

Patient involvement in patient safety: How willing are patients to participate?

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Background: Despite growing recognition internationally that patients can help to promote their own safety, little evidence exists on how willing patients are to take on an active role.

Objectives: To investigate medical and surgical patients' perceived willingness to participate in different safety-related behaviours and the potential impact of doctors'/nurses' encouragement on patients' willingness levels.

Design: Cross-sectional exploratory study using a survey that addressed willingness to participate in different behaviours recommended by current patient safety initiatives. Interactional behaviours (asking factual or challenging questions, notifying doctors or nurses of errors or problems) and non-interactional behaviours (choosing a hospital based on the safety record, bringing medicines and a list of allergies into hospital, and reporting an error to a national reporting system) were assessed.

Participants: 80 medical and surgical patients from an inner city London teaching hospital.

Findings: Patients' perceived willingness to participate was affected ($p < 0.05$) by the action required by the patient and (for interactional behaviours) whether the patient was engaging in the specific action with a doctor or nurse. Patients were less willing to participate in challenging behaviours. Doctors' and nurses' encouragement appeared to increase patient-reported willingness to ask challenging questions, but no other consistent findings were observed.

Conclusion: Patients do not view involvement in a range of safety-related behaviours uniformly. Particular efforts are needed to encourage patients to participate in novel or challenging behaviours as these are behaviours where patients appear less inclined to take on an active role.

promote and achieve safety goals.⁵ Following this report the National Patient Safety Agency (NPSA) was established. Since its inception, the NPSA have placed promoting patient and public involvement in safety firmly on their agenda. Numerous leaflets and campaigns to encourage and empower the 'active' patient have been introduced together with firm guidelines for healthcare staff on how to communicate with patients or families following error or harm.^{6–10} Similar policies and interventions are also evident elsewhere in the world—the underlying premise being that patients can help to improve the safety of healthcare.^{11–19}

However, while these interventions are well intentioned, a key issue is the lack of evidence on patients' preferences to adhere to the advice and recommendations, namely how willing patients really are to take on such an active role. Our research group first tackled this issue by examining surgical patients' willingness to ask questions recommended in leaflets developed by patient safety advisories and healthcare organisations.¹ Based on patients' self-reports, we found patients were more willing to ask factual (eg, 'How long will I be in hospital for?') as opposed to challenging questions (eg, 'have you washed your hands?'); particularly when interacting with a doctor (vs nurse). The research also highlighted the potential facilitating role of doctors: patients reported they would be more willing to ask challenging questions if they were instructed to by a doctor.

In the research reported here, we aim to extend our previous work by investigating surgical and medical patients' preferences to take on a more active role in a number of safety-related activities (in addition to asking questions). To date, there are very little data in this area; most work has been conducted in the US^{20–22} as opposed to the UK²³ and extant data specifically from

INTRODUCTION

It is becoming increasingly recognised that patients can make valuable contributions to their healthcare safety.^{1–4} In the UK, the Department of Health report 'Building a safer NHS for patients: Implementing an organisation with a memory' argued the need to create a clear role for patients in helping to

patient populations is limited. In addition, our previous research solely examined the potential effect that doctors could have on increasing patients' willingness to participate.¹ However, given patient involvement in safety is largely a function of patients' interactions with different healthcare professionals, it seems likely that nurses could also play a part in encouraging patient involvement.

With these thoughts in mind the aims of the study were to investigate:

1. Medical and surgical patients' willingness to participate in different safety-related behaviours;
2. The potential effect of doctors' or nurses' encouragement on patients' willingness to be involved.

METHOD

Design

A cross-sectional design using a patient self-report survey was employed. Given the lack of current relevant evidence no specific hypotheses were entertained. The study was exploratory in nature.

Participants

A convenience sample of 80 medical and surgical patients were recruited from wards on an inner city London teaching hospital over a 6 month period (May–Oct 2008). Patients were eligible to participate if they were over 18 years of age, spoke English, and were able and willing to give informed consent to participate. Patients that were healthcare professionals were excluded because they may present a biased representation of the 'lay' patients' attitudes.

Measures

A 41-item survey tool was developed to assess patients' willingness to participate in a range of safety-related behaviours recommended by current patient safety initiatives.^{1 6 8 10–19} Twenty-six items captured patient-reported willingness to participate in three main categories of 'interactional' behaviours that involved engaging in dialogue with healthcare professionals: asking factual questions (10 items); challenging questions (8 items) and notifying doctors/nurses of problems or errors in their care (8 items). In order to examine the potential effect of professional role, separate items were used to assess patient-reported willingness to participate in these behaviours with either a doctor or nurse.

