BMJ open

# Patient initiated questions: how can doctors encourage them and improve the consultation process? A qualitative study



| | |
|---|---|
| Journal: | *BMJ Open* |
| Manuscript ID: | bmjopen-2013-003112 |
| Article Type: | Research |
| Date Submitted by the Author: | 23-Apr-2013 |
| Complete List of Authors: | Murtagh, Ged; Imperial College London, Surgery and Cancer<br>Furber, Lynn; University of Leicester, Department of Cancer Studies and Molecular Medicine<br>Thomas, Anne; Leicester Royal Infirmary, Department of Cancer Studies and Molecular Medicine |
| Primary Subject Heading: | Communication |
| Secondary Subject Heading: | Oncology |
| Keywords: | QUALITATIVE RESEARCH, ONCOLOGY, MEDICAL EDUCATION & TRAINING |
| | |
| Note: The following files were submitted by the author for peer review, but cannot be converted to PDF. You must view these files (e.g. movies) online. | |
| New_patients1.3approved[1].docm<br>Follow_up_patients1.3approved[1].docm | |

# Patient initiated questions: how can doctors encourage them and improve the consultation process? A qualitative study

Dr. GM Murtagh,[1] Dr L Furber[2] Dr. AL Thomas[3]

[1] Senior Lecturer in Clinical Communication, Division of Surgery, Department of Surgery and Cancer, St Mary's Campus, Imperial College London, South Wharf Road, London W2 1BL
g.murtagh@imperial.ac.uk

[2] Senior Nurse Researcher, Department of Cancer Studies and Molecular Medicine
Robert Knighton Clinical Sciences Building, University of Leicester, Leicester Royal Infirmary, Leicester LE2 7LX

[3] Reader and Consultant in Medical Oncology, Department of Cancer Studies and Molecular Medicine, Leicester Royal Infirmary
Leicester LE 1 5WW

**Correspondence to:**

Dr. G.M. Murtagh
Division of Surgery, Department of Surgery and Cancer, St Mary's Hospital,
Imperial College London, South Wharf Road, London W2 1BL
g.murtagh@imperial.ac.uk

**Manuscript word count** 3,505
**Abstract word count:** 237

## Abstract

**Objective:** To investigate the circumstances under which patients initiate direct questions in Oncology consultations

**Design:** Conversation analysis of 47 consultations between oncologists and cancer patients

**Setting:** An oncology clinic at a teaching hospital in the East Midlands.

**Participants:** 16 Oncologists and 67 cancer patients

**Outcome measure:** Patient initiated direct questions

**Results:** On the whole patients' direct questions are designed to seek specific information regarding, the cancer itself, treatment options or their experience of symptoms. When patients do ask direct questions they typically follow the announcement of test results where some reference to the details of those results, is provided. More specifically, there is a relation between showing the patient their scan/x-ray results, patient involvement and patient initiated direct questions. Higher levels of patient initiated direct questions were clustered around occasions where doctors provided information and explanations of test results (twelve consultations) sometimes with direct reference to scan or x-ray results (seven consultations).

**Conclusions:** This study highlights the importance of careful explanation of diagnostic evidence as a factor contributing to increased patient involvement. More specifically, the findings suggest

that, when appropriate, invoking diagnostic evidence (e.g. scan or x-ray results) is an effective way of increasing levels of patient question asking. Doctors need to be able to encourage patient question asking to ensure that patients have at their disposal an important means through which they can determine their information needs. Although these results come from a study of oncology consultations, this finding may be transferable to other clinical contexts.

## Article Summary

- In cancer care patient question asking can significantly influence the provision of information from the doctor.
- The paper extends the existing research into communication in cancer care by reporting on distinctive patterns of communication behaviour which influence, in this case, patient question asking.

## Key Messages

- The frequency of direct questions initiated by patients in oncology consultations is relatively low.
- Explicating test results alongside diagnostic evidence increases the chances of patient initiated direct questions in oncology consultations.
- This finding has implications for understanding how doctors can encourage patient questions within cancer care and, potentially, other clinical settings.

## Strengths and Limitations of this study

- The strength of the study is that it targets actual instances of question asking behaviour in relation to other situational variables in the consultation.

- The study is limited by its sole reliance on audio recordings of consultations. Consequently, other aspects of social interaction, e.g. eye contact, bodily comportment etc which can also have a significant influence on the content of the consultation, have not been included.

## Introduction

One of the main problems oncologists face in the consultation is the difficulty of accurately gauging the patient's information needs.[1,2] Studies have examined patient preferences for information provision and involvement[1,3,4,5] and have shown, among other things, that patients do want specific information concerning their illness.[4,5] However, patients' information needs are not static and there can be significant variations between patients in terms of their preferences for the timing, content and detail of information they require. Such variations may change during the course of an illness and even during the course of a single consultation depending on the type of information a patient receives.[1] Consequently, patients' attempts to elicit information from doctors also varies. These contingencies indicate a real need to understand more about the conditions under which patients actively seek information and, more specifically, the kinds of communication behaviours patients use to seek out information. Among these behaviours, question asking is key, as it can be used as a basic form of information seeking.[6] When patients ask questions it allows them to shape their own levels of involvement[8] and handle the contingencies of information exchange.[9] In addition, patient question asking has been linked to improved information provision.[8,10]

These findings still beg the question, how and when do patients ask questions? In the context of cancer care studies have shown that direct questions (alongside indirect cues) occur most often during the treatment phase of the consultation[11]; that companions who accompany patients, tend to ask more questions than patients particularly in relation to treatment and diagnsosis[12]; that

ethnic and racial differences between patients can reflect differences in levels of question asking and direct question asking[13]; that question prompt lists can encourage patient question asking particularly in relation to prognosis and diagnosis.[14,15] Moreover, patients who receive an answer to their question demonstrate better psychological adjustment following the consultation than those who ask questions but don't receive a response.[16, 17]

These studies provide valuable direction in understanding some of the factors behind patient question asking in cancer care. However, there is still a lot that is unknown about the specific situational variables which underpin and shape patient question asking in relation to the doctor's communication behaviours. The extent to which patients initiate information seeking, in the first place, is often contingent on the doctor's communicative style. The import of this lies in the fact that when patients seek information (e.g. through asking questions), doctors typically respond in more informative and accommodative ways, [18] simply because patient questions are one of the ways in which patients establish their information needs. The purpose of this study was to capture the interactional and situational variables that occur alongside patient initiated questions to establish possible connections between the two.

## Methods

The study was carried out in a large UK Cancer Centre. LF recruited patients (with different types of cancers) attending the oncology department (n=77) as well as a mix of oncology consultants and specialist registrars. Both newly diagnosed and follow up patients were recruited

to ensure maximum variability in our sample group. Following each consultation patients were invited to complete a satisfaction questionnaire and interviews were conducted with the patients by LF shortly after their consultation. We audio recorded 47 consultations which were then transcribed and analysed using conversation analysis.[22] This paper reports on the first 30 of those consultations.

.

**Analysis**

This analysis involved examining the turn-by-turn construction of utterances between doctor and patient. This allowed us to identify the occasions where patients ask direct questions. It also enabled us to target the link between the different ways in which test results were delivered and levels of patient initiated questions. For the purposes of analysis we defined a direct question as that which is initiated solely by the patient, without a verbal prompt from the doctor and which targets a specific topic.

Audio recordings of the oncology consultations were subjected to repeated listening and were then transcribed and analysed using conversation analysis, a method of analysis which details characteristics of speech exchange including phraseology, pauses, pace and intonation. Analysis with this level of detail allowed us to identify typical as well as variable features of doctor and patient talk. We then re-analysed the data to see how those features influenced levels of patient involvement patient initiated question asking. For example, we started to notice how variations in the delivery format of test results can shape the patient's response and more specifically influence their levels of question asking. The transcription symbols used to indicate these

characteristics are provided in table 1.The consultations were examined with a view to identifying some of the systematic and recurrent properties of patient question asking to see if that would provide further direction in improving consultation practice. Some key sequences from the consultations are presented verbatim in the text and the symbols used for characteristics of speech exchange are provided in table 1.

**Results**

Our focussed sample of 30 consultations in total came to 451.30 mins, just over 7.5 hours of consultation time with the average length of the consultation at 15.04 mins. In 7 out of the 30 consultations (just under 60 mins of consultation time) there were no patient initiated direct questions. In the remaining 23 consultations there were 76 instances of patients asking questions (avg. 2.5 direct patient questions per consultation). In 5 out of those 23 consultations (22%) patients' questions came at the end (within 3-4 mins of the end of the consultation) following a prompt from the doctor. In 6 out of the 23 consultations (26%) there is evidence of indirect or embedded questions arising at different junctures of the consultation following a prompt from the doctor. In 12 of the 23 consultations, (52%) patient initiated direct questions occur specifically in relation to discussion of test results. In 7 of these 12 consultations (58%) patient initiated question asking occurs following a careful explanation of test results and diagnostic evidence e.g. the doctor's use of scan or x-rays. In only two consultations did the patient decline to ask a question following and invitation to do so from the doctor.

We noted a number of variations in the way in which doctors announce test results. Our main finding, however, is that patients are more inclined to initiate direct questions when doctors explicate test results with direct reference to the diagnostic evidence e.g. x-rays or scans. We identified two types of information delivery each resulting in different types of patient response, the most marked difference being levels of patient initiated question asking. In delivery type 1, test results were delivered in a very general way without elaboration (e.g. 'your scan results are fine'). With this type of delivery patient initiated questions were absent or minimal. In delivery type 2 ('your scan shows that') the doctor elaborated or explained the test results sometimes invoking the scan or the x-ray to do so. This type of delivery typically positively influenced levels of patient involvement in the consultation and prompted more patient initiated direct questions and consequently more information provision from the doctor.

