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## Second opinions in orthopaedic surgery

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## 4 Patients motives for second opinion in orthopaedic surgery



### 4.1 Abstract

- Background:** The number of second opinions in orthopaedic surgery is increasing rapidly. Yet the grounds on which patients and their doctors decide to seek a second opinion have been little studied. The goal of the study was to identify patient and consultant factors which appeared to contribute to seeking a second opinion.
- Methods:** 2079 consecutive new patients visiting at the orthopaedic surgical outpatient clinic at the University Hospital Groningen in 1996/1997 participated in the study. Patients were self-defined as seeking a second opinion if they had visited at least one other consultant for the same condition within the previous two years. Each of these patients completed a questionnaire prior to seeing the orthopaedic surgeon which included details about the physician-patient relationship, reasons for seeking a second opinion, and their perceived health status. The first opinion consultants were contacted by mail, and their practice characteristics and motives for seeking a second opinion were also obtained.
- Results:** Thirty percent of the study population (n=625) had sought a second opinion. Patients sought a second opinion because of disappointment concerning their original treatment, or because they wanted more information about their condition and/or its treatment. First opinion consultants were usually unaware of these communication issues. Patients' inclination to initiate a second opinion was best predicted by their evaluation of their relationship with their first-opinion consultant. The propensity to initiate referrals for a second opinion varied widely among the first opinion consultants (10 - 70%), and was inversely proportional to the size of the group they worked in and their distance from the referral centre.
- Conclusion:** Patients did not seek a second opinion because they had doubts about the competence of their treating consultant, but because they were dissatisfied about the level of communication or about the results of their treatment. Medical educators should continue to increase their efforts to improve specialists' communication and relationship skills since these seem to generate referrals for second opinions which occupy clinic space which could be used by other patients.

### 4.2 Introduction

Despite its importance, obtaining a second opinion is one of the least understood and studied processes in medicine. The dearth of articles in the literature on this subject reflects a lack of understanding of the whole process, among the treating doctors and second opinion specialists. At the same time, second opinions are swiftly gaining popularity<sup>1,2</sup>. A recent American population survey showed that 16% of the study sample had sought a medical second opinion in the preceding year<sup>3</sup>. In Europe, second opinion criteria and evaluations are being developed in the field of elective surgery<sup>4-7</sup>. In 1996 / 1997, approximately 30% of the new patients seen at Groningen University Hospital orthopaedic surgery outpatient clinic, a tertiary referral centre, were referred for second opinions.

Second opinions may be sought for many reasons. An important factor in the apparent growth of the number of second opinions is likely to be patients' increasing expectations of medical care, lowering their threshold for seeking a second opinion<sup>1,8</sup>. The patient or patient's family may be concerned about the prognosis or the (lack of) diagnosis and may need confirmation by another expert. There may also be discomfort with either the treatment or the communication about it. Patients may not have fully understood the first consultant, or may think that not enough time was given for full discussion. Furthermore, interpersonal difficulties between patients and consultants could be a reason for seeking a second opinion. Disputes between social security agencies administering disability benefits and patients may also lead to being referred for a second opinion. However, one of the most common reasons is likely to be that the prescribed treatment has failed or its result was disappointing.

In the Netherlands, patients usually have to be referred for a second specialist opinion by a general practitioner (GP). Therefore, seeking a second opinion on the patients' initiative is usually a joint decision of the patient and GP. But second opinions are not only initiated by patients, they can also come from GPs or treating consultants. GPs may propose a second opinion themselves either because they sense the patient's dissatisfaction or have strong ideas of their own, which are at odds with those of the first consultant. In other cases, the treating consultant may encourage the patient to seek a second opinion, perhaps to corroborate and validate the advice given. Consultants may also encourage patients to seek a second opinion if the doctor-patient interaction is unsatisfactory, in order to give the patient a chance to get more acceptable advice. Furthermore, new ideas from more experienced colleagues could be helpful for the treating consultant, especially if the first consultant and the patient have reached a deadlock in deciding on the treatment.

This article addresses three questions concerning specialist second opinions:

- 1 Why do patients seek a second opinion?
- 2 Who took the initiative to seek the second opinion and which patient characteristics influence the initiative?
- 3 Does the context of the first opinion consultant influence the initiative to seek the second opinion?

