 ^c | 35.4 ^{a,b} |
| Other utterances | 7.9 ^c | 6.6 ^c | 10.8 ^{a,b} |
| Total instrumental beh. | 3.4 ^{b,c} | 4.6 ^{a,c} | 7.6 ^{a,b} |
| | 69.3 ^{b,c} | 71.9 ^a | 73.9 ^a |
| Ratio instr/affect beh. | 2.3 | 2.6 | 2.8 |
| Ratio biomed/psysoc | 5.5 | 6.3 | 3.3 |

Notes: 1 per cent relative to the total number of utterances; $p \leq 0.05$; ^aScore differs significantly from score of country 1 (Estonia); ^bScore differs significantly from score of country 2 (Poland); ^cScore differs significantly from score of country 3 (Romania)

Table 3: Affective and instrumental behaviour of patients (%) per country

| | 1 Estonia (n = 401) | 2 Poland (n = 525) | 3 Romania (n = 450) |
|-------------------------------|---------------------|---------------------|---------------------|
| <i>Affective behaviour</i> | | | |
| Personal remarks | 11.4 ^c | 12.3 ^c | 8.3 ^{a,b} |
| Agreement | 13.9 ^{b,c} | 11.8 ^{a,c} | 4.7 ^{a,b} |
| <i>Rapport building</i> | | | |
| Verbal attention | 4.3 ^{b,c} | 2.3 ^{a,c} | 3.5 ^{a,b} |
| Showing concern | 0.2 ^b | 0.4 ^{a,c} | 0.2 ^b |
| Reassurance | 3.7 ^{b,c} | 0.7 ^{a,c} | 2.3 ^{a,b} |
| Facilitation | 0.4 ^{b,c} | 1.6 ^{a,c} | 1.0 ^{a,b} |
| Disagreement | 1.2 ^{b,c} | 2.4 ^a | 2.3 ^a |
| Total affective beh. | 0.5 ^c | 0.6 ^c | 0.2 ^{a,b} |
| | 31.2 ^c | 29.4 ^c | 18.9 ^{a,b} |
| <i>Instrumental behaviour</i> | | | |
| Giving instructions | 0.0 ^{b,c} | 1.5 ^{a,c} | 2.3 ^{a,b} |
| Asking for clarification | 2.9 ^c | 3.2 ^c | 5.9 ^{a,b} |
| <i>Asking questions</i> | | | |
| Medical/therapeutic | 4.9 | 5.9 ^c | 4.8 ^b |
| Lifestyle/psychosocial | 3.8 ^b | 5.0 ^a | 4.3 |
| | 1.1 | 0.9 | 0.5 |
| <i>Giving information</i> | | | |
| Medical/therapeutic | 56.7 | 54.2 ^c | 58.8 ^b |
| Lifestyle/psychosocial | 45.9 ^c | 44.5 ^c | 38.2 ^{a,b} |
| Biomedical talk | 10.8 ^c | 9.7 ^c | 20.7 ^{a,b} |
| Psychosocial talk | 49.7 ^c | 49.5 ^c | 42.5 ^{a,b} |
| Other utterances | 11.9 ^c | 10.6 ^c | 21.2 ^{a,b} |
| Total instrumental beh. | 4.2 ^c | 5.8 ^c | 9.2 ^{a,b} |
| Ratio instr/affect beh. | 68.8 ^c | 70.6 ^c | 81.1 ^{a,b} |
| Ratio biomed/psysoc. | 2.2 | 2.4 | 4.3 |
| | 4.2 | 4.7 | 2.0 |

Notes: 1 per cent relative to the total number of utterances; $p \leq 0.05$; ^aScore differs significantly from score of country 1 (Estonia); ^bScore differs significantly from score of country 2 (Poland); ^cScore differs significantly from score of country 3 (Romania)

Table 4: Consultation characteristics per country

| | 1 Estonia | 2 Poland | 3 Romania |
|--------------------------------------|---------------------|---------------------|-------------------|
| <i>Mean length of consultations</i> | | | |
| Mean | 9.1 | 9.5 | 9.2 |
| SD | 5.0 | 5.1 | 4.9 |
| <i>Mean length of physical exams</i> | | | |
| Mean | 2.1 | 2.0 | 2.6 |
| SD | 2.0 | 1.5 | 1.6 |
| <i>Mean length of interruptions</i> | | | |
| Mean | 1.1 | 1.1 | 1.1 |
| SD | 1.1 | 1.8 | 1.5 |
| Eye contact (%) | 41.7 ^b | 24.6 ^{a,c} | 44.2 ^b |
| GPs' verbal contribution (%) | 62.3 ^{b,c} | 59.8 ^a | 59.9 ^a |
| N consultations | 401 | 525 | 450 |

Notes: $p \leq 0.05$; ^aScore differs significantly from score of country 1 (Estonia); ^bScore differs significantly from score of country 2 (Poland); ^cScore differs significantly from score of country 3 (Romania)