**Transcription symbols**

| | |
|---|---|
| º º | Talk marked by the degree sound indicates words that are softly spoken |
| (.) | A full stop in brackets indicates a micro pause |
| (1.0), (0.5) | indicates silence in seconds and tenths of seconds |
| [Okay<br>[Yes | Talk which is preceded by a square bracket indicates overlap in speech between two different speakers |
| = | Talk marked with the equals sign at the end of one line and the beginning of another indicates no pause between the end of one utterance and the start of another |

**Type 1**

**Table 1**

**0 patient initiated questions**

1. Doctor: The CT scan result is here (0.5) and that was
2. basically normal erm nothing to suggest any new no new
3. glands you have got some changes on your erm (4.0) lungs
4. from(.) previous radiotherapy (0.5)uhm (1.5) so that's your
5. CT scan and I'm just trying to find the (0.5) lung function
6. tests(.) when did you have those done
7. Patient: (2.0) had them done
8. Husband: Two weeks ago

**Table 2**

**0 initiated patient questions**

1. Doctor: Okay (.) um (0.5) scan result was fine
2. Patient: Good
3. Doctor: Good okay an everything's stable on the in the
4. bones

5. Patient: Right

**Table 3**

**0 patient questions**

1. Doctor: Your scan shows everything is the same
2. Patient: Good
3. Doctor: So that's very good

**Table 4**

**1 patient initiated question**

1. Doctor: And you've had an echocardiogram of your heart an
2. that's all fine
3. Patient: Is it [okay
4. Doctor: [you had that done on?
5. Patient: °Last Friday°
6. Doctor: Last Friday that's all fine (.) no problems so
7. that's good news could I er examine you

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 1 delivery. In each case the results are delivered in a general, non-specific way characterised by a general clinical assessment, 'fine', 'normal' or 'no change'. In each case this type of delivery produces a minimal response from the patient. It seems that this is partly to do with the fact that the general delivery projects a paternalistic approach where the doctor presents his/her interpretation of the results as the authoritative one, without any specific reference to further details of findings.[21] Consequently, the patient is invited to accept the diagnostic judgement of the doctor and the general, non-specific explanation of the results is reflected in the general, non-specific response provided by the patient.[19] In almost a third of the sample, apart from the sequence in table 4, the patient does not question or inquire further into the results following the type 1 delivery. In table 4 for the patient does ask a question, but again this is presented in a general form 'is it okay?' again reflecting the general way in which the results of the echocardiogram is presented. However, later on following a physical examination the patient targets back on this assessment, after a physical examination, following a prompt from the doctor.

1. Doctor: Is there anything you wanted to ask at all?
2. Patient: I did want to ask about my heart function
3. Doctor: Ya sure
4. Patient: I know you said the echocardiograms are oka:y
5. Doctor: Yes
6. Patient: but has it (.) erm deteriorated at all[through
7. Doctor: [no no

**Type 2**

**Table 1**

**1patient initiated question**

1. Doctor: The head scan, the CT and the MRI show that there
2. is something in the bones but what is unusual is that it
3. seems to be more on the right hand side than the left and I
4. think it was the left eye you were having problems with?
5. Patient: (0.5) Don't they cross?
6. Doctor: Well sometimes if it's more of a visual problem
7. they do cross yeah

In this sequence there are two distinctive features which appear to shape the patient's response. Firstly, the doctor delivers the findings from the scan and produces an expression of uncertainty regarding which eye the patient was having problems with. Secondly, there is a half second pause following the delivery which not only provides the patient with the opportunity to respond but also scope to negotiate the nature of that response.

**Table 2**

**5 patient initiated questions**

1. Doctor: Your scan shows that things are very much the
2. same, maybe slightly bigger but literally by 4mm both in
3. the chest and in the bowel
4. Patient: Is it possible for me to see the scan?
5. Doctor: Yes, these are your lungs, that's your heart
6. Patient: Where's the tumor?
7. Doctor: That's it
8. Patient: It's there? So when I saw it previously it was
9. about that size?
10. Doctor: It's only a couple of centimetres most
11. Patient: As small as that? In fact it's smaller
12. than when I first came about walnut size
13. Doctor: It doesn't really say how big it was
14. initially
15. Patient: So it would be about like that wouldn't it?
16. Doctor: Yeah
17. Patient: It was on the lymph gland, is that the lymph
18. gland?
19. Doctor: No that's your bowel that's the tumor and
20. that's your bowel there and that's your aneurism
21. they've

```
22.     measured it for you 55 mm
```

In this sequence the results are delivered and carefully explicated with the inclusion of numerical data specifying the size of the cancerous growth (lines 1-3). This provides the patient with a precise frame of reference regarding the cancer. Interestingly in this case the patient, in response, asks to see the scan (line 4). The doctor then identifies the patient's lungs and heart providing the relevance for the proximal distance of the tumour from the lungs and heart. The patient (line 6) then asks about the location of the tumour, its size (lines 8-9, 11) and finally asks about the lymph gland (line 17-18).

**Table 3**

**2 patient initiated questions**

```
1. Doctor: The scan is very much the same erm there hasn't
2. been um any obvious problems there is quite a lot of
3. fibrosis still but that's to be expected so fibrosis is
4. healing and scarring
5. Patient: Where's that?
6. Doctor: Umm both in the air in the central areas you know
7. where all the problems originally were with the
8. swallowing so in the central area and in the tummy um (2.0)
9. °let me tell you exactly°
10.  Patient: Was that there before?
```

11. Doctor: They've said there's an increase in the volum
12. of that fibrosis
13. Patient: So basically that's scar tissue, is that what
14. you're saying?

This delivery of diagnostic news starts out almost as a type 1 delivery ('The scan is very much the same') but then goes on to point out that fibrosis is still present which is 'to be expected'. The doctor then explains the term fibrosis and the patient responds (line 5) by asking where it is. When the doctor explains the location of the fibrosis, the patient asks if it was present before. The doctor then refers to the report regarding the increase in fibrosis and the patient (line 13) then presents a gloss of the meaning of the news which is posed as a question.

**Table 4**

**5 patient initiated questions**

1. Doctor: So they've reported it as stable disease basically
2. nothing new to find there are some lymph nodes in your
3. pelvis but there's nothing different from that
4. Patient: Just where exactly?
5. Doctor: Did you want to look at your scan you [can
6. Patient: [Will I be
7. able to tell from that?
8. Doctor: Well we can look at it together
9. Patient: Yeah

10. Doctor: (3.0) So this is your pelvis
11. Patient: Right
12. Doctor: This is your right hip and that is your left
13. hip=
14. Patient: =Mhm
15. Doctor: And then you've got some lymph nodes that are
16. predominantly on the on the right hand side
17. Patient: Yes right so the other side is what they
18. should look like is it?
19. Doctor: Yeah you've got some tiny lymph nodes there
20. they're normally a centimeter and a half is as big as
21. you'd expect them to be normally
22. Patient: Right
23. Doctor: You have got some higher up as well
24. Patient: So that's more into the tummy?
25. Doctor: Yeah
26. Patient: Dya think it is possible that thee enlarged
27. (.) lymph nodes could be (0.5) pressing on a ne::rve
28. [or
29. Doctor: [Sometimes they can do ya ya

The diagnostic news in this delivery specifies the fact that there 'are some lymph nodes'. In response the patient asks 'where' exactly' (line 6). The doctor then asks the patient if they would like to look at their scan. Interestingly the patient's next question ('will I be able to tell from

that'?) at line 7 manifests the knowledge-competence gap between doctors and patients. This may partly account for why doctors do not always invite patients to look at scan/x-ray results and why patients do not always ask to see them when they are available. The doctor's response ('we can look at it together') bridges this gap by inviting the patient to examine the scan jointly allowing the doctor to identify, for the patient, key anatomical structures whilst also allowing the patient to inquire further.

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 2 delivery. In these sequences the results are delivered alongside a clinical assessment which either includes a numerical reading or further explication of the findings. These features appear to be interpreted by patients as accommodative of their opinion and understanding. An important consequence of this is higher levels of patient involvement including more patient initiated questions.

**Discussion**

In the main, consultations covered topics such as treatment, the progression of the cancer itself and the symptoms experienced by the patient. Not all topics were addressed in every consultation and doctors varied in how they dealt with each topic. We found that generally patients' actual levels of involvement in the consultation were relatively low and patients varied in how active they were in seeking information. We also found that, on the whole, patients seemed disinclined to ask questions or show communication behaviours designed to elicit information. This finding

is consistent with much earlier research into this topic.[6,17]

In relation to discussions of test results between doctor and patient, the data appear to indicate that there may be a connection between the way in which the results are delivered and the occurrence of patient initiated direct questions. That is to say, the plainer announcement of diagnostic results ('your scan is fine' - Type 1), which does not include sharing the diagnostic evidence projects a more paternalistic approach implicit in which, the patient is expected to accept the diagnostic judgement of the doctor. It is also characterised by a general explanation of the results which is reflected in the general response provided by the patient.[19] In contrast the Type 2 delivery is much more accommodative of patient input. Moreover, the invocation of the scan or the x-ray, where appropriate, appears to be significant in encouraging patient involvement and consequently patient initiated direct questions. Incorporating and explaining the evidence appears to be interpreted by patients as an opportunity to contribute to the consultation and establish their information needs in an environment within which the patient's queries/opinions are welcomed. Unless the patient has specifically requested not to see scans or x-rays, this would appear to be an effective way of encouraging patient involvement generally and increasing levels of patient question asking. Consequently, patients are then able to establish and satisfy their information needs in a timely and effective way.

In cases where patients did ask more questions, there was no significant increase in consultation length and no patient refused the offer of looking at examination results. The examples presented above were carefully selected because they display the most marked variation in consultation style highlighting clear contrasts between the two types of delivery.

A number of different types of intervention have been used in cancer care to help facilitate patient involvement. For example, question prompt lists have been used quite widely, but their actual implementation in consultations is not always straightforward and their rates of success do vary.[15] Moreover, we found in our study, that even when patients entered the consultation with question lists, they often left the consultation without having asked the questions they came prepared for.

