Predictors for the symptomatic prostate cancer patient's delays in seeking care

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ABSTRACT

Aim: This study aims to determine the predictors for the symptomatic prostate cancer patient's delays in seeking care.

Methods: We followed a cohort of 931 men with prostate cancer from Stockholm County (Sweden) asking about socio-demographic and information-level characteristics as well as the length of delay in seeking care.

Results: Of the 511 patients who returned a completed questionnaire, 219 (43%) reported having clinical symptoms before prostate cancer was diagnosed. Of all men with clinical symptoms, self-employed men were more likely to make an early first contact with the health-care system than pensioners or men with other employment (relative risk (RR), 3.9; 95% confidence interval (CI), 1.4–11.0). Men who had obtained moderate or much information from the internet about prostate cancer were more likely to have made an early first contact with the health-care system (RR, 2.2; 95% CI, 1.3–3.9). Men who had obtained moderate or much information from health-care staff (RR, 1.4; 95% CI, 1.0–1.6), or from any doctor (RR, 1.4; 95% CI, 1.0–1.8) or from family members/acquaintances (RR, 1.3; 95% CI, 1.0–1.9) had an early first visit to the health-care system. Men who were 70 to 80 years old started treatment earlier than men who were 50 to 69 years old (RR, 2.3; 95% CI, 1.4–3.6).

Conclusions: The patients' level of information about prostate cancer obtained from the internet and other sources such as the health-care system, doctors or family members/ acquaintances coupled with their employment status were influential in leading to early first contact and first visit to the health-care system. Older patients started treatment earlier than younger patients.

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1. Introduction

There is an ongoing concern that delays in the management of urological cancers can have a negative impact on patients' outcomes and their quality of life. Delays on the part of the patient and delays that are part of the health-care system have been documented as the major factors responsible for adverse outcomes in urological cancers.[1,2]

In this follow-up study we hypothesised that associations of socio-demographic and information-level characteristics of prostate cancer patients can serve as predictors of the length of delays at each step from the onset of clinical symptoms to

the start of treatment. We used patient-reported data obtained from Stockholm County prostate cancer patients.

2. Patients and methods

2.1. Study population

We followed a cohort of 931 men who had been diagnosed with prostate cancer in 1999 from Stockholm County (Sweden). Of these men, 591 (aged 50–80 years) who were alive on 1 October 2002 were included in the study. After receiving a letter of introduction and being contacted by telephone, those agreeing were mailed a questionnaire, a registration form and two prepaid envelopes. The registration form was returned separately from the questionnaire in order to ensure anonymity. Patients who had not sent the return form back within 2 weeks were reminded by telephone contact. The study was approved by the Regional Ethics Committee at the Karolinska Institute. These 591 men completed a questionnaire asking about socio-demographic and information-level characteristics as well as the length of delay at each step from the first time they noticed symptoms until the start of the treatment.

2.2. The questionnaire

Data were collected with a study-specific questionnaire based on previous instruments from our group.[3–5] We sorted information from transcribed in-depth interviews, prepared questions and compiled a questionnaire. This questionnaire was first tested face-to-face to make sure the men understood the questions and thereafter in a pilot study to check to ensure that means for data collection gave a reasonable participation frequency.

The question used for identifying the symptomatic patients was: 'As regards your prostate cancer, what led you to apply for contact with the health-care system from the very beginning?' There were seven response categories: 'Symptoms-urine problem', 'Symptom-pain', 'Symptom-impotence', 'Symptom-other', 'Health control, annual, general', 'Health control, own initiatives' and 'Health control, other reason'. The first four response categories were considered to indicate men who were symptomatic at the time of diagnosis. We have collected several independent variables corresponding to questions on socio-demographic and information-level characteristics of all these men. The response categories corresponding to each of the independent variables were combined into appropriate groups for analysis. We have four outcome variables corresponding to each of the following five questions: (i) 'How much time passed from the first time you labelled symptoms to the time you made contact with the health care system?' (The response categories: 'I had no symptoms', '0–1 week', '1–2 weeks', '2–4 weeks', '1–2 months', '3–4 months' and 'More than 4 months'.) (ii) 'How much time passed from first contact with the health care system to the first visit?' (The response categories: '0–1 week', '1–2 weeks', '2–4 weeks', '1–2 months', '3–4 months' and 'More than 4 months'.) (iii) 'How much time passed from the time that you got your diagnosis to the time that you and your doctor decided about treatment/continued processing?'