Three items were used to assess patients' perceived willingness to participate in three 'non-interactional' behaviours. First, bringing medications into hospital and a list of allergies—behaviours recommended by a number of safety initiatives.^{6 13 18} Second, choosing

a hospital based on its safety record—evidence suggests patients may choose a hospital based on geographical location or waiting times but the extent that they would consider performance indicator information when making a choice is unclear.^{24–26} Third, reporting an error to a national reporting system (NRS)—while there is research investigating patients' complaints (eg, predictors of complaints,²⁷ there are little data on patients' preferences to report errors or problems to a NRS (such as the National Patient Safety Agency's National Reporting and Learning Service)).

The potential effect of doctors' or nurses' encouragement on patient-reported willingness to participate was assessed for each of the categories of interactional behaviours (six items) and the individual items examining non-interactional behaviours (six items).

Seven-point scales were used to assess patients' level of agreement on how willing they would be to participate for each one of the survey items (1=Strongly Disagree, 7=Strongly Agree).

Procedure

The survey items were pretested on 20 medical and surgical patients to ensure face validity and comprehension. After initial piloting, patients were approached by the same psychologist researcher (RD) who explained the purpose of the study. After providing informed consent, patient characteristic information (eg, age, speciality) was collected. Patients were provided with standardised instructions regarding survey completion and given the opportunity to ask the researcher if there was anything they did not understand. The surveys were then self-administered and collected by the researcher at a mutually convenient time. All completed surveys were checked on the hospital wards by the researcher to ensure all items had been answered and there were no missing data.

Data analysis

Data were analysed using SPSS for Windows Version 16.0. Mean scores for each of the non-interactional items in the survey and overall mean scores for all items pertaining to each of the groups of interactional behaviours were computed. Characteristics of participants were described using proportions for categorical variables. Paired-sample *T* tests compared disparities in patients' willingness to participate in different safety-related behaviours.

RESULTS

Patient characteristics

In total 80 (out of 95) patients agreed to participate (84% response rate). Reasons for declining were:

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tiredness/sickness (n=13); hearing problems (n=1) and not believing the study was important (n=1). **Table 1** displays patient characteristic information for surgical and medical patients and for the study sample as a whole.

Survey findings

Table 2 displays descriptive statistics for each survey item. The total mean score for items pertaining to each of the scales of interactional behaviours is also provided (all items in the scales had an acceptable level of internal consistency—Cronbach's alphas ranged from 0.65 to 0.86).

Findings in relation to interactional behaviours

With regard to interactions with doctors, patients' self-reported willingness to ask challenging questions was significantly lower than their willingness to ask factual questions ($t=11.02$, $p<0.001$), or to notify doctors of problems or errors ($t=8.87$, $p<0.001$). Patients also reported lower willingness to notify doctors of problems or errors than to ask factual questions ($t=2.08$, $p<0.05$).

Similarly, with respect to interactions with nurses, patients' self-reported willingness to ask challenging

questions was significantly lower than their willingness to ask factual questions ($t=4.46$, $p<0.001$) or to notify nurses of errors or problems ($t=10.02$, $p<0.001$). In contrast to the findings for doctors, however, patients reported higher perceived willingness to notify nurses of problems or errors than to ask them factual questions ($t=4.46$, $p<0.001$).

Further analyses were performed to investigate whether patients were more willing to engage in the relevant behaviours with doctors or with nurses. In comparison to asking nurses, patients reported higher willingness to ask doctors factual questions ($t=5.61$, $p<0.001$), but lower willingness to ask doctors challenging questions ($t=3.08$, $p<0.005$) or notify doctors of problems or errors ($t=3.01$, $p<0.005$).

Findings in relation to non-interactional behaviours

Patients were significantly more willing to bring into hospital their medications and a list of their allergies than to choose a hospital based on its safety record ($t=4.07$, $p<0.001$) or to report an error to a NRS ($t=9.41$, $p<0.001$). Higher willingness was reported for choosing a hospital based on its safety record than reporting an error to a NRS ($t=4.89$, $p<0.001$).