The finding that when the doctor elaborates or explicates findings from the evidence, this can increase levels of patient involvement has been identified previously in a study of primary care consultations. [20] Clearly there are important differences between an oncology consultation and a primary care consultation. However, in relation to consulting behaviours, in both settings there appear to be striking similarities. That is to say, careful explication of diagnostic findings can encourage patient involvement such as, in this case, question asking, which in turn can enable patients to establish their information needs. Further research in this are demands a closer investigation of what Frankel[9] has described as the 'presuppositional grounds upon which the communication situation itself rests'. This would then allow us to identify other consulting behaviours doctors can utilise to encourage patient involvement.

There may be a number of reasons why patients are disinclined to ask questions following the 'your scan result is fine' type of announcement. The minimal responses identified may not actually be conditioned solely by the type of announcement of test results but may also be a consequence of patient preference or information needs at that particular moment. As noted, in

Type 1, table 4 the patient targets back on a general assessment of the echocardiogram as 'okay'. This clearly merits further empirical investigation.

**Conclusion**

Currently there is good research evidence indicating that patient initiated question asking should be encouraged. Doctors need to be able to encourage patient question asking to ensure that patients have at their disposal an important means through which they can determine and express their information needs. This study confirms the findings from previous studies showing that levels of patient initiated questions in Oncology are relatively low. Our study suggests that patient initiated question asking can be encouraged through timely and deliberate information giving which incorporates and explanation and display of test results. The findings at this stage are only suggestive and further exploration is required to establish their actual significance. Studies which involve closer examination of the actual interactional episodes between doctors and patients are required to provide a deeper understanding of patient initiated questions and the situational variables which may influence them.

.

## References


1. Butow P.N., Maclean M, Dunn S.M., Tatersall M.H.N., Boyer M.J. The dynamics of change: Cancer patients' preferences for information, involvement and support. Annals of Oncology 1997; 8: 857-863.
2. Gattellari M, Butow P.N., Tattersall M.H.N. Sharing decisions in cancer care. Social Science and Medicine 2001; 52: 1865-1878.
3. Leydon G.M., Boulton M, Moynihan C, Jones A, Mossman J, Boudioni M, et al. Cancer patients' information needs and information seeking behaviour: in-depth interview study. BMJ 2000; 320: 909-913.
4. Jenkins V., Fallowfield L., Saul J. Information needs of patients with cancer: results from a large study in UK cancer centres. British Journal of Cancer 2001; 84: 48-51.
5. Cox A., Jenkins V., Catt S., Langridge C., and Fallowfield L. Information needs and experiences: An audit of UK cancer patients. European Journal of Oncology Nursing. 2006; Vol. 10 Issue 4 263-272.
6. Beisecker A.E. and Beisecker T.D. Patient information seeking behaviours when communicating with doctors. Medical Care. 1990; Vol. 28, No. 1: 19-28
7. Cegala D, Marinelli T and Post D. The effect of patient communication skills training on compliance. Archives of Family Medicine. 2000; 9: 957-964.
8. Street R.L. and Millay B. Analysing patient participation in medical encounters. Health Communication. 2001; Vol. 13, Issue 1: 61-73

9. Frankel R, Talking in interviews: a dispreference for patient initiated questions in physician-patient encounters. In Psathas G, (ed.) Interaction Competence. Lanham, MD: University Press of America, 1990: 231-261

10. Cegala D, Street R.L., and Clinch R.C. The impact of patient participation on physicians' information provision during a primary care medical interview. Health Communication, 2007; Vol. 21, Issue 2: 177-185.

11. Butow P.N. et al. Oncologists reactions to cancer patients' verbal cues. Psycho-oncology. Vol. 11, Issue 1 2002; 47-58.

12. Eggly S. et al. Information seeking during "bad news" oncology interactions: Question asking by patients and their companions. Social Science and Medicine, 2006; 63: 2974-2985.

13. Eggly S. et al. Variation in question asking during cancer clinical interactions: A potential source of disparities in access to information. Patient Education and Counselling, 2011; Vol. 82, Issue 1: 63-68.

14. Brown R, Butow PN, Boyer MJ and Tatersall MHN. Promoting patient participation in the cancer consultation: evaluation of a prompt sheet and coaching in question asking. British Journal of Cancer 1999; Vol. 80: 242–248

15. Dimoska A, Tattersall M.H.N, Butow PN, Shepherd H. Can a "prompt list" empower cancer patients to ask relevant questions. Cancer 2008; Vol. 113, Issue 2: 225-237.

16. Butow PN, Dunn SM, Tattersall MHN, and Jones QJ. Computer-based interaction analysis of the cancer consultation. British Journal of Cancer 1995; Vol. 71: 1115-1121.

17. Street RL Information giving in medical consultations: The influence of patients' communicative styles and personal characteristics. Social Science and Medicine 1991; Vol 32. Issue 5: 541-548.

18. Street RL, Gordon HS, Ward MM, Krupat E, Kravitz RL. Patient participation in medical consultations: Why some patients are more involved than others. Medical Care 2005; Vol 43, No. 10: 960-969.

19. Collins S, Drew P, Watt I, and Entwistle V. 'Unilateral' and 'bilateral' practitioner approaches in decision-making about treatment. Social Science and Medicine 2005; 61: 2611-2627.

20. Perakyla A, Communicating and responding to diagnosis in Heritage J, and Maynard D. (eds.) Communication in Medical Care. 2006: 214-247.

21. Pomerantz A, and E. Sean Rintel. Practices for reporting and responding to test results during medical consultations: enacting the roles of paternalism and independent expertise. Discourse Studies 2004; Vol. 6 (1): 9-26.

22. Heritage J, and Maynard D. Communication in Medical Care: Interaction between Primary Care Physicians and Patients. 2006. Cambridge: Cambridge University Press.

## Copyright/licence for publication



## Competing interests

All authors have completed the ICMJE uniform disclosure form at www.icmje.org/coi_disclosure.pdf (available on request from the corresponding author) and declare: no support from any organisation for the submitted work; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years; no other relationships or activities that could appear to have influenced the submitted work."

## Contributorship statement

All authors contributed to the research study. As PI AT led the study design with contributions from GM and LF. GM and LF led the data collection and analysis with contributions from AT. The first draft of the paper was prepared by GM and then subsequently all authors contributed to data interpretation and revisions to the manuscript. All authors had full access to the data derived from the study and can take full responsibility for the integrity of the data and the accuracy of the data analysis.

## Data sharing

There is no additional data available

## Ethics approval

This paper is an outcome from a study funded by the NIHR Research for Patient Benefit Programme. The funding body did not partake in the design of the study, collection, analysis and interpretation of data, writing and submission of the article for publication. The study received ethical approval from the Nottingham research ethics committee 2 ID: 09/H0408/34. All participants in the study gave informed consent before taking part. All authors are independent

from the funding body. Each had had full access to all of the data in the study and can take responsibility for the integrity of the data and the accuracy of the data analysis

This paper presents independent research funded by the National Institute for Health Research (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number PB-PG-0807-14122). The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health.

# Please wait...

If this message is not eventually replaced by the proper contents of the document, your PDF viewer may not be able to display this type of document.

You can upgrade to the latest version of Adobe Reader for Windows®, Mac, or Linux® by visiting http://www.adobe.com/products/acrobat/readstep2.html.

For more assistance with Adobe Reader visit http://www.adobe.com/support/products/acrreader.html.

# Please wait...

If this message is not eventually replaced by the proper contents of the document, your PDF viewer may not be able to display this type of document.

You can upgrade to the latest version of Adobe Reader for Windows®, Mac, or Linux® by visiting http://www.adobe.com/go/reader_download.

For more assistance with Adobe Reader visit http://www.adobe.com/go/acrreader.

# Please wait...

If this message is not eventually replaced by the proper contents of the document, your PDF viewer may not be able to display this type of document.

You can upgrade to the latest version of Adobe Reader for Windows®, Mac, or Linux® by visiting http://www.adobe.com/go/reader_download.

For more assistance with Adobe Reader visit http://www.adobe.com/go/acrreader.

# Patient initiated questions: how can doctors encourage them and improve the consultation process? A qualitative study

| | |
|---|---|
| Journal: | *BMJ Open* |
| Manuscript ID: | bmjopen-2013-003112.R1 |
| Article Type: | Research |
| Date Submitted by the Author: | 30-May-2013 |
| Complete List of Authors: | Murtagh, Ged; Imperial College London, Surgery and Cancer<br>Furber, Lynn; University of Leicester, Department of Cancer Studies and Molecular Medicine<br>Thomas, Anne; Leicester Royal Infirmary, Department of Cancer Studies and Molecular Medicine |
| Primary Subject Heading: | Communication |
| Secondary Subject Heading: | Oncology |
| Keywords: | QUALITATIVE RESEARCH, ONCOLOGY, MEDICAL EDUCATION & TRAINING |
| | |

Note: The following files were submitted by the author for peer review, but cannot be converted to PDF. You must view these files (e.g. movies) online.