(The response categories: '0–1 week', '1–2 weeks', '2–4 weeks', '1–2 months', '3–4 months' and 'More than 4 months'.) (iv) 'How much time passed between the times you made decisions about treatment to the time when treatment actually started?' (The response categories: '0–1 week', '1–2 weeks', '2–4 weeks', '1–2 months', '3–4 months' and 'More than 4 months'.) The response categories '0–1 week' and '1–2 weeks' corresponding to each of the four outcome variables were then grouped and cited as 'An early occurrence' indicating the time spent by patients or doctors.

For the outcome 'An early occurrence' corresponding to the time spent by patients or doctors for each of the four outcome variables, we calculated the percentage of patients in each category of the independent variable. To compare the influence of different categories of the independent variables in explaining the outcomes, we first calculated the relative risk (RR) as the ratio of the percentages, together with a 95% confidence interval (CI) for the RR (using the Mantel–Haenszel formula for the variance).[6] Multivariable logistic models were then constructed to determine the odds ratios (ORs) for different categories of the independent variables in explaining the outcomes. We first grouped the independent variables into two groups according to their nature; the first group consisted of socio-demographic characteristics of the patients, the second of information level. We prepared two different final models, for each of the four outcomes. We used both forward selection and backward elimination of variables to construct the final model corresponding to each group of variables. For forward selection, we started with one bi-variable model for each independent variable corresponding to each outcome. The independent variable with the highest chi-square value was then introduced into tri-variable models with the remaining independent variables, and the remaining independent variable with the highest chi-square value was introduced into four-variable models. We continued in this manner as long as all independent variables in respective models had a chi-square value that corresponded to $P < 0.05$. For backward elimination, we started with all independent variables, the variables with the lowest chi-square values were eliminated, one by one, until $P < 0.05$ for all remaining independent variables corresponding to the respective models. Finally, we used multivariable logistic models to determine adjusted ORs, i.e. for the association between an independent variable and an outcome (e.g. 'An early occurrence' for the time spent by patients and doctors). In respective groups of independent variables, we adjusted for the variables remaining in the final model after forward selection. We have used the Stata 9.0 statistical package for the entire analysis.[7]

3. Results

Of the 591 men included in the study, 511 (87%) returned a completed questionnaire, 16 patients were excluded from participation, 27 patients agreed to participate but did not return the questionnaire and for 39 men, we had no contact information. Of the 511 patients who returned a completed questionnaire, 219 (43%) reported having clinical symptoms before the diagnosis of prostate cancer and the final analysis included only these 219 men. The mean (standard deviation

(SD)) age of the 219 patients was 71.0 (7.1) years. Of the 219 men, 81% were Lutherans, 72% were married, 27% had a university education, 74% were pensioners and 4.7% were self employed (Table 1).

Table 2 shows the results of the multivariable analysis of data for the socio-demographic and information-level characteristics of 219 symptomatic patients who provided information on their delay times for early first contact with the health-care system. Of these 219 patients, 47 (21%) reported an early first contact with the health-care system. The RRs (as a ratio of percentages) were >1.0 with 95% CI not including 1.0 for some categories of the variables with 'source of income' as well as 'obtained information from internet'. For group 1, by forward selection, we obtained a final logistic regression model for the variable with 'source of income' as the only independent variable ($P < 0.02$). The same final model was obtained by the procedure of backward elimination. The crude OR shown in Table 2 for group 1 were adjusted for 'source of income' in the final model. None of the other socio-demographic factors had statistical significance after adjusting for 'source of income'. Self-employed men were more likely to have had an early first contact with the health care system compared to pensioners or men with other employment (adjusted OR, 6.3). For group 2, by forward selection, we obtained a final logistic model with 'obtained information from internet' as the only independent variable ($P < 0.02$). The same final model was obtained by the procedure of backward elimination. The crude OR shown in Table 2

for group 2 were adjusted for 'obtained information from internet' in the final model. None of the other variables in group 2 had statistical significance after adjusting for 'internet'. Men who had obtained moderate or much information from the internet about prostate cancer were more likely to have had an early first contact with the health care system (adjusted OR, 3.2).