Table 1 Patient characteristics

Socio-demographic variables	Surgical patients, N=21 (%)	Medical patients, N=59 (%)	Total sample, N=80 (%)
Sex			
Male	10 (48)	29 (49)	39 (49)
Female	11 (52)	30 (51)	41 (51)
Education			
No qualifications	12 (57)	22 (37)	34 (42)
GSCE's	5 (24)	10 (17)	15 (19)
A levels	1 (5)	7 (12)	8 (10)
Undergraduate degree	2 (9)	10 (17)	12 (15)
Postgraduate degree	1 (5)	10 (17)	11 (14)
Ethnicity			
White British	12 (57)	40 (68)	52 (65)
White (other)	4 (19)	5 (8)	9 (11)
Mixed (White and Black Caribbean)	1 (5)	2 (3)	3 (4)
Mixed (White and Asia)	1 (5)	2 (3)	3 (4)
Asian/Asian British	1 (5)	4 (7)	5 (6)
Black/Black British (African)	1 (5)	3 (5)	4 (5)
Chinese	1 (5)	3 (5)	4 (5)
Employment			
Employed	5 (24)	28 (47)	33 (41)
Unemployed	4 (19)	3 (5)	7 (9)
Retired	12 (57)	22 (37)	34 (43)
Student		2 (3)	2 (3)
Registered disabled		4 (7)	4 (5)
Age	Range 29–90 years (mean 65.29, SD 17.35)	Range 22–90 (mean 50.78, SD 18.34)	Range 22–90 (mean 54.59, SD 19.1)
Previous number of times in hospital	Range 0–10 (mean 3.86, SD 2.89)	Range 0–30 (mean 4.59, SD 5.46)	Range 0–30 (mean 4.40, SD 4.91)

Note: Percentages in **Table 1** have been rounded off the nearest whole percent.

Table 2 Descriptive statistics for survey items

Item description	Mean	SD
Factual questions to a nurse (interactional behaviour)		
Would you ask a nurse: How long will I be in hospital for?	5.60	1.84
Would you ask a nurse: How long will the pain last?	5.51	1.87
Would you ask a nurse: What signs should I look out for if my wound is not healing as it should?	5.31	1.87
Would you ask a nurse: When can I return to my normal activities	5.20	2.02
Would you ask a nurse: How is the procedure done?	4.65	2.12
Total	5.26	1.56
If a nurse encouraged you to ask the above questions (eg, by saying 'its ok to ask staff questions') would you be more willing to ask these questions?	5.75	1.71
Factual questions to a doctor (interactional behaviour)		
Would you ask a doctor: How long will the pain last?	6.28	1.37
Would you ask a doctor: How long will I be in hospital for?	6.44	1.30
Would you ask a doctor: When can I return to my normal activities	6.23	1.49
Would you ask a doctor: How is the procedure done?	6.16	1.67
Would you ask a doctor: What signs should I look out for if my wound is not healing as it should?	5.80	1.72
Total	6.18	1.21
If a doctor encouraged you to ask the above questions (eg, by saying 'its ok to ask staff questions') would you be more willing to ask these questions?	6.03	1.72
Challenging questions to a nurse (interactional behaviour)		
Would you ask a nurse: Can you check that this is the correct medication for me?	4.58	2.54
Would you ask a nurse: What is your name and what do you do?	4.42	2.17
Would you ask a nurse: Why are you removing that piece of monitoring equipment?	4.39	2.29
Would you ask a nurse: Have you washed your hands?	3.58	2.19
Total	4.24	1.84
If a nurse encouraged you to ask the above questions (eg, by saying 'its Ok to ask staff questions') would you be more willing to ask these questions?	5.50	1.82
Challenging questions doctor (interactional behaviour)		
Would you ask a doctor: Why are you removing that piece of monitoring equipment?	4.39	2.34
Would you ask a doctor: Can you check that this is the correct medication for me?	4.41	2.39
Would you ask a doctor: What is your name and what do you do?	3.93	2.32
Would you ask a doctor: Have you washed your hands?	2.74	2.13
Total	3.87	1.88
If a doctor encouraged you to ask the above questions (eg, by saying 'its Ok to ask staff questions') would you be more willing to ask these questions?	5.64	1.73
Notifying nurse (interactional behaviour)		
Would you notify a nurse if you thought your wound had become infected?	6.73	0.66
Would you notify a nurse if your hospital identification bracelet came off?	6.18	1.65
Would you notify a nurse if you had not received the results of a medical test?	6.16	1.52
Would you notify a nurse if you thought an error had occurred in your care?	5.88	1.79
Total	6.23	1.00
From the above problems and concerns, if a nurse said to you 'its ok to notify me of any of these problems or concerns' would you be more willing to do this?	6.00	1.58
Notifying doctor (interactional behaviour)		
Would you notify a doctor if you had not received the results of a medical test?	6.28	1.41
Would you notify a doctor if you thought an error had occurred in your care?	6.25	1.46
Would you notify a doctor if you thought your wound had become infected?	6.25	1.50
Would you notify a doctor if your hospital identification bracelet came off?	4.56	2.37
Total	5.83	1.34
From the above problems and concerns, if a doctor said to you 'its ok to notify me of any of problems or errors' would you be more willing to do this?	6.24	1.33
Information provision (non-interactional behaviour)		
Would you be willing to bring into hospital medications that you are taking and a list of allergies?	6.61	1.10
If a doctor encouraged you to bring into hospital medications and a list of allergies, would you be more willing to do this?	6.36	1.54