New_patients1.3approved[1].docm
Follow_up_patients1.3approved[1].docm

# Patient initiated questions: how can doctors encourage them and improve the consultation process? A qualitative study

Dr. GM Murtagh,[1] Dr L Furber[2] Dr. AL Thomas[3]

[1] Senior Lecturer in Clinical Communication, Division of Surgery, Department of Surgery and Cancer, St Mary's Campus, Imperial College London, South Wharf Road, London W2 1BL
g.murtagh@imperial.ac.uk

[2] Senior Nurse Researcher, Department of Cancer Studies and Molecular Medicine
Robert Knighton Clinical Sciences Building, University of Leicester, Leicester Royal Infirmary, Leicester LE2 7LX

[3] Reader and Consultant in Medical Oncology, Department of Cancer Studies and Molecular Medicine, Leicester Royal Infirmary
Leicester LE 1 5WW

**Correspondence to:**

Dr. G.M. Murtagh
Division of Surgery, Department of Surgery and Cancer, St Mary's Hospital,
Imperial College London, South Wharf Road, London W2 1BL
g.murtagh@imperial.ac.uk

**Manuscript word count** 3,505
**Abstract word count:** 237

## Abstract

**Objective:** To investigate the circumstances under which patients initiate direct questions in oncology consultations

**Design:** Conversation analysis of 47 consultations between oncologists and cancer patients

**Setting:** An oncology clinic at a teaching hospital in the East Midlands.

**Participants:** 16 Oncologists and 67 cancer patients

**Outcome measure:** Patient initiated direct questions

**Results:** On the whole patients' direct questions are designed to seek specific information regarding, the cancer itself, treatment options or their experience of symptoms. When patients do ask direct questions they typically follow the announcement of test results where some reference to the details of those results, is provided. More specifically, there appears to be a relation between showing the patient their scan/x-ray results, patient involvement and patient initiated direct questions. Higher levels of patient initiated direct questions were clustered around occasions where doctors provided information and explanations of test results (twelve consultations) sometimes with direct reference to scan or x-ray results (seven consultations).

**Conclusions:** This study highlights the importance of careful explanation of diagnostic evidence as a factor contributing to increased patient involvement. More specifically, the findings suggest

that, when appropriate, invoking diagnostic evidence (e.g. scan or x-ray results) is an effective way of increasing levels of patient question asking. Doctors need to be able to encourage patient question asking to ensure that patients have at their disposal an important means through which they can determine their information needs. Although these results come from a study of oncology consultations, this finding may be transferable to other clinical contexts.

## Article Summary

- In cancer care patient question asking can significantly influence the provision of information from the doctor.
- The paper extends the existing research into communication in cancer care by reporting on distinctive patterns of communication behaviour which influence, in this case, patient question asking.

## Key Messages

- The frequency of direct questions initiated by patients in oncology consultations is relatively low.
- Explicating test results alongside diagnostic evidence increases the chances of patient initiated direct questions in oncology consultations.
- This finding has implications for understanding how doctors can encourage patient questions within cancer care and, potentially, other clinical settings.

## Strengths and Limitations of this study

- The strength of the study is that it targets actual instances of question asking behaviour in relation to other situational variables in the consultation.

- The study is limited by its sole reliance on audio recordings of consultations. Consequently, other aspects of social interaction, e.g. eye contact, bodily comportment etc which can also have a significant influence on the content of the consultation, have not been included.

## Introduction

One of the main problems oncologists face in the consultation is the difficulty of accurately gauging the patient's information needs.[1,2] Studies have examined patient preferences for information provision and involvement[1,3,4,5] and have shown, among other things, that patients do want specific information concerning their illness.[4,5] However, patients' information needs are not static and there can be significant variations between patients in terms of their preferences for the timing, content and detail of information they require. Such variations may change during the course of an illness and even during the course of a single consultation depending on the type of information a patient receives.[1] Consequently, patients' attempts to elicit information from doctors also varies. These contingencies indicate a real need to understand more about the conditions under which patients actively seek information and, more specifically, the kinds of communication behaviours patients use to seek out information. Among these behaviours, question asking is key, as it can be used as a basic form of information seeking.[6] When patients ask questions it allows them to shape their own levels of involvement[8] and handle the contingencies of information exchange.[9] In addition, patient question asking has been linked to improved information provision.[8,10] Moreover, patients who receive an answer to their question demonstrate better psychological adjustment following the consultation than those who ask questions but don't receive a response.[16, 17]

These findings still beg the question, how and when do patients ask questions? In the context of cancer care, studies have shown that direct questions (alongside indirect cues) occur most often during the treatment phase of the consultation[11]; that companions who accompany patients, tend to ask more questions than patients particularly in relation to treatment and diagnsosis[12]; that ethnic and racial differences between patients can reflect differences in levels of question asking and direct question asking[13]; that question prompt lists can encourage patient question asking particularly in relation to prognosis and diagnosis.[14,15]

These studies provide valuable direction in understanding some of the factors behind patient question asking in cancer care. However, there is still a lot that is unknown about the specific situational variables which underpin and shape patient question asking in relation to the doctor's communication behaviours. The extent to which patients initiate information seeking, in the first place, is often contingent on the doctor's communicative style. The import of this lies in the fact that when patients seek information (e.g. through asking questions), doctors typically respond in more informative and accommodative ways, [18] simply because patient questions are one of the ways in which patients establish their information needs. The purpose of this study was to capture the interactional and situational variables that occur alongside patient initiated questions to establish how and when patients are more inclined to initiate direct questions.

## Methods

The study was carried out in a large UK Cancer Centre. LF recruited patients (with different types of cancers) attending the oncology department (n=77) as well as a mix of oncology consultants and specialist registrars. Both newly diagnosed and follow up patients were recruited to ensure maximum variability in our sample group. Following each consultation patients were invited to complete a satisfaction questionnaire and interviews were conducted with the patients by LF shortly after their consultation. Patient consent was obtained before their consultation was recorded and before collecting questionnaire data.

We audio recorded 47 consultations which were then transcribed and analysed using conversation analysis.[22] 30 of those 47 consultations were selected for closer inspection as they demonstrated the strongest variation in delivery style and patient response. The paper reports on a sample from that selection of 30. Transcription and analysis was carried out by GM. Subsequent analyses were carried out by GM, AT and LF. Any disagreements regarding interpretation of the data were resolved through discussion and by revisiting the data. This paper reports on a sample from these consultations which were most strongly indicative of a general pattern between the doctor's communicative style and patient initiated direct questions. Inclusion Criteria: Patients over the age of eighteen, having been diagnosed with cancer, aware of their diagnosis and willing to participate in the study. Exclusion criteria: Any patient unable to consent for themselves, patients with a cognitive impairment and patients who do not speak fluent English.

## Analysis

This analysis involved examining the turn-by-turn construction of utterances between doctor and patient. This allowed us to identify the occasions where patients ask questions as well as the type of question e.g. if the question followed a prompt from the doctor or not. It also enabled us to target the link between the different ways in which test results were delivered and levels of patient initiated questions. For the purposes of analysis we defined a direct question as that which is initiated solely by the patient, without a verbal prompt from the doctor and which targets a specific topic.

Audio recordings of the oncology consultations were subjected to repeated listening and were then transcribed and analysed using conversation analysis, a method of analysis which details characteristics of speech exchange including pauses, pace and intonation etc (the transcription symbols used to indicate these characteristics are provided in table 1). The consultations were examined with a view to identifying some of the systematic and recurrent properties of patient question asking to see if that would provide further direction in improving consultation practice. Analysis with this level of detail allowed us to unpack the exchanges and to identify typical as well as variable features of doctor and patient talk. For example, we started to notice how variations in the delivery format of test results can shape the patient's response and more specifically influence their levels of question asking.

**Transcription symbols**

| | |
|---|---|
| º º | Talk marked by the degree sound indicates words that are softly spoken |
| (.) | A full stop in brackets indicates a micro pause |
| (1.0), (0.5) | indicates silence in seconds and tenths of seconds |
| [Okay | |
| [Yes | Talk which is preceded by a square bracket indicates overlap in speech between two different speakers |
| = | Talk marked with the equals sign at the end of one line and the beginning of another indicates no pause between the end of one utterance and the start of another |



## Results

Our focussed sample of 30 consultations in total came to 451.30 mins, just over 7.5 hours of consultation time with the average length of the consultation at 15.04 mins. In 7 out of the 30 consultations (just under 60 mins of consultation time) the patients did not ask any questions. In the remaining 23 consultations there were 76 instances of patients asking questions (avg. 2.5 direct patient questions per consultation). However patients' questions arose in different ways. For example, in 5 out of those 23 consultations (22%) patients' questions came at the end (within 3-4 mins of the end of the consultation) again following a prompt from the doctor. In 6 out of the 23 consultations (26%) there is evidence of indirect or embedded questions arising at different

junctures of the consultation following a prompt from the doctor. In 12 of the 23 consultations, (52%) patient initiated direct questions occur specifically in relation to discussion of test results. In 7 of these 12 consultations (58%) patient initiated question asking occurs following a careful explanation of test results and diagnostic evidence e.g. the doctor's use of scan or x-rays. In only two consultations did the patient decline to ask a question following an invitation to do so from the doctor.

We noted a number of variations in the way in which doctors deliver test results. Our main finding, however, is that patients are more inclined to initiate direct questions when doctors deliver results with direct reference to the diagnostic evidence e.g. x-rays or scans. To exemplify this we identified two types of information delivery each resulting in different types of patient response, the most marked difference being levels of patient initiated question asking. In delivery type 1, test results were delivered in a very general way without elaboration (**Restricted delivery** - e.g. 'your scan results are fine'). With this type of delivery patient initiated questions were absent or minimal. In delivery type 2 (**Elaborate delivery** - 'your scan shows that...') the doctor elaborated or explained the test results sometimes invoking the scan or the x-ray to do so. This type of delivery typically positively influenced levels of patient involvement in the consultation and prompted more patient initiated direct questions and consequently more information provision from the doctor.