Table 3 shows the results of the multivariable analysis of data for the information level characteristics of 219 symptomatic patients who provided information on their delay times for early first visit to the health-care system. Of these 219 patients, 112 (51%) reported an early first visit. The RRs (as a ratio of percentages) were >1.0 with 95% CI not including 1.0 for the variable 'obtained information from family doctor'. None of the variables in group 1 remained statistically significant in forward or backward selection. For group 2, by forward selection, we obtained a final logistic regression model for the variables with 'obtained information from health care staff' ($P < 0.02$), 'obtained written information from any doctor' ($P < 0.02$) and 'obtained information from family member/acquaintance' ($P < 0.05$). The same final model was obtained by the procedure of backward elimination. The crude OR shown in Table 3 for group 2 were adjusted for these three independent variables in the final model and these three independent variables are adjusted for each other in the final model. None of the other variables in group 2 had statistical significance after adjusting for these three independent variables. Patients who had obtained moderate or much information from health care staff (adjusted OR, 3.1), written information from any doctor (adjusted OR, 4.9) and moderate or much information from family members/acquaintances (adjusted OR, 3.9) had an early first visit to health care.

Table 4 shows the results of the multivariable analysis of data for the socio-demographic, and information level characteristics of 219 symptomatic patients who provided information on the delay times before the start of early treatment. Of these 219 patients, 75 (34%) reported having an early start of treatment. The RRs (as a ratio of percentages) were >1.0 with 95% CI not including 1.0 for some of the categories of the variable with 'age' and 'source of income'. For group 1, by forward selection, we obtained a final logistic regression model for the variable with only 'age' ($P < 0.001$). The same final model was obtained by the procedure of backward elimination. The crude OR shown in Table 4 for group 1 were adjusted for 'age' in the final model. None of the other variables in group 1 had statistical significance after adjusting for 'age'. Men who were 70 to 80 years old had an early start of treatment by the health-care system compared to men who were 50 to 69 years old (adjusted OR, 3.6). For group 2, by forward selection, we obtained a final logistic model for the variable with only 'written information by any doctor' ($P < 0.03$). The crude OR shown in Table 4 for group 2 were adjusted for the variable 'written information by any doctor'. None of the other variables except the variable 'obtained information from brochure/books' in group 2 had statistical significance after adjusting for 'written information by any doctor'. Patients who had received moderate or much written information from any doctor (adjusted OR, 0.2) or from brochure/books (adjusted OR, 0.2) had a late start of treatment.

Table 1 – Characteristics of 219 patients symptomatic at the time of diagnosis	
Patient Characteristics	No./Total no. (%)
Age	
50–69	80/214 (37)
70–80 (Mean = 71.0; SD = 7.1)	134/214 (63)
Level of education	
Primary	64/215 (30)
Secondary	62/215 (29)
Junior college	30/215 (14)
University	59/215 (27)
Marital status	
Single	32/216 (15)
Married	156/216 (72)
Partner, not married	17/216 (7.9)
Partner, not living together	8/216 (3.7)
Lives with relative	3/216 (1.4)
Religious status	
Not religious	33/218 (15)
Christian – Lutheran	176/218 (81)
Christian – Evangelical	2/218 (0.9)
Christian – Catholic	2/218 (0.9)
Other	5/218 (2.1)
Source of income	
Employment	27/215 (13)
Self-employed	10/215 (4.7)
Pension	159/215 (74.0)
Financial investments	4/215 (1.9)
Unemployment/Sickness benefit	5/215 (2.3)
Disability pension	10/215 (4.7)

Table 2 – RR, OR, and adjusted OR for early contact with the health care system according to certain socio-demographic and information level characteristics of the prostate cancer patients