Continued

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Table 2 Continued

Item description	Mean	SD
If a nurse encouraged you to bring into hospital medications and a list of allergies, would you be more willing to do this?	6.36	1.51
Information gain (non-interactive behaviour)		
Would you want to be given information to help you decide which hospital had the highest safety record for your treatment?	5.74	1.89
If a doctor encouraged you to look at information to help you decide which hospital had the highest safety record, would you be more willing to do this?	5.70	1.81
If a nurse encouraged you to look at information to help you decide which hospital had the highest safety record, would you be more willing to do this?	5.23	1.98
Reporting (non-interactive behaviour)		
If you experienced an error in your care would you report this to a national reporting system?	4.36	2.07
If a doctor encouraged you to report an error you experienced in your care to a national reporting system, would you be more willing to do this?	5.68	1.70
If a nurse encouraged you to report an error you experienced in your care to a national reporting system, would you be more willing to do this?	5.31	1.89

Effect of healthcare staff encouragement on patient-reported willingness

Paired-sample *t* tests were used to examine differences (in mean scores) in patients' perceived baseline willingness to participate in each of the groups of interactive behaviours and each of the non-interactive behaviours compared to their willingness to participate in these behaviours when given encouragement by a doctor or nurse. For interactive behaviours, doctors' encouragement increased patients' self-reported willingness to ask doctors challenging questions ($t=7.54$, $p<0.001$), and to notify doctors of problems or errors ($t=2.10$, $p<0.05$). Nurses' encouragement had a similar effect on perceived willingness to ask nurses challenging questions ($t=5.77$, $p<0.001$). However, no effect was obtained for notifying nurses about problems or errors (when given encouragement). In addition, nurses' (unlike doctors') encouragement increased perceived willingness to ask nurses factual questions ($t=2.47$, $p<0.05$).

For non-interactive behaviours, doctors' or nurses' encouragement increased patient-reported willingness to report an error to a NRS ($t=5.95$, $p<0.001$ and $t=4.21$, $p<0.001$). No other significant findings were found.

DISCUSSION

We presented here the findings of an exploratory study which examines patients' willingness to participate in safety-related behaviours. While the findings should be treated with a certain degree of caution (due to the exploratory nature) they suggest that patient-reported willingness to participate in different actions recommended by current patient safety advisories and initiatives may be influenced by the type of behaviour, professional role of healthcare staff and also, possibly,

whether the behaviour has been encouraged by doctors or nurses.

Patients' perceived willingness to participate varied considerably with specific actions. Patients appeared willing to ask general questions about their healthcare management, but less willing to undertake more challenging actions. This pattern was also reflected in our previous study and has also been reported in other similar studies.^{1 20–23} There are several explanations for these findings. Consider, for example, patients asking doctors/nurses if they have washed their hands: patients may be concerned that asking this question could cause offence. Alternatively, they may believe healthcare professionals cannot transmit hospital-acquired infections to a patient²⁸ or that asking a doctor/nurse about their handwashing practices may not be a very effective infection control strategy.^{21 23} In addition, patients appeared more willing to engage in those behaviours that were more long-standing recommendations than newer unfamiliar actions; a finding also reflected in similar research.^{20–23}

Our findings also suggest that patients' preferences for involvement could be mediated by healthcare staff's professional role. There are a number of possible explanations for these findings. First (and perhaps foremost) patients' perceptions of who it is appropriate to interact with in relation to specific behaviours, rather than their willingness to participate per se, could account for some variability. It is not surprising that patients reported greater willingness to ask doctors factual questions such as how the procedure is done—patients are likely to view doctors (vs. nurses) as a more trusted resource for this type of information. In addition, hospital inpatients are likely to build up more of a rapport with nurses than doctors as they are more involved in the day–day management of the patient

(rather than doctors who have limited time and often are in groups on 'ward rounds')—this could explain why self-reported willingness to notify nurses of problems or errors was higher than doctors.