**Restricted delivery**

**Table 1**

**0 patient initiated questions**

1. Doctor: The CT scan result is here (0.5) and that was
2. basically normal erm nothing to suggest any new no new
3. glands you have got some changes on your erm (4.0) lungs
4. from(.) previous radiotherapy (0.5)uhm (1.5) so that's your
5. CT scan and I'm just trying to find the (0.5) lung function
6. tests(.) when did you have those done
7. Patient: (2.0) had them done
8. Husband: Two weeks ago

**Table 2**

**0 initiated patient questions**

1. Doctor: Okay (.) um (0.5) scan result was fine
2. Patient: Good
3. Doctor: Good okay an everything's stable on the in the
4. bones
5. Patient: Right

**Table 3**

**0 patient questions**

1. Doctor: Your scan shows everything is the same
2. Patient: Good
3. Doctor: So that's very good

**Table 4**

**1 patient initiated question**

1. Doctor: And you've had an echocardiogram of your heart an
2. that's all fine
3. Patient: Is it [okay
4. Doctor: [you had that done on?
5. Patient: °Last Friday°
6. Doctor: Last Friday that's all fine (.) no problems so
7. that's good news could I er examine you

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 1 delivery. In each case the results are delivered in a general, non-specific way characterised by a general clinical assessment, 'fine', 'normal' or 'no change'. In each case this type of delivery

produces a minimal response from the patient. It seems that this is partly to do with the fact that the general delivery projects a paternalistic approach where the doctor presents his/her interpretation of the results as the authoritative one, without any specific reference to further details of the findings.[21] Consequently, the patient is invited to accept the diagnostic judgement of the doctor and the general, non-specific explanation of the results is reflected in the general, non-specific response provided by the patient.[19] In almost a third of the sample, apart from the sequence in table 4, the patient does not question or inquire further into the results following the type 1 delivery. In table 4 the patient does ask a question, but again this is presented in a general form 'is it okay?' again reflecting the general way in which the results of the echocardiogram is presented. However, later on following a physical examination the patient targets back on this assessment, after a physical examination, following a prompt from the doctor.

1. Doctor: Is there anything you wanted to ask at all?
2. Patient: I did want to ask about my heart function
3. Doctor: Ya sure
4. Patient: I know you said the echocardiograms are oka:y
5. Doctor: Yes
6. Patient: but has it (.) erm deteriorated at all[through
7. Doctor: [no no

**Elaborate delivery**

**Table 1**

**1patient initiated question**

1. Doctor: The head scan, the CT and the MRI show that there
2. is something in the bones but what is unusual is that it
3. seems to be more on the right hand side than the left and I
4. think it was the left eye you were having problems with?
5. Patient: (0.5) Don't they cross?
6. Doctor: Well sometimes if it's more of a visual problem
7. they do cross yeah

In this sequence there are two distinctive features which appear to shape the patient's response. Firstly, the doctor delivers the findings from the scan and produces an expression of uncertainty regarding which eye the patient was having problems with. Secondly, there is a half second pause following the delivery which not only provides the patient with the opportunity to respond but also scope to negotiate the nature of that response.

**Table 2**

**5 patient initiated questions**

1. Doctor: Your scan shows that things are very much the
2. same, maybe slightly bigger but literally by 4mm both in

3. the chest and in the bowel
4. Patient: Is it possible for me to see the scan?
5. Doctor: Yes, these are your lungs, that's your heart
6. Patient: Where's the tumor?
7. Doctor: That's it
8. Patient: It's there? So when I saw it previously it was
9. about that size?
10. Doctor: It's only a couple of centimetres most
11. Patient: As small as that? In fact it's smaller
12. than when I first came about walnut size
13. Doctor: It doesn't really say how big it was
14. initially
15. Patient: So it would be about like that wouldn't it?
16. Doctor: Yeah
17. Patient: It was on the lymph gland, is that the lymph
18. gland?
19. Doctor: No that's your bowel that's the tumor and
20. that's your bowel there and that's your aneurism
21. they've measured it for you 55 mm

In this sequence the results are delivered and carefully explicated with the inclusion of numerical data specifying the size of the cancerous growth (lines 1-3). This provides the patient with a precise frame of reference regarding the cancer. Interestingly in this case the patient, in response,

asks to see the scan (line 4). The doctor then identifies the patient's lungs and heart providing the relevance for the proximal distance of the tumour from the lungs and heart. The patient (line 6) then asks about the location of the tumour, its size (lines 8-9, 11) and finally asks about the lymph gland (line 17-18).

**Table 3**

**2 patient initiated questions**

```
1. Doctor: The scan is very much the same erm there hasn't
2. been um any obvious problems there is quite a lot of
3. fibrosis still but that's to be expected so fibrosis is
4. healing and scarring
5. Patient: Where's that?
6. Doctor: Umm both in the air in the central areas you know
7. where all the problems originally were with the
8. swallowing so in the central area and in the tummy um (2.0)
9. °let me tell you exactly°
10. Patient: Was that there before?
11. Doctor: They've said there's an increase in the volum
12. of that fibrosis
13. Patient: So basically that's scar tissue, is that what
14. you're saying?
```

This delivery of diagnostic news starts out almost as a type 1 delivery ('The scan is very much the same') but then goes on to point out that fibrosis is still present which is 'to be expected'. The doctor then explains the term fibrosis and the patient responds (line 5) by asking where it is. When the doctor explains the location of the fibrosis, the patient asks if it was present before. The doctor then refers to the report regarding the increase in fibrosis and the patient (line 13) then presents a gloss of the meaning of the news which is posed as a question.

**Table 4**

**5 patient initiated questions**

```
1. Doctor: So they've reported it as stable disease basically
2. nothing new to find there are some lymph nodes in your
3. pelvis but there's nothing different from that
4. Patient: Just where exactly?
5. Doctor: Did you want to look at your scan you [can
6. Patient:                                      [Will I be
7. able to tell from that?
8. Doctor: Well we can look at it together
9. Patient: Yeah
10. Doctor: (3.0) So this is your pelvis
11. Patient: Right
12. Doctor: This is your right hip and that is your left
13. hip=
14. Patient: =Mhm
```

15. Doctor: And then you've got some lymph nodes that are
16. predominantly on the on the right hand side
17. Patient: Yes right so the other side is what they
18. should look like is it?
19. Doctor: Yeah you've got some tiny lymph nodes there
20. they're normally a centimeter and a half is as big as
21. you'd expect them to be normally
22. Patient: Right
23. Doctor: You have got some higher up as well
24. Patient: So that's more into the tummy?
25. Doctor: Yeah
26. Patient: Dya think it is possible that thee enlarged
27. (.) lymph nodes could be (0.5) pressing on a ne::rve
28. [or
29. Doctor: [Sometimes they can do ya ya

The diagnostic news in this delivery specifies the fact that there 'are some lymph nodes'. In response the patient asks 'where' exactly' (line 6). The doctor then asks the patient if they would like to look at their scan. Interestingly the patient's next question ('will I be able to tell from that'?) at line 7 manifests the knowledge-competence gap between doctors and patients. This may partly account for why doctors do not always invite patients to look at scan/x-ray results and why patients do not always ask to see them when they are available. The doctor's response ('we can look at it together') bridges this gap by inviting the patient to examine the scan jointly

allowing the doctor to identify, for the patient, key anatomical structures whilst also allowing the patient to inquire further.

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 2 delivery. In these sequences the results are delivered alongside a clinical assessment which either includes a numerical reading or further explication of the findings. When results are delivered in this way, patients tend to engage with the doctor. An important consequence of this is higher levels of patient involvement including more patient initiated questions.

**Discussion**

In the main, consultations covered topics such as treatment, the progression of the cancer itself and the symptoms experienced by the patient. Not all topics were addressed in every consultation and doctors varied in how they dealt with each topic. We found that generally patients' actual levels of involvement in the consultation were relatively low and patients varied in how active they were in seeking information. We also found that, on the whole, patients seemed disinclined to ask questions or show communication behaviours designed to elicit information. This finding is consistent with much earlier research into this topic.[6,17]

In relation to discussions of test results between doctor and patient, the data appear to indicate that there may be a connection between the way in which the results are delivered and the occurrence of patient initiated direct questions. That is to say, the plainer announcement of

diagnostic results ('your scan is fine' - Type 1), which does not include sharing the diagnostic evidence projects a more paternalistic approach implicit in which, the patient is expected to accept the diagnostic judgement of the doctor. It is also characterised by a general explanation of the results which is reflected in the general response provided by the patient.[19] In contrast the Type 2 delivery is much more accommodative of patient input. Moreover, the invocation of the scan or the x-ray, where appropriate, appears to be significant in encouraging patient involvement and consequently patient initiated direct questions. Incorporating and explaining the evidence appears to be interpreted by patients as an opportunity to contribute to the consultation and establish their information needs in an environment within which the patient's queries/opinions are welcomed. Unless the patient has specifically requested not to see scans or x-rays, this would appear to be an effective way of encouraging patient involvement generally and increasing levels of patient question asking. Consequently, patients are then able to establish and satisfy their information needs in a timely and effective way.

In cases where patients did ask more questions, there was no significant increase in consultation length and no patient refused the offer of looking at examination results. The examples presented above were carefully selected because they display the most marked variation in consultation style highlighting clear contrasts between the two types of delivery.

A number of different types of intervention have been used in cancer care to help facilitate patient involvement. For example, question prompt lists have been used quite widely, but their actual implementation in consultations is not always straightforward and their rates of success do vary.[15] Moreover, we found in our study, that even when patients entered the consultation with

question lists, they often left the consultation without having asked the questions they came prepared for.

The finding that when the doctor elaborates or explicates findings from the evidence, this can increase levels of patient involvement has been identified previously in a study of primary care consultations. [20] Clearly there are important differences between an oncology consultation and a primary care consultation. However, in relation to consulting behaviours, in both settings there appear to be striking similarities. That is to say, careful explication of diagnostic findings can encourage patient involvement such as, in this case, question asking, which in turn can enable patients to establish their information needs. Further research in this are demands a closer investigation of what Frankel[9] has described as the 'presuppositional grounds upon which the communication situation itself rests'. This would then allow us to identify other consulting behaviours doctors can utilise to encourage patient involvement.

There may be a number of reasons why patients are disinclined to ask questions following the 'your scan result is fine' type of announcement. The minimal responses identified may not actually be conditioned solely by the type of announcement of test results but may also be a consequence of patient preference or information needs at that particular moment. As noted, in Type 1, table 4 the patient targets back on a general assessment of the echocardiogram as 'okay'. This clearly merits further empirical investigation.