Patients Characteristics	Patients early contact/ Delay less than 3 weeks from symptoms to first contact[a]			
	No./Tot (%)	RR (95% CI)	OR (95% CI)	
		Unadjusted	Unadjusted	Adjusted
GROUP 1				
Age				
50–69	19/74 (26)	1.0	1.0	1.0
70–80	27/126 (21)	0.8 (0.5–1.4)	0.8	0.8 (0.3–1.9)
Level of education				
Primary	15/60 (25)	1.0	1.0	1.0
Secondary	10/55 (18)	0.7 (0.4–1.5)	0.7	0.8 (0.3–1.7)
Junior college	9/30 (30)	1.2 (0.6–2.4)	1.3	1.1 (0.4–3.0)
University	12/56 (21)	0.9 (0.4–1.7)	0.8	0.8 (0.3–2.0)
Marital status				
Single	10/27 (37)	1.0	1.0	1.0
Married/partner	35/137 (20)	0.5 (0.3–1.0)	0.4	0.5 (0.2–1.1)
Religious status				
Not religious	7/30 (23)	1.0	1.0	1.0
Swedish church (Lutheran)	36/166 (22)	0.9 (0.5–1.9)	0.9	1.2 (0.4–3.2)
Other	3/8 (38)	1.6 (0.5–4.9)	2.0	2.3 (0.4–13.9)
Source of income				
Employment	4/26 (15)	1.0	1.0	1.0
Self-employed	6/10 (60)	3.9 (1.4–11.0)	8.3	6.3 (1.1–34.7)
Pension	30/147 (20)	1.3 (0.5–3.5)	1.4	1.4 (0.4–4.4)
Others	6/19 (32)	2.1 (0.7–6.3)	2.5	2.3 (0.5–9.8)
GROUP 2				
Obtained Information from				
Health care staff				
None/Little	36/148 (24)	1.0	1.0	1.0
Moderate/Much	7/35 (20)	0.8 (0.4–1.7)	0.8	1.1 (0.4–2.8)
Written information by any doctor				
None/Little	32/150 (21)	1.0	1.0	1.0
Moderate/Much	6/20 (30)	1.4 (0.7–2.9)	1.6	1.7 (0.6–5.0)
Family doctor				
None/Little	36/161 (22)	1.0	1.0	1.0
Moderate/Much	5/11 (45)	2.0 (1.0–4.1)	2.9	3.2 (0.8–11.8)
Mass media				
None/Little	29/135 (21)	1.0	1.0	1.0
Moderate/Much	13/46 (28)	1.3 (0.8–2.3)	1.4	1.4 (0.6–3.2)
Family member/acquaintance				
None/Little	36/154 (23)	1.0	1.0	1.0
Moderate/Much	5/16 (31)	1.3 (0.6–2.9)	1.5	1.4 (0.4–4.6)
Brochures/books				
None/Little	19/97 (20)	1.0	1.0	1.0
Moderate/Much	22/81 (27)	1.4 (0.8–2.4)	1.5	1.4 (0.7–2.9)
Internet				
None/Little	33/153 (22)	1.0	1.0	1.0
Moderate/Much	9/19 (47)	2.2 (1.3–3.9)	3.2	3.2 (1.2–8.7)

Group 1 adjusted for the variable 'source of income'. Group 2 adjusted for the variable 'internet'.
a The data are based on 219 patients symptomatic at the time of diagnosis. Whenever the denominators do not add up to 219, data are missing for the independent variable.

4.   Discussion

Of all men with clinical symptoms, self-employed men were more likely to have had an early first contact with the health care system than pensioners or men with other employment. Men who had obtained moderate or much information about prostate cancer from the internet were more likely to have made an early first contact with the health care system. Men who were 70 to 80 years old started treatment earlier than men who were 50 to 69 years old.

In our study, occupation emerged as a significant factor influencing early contact with the health-care system. Self-employed men who perceived disease symptoms were more likely to have made an early first contact with the health-care system than pensioners or men with other employment. One may speculate that self-employed men are entrepreneurs, used to taking the initiative and finding their way in bureau-

Table 3 – RR, OR, and adjusted OR for early visit to the health care system according to certain socio-demographic and information level characteristics of the prostate cancer patients