### 4.3 Patients and methods

All new patients visiting the outpatient clinic for orthopaedic surgery of the Groningen University Hospital between August 1996 to August 1997 were asked to participate in the study, based on informed consent. A visit for a second opinion was considered to have occurred if a patient had visited at least one other consultant for the same complaints within the previous two years. Referrals for special diagnostic or therapeutic interventions needing an academic environment were not included in this study.

Patients who were willing to participate were asked to complete a self-administered questionnaire prior to seeing the second opinion consultant. In this article, information was used from questions about their socio-demographic characteristics and the diagnosis as assessed by the second opinion consultant, both used as control variables in the analyses, and 14 items representing possible motives for seeking a second opinion (based on the extensive clinical experience on treating second opinion patients of two of the authors), 8 items characterizing the doctor - patient relationship with the first opinion consultant, and three items to measure scepticism toward physicians<sup>9</sup>. Finally, it was asked whose decision it was to seek a second opinion: the patient, the GP, or the consultant. As was explained above, the initiative of patient and GP were taken together.

If the patient had agreed on it, the first opinion consultant was sent a self-administered questionnaire by mail. In this article, we used their information about the motives for seeking a second opinion and who initiated the second opinion according to the first opinion consultant, the location and number of consultants of the practice.

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The data have been analysed in three steps, following the three research questions. The first step describes the motives of patients to seek a second opinion. Apart from frequency tables, factor analysis has been used in order to reduce the items about the motives of patients and the items about the communication with the first opinion consultant to a smaller number of meaningful variables. The second step concerns the determinants of patient or doctor initiative to seek a second opinion. As determinants socio-demographic background variables, grouped diagnoses, and the variables concerning motives and communication from the first step have been used. This has been analysed using logistic regression. In the third step the context of the first opinion doctor has been added, using multi-level logistic regression. Multi-level analysis was used because the second opinion patients were nested in a smaller number of first opinion doctors, resulting in correlated observations<sup>10,11</sup>. Combination of step 2 and 3 would lead to undesirable loss of information at step 2. The first opinion doctor is only known for a sub-sample of patients who gave consent to contact the first opinion doctor. To rule out selection bias, step 2 was done both for the whole sample and for the sub-sample with known first opinion doctor. The results for the whole sample were equal to the sub-sample and will not be reported separately.

## 4.4 Results

### *General information about the study population*

Of the 2880 new patients who attended the clinic between August 1996 and August 1997, 2079 (72 %) completed the questionnaire. Eight hundred and one patients did not participate because of language problems and/or refusal. For reasons of confidentiality, it was not possible to compare participants and non-participants. The mean age of the study population was 39 (range 1-85) years: 42% were male, and 58% female. The mean duration of complaints was 54 weeks (range: 1-492). Seventy one per cent were publicly insured, and 29% privately. Thirty percent of the patients (n=625) defined themselves as seeking a second opinion. Twenty-six per cent of them had sought more than one other opinion prior to the index consultation

### *Patients' reported motives for seeking a second opinion*

Sixty-two percent of the second opinion patients stated that it was their own decision to seek a second opinion, mostly in conjunction with their GP. Three percent of the patients were self-referred. Thirty-five per cent judged that the treating (first opinion) consultant had initiated the request for a second opinion.

Second opinion patients primarily sought a second opinion out of a need for more information about their diagnosis and/or treatment possibilities, or because they were dissatisfied with the result of previous treatment (*table 1*). Patients who were self-referred or referred by their GP had less confidence in, and more communication difficulties with, the first opinion consultant than patients who were referred by their treating specialist (*table 1 and table 2*). Furthermore, they believed that they were less well understood and had received less personal attention from the first opinion consultant (*table 2*). Since communication is a two-sided process, we expected that the patients' evaluation of the communication style of the first opinion consultant would cluster to some extent among the patients of the same consultant. This was confirmed, but showed less variation in the evaluation of the patient-physician relationship at consultant level than at patient level. This is probably partially due to the small size of the sample of consultants.

Of the patients receiving disability benefits, a re-examination (separate from the second opinion) was requested for the purpose of disability benefit assessment in 18% of cases, and in 2% there was a conflict with one of the social security authorities.