## Conclusion

Currently there is good research evidence indicating that patient initiated question asking should be encouraged. Doctors need to be able to encourage patient question asking to ensure that patients have at their disposal an important means through which they can determine and express their information needs. This study confirms the findings from previous studies showing that levels of patient initiated questions in Oncology are relatively low. Our study suggests that patient initiated question asking can be encouraged through timely and deliberate information giving which incorporates an explanation and display of test results. The findings at this stage are only suggestive and further exploration is required to establish their actual significance. Studies which involve closer examination of the actual interactional episodes between doctors and patients are required to provide a deeper understanding of patient initiated questions and the situational variables which may influence them.

.

## References


1. Butow P.N., Maclean M, Dunn S.M., Tatersall M.H.N., Boyer M.J. The dynamics of change: Cancer patients' preferences for information, involvement and support. Annals of Oncology 1997; 8: 857-863.
2. Gattellari M, Butow P.N., Tattersall M.H.N. Sharing decisions in cancer care. Social Science and Medicine 2001; 52: 1865-1878.
3. Leydon G.M., Boulton M, Moynihan C, Jones A, Mossman J, Boudioni M, et al. Cancer patients' information needs and information seeking behaviour: in-depth interview study. BMJ 2000; 320: 909-913.
4. Jenkins V., Fallowfield L., Saul J. Information needs of patients with cancer: results from a large study in UK cancer centres. British Journal of Cancer 2001; 84: 48-51.
5. Cox A., Jenkins V., Catt S., Langridge C., and Fallowfield L. Information needs and experiences: An audit of UK cancer patients. European Journal of Oncology Nursing. 2006; Vol. 10 Issue 4 263-272.
6. Beisecker A.E. and Beisecker T.D. Patient information seeking behaviours when communicating with doctors. Medical Care. 1990; Vol. 28, No. 1: 19-28
7. Cegala D, Marinelli T and Post D. The effect of patient communication skills training on compliance. Archives of Family Medicine. 2000; 9: 957-964.
8. Street R.L. and Millay B. Analysing patient participation in medical encounters. Health Communication. 2001; Vol. 13, Issue 1: 61-73

9. Frankel R, Talking in interviews: a dispreference for patient initiated questions in physician-patient encounters. In Psathas G, (ed.) Interaction Competence. Lanham, MD: University Press of America, 1990: 231-261

10. Cegala D, Street R.L., and Clinch R.C. The impact of patient participation on physicians' information provision during a primary care medical interview. Health Communication, 2007; Vol. 21, Issue 2: 177-185.

11. Butow P.N. et al. Oncologists reactions to cancer patients' verbal cues. Psycho-oncology. Vol. 11, Issue 1 2002; 47-58.

12. Eggly S. et al. Information seeking during "bad news" oncology interactions: Question asking by patients and their companions. Social Science and Medicine, 2006; 63: 2974-2985.

13. Eggly S. et al. Variation in question asking during cancer clinical interactions: A potential source of disparities in access to information. Patient Education and Counselling, 2011; Vol. 82, Issue 1: 63-68.

14. Brown R, Butow PN, Boyer MJ and Tatersall MHN. Promoting patient participation in the cancer consultation: evaluation of a prompt sheet and coaching in question asking. British Journal of Cancer 1999; Vol. 80: 242–248

15. Dimoska A, Tattersall M.H.N, Butow PN, Shepherd H. Can a "prompt list" empower cancer patients to ask relevant questions. Cancer 2008; Vol. 113, Issue 2: 225-237.

16. Butow PN, Dunn SM, Tattersall MHN, and Jones QJ. Computer-based interaction analysis of the cancer consultation. British Journal of Cancer 1995; Vol. 71: 1115-1121.

17. Street RL Information giving in medical consultations: The influence of patients' communicative styles and personal characteristics. Social Science and Medicine 1991; Vol 32. Issue 5: 541-548.

18. Street RL, Gordon HS, Ward MM, Krupat E, Kravitz RL. Patient participation in medical consultations: Why some patients are more involved than others. Medical Care 2005; Vol 43, No. 10: 960-969.

19. Collins S, Drew P, Watt I, and Entwistle V. 'Unilateral' and 'bilateral' practitioner approaches in decision-making about treatment. Social Science and Medicine 2005; 61: 2611-2627.

20. Perakyla A, Communicating and responding to diagnosis in Heritage J, and Maynard D. (eds.) Communication in Medical Care. 2006: 214-247.

21. Pomerantz A, and E. Sean Rintel. Practices for reporting and responding to test results during medical consultations: enacting the roles of paternalism and independent expertise. Discourse Studies 2004; Vol. 6 (1): 9-26.

22. Heritage J, and Maynard D. Communication in Medical Care: Interaction between Primary Care Physicians and Patients. 2006. Cambridge: Cambridge University Press.

## Copyright/licence for publication



## Competing interests

All authors have completed the ICMJE uniform disclosure form at www.icmje.org/coi_disclosure.pdf (available on request from the corresponding author) and declare: no support from any organisation for the submitted work; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years; no other relationships or activities that could appear to have influenced the submitted work."

## Contributorship statement

All authors contributed to the research study. As PI AT led the study design with contributions from GM and LF. GM and LF led the data collection and analysis with contributions from AT. The first draft of the paper was prepared by GM and then subsequently all authors contributed to data interpretation and revisions to the manuscript. All authors had full access to the data derived from the study and can take full responsibility for the integrity of the data and the accuracy of the data analysis.

## Data sharing

There is no additional data available

## Ethics approval

This paper is an outcome from a study funded by the NIHR Research for Patient Benefit Programme. The funding body did not partake in the design of the study, collection, analysis and interpretation of data, writing and submission of the article for publication. The study received ethical approval from the Nottingham research ethics committee 2 ID: 09/H0408/34. All participants in the study gave informed consent before taking part. All authors are independent

from the funding body. Each had had full access to all of the data in the study and can take responsibility for the integrity of the data and the accuracy of the data analysis

This paper presents independent research funded by the National Institute for Health Research (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number PB-PG-0807-14122). The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health.

# Patient initiated questions: how can doctors encourage them and improve the consultation process? A qualitative study

Dr. GM Murtagh,[1] Dr L Furber[2] Dr. AL Thomas[3]

[1] Senior Lecturer in Clinical Communication, Division of Surgery, Department of Surgery and Cancer, St Mary's Campus, Imperial College London, South Wharf Road, London W2 1BL
g.murtagh@imperial.ac.uk

[2] Senior Nurse Researcher, Department of Cancer Studies and Molecular Medicine
Robert Knighton Clinical Sciences Building, University of Leicester, Leicester Royal Infirmary, Leicester LE2 7LX

[3] Reader and Consultant in Medical Oncology, Department of Cancer Studies and Molecular Medicine, Leicester Royal Infirmary
Leicester LE 1 5WW

**Correspondence to:**

Dr. G.M. Murtagh
Division of Surgery, Department of Surgery and Cancer, St Mary's Hospital,
Imperial College London, South Wharf Road, London W2 1BL
g.murtagh@imperial.ac.uk

**Manuscript word count** 3,505
**Abstract word count:** 237

## Abstract

**Objective:** To investigate the circumstances under which patients initiate direct questions in oncology consultations

**Design:** Conversation analysis of 47 consultations between oncologists and cancer patients

**Setting:** An oncology clinic at a teaching hospital in the East Midlands.

**Participants:** 16 Oncologists and 67 cancer patients

**Outcome measure:** Patient initiated direct questions

**Results:** On the whole patients' direct questions are designed to seek specific information regarding, the cancer itself, treatment options or their experience of symptoms. When patients do ask direct questions they typically follow the announcement of test results where some reference to the details of those results, is provided. More specifically, there appears to be a relation between showing the patient their scan/x-ray results, patient involvement and patient initiated direct questions. Higher levels of patient initiated direct questions were clustered around occasions where doctors provided information and explanations of test results (twelve consultations) sometimes with direct reference to scan or x-ray results (seven consultations).

**Conclusions:** This study highlights the importance of careful explanation of diagnostic evidence as a factor contributing to increased patient involvement. More specifically, the findings suggest

that, when appropriate, invoking diagnostic evidence (e.g. scan or x-ray results) is an effective way of increasing levels of patient question asking. Doctors need to be able to encourage patient question asking to ensure that patients have at their disposal an important means through which they can determine their information needs. Although these results come from a study of oncology consultations, this finding may be transferable to other clinical contexts.

## Article Summary

- In cancer care patient question asking can significantly influence the provision of information from the doctor.
- The paper extends the existing research into communication in cancer care by reporting on distinctive patterns of communication behaviour which influence, in this case, patient question asking.

## Key Messages

- The frequency of direct questions initiated by patients in oncology consultations is relatively low.
- Explicating test results alongside diagnostic evidence increases the chances of patient initiated direct questions in oncology consultations.
- This finding has implications for understanding how doctors can encourage patient questions within cancer care and, potentially, other clinical settings.

## Strengths and Limitations of this study

- The strength of the study is that it targets actual instances of question asking behaviour in relation to other situational variables in the consultation.

- The study is limited by its sole reliance on audio recordings of consultations. Consequently, other aspects of social interaction, e.g. eye contact, bodily comportment etc which can also have a significant influence on the content of the consultation, have not been included.