Table 5: Affective and instrumental behaviour of GP (%) and type of talk (%^a and ratio) per country

| | Countries | | | | | | | | | |
|---------------------|-----------|------|------|------|------|------|------|------|------|------|
| | Neth. | UK | Spa. | Bel. | Ger. | Swi. | Est. | Pol. | Rom. | Swe. |
| Personal remarks | 7.0 | 9.3 | 8.7 | 9.2 | 6.7 | 7.2 | 7.1 | 9.1 | 8.8 | 4.4 |
| Agreement | 13.9 | 21.7 | 10.6 | 12.7 | 15.7 | 17.0 | 14.1 | 8.8 | 4.4 | 13.7 |
| Rapport building | 2.9 | 4.2 | 1.9 | 2.7 | 6.7 | 5.9 | 5.4 | 4.2 | 7.1 | 6.7 |
| Facilitation | 11.4 | 9.6 | 13.7 | 5.0 | 9.2 | 8.5 | 7.8 | 10.6 | 12.9 | 4.8 |
| Asking questions | 10.2 | 11.2 | 18.4 | 14.7 | 13.7 | 14.5 | 17.7 | 17.7 | 19.2 | 20.9 |
| Info/advice | 40.4 | 30.3 | 33.9 | 37.2 | 34.3 | 32.5 | 33.5 | 31.2 | 27.0 | 36.3 |
| Ratio instr./affect | 2.0 | 1.3 | 2.2 | 2.4 | 1.8 | 1.7 | 2.3 | 2.6 | 2.8 | 2.6 |
| Biomedical talk | 42.1 | 33.0 | 39.4 | 40.6 | 39.2 | 36.2 | 43.5 | 41.8 | 35.4 | 49.8 |
| Psychosocial talk | 8.5 | 8.5 | 12.9 | 11.3 | 7.8 | 10.8 | 7.9 | 6.6 | 10.8 | 7.9 |
| Ratio biom/psysoc | 5.0 | 3.9 | 3.1 | 3.6 | 5.0 | 3.4 | 5.5 | 6.3 | 3.3 | 6.3 |

Note: Relative to the total number of patients' utterances

Table 6: Affective and instrumental behaviours of patients(%) and type of talk (%^a and ratio) per country

| | Countries | | | | | | | | | |
|-------------------------------|-----------|------|------|------|------|------|------|------|------|------|
| | Neth | UK | Spa | Bel | Ger | Swi | Est | Pol | Rom | Swe |
| Personal remarks | 7.7 | 9.8 | 10.7 | 9.6 | 8.0 | 9.9 | 11.4 | 12.3 | 8.3 | 4.4 |
| Agreement | 14.0 | 22.3 | 13.3 | 15.8 | 21.5 | 22.0 | 13.9 | 11.8 | 4.7 | 10.2 |
| Rapport building | 1.4 | 2.7 | 3.7 | 1.0 | 4.9 | 3.0 | 4.3 | 2.3 | 3.5 | 1.5 |
| Facilitation | 3.0 | 3.6 | 3.2 | 2.3 | 2.6 | 2.5 | 4.1 | 5.6 | 8.2 | 1.3 |
| Asking questions | 4.1 | 3.5 | 5.2 | 5.3 | 4.7 | 3.1 | 4.9 | 5.9 | 4.8 | 6.5 |
| Giving info/(only gps) advice | 64.5 | 51.0 | 60.1 | 56.1 | 54.2 | 52.0 | 56.7 | 54.2 | 58.8 | 69.2 |
| Ratio instr./affect | 2.9 | 1.7 | 2.3 | 2.5 | 1.7 | 1.6 | 2.2 | 2.4 | 4.3 | 4.9 |
| Biomedical talk | 51.0 | 34.3 | 46.0 | 38.8 | 40.7 | 33.7 | 49.7 | 49.5 | 42.5 | 58.5 |
| Psychosocial talk | 17.6 | 20.2 | 19.3 | 22.6 | 18.2 | 21.4 | 11.9 | 10.6 | 21.2 | 17.2 |
| Ratio biom/psysoc | 2.9 | 1.7 | 2.4 | 1.7 | 2.2 | 1.6 | 4.2 | 4.7 | 2.0 | 3.4 |

Note: Relative to the total number of patients' utterances

Table 7: Consultation characteristics per country

| | Countries | | | | | | | | | |
|----------------------|-----------|------|------|------|------|------|------|------|------|------|
| | Neth. | UK | Spa. | Bel. | Ger. | Swi. | Est. | Pol. | Rom. | Swe. |
| Cons length (min.) | 10.2 | 9.4 | 7.8 | 15.0 | 7.6 | 15.6 | 9.1 | 9.5 | 9.2 | 14.5 |
| Eye contact (%) | 46.8 | 55.2 | 52.9 | 55.1 | 56.3 | 54.3 | 41.7 | 24.6 | 44.2 | 79.7 |
| Speaking time GP (%) | 55.4 | 52.4 | 52.9 | 55.1 | 56.3 | 54.3 | 62.3 | 59.8 | 59.9 | 59.9 |