Patients' motives	Agree, consultants initiative	Agree, patient initiative
1 The patient is concerned about the diagnosis	8%	9%
2 The patients hopes to get a different diagnosis	18%	26%
3 The patients believes the diagnosis is incorrect	17%	40%
4 The first opinion consultant found no substantive diagnosis	36%	37%
5 The patient wants more information about the affliction	60%	67%
6 The patient disapproved the advised treatment	9%	12%
7 The result of treatment was disappointing	59%	60%
8 The first consultant offered no treatment	39%	43%
9 The patient wants more information treatment possibilities	75%	84%
10 The patient had no confidence in first opinion consultant	22%	39%
11 The patient was dissatisfied about the first opinion consultant	22%	51%
12 The first consultant had no solution for the complaints	62%	61%
13 Family/friends had good experience with a certain treatment	6%	8%
14 Family/friends had good experience with a certain consultant	13%	16%

**Table 1** Patients' motives for seeking a second opinion (percentage agree) by initiative to seek a second opinion (N varying between 461 and 523)

Interpersonal relationship of the patient with the first opinion consultant	Agree, consultants initiative	Agree, patient initiative
Enough confidence in the first opinion consultant	67%	36%
Received enough attention from the first opinion consultant	71%	34%
Received enough understanding from the first opinion consultant	70%	35%
The patient had a good dialogue with the consultant	60%	34%
The first opinion consultant asked appropriate questions	63%	40%
The first opinion consultant answered their questions adequately	63%	32%
The first opinion consultant spent enough time	62%	34%
The first opinion consultant was enough expert of the problem	48%	46%

**Table 2** Patients' evaluation of their relationship with the first opinion consultant (percentage agree) by initiative to seek a second opinion (N varying between 520 and 560)

The items in table 1 were factor analyzed, revealing six factors with Eigen value above 1. These factors were (in descending Eigenvalue order):

- lack of trust in, or dissatisfaction with, the first opinion consultant (items 10 and 11)
- the first opinion consultant had no solution to the patient's problems (items 4, 8 and 12)
- positive experience of family or friends with either a certain treatment or certain consultant (items 13 and 14)
- need for more information (items 5 and 9)
- hope or belief that the diagnosis of the first opinion consultant would turn out to be wrong (items 2, 3 and 7)
- fear of having a serious disease (items 1 and 6)

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The items on the doctor-patient relationship in table 2 were also factor analyzed, constituting only one factor, and all items loaded on this factor.

*Patient variables explaining the decision to seek a second opinion*

Logistic regression was used to identify the patient variables associated with the decision to seek the second opinion. Variables used in the regression were patients' socio-economic background and diagnosis, together with the above mentioned motives for seeking a second opinion (*table 3, model 1*).

It was assumed that patients who were referred by their GP, initiated the second opinion themselves. The main factor associated with taking the initiative to seek a second opinion was the patient's evaluation of the relationship with the first opinion consultant. Those who felt that their relationship was poorer had a much higher likelihood of seeking a second opinion on their own initiative (or in conjunction with their GP). Patients who rated their own health more poorly were also more likely to seek a second opinion on their consultant's initiative. The scepticism score did not discriminate between patient-initiated and consultant-initiated second opinions in either analysis. No other variables entered in the analysis were found to have a significant relationship with the decision to seek a second opinion (*table 3*).

The analysis was repeated as a single level logistic regression for all patients, including those who had not agreed on participation of the first opinion consultant in the study. There were more specialist-initiated second opinions among those who did not agree to first opinion consultants' involvement. In line with this, the groups also differed in their motives. Both subgroups were similar in terms of their socio-economic variables and diagnosis. The patient's evaluation of the doctor-patient relationship was again the most important factor differentiating between patient- and specialist-initiated second opinions, but subjective health was not significant in this case.

	Model 0		Model 1		Model 2	
	B	SE	B	SE	B	SE
<u>Socio-economic background:</u>						
age			-.008	.010	-.009	.011
gender (male=1)			.000	.300	-.108	.323
education			.016	.216	.006	.236
insurance status (public=1)			.013	.357	-.057	.392
<u>Diagnosis:</u>						
arthritis			.322	.451	.298	.497
lumbago			.565	.502	.374	.534
patello femoral complaints			.440	.496	.360	.530
cuff pain			.477	.637	.536	.682
no orthopaedic diagnosis			.182	.507	-.012	.549
other (reference category)			-	-	-	-
subjective health (higher value stands for worse health)			*.454	.171	*.498	.185
<u>Reasons for seeking a second opinion:</u>						
Motive:						
lack of trust / satisfaction			-.428	.451	-.554	.508
first opinion doctor had no solution			.116	.398	-.012	.449
positive experience			.307	.605	.504	.677
need for information			-.498	.403	-.632	.451
hope / belief wrong diagnosis			-.420	.551	-.151	.618
afraid			.676	.727	.407	.818
communication with first opinion doctor			*-1.469	.352	*-1.236	.385
scepticism			.121	.106	.141	.117
<u>Context of first opinion doctor:</u>						
distance to academic centre					*.699	.340
size of practice group					*-1.293	.548
aggregated patients' evaluation of communication				-1.331	1.432	
Level 2 variance	.983	.388	.701	.350	.127	.204
Contrast test (Chi-square)	* 6.42		* 4.02		.39	