## Introduction

One of the main problems oncologists face in the consultation is the difficulty of accurately gauging the patient's information needs.[1,2] Studies have examined patient preferences for information provision and involvement[1,3,4,5] and have shown, among other things, that patients do want specific information concerning their illness.[4,5] However, patients' information needs are not static and there can be significant variations between patients in terms of their preferences for the timing, content and detail of information they require. Such variations may change during the course of an illness and even during the course of a single consultation depending on the type of information a patient receives.[1] Consequently, patients' attempts to elicit information from doctors also varies. These contingencies indicate a real need to understand more about the conditions under which patients actively seek information and, more specifically, the kinds of communication behaviours patients use to seek out information. Among these behaviours, question asking is key, as it can be used as a basic form of information seeking.[6] When patients ask questions it allows them to shape their own levels of involvement[8] and handle the contingencies of information exchange.[9] In addition, patient question asking has been linked to improved information provision.[8,10] Moreover, patients who receive an answer to their question demonstrate better psychological adjustment following the consultation than those who ask questions but don't receive a response.[16, 17]

These findings still beg the question, how and when do patients ask questions? In the context of cancer care, studies have shown that direct questions (alongside indirect cues) occur most often during the treatment phase of the consultation[11]; that companions who accompany patients, tend to ask more questions than patients particularly in relation to treatment and diagnsosis[12]; that ethnic and racial differences between patients can reflect differences in levels of question asking and direct question asking[13]; that question prompt lists can encourage patient question asking particularly in relation to prognosis and diagnosis.[14,15]

These studies provide valuable direction in understanding some of the factors behind patient question asking in cancer care. However, there is still a lot that is unknown about the specific situational variables which underpin and shape patient question asking in relation to the doctor's communication behaviours. The extent to which patients initiate information seeking, in the first place, is often contingent on the doctor's communicative style. The import of this lies in the fact that when patients seek information (e.g. through asking questions), doctors typically respond in more informative and accommodative ways, [18] simply because patient questions are one of the ways in which patients establish their information needs. The purpose of this study was to capture the interactional and situational variables that occur alongside patient initiated questions to establish how and when patients are more inclined to initiate direct questions.

## Methods

The study was carried out in a large UK Cancer Centre. LF recruited patients (with different types of cancers) attending the oncology department (n=77) as well as a mix of oncology consultants and specialist registrars. Both newly diagnosed and follow up patients were recruited to ensure maximum variability in our sample group. Following each consultation patients were invited to complete a satisfaction questionnaire and interviews were conducted with the patients by LF shortly after their consultation. **Patient consent was obtained before their consultation was recorded and before collecting questionnaire data.**

We audio recorded 47 consultations which were then transcribed and analysed using conversation analysis.[22] 30 of those 47 consultations were selected for closer inspection as they demonstrated the strongest variation in delivery style and patient response. The paper reports on a sample from that selection of 30. **Transcription and analysis was carried out by GM. Subsequent analyses were carried out by GM, AT and LF. Any disagreements regarding interpretation of the data were resolved through discussion and by revisiting the data. This paper reports on a sample from these consultations which were most strongly indicative of a general pattern between the doctor's communicative style and patient initiated direct questions. Inclusion Criteria: Patients over the age of eighteen, having been diagnosed with cancer, aware of their diagnosis and willing to participate in the study. Exclusion criteria: Any patient unable to consent for themselves, patients with a cognitive impairment and patients who do not speak fluent English.**

## Analysis

This analysis involved examining the turn-by-turn construction of utterances between doctor and patient. This allowed us to identify the occasions where patients ask questions as well as the type of question e.g. if the question followed a prompt from the doctor or not. It also enabled us to target the link between the different ways in which test results were delivered and levels of patient initiated questions. For the purposes of analysis we defined a direct question as that which is initiated solely by the patient, without a verbal prompt from the doctor and which targets a specific topic.

Audio recordings of the oncology consultations were subjected to repeated listening and were then transcribed and analysed using conversation analysis, a method of analysis which details characteristics of speech exchange including pauses, pace and intonation etc (the transcription symbols used to indicate these characteristics are provided in table 1). The consultations were examined with a view to identifying some of the systematic and recurrent properties of patient question asking to see if that would provide further direction in improving consultation practice. Analysis with this level of detail allowed us to unpack the exchanges and to identify typical as well as variable features of doctor and patient talk. For example, we started to notice how variations in the delivery format of test results can shape the patient's response and more specifically influence their levels of question asking.

**Transcription symbols**

| | |
|---|---|
| º º | Talk marked by the degree sound indicates words that are softly spoken |
| (.) | A full stop in brackets indicates a micro pause |
| (1.0), (0.5) | indicates silence in seconds and tenths of seconds |
| [Okay | |
| [Yes | Talk which is preceded by a square bracket indicates overlap in speech between two different speakers |
| = | Talk marked with the equals sign at the end of one line and the beginning of another indicates no pause between the end of one utterance and the start of another |



**Results**

Our focussed sample of 30 consultations in total came to 451.30 mins, just over 7.5 hours of consultation time with the average length of the consultation at 15.04 mins. In 7 out of the 30 consultations (just under 60 mins of consultation time) **the patients did not ask any questions**. In the remaining 23 consultations there were 76 instances of patients asking questions (avg. 2.5 direct patient questions per consultation). **However patients' questions arose in different ways. For example,** in 5 out of those 23 consultations (22%) patients' questions came at the end (within 3-4 mins of the end of the consultation) **again** following a prompt from the doctor. In 6 out of the 23 consultations (26%) there is evidence of indirect or embedded questions arising at

different junctures of the consultation following a prompt from the doctor. In 12 of the 23 consultations, (52%) patient initiated direct questions occur specifically in relation to discussion of test results. In 7 of these 12 consultations (58%) patient initiated question asking occurs following a careful explanation of test results and diagnostic evidence e.g. the doctor's use of scan or x-rays. In only two consultations did the patient decline to ask a question following an invitation to do so from the doctor.

We noted a number of variations in the way in which doctors deliver test results. Our main finding, however, is that patients are more inclined to initiate direct questions when doctors deliver results with direct reference to the diagnostic evidence e.g. x-rays or scans. To exemplify this we identified two types of information delivery each resulting in different types of patient response, the most marked difference being levels of patient initiated question asking. In delivery type 1, test results were delivered in a very general way without elaboration (**Restricted delivery** - e.g. 'your scan results are fine'). With this type of delivery patient initiated questions were absent or minimal. In delivery type 2 (**Elaborate delivery** - 'your scan shows that...') the doctor elaborated or explained the test results sometimes invoking the scan or the x-ray to do so. This type of delivery typically positively influenced levels of patient involvement in the consultation and prompted more patient initiated direct questions and consequently more information provision from the doctor.

**Restricted delivery**

**Table 1**

**0 patient initiated questions**

1. Doctor: The CT scan result is here (0.5) and that was
2. basically normal erm nothing to suggest any new no new
3. glands you have got some changes on your erm (4.0) lungs
4. from(.) previous radiotherapy (0.5)uhm (1.5) so that's your
5. CT scan and I'm just trying to find the (0.5) lung function
6. tests(.) when did you have those done
7. Patient: (2.0) had them done
8. Husband: Two weeks ago

**Table 2**

**0 initiated patient questions**

1. Doctor: Okay (.) um (0.5) scan result was fine
2. Patient: Good
3. Doctor: Good okay an everything's stable on the in the
4. bones
5. Patient: Right

**Table 3**

**0 patient questions**

1. Doctor: Your scan shows everything is the same
2. Patient: Good
3. Doctor: So that's very good

**Table 4**

**1 patient initiated question**

1. Doctor: And you've had an echocardiogram of your heart an
2. that's all fine
3. Patient: Is it [okay
4. Doctor: [you had that done on?
5. Patient: °Last Friday°
6. Doctor: Last Friday that's all fine (.) no problems so
7. that's good news could I er examine you

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 1 delivery. In each case the results are delivered in a general, non-specific way characterised by a general clinical assessment, 'fine', 'normal' or 'no change'. In each case this type of delivery

produces a minimal response from the patient. It seems that this is partly to do with the fact that the general delivery projects a paternalistic approach where the doctor presents his/her interpretation of the results as the authoritative one, without any specific reference to further details of the findings.[21] Consequently, the patient is invited to accept the diagnostic judgement of the doctor and the general, non-specific explanation of the results is reflected in the general, non-specific response provided by the patient.[19] In almost a third of the sample, apart from the sequence in table 4, the patient does not question or inquire further into the results following the type 1 delivery. In table 4 the patient does ask a question, but again this is presented in a general form 'is it okay?' again reflecting the general way in which the results of the echocardiogram is presented. However, later on following a physical examination the patient targets back on this assessment, after a physical examination, following a prompt from the doctor.

1. Doctor: Is there anything you wanted to ask at all?
2. Patient: I did want to ask about my heart function
3. Doctor: Ya sure
4. Patient: I know you said the echocardiograms are oka:y
5. Doctor: Yes
6. Patient: but has it (.) erm deteriorated at all[through
7. Doctor: [no no

**Elaborate delivery**

**Table 1**

**1patient initiated question**

1. Doctor: The head scan, the CT and the MRI show that there
2. is something in the bones but what is unusual is that it
3. seems to be more on the right hand side than the left and I
4. think it was the left eye you were having problems with?
5. Patient: (0.5) Don't they cross?
6. Doctor: Well sometimes if it's more of a visual problem
7. they do cross yeah

In this sequence there are two distinctive features which appear to shape the patient's response. Firstly, the doctor delivers the findings from the scan and produces an expression of uncertainty regarding which eye the patient was having problems with. Secondly, there is a half second pause following the delivery which not only provides the patient with the opportunity to respond but also scope to negotiate the nature of that response.