Furthermore, these findings replicate our previous results that patients may be more willing to ask challenging questions if given encouragement by a doctor.¹ In addition, in this study, nurses appeared to have a potential facilitating role in encouraging patients to ask challenging questions. Our work also suggests that doctors' and nurses' encouragement may help increase patients' willingness to participate in other safety-related behaviours, although, interestingly the effects were not always consistent across professions—that is, nurses and doctors did not always appear to encourage involvement in the same behaviours. A possible explanation is that encouragement may be most effective at encouraging involvement in types of behaviours where patient-reported willingness is quite low. This would explain why an effect was displayed for nurses' encouragement on patients' willingness to ask factual questions, but the same effect was not observed in relation to doctors.

There are several limitations to this work. First of all, the exploratory nature of our work means we need to interpret the results with caution until further studies can replicate our findings. Second, patients' intentions to participate do not always predict engagement in actual behaviours.²² Our findings were based on patients' self-report so we do not know how willing patients would be to participate in these behaviours or how effective doctors' or nurses' encouragement could be at improving involvement in real-life clinical-settings. Third, the sample was small and comprised medical and surgical patients from one teaching hospital so may not be generalisable to other patient groups. Fourth, the inclusion criteria for participants could have induced biases. Patients that speak English and are well enough and happy to participate are likely to be more active in other aspects of their healthcare management too. Arguably, different findings may have been displayed if more vulnerable patients were studied.

Future research is needed in order to assess the extent to which our findings can be replicated and to investigate in more detail what motivates patients to participate in the safety of their healthcare. A mixed-methods design using quantitative and qualitative approaches could be used to provide not only a measure of how willing patients are to be involved in various behaviours but also an explanation of why. Social cognition models could be used (eg, Health Belief model,²⁹ Theory of Planned Behaviour)³⁰ to try and delineate key predictors of patient involvement in safety which could then be used to inform the design of interventions which take into account these key ingredients. Observational studies

of patients' involvement in actual safety-related behaviours in different medical encounters need to be conducted to gain an understanding of how intentions may predict participation and how this relationship may be mediated by patient socio-demographic characteristics and physical, social, psychological and environmental factors. A selection of patients from various different backgrounds should be studied to help determine the extent to which cultural values may affect their readiness to undertake error prevention actions. We also need to examine in more detail patients' perceptions of the roles of different healthcare professionals (eg, doctors, nurses) and the relative salience they place of engaging in specific behaviours with each. Finally, we need to investigate patients' knowledge of current patient safety initiatives and their awareness of their rights as a patient as this may determine their willingness to take actions.

CONCLUSION

Taken together, these findings suggest that patients do not view involvement in all safety-related behaviours in a uniform manner. Patients appear less likely to engage in behaviours that require them to question doctors' or nurses' actions or that are novel or unfamiliar. Specific attention should be paid to increasing patients to participate in behaviours perceived as challenging clinical abilities of healthcare staff as these are the behaviours patients are least willing to be involved in. Doctors or nurses may play an important part in encouraging involvement in such behaviours by offering encouragement and positive reinforcement to the patient. Studies that extend our understanding of what strategies may be most effective at involving patients, under what circumstances and why are needed in this very important but under-researched area.

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REFERENCES

1. Davis R, Koutantji M, Vincent C. How willing are patients to question healthcare staff on issues related to the quality and safety of their healthcare? An exploratory study. *Qual Safe Health Care* 2008;17:90–6.