Patients' Characteristics	Patients' early visit/ Delay less than 3 weeks from first contact to first visit[a]			
	No./Tot (%)	RR (95% CI)	OR (95% CI)	
		Unadjusted	Unadjusted	Adjusted
GROUP 1				
Age				
50–69	41/73 (56)	1.0	1.0	
70–80	69/124 (56)	1.0 (0.8–1.3)	1.0	
Level of education				
Primary	28/58 (48)	1.0	1.0	
Secondary	30/54 (56)	1.2 (0.8–1.6)	1.3	
Junior college	17/30 (57)	1.2 (0.8–1.8)	1.4	
University	36/56 (64)	1.3 (1.0–1.9)	1.9	
Marital status				
Single	18/26 (69)	1.0	1.0	
Married/partner	91/170 (54)	0.8 (0.6–1.0)	0.5	
Religious status				
Not religious	20/30 (67)	1.0	1.0	
Swedish church (Lutheran)	84/164 (51)	0.8 (0.6–1.0)	0.5	
Other	7/7 (100)	1.5 (1.2–1.9)	–	
Source of income				
Employment	12/26 (46)	1.0	1.0	
Self-employed	8/10 (80)	1.7 (1.0–2.9)	4.7	
Pension	81/145 (56)	1.2 (0.8–1.9)	1.5	
Others	9/18 (50)	1.1 (0.6–2.0)	1.2	
GROUP 2				
Obtained Information from				
Health care staff				
None/Little	79/145 (54)	1.0	1.0	1.0
Moderate/Much	24/35 (69)	1.3 (1.0–1.6)	1.8	3.1 (1.2–8.0)
Written information by any doctor				
None/Little	82/149 (55)	1.0	1.0	1.0
Moderate/Much	15/20 (75)	1.4 (1.0–1.8)	2.5	4.9 (1.3–18.0)
Family doctor				
None/Little	89/158 (56)	1.0	1.0	1.0
Moderate/Much	10/11 (91)	1.6 (1.3–2.0)	7.8	4.0 (0.5–36.0)
Mass media				
None/Little	73/132 (55)	1.0	1.0	1.0
Moderate/Much	28/46 (61)	1.1 (0.8–1.5)	1.3	1.6 (0.7–3.5)
Family member/acquaintance				
None/Little	83/151 (55)	1.0	1.0	1.0
Moderate/Much	12/16 (75)	1.4 (1.0–1.9)	2.5	3.9 (1.0–14.6)
Brochures/books				
None/Little	57/94 (56)	1.0	1.0	1.0
Moderate/Much	45/81 (56)	1.0 (0.8–1.3)	1.0	0.9 (0.4–1.7)
Internet				
None/Little	85/151 (56)	1.0	1.0	1.0
Moderate/Much	13/18 (72)	1.3 (0.9–1.8)	2.0	1.7 (0.5–6.1)

Group 2 adjusted for the variables 'health care staff', 'written information by any doctor', and 'brochures/books'.
a The data are based on 219 patients symptomatic at the time of diagnosis. Whenever the denominators do not add up to 219, data are missing for the independent variable.

cracies, helping them to make an early contact with the health-care system when they suspect they may be sick. Also, self-employed men may have flexible working hours, making it easier for them than others to make an appointment with a physician. One study in the literature has correlated socio-demographic factors and the delay in the diagnosis of prostate cancer.[8] In that study, Generalized Linear Modelling (GLM) showed that social class, derived from occupational data, emerged as an important factor for secondary care delay ($F(7) = 2.4$, $P < 0.021$) as well as for total delay ($F(7) = 2.1$, $P < 0.046$). Lower social class groups had longer delays than higher social class groups, but for pre hospital delay and referral delay, social class was not a significant factor. Few other studies conducted previously suggested a relationship between socio-demographic factors and the different stages of diagnostic delay (total, patient and primary care, referral,

Table 4 – RR, OR, and adjusted OR for early treatment start according to certain socio-demographic and information level characteristics of the prostate cancer patients