\* p<.05

Table 3 Multilevel logistic regression on patient's (0, N = 321) or physicians (1, N = 36) initiative to the second opinion

*First opinion consultant variables explaining the decision to seek a second opinion*

Eighty-four percent of the first opinion consultants were orthopaedic surgeons, 4% rehabilitation consultants, 1% neurologists and 6% other specialists. The majority (72%) worked in a practice of three or fewer consultants. Of the 471 questionnaires which were sent to first consultants, 349 (74%) were returned.

The first opinion consultant was not aware of the fact that the patient had sought a second opinion in 48% of the cases. If the consultant was informed about the second opinion (n=157), he/she believed that he/she had initiated the second opinion in 54% of cases. In 10% of cases, the

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consultant thought it was as a joint decision with the patient.

The main reasons for seeking a second opinion according to the first opinion consultant were that the results of the treatment had been disappointing (33%) and that the patient wanted more information about the treatment (28%) (*table 4*). This was consistent with the motives indicated by the patients. In contrast to second opinion patients, communication problems were seldom reported by the consultants (1%) as a reason for seeking a second opinion.

Reasons for second opinion according to first opinion consultant	Agree
The patient is concerned about the diagnosis	3%
The patient wants more information about the affliction	16%
The patient disapproved the advised treatment	7%
The result of treatment was disappointing	33%
The patient wants more information about the treatment	28%
There were communication problems	2%
Other reasons	15%

Table 4 Patients' motives for seeking a second opinion according to the first opinion consultant (percentage agree); N = 334

Because of the hierarchical nature of the data with second opinion patients being seen by a smaller number of first opinion consultants, a multilevel logistic regression analysis was performed to study the role of the first opinion consultant in the initiative to seek a second opinion. There was significant variation between first opinion consultants in their likelihood of initiating referrals for a second opinion (*table 3, model 0, level 2 variance*). Some consultants were initiator of the second opinion of the majority of their second opinion patients, while other consultants seldom were (range 10 - 70%). Patient level variables reduced the amount of variance, indicating that part of the variation between consultants was the result of the composition of their patient populations (*table 3, model 1*). With the addition of the characteristics of the first opinion consultants to the model, the variation between consultants became non-significant (*table 3, model 2*).

The variation between first opinion consultants in their likelihood of initiating second opinion referrals was related to the location of their practices: patients whose first opinion consultant practiced closer to the academic (second opinion) centre, were more likely to initiative referrals themselves. Patients more often sought a second opinion on their own initiative if they had visited a first opinion consultant working in a larger group of consultants. Because of the importance of the patients' evaluations of the doctor-patient relationship, the patients' evaluations were aggregated to consultant level to find out whether this had an additional influence as a first opinion consultant characteristic. This turned out not to be the case.

Further analysis looked at the clustering of patients' evaluations of the doctor-patient relationship. Most of the variation in the evaluation of the doctor-patient relationship was situated at the level of individual patients, but there was also a significant amount of variation between consultants: 13% of the variation was located at the consultant level. This indicates some differences between consultants in their relationship to their patients.



## 4.5 Discussion

The purpose of the study was to assess motives for seeking a second opinion from the point of view of the patient and of their treating doctors. Until now, motives of patients and physicians for seeking a second opinion have been little studied. To our knowledge, only one study focussing on patients' reasons for seeking a second opinion has been published<sup>1</sup>. Therefore, the current study is an initial impetus to further investigation of this phenomenon.

In the 1970s, health care insurers in the USA developed an extensive surgical second opinion programme (Surgery Second Opinion Programs, SSOPs). A number of insurance companies requested a second opinion from an independent specialist if the treating specialist proposed an elective intervention<sup>12-15</sup>. Sometimes, this second opinion was *obligatory* if the patient was to be considered for reimbursement of the costs of surgery; in other cases the second opinion was sought voluntarily. In the United States, patients nowadays seek more and more second opinions on their own request<sup>3</sup>.