ERROR MANAGEMENT

2. Davis R, Sevdalis N, Jacklin R. Patient involvement in safety: What factors influence patient participation and engagement? *Health Expectations* 2007;10:259–67.
3. Koutantji M, Davis R, Vincent C, *et al*. The Patient's role in patient safety: engaging patients, their representatives, and health professionals. *Clinical Risk* 2005;11:99–104.
4. Coulter A, Ellins J. *Patient-focused interventions: A review of the evidence*. London: Picker Institute Europe/ Health Foundation, 2006.
5. Department of Health (DoH). *Building a safer NHS for patients: Implementing an Organisation with a Memory*. London: DoH, 2001.
6. National Patient Safety Agency. 'Please Ask' campaign'. <http://www.npsa.nhs.uk/pleaseask/>.
7. National Patient Safety Agency. Being Open: Communicating Patient Safety Incidents with Patients and Carers. <http://www.nrls.npsa.nhs.uk/resources/?entryid45=65077>.
8. National Patient Safety Agency. 'Clean your hands' campaign. <http://www.npsa.nhs.uk/cleanyourhands/>.
9. National Patient Safety Agency. *Safety First: One Year On: Outlining progress on the recommendations of Safety First*. London: NPSA, 2007.
10. National Patient Safety Agency. Why you should wear a wristband in hospital <http://www.nrls.npsa.nhs.uk/resources/type/alerts/?entryid45=59799&cid=898229>.
11. National Patient Safety Foundation. 'Safety as you go home from hospital'. <http://www.npsf.org/download/SafetyAsYouGo.pdf>.
12. National Patient Safety Foundation. Preventing Infections in the Hospital – What you can do. <http://www.npsf.org/download/PreventingInfections.pdf>.
13. Agency for Healthcare Research & Quality. Twenty Tips to Prevent Medical Errors. <http://www.ahrq.gov/consumer/20tips.htm>.
14. National Patient Safety Foundation. Ask me 3. <http://www.npsf.org/askme3/>.
15. Agency for Healthcare Research & Quality. Having surgery? What you need to know. Questions to ask your doctor and your surgeon. <http://www.ahrq.gov/consumer/surgery/surgery.htm>.
16. Agency for Healthcare Research & Quality. Quick Tips - When talking with your doctor. <http://www.ahrq.gov/consumer/quicktips/doctalk.htm>.
17. Agency for Healthcare Research & Quality. *Questions Are the Answer: Get More Involved With Your Health Care*. <http://www.ahrq.gov/questionsaretheanswer/>.
18. Joint Commission on Accreditation of Healthcare Organisations. Speak Up, help prevent errors in your care. <http://www.jointcommission.org/patientsafety/speakup/>.
19. United States Department of Veteran Affairs. *Patient Safety Tips for Patients*. <http://www.patientsafety.gov/patients.html>.
20. Marella W, Finley E, Thomas A, *et al*. Health care consumers' inclination to engage in selected patient safety practices: A survey of adults in Pennsylvania. *J Patient Safety* 2007;3:184–9.
21. Hibbard J, Peters E, Slovic P, *et al*. Can patients be part of the solution? Views on their role in preventing medical errors. *Med Care Res Rev* 2005;62:601–16.
22. Waterman AD, Gallagher TH, Garbutt J, *et al*. Brief report: Hospitalized patients' attitudes about and participation in error prevention. *J Gen Intern Med* 2006;21:367–70.
23. Wallace L, Sembi S. Are patients ready to help prevent harm in healthcare? *Healthcare Risk Report* 2008;16–18.
24. Coulter A, Le Maistre N, Henderson L. *Patients' experience of choosing where to undergo surgical treatment: Evaluation of the London Patient Choice scheme*. Oxford: Picker Institute, 2005.
25. Le Maistre N, Reeves R, Coulter A. *Patients' experiences of CHD Choice*. Oxford: Picker Institute Europe, 2003.
26. Schneider EC, Epstein AM. Use of public performance reports: a survey of patients undergoing cardiac surgery. *JAMA* 1998;279:1638–42.
27. Kline TJB, Willness C, Ghali WA. Predicting patient complaints in hospital settings *Qual Safe Health Care* 2008;17:346–50.
28. Abbate R, Di Giuseppe G, Marinelli P, *et al*. Patients' knowledge, attitudes, and behaviour toward hospital-associated infections in Italy. *Am J Infect Control* 2008;36:39–47.
29. Becker MH. The health belief model and personal health behaviour. *Health Education Monographs* 1974;2:324–508.
30. Ajzen I. From intention to actions: a theory of planned behaviour. In: Kuhl J, Beckman J, eds. *Action-control: From cognition to behaviour* (pg 11–39). Heidelberg: Springer, 1985.



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