Patients Characteristics	Early treatment start/ Delay less than 3 weeks from treatment decision to start of treatment[a]			
	No./Tot (%)	RR (95% CI)	OR (95% CI)	
		Unadjusted	Unadjusted	Adjusted
GROUP 1				
Age				
50–69	17/75 (23)	1.0	1.0	1.0
70–80	57/111 (51)	2.3 (1.4–3.6)	3.6	3.6 (1.9–6.9)
Level of education				
Primary	21/54 (39)	1.0	1.0	1.0
Secondary	21/53 (40)	1.0 (0.6–1.6)	1.0	1.1 (0.5–2.4)
Junior college	10/27 (37)	1.0 (0.5–1.7)	0.9	1.1 (0.4–3.2)
University	22/54 (41)	1.0 (0.7–1.7)	1.1	1.3 (0.6–3.0)
Marital status				
Single	12/27 (44)	1.0	1.0	1.0
Married/partner	62/158 (39)	0.9 (0.6–1.4)	0.8	0.6 (0.3–1.5)
Religious status				
Not religious	8/27 (30)	1.0	1.0	1.0
Swedish church (Lutheran)	63/156 (40)	1.4 (0.7–2.5)	1.6	1.6 (0.6–3.9)
Other	4/7 (57)	1.9 (0.8–4.6)	3.2	2.7 (0.5–16.4)
Source of income				
Employment	3/26 (12)	1.0	1.0	1.0
Self-employed	3/10 (30)	2.6 (0.6–10.8)	3.2	1.8 (0.3–11.8)
Pension	61/135 (45)	3.9 (1.3–11.5)	6.3	2.7 (0.7–10.8)
Others	6/16 (38)	3.2 (0.9–11.2)	4.6	4.0 (0.8–19.9)
GROUP 2				
Obtained Information from				
Health care staff				
None/Little	53/138 (38)	1.0	1.0	1.0
Moderate/Much	15/32 (47)	1.2 (0.8–1.9)	1.4	1.6 (0.7–3.7)
Written information by any doctor				
None/Little	60/139 (43)	1.0	1.0	1.0
Moderate/Much	3/19 (16)	0.4 (0.4–1.1)	0.2	0.2 (0.1–0.9)
Family doctor				
None/Little	59/149 (40)	1.0	1.0	1.0
Moderate/Much	3/11 (27)	0.7 (0.3–1.8)	0.6	0.8 (0.2–3.3)
Mass media				
None/Little	47/124 (38)	1.0	1.0	1.0
Moderate/Much	19/45 (42)	1.2 (0.7–1.7))	1.2	1.4 (0.7–2.9)
Family member/acquaintance				
None/Little	57/142 (40)	1.0	1.0	1.0
Moderate/Much	5/16 (31)	0.8 (0.4–1.7)	0.7	0.7 (0.2–2.2)
Brochures/books				
None/Little	42/88 (48)	1.0	1.0	1.0
Moderate/Much	20/77 (26)	0.5 (0.4–0.8)	0.4	0.5 (0.2–0.9)
Internet				
None/Little	58/144 (40)	1.0	1.0	1.0
Moderate/Much	3/16 (19)	0.5 (0.2–1.3)	0.3	0.4 (0.1–1.7)

Group 1 adjusted for the variable 'age'. Group 2 adjusted for the variable 'written information by any doctor'.
a The data are based on 219 patients symptomatic at the time of diagnosis. Whenever the denominators do not add up to 219, data are missing for the independent variable.

secondary care) for cancers such as breast[9,10] and colorectal.[11–13] We do not have enough evidence to firmly conclude that self employed men have a shortened duration between perceiving symptoms of disease and meeting a physician. Nevertheless, all the data we have indicates that such is the case.

Men who have obtained moderate or much information from the internet about prostate cancer were more likely to have made an early first contact with the health-care system.

Possibly, access to health information may enable the patients to be alerted and to become health conscious when they perceive symptoms of disease and this may in turn lead them to take early measures. We do not have enough data from the literature to compare such an association with our finding.

Men who were 70 to 80 years old had an early start of treatment compared to men who were 50 to 69 years old. Possibly, older men do not need to postpone the start of

treatment due to work commitments as often as young men. Recent studies in the USA had shown rising trends in androgen deprivation therapy (ADT) in older men with prostate cancer.[14] Elderly men possibly get treatment earlier because they go for ADT directly, whereas younger men more often have to wait for radical prostatectomy or radiotherapy. Moreover, a possible hesitation in making a decision on a choice of treatment strategy postpones the start of treatment of older men less frequently than for younger men. Neal and Allgar[8] conducted a secondary analysis of patient-reported data (65,192 patients) from the 'National Survey of National Health Survey (NHS) patients: Cancer' to explore the relationship between socio-demographic factors and the components of diagnostic delay (total, patient and primary care, referral, secondary care) for prostate cancer. In their study, age turned out to be a significant factor from GLM for referral delay ($F(1) = 12.9$, $P < 0.001$) as well as for secondary care delay ($F(1) = 260.5$, $P < 0.001$), younger people had longer delays than older people.

Patients' personality factors such as employment and searching for information on the internet influence their decision to make an early contact with the health-care system. One implication could be that health-care systems may adapt and create a situation in which patients do not need to have these personality factors to diminish delays.

5.   Limitations

Patients presented with symptoms constituted a small number to provide enough power for the study. There is no standard tool for asking patients about their delays and hence comparisons with other studies must be undertaken with caution.

Conflict of interest statement

None declared.

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