The number of second opinion patients in our tertiary referral centre was surprisingly high. There are only limited data about other hospitals in the Netherlands; but these show that the Groningen University Hospital does not differ from other university hospitals in the Netherlands in this regard. General hospitals will presumably receive fewer second opinion referrals, if it is assumed that patients generally seek their second opinions higher up a perceived system of specialisation. The proportion of Dutch first (orthopaedic) opinions which result in a second opinion has not hitherto been studied, but based on a number of assumptions we calculate that it would be just over 3%<sup>16</sup>.

There is some sort of threshold in seeking second opinions in the Netherlands, because patients require a referral from their GP in order to consult a specialist (referrals from one specialist to another are not subject to such restrictions). But, in general, patients have a substantial influence on whether or not a referral takes place<sup>17</sup>. We have no information about the number of patients wanting a second opinion but being denied by their GP. The rate of second opinions might be higher in those European countries where patients are able to refer themselves directly to consultants. Due to the budgetary control system in Dutch health care, there are no incentives for the public health insurers to make a distinction between a first consultation, a second opinion or a tertiary referral. Hospitals and consultants work within a budget that is negotiated with the health insurers. This budget is largely based on the (negotiated) number of new ambulatory patients to be expected. Since second opinion patients count as 'new patients' there is no disincentive to see them, but they do increase pre-existing long waiting lists. Quite recently, Dutch health insurers have even started to recruit new policyholders by advertising that they would reimburse all the costs of second opinion referrals.

In the current study it was not always very clear who had initiated the second opinion. Sutherland similarly found disagreement between the patient and referring physicians as to the initiation of 50% of cases<sup>2</sup>. We found a similar disagreement in 25% of cases, mostly because the treating consultant and the patient both thought it had been their own decision to seek a second opinion.

The doctor-patient relationship and difficulties in communication between the patient and the consultant seemed to be important in initiating a second opinion. This confirms the findings of Sutherland that patients wanted the consultant to have spent more time with them<sup>1</sup>. However, consultants were mostly not aware of communication problems indicated by their patients. Owing to the increased autonomy and independence of patients, much more is demanded of the physician's communication skills than used to be the case. Doctor-patient communication affects patient satisfaction, compliance and the probability of patients seeking other physicians' opinions<sup>18</sup>. Most patients feel a strong need for information and support. Information gives the patient a sense of control of his/her disease. However, doctors providing information is time-consuming. Longer consultation times would be desirable, but could only be realised in the Netherlands if the budgetary system for health care were to change. At present, physicians are obliged to treat a fixed number of new ambulatory patients annually.

Interest in communication training in medical education has gradually increased. For the last decade, all Dutch medical schools have used some form of communication training, albeit that, on the whole, less than 5% of curriculum time is available for this subject. From this study, it seems

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that training in communication techniques for prospective physicians should be intensified <sup>19</sup>.

We found wide variation amongst the referring consultants in their likelihood of initiating a second opinion. This is probably partly due to their individual clinical approach and their communication style. Some consultants may want a reaffirmation of diagnosis and/or therapy by another specialist in order to put the matter beyond doubt, while others may not see much point in referring patients with persistent, but minor problems. However, variation between first opinion consultants was also related to the size of their practices and their distance from the referral centre. Practices in the vicinity of the referral centre generated relatively more patient-initiated second opinions. This finding can be interpreted in two ways. First, patients living closer to the academic centre may find it easier to seek a second opinion and could, therefore, more often decide to seek one on their own initiative <sup>20</sup>. A second line of argument could be that the real distribution of patient-initiated second opinions is the same for all first opinion consultants, but that patients living further away from our study centre, will usually go to a hospital closer to their place of residence for a second opinion. In our view, this second line of reasoning is less probable, because there are no other academic centres in this part of the country.

Variation between consultants in their share of patient-initiated second opinions was also related to team size. Consultants in larger teams had a larger share of patient-initiated second opinions. There are two possible interpretations of this finding. First, in larger teams, it is customary to obtain intra departmental second opinions. The availability of more subspecialised consultants might make consultant-initiated second opinions superfluous. Second, there is some evidence that specialists in smaller teams are more dependent upon patients' esteem for behavioural confirmation, while those in larger teams are more oriented towards their colleagues <sup>21</sup>. A consequence of this difference could be that consultants in small teams are more inclined to give in to their patients' demands to have a second opinion and are more often perceived by their patients as having initiated the second opinion. By contrast, consultants in larger teams might be less inclined to give in to their patients' demands for a second opinion, leaving them no other way than to take the initiative themselves.

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