**Table 2**

**5 patient initiated questions**

1. Doctor: Your scan shows that things are very much the
2. same, maybe slightly bigger but literally by 4mm both in

3. the chest and in the bowel
4. Patient: Is it possible for me to see the scan?
5. Doctor: Yes, these are your lungs, that's your heart
6. Patient: Where's the tumor?
7. Doctor: That's it
8. Patient: It's there? So when I saw it previously it was
9. about that size?
10. Doctor: It's only a couple of centimetres most
11. Patient: As small as that? In fact it's smaller
12. than when I first came about walnut size
13. Doctor: It doesn't really say how big it was
14. initially
15. Patient: So it would be about like that wouldn't it?
16. Doctor: Yeah
17. Patient: It was on the lymph gland, is that the lymph
18. gland?
19. Doctor: No that's your bowel that's the tumor and
20. that's your bowel there and that's your aneurism
21. they've measured it for you 55 mm

In this sequence the results are delivered and carefully explicated with the inclusion of numerical data specifying the size of the cancerous growth (lines 1-3). This provides the patient with a precise frame of reference regarding the cancer. Interestingly in this case the patient, in response,

asks to see the scan (line 4). The doctor then identifies the patient's lungs and heart providing the relevance for the proximal distance of the tumour from the lungs and heart. The patient (line 6) then asks about the location of the tumour, its size (lines 8-9, 11) and finally asks about the lymph gland (line 17-18).

**Table 3**

**2 patient initiated questions**

```
1. Doctor: The scan is very much the same erm there hasn't
2. been um any obvious problems there is quite a lot of
3. fibrosis still but that's to be expected so fibrosis is
4. healing and scarring
5. Patient: Where's that?
6. Doctor: Umm both in the air in the central areas you know
7. where all the problems originally were with the
8. swallowing so in the central area and in the tummy um (2.0)
9. °let me tell you exactly°
10. Patient: Was that there before?
11. Doctor: They've said there's an increase in the volum
12. of that fibrosis
13. Patient: So basically that's scar tissue, is that what
14. you're saying?
```

This delivery of diagnostic news starts out almost as a type 1 delivery ('The scan is very much the same') but then goes on to point out that fibrosis is still present which is 'to be expected'. The doctor then explains the term fibrosis and the patient responds (line 5) by asking where it is. When the doctor explains the location of the fibrosis, the patient asks if it was present before. The doctor then refers to the report regarding the increase in fibrosis and the patient (line 13) then presents a gloss of the meaning of the news which is posed as a question.

**Table 4**

**5 patient initiated questions**

```
1. Doctor: So they've reported it as stable disease basically
2. nothing new to find there are some lymph nodes in your
3. pelvis but there's nothing different from that
4. Patient: Just where exactly?
5. Doctor: Did you want to look at your scan you [can
6. Patient:                                      [Will I be
7. able to tell from that?
8. Doctor: Well we can look at it together
9. Patient: Yeah
10. Doctor: (3.0) So this is your pelvis
11. Patient: Right
12. Doctor: This is your right hip and that is your left
13. hip=
14. Patient: =Mhm
```

15. Doctor: And then you've got some lymph nodes that are
16. predominantly on the on the right hand side
17. Patient: Yes right so the other side is what they
18. should look like is it?
19. Doctor: Yeah you've got some tiny lymph nodes there
20. they're normally a centimeter and a half is as big as
21. you'd expect them to be normally
22. Patient: Right
23. Doctor: You have got some higher up as well
24. Patient: So that's more into the tummy?
25. Doctor: Yeah
26. Patient: Dya think it is possible that thee enlarged
27. (.) lymph nodes could be (0.5) pressing on a ne::rve
28. [or
29. Doctor: [Sometimes they can do ya ya

The diagnostic news in this delivery specifies the fact that there 'are some lymph nodes'. In response the patient asks 'where' exactly' (line 6). The doctor then asks the patient if they would like to look at their scan. Interestingly the patient's next question ('will I be able to tell from that'?) at line 7 manifests the knowledge-competence gap between doctors and patients. This may partly account for why doctors do not always invite patients to look at scan/x-ray results and why patients do not always ask to see them when they are available. The doctor's response ('we can look at it together') bridges this gap by inviting the patient to examine the scan jointly

allowing the doctor to identify, for the patient, key anatomical structures whilst also allowing the patient to inquire further.

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 2 delivery. In these sequences the results are delivered alongside a clinical assessment which either includes a numerical reading or further explication of the findings. When results are delivered in this way, patients tend to engage with the doctor. An important consequence of this is higher levels of patient involvement including more patient initiated questions.

**Discussion**

In the main, consultations covered topics such as treatment, the progression of the cancer itself and the symptoms experienced by the patient. Not all topics were addressed in every consultation and doctors varied in how they dealt with each topic. We found that generally patients' actual levels of involvement in the consultation were relatively low and patients varied in how active they were in seeking information. We also found that, on the whole, patients seemed disinclined to ask questions or show communication behaviours designed to elicit information. This finding is consistent with much earlier research into this topic.[6,17]

In relation to discussions of test results between doctor and patient, the data appear to indicate that there may be a connection between the way in which the results are delivered and the occurrence of patient initiated direct questions. That is to say, the plainer announcement of

diagnostic results ('your scan is fine' - Type 1), which does not include sharing the diagnostic evidence projects a more paternalistic approach implicit in which, the patient is expected to accept the diagnostic judgement of the doctor. It is also characterised by a general explanation of the results which is reflected in the general response provided by the patient.[19] In contrast the Type 2 delivery is much more accommodative of patient input. Moreover, the invocation of the scan or the x-ray, where appropriate, appears to be significant in encouraging patient involvement and consequently patient initiated direct questions. Incorporating and explaining the evidence appears to be interpreted by patients as an opportunity to contribute to the consultation and establish their information needs in an environment within which the patient's queries/opinions are welcomed. Unless the patient has specifically requested not to see scans or x-rays, this would appear to be an effective way of encouraging patient involvement generally and increasing levels of patient question asking. Consequently, patients are then able to establish and satisfy their information needs in a timely and effective way.

In cases where patients did ask more questions, there was no significant increase in consultation length and no patient refused the offer of looking at examination results. The examples presented above were carefully selected because they display the most marked variation in consultation style highlighting clear contrasts between the two types of delivery.

A number of different types of intervention have been used in cancer care to help facilitate patient involvement. For example, question prompt lists have been used quite widely, but their actual implementation in consultations is not always straightforward and their rates of success do vary.[15] Moreover, we found in our study, that even when patients entered the consultation with

question lists, they often left the consultation without having asked the questions they came prepared for.

The finding that when the doctor elaborates or explicates findings from the evidence, this can increase levels of patient involvement has been identified previously in a study of primary care consultations. [20] Clearly there are important differences between an oncology consultation and a primary care consultation. However, in relation to consulting behaviours, in both settings there appear to be striking similarities. That is to say, careful explication of diagnostic findings can encourage patient involvement such as, in this case, question asking, which in turn can enable patients to establish their information needs. Further research in this are demands a closer investigation of what Frankel[9] has described as the 'presuppositional grounds upon which the communication situation itself rests'. This would then allow us to identify other consulting behaviours doctors can utilise to encourage patient involvement.

There may be a number of reasons why patients are disinclined to ask questions following the 'your scan result is fine' type of announcement. The minimal responses identified may not actually be conditioned solely by the type of announcement of test results but may also be a consequence of patient preference or information needs at that particular moment. As noted, in Type 1, table 4 the patient targets back on a general assessment of the echocardiogram as 'okay'. This clearly merits further empirical investigation.

## Conclusion

Currently there is good research evidence indicating that patient initiated question asking should be encouraged. Doctors need to be able to encourage patient question asking to ensure that patients have at their disposal an important means through which they can determine and express their information needs. This study confirms the findings from previous studies showing that levels of patient initiated questions in Oncology are relatively low. Our study suggests that patient initiated question asking can be encouraged through timely and deliberate information giving which incorporates an explanation and display of test results. The findings at this stage are only suggestive and further exploration is required to establish their actual significance. Studies which involve closer examination of the actual interactional episodes between doctors and patients are required to provide a deeper understanding of patient initiated questions and the situational variables which may influence them.

.

## References


1. Butow P.N., Maclean M, Dunn S.M., Tatersall M.H.N., Boyer M.J. The dynamics of change: Cancer patients' preferences for information, involvement and support. Annals of Oncology 1997; 8: 857-863.
2. Gattellari M, Butow P.N., Tattersall M.H.N. Sharing decisions in cancer care. Social Science and Medicine 2001; 52: 1865-1878.
3. Leydon G.M., Boulton M, Moynihan C, Jones A, Mossman J, Boudioni M, et al. Cancer patients' information needs and information seeking behaviour: in-depth interview study. BMJ 2000; 320: 909-913.
4. Jenkins V., Fallowfield L., Saul J. Information needs of patients with cancer: results from a large study in UK cancer centres. British Journal of Cancer 2001; 84: 48-51.
5. Cox A., Jenkins V., Catt S., Langridge C., and Fallowfield L. Information needs and experiences: An audit of UK cancer patients. European Journal of Oncology Nursing. 2006; Vol. 10 Issue 4 263-272.
6. Beisecker A.E. and Beisecker T.D. Patient information seeking behaviours when communicating with doctors. Medical Care. 1990; Vol. 28, No. 1: 19-28
7. Cegala D, Marinelli T and Post D. The effect of patient communication skills training on compliance. Archives of Family Medicine. 2000; 9: 957-964.
8. Street R.L. and Millay B. Analysing patient participation in medical encounters. Health Communication. 2001; Vol. 13, Issue 1: 61-73

9. Frankel R, Talking in interviews: a dispreference for patient initiated questions in physician-patient encounters. In Psathas G, (ed.) Interaction Competence. Lanham, MD: University Press of America, 1990: 231-261

10. Cegala D, Street R.L., and Clinch R.C. The impact of patient participation on physicians' information provision during a primary care medical interview. Health Communication, 2007; Vol. 21, Issue 2: 177-185.

11. Butow P.N. et al. Oncologists reactions to cancer patients' verbal cues. Psycho-oncology. Vol. 11, Issue 1 2002; 47-58.

12. Eggly S. et al. Information seeking during "bad news" oncology interactions: Question asking by patients and their companions. Social Science and Medicine, 2006; 63: 2974-2985.

13. Eggly S. et al. Variation in question asking during cancer clinical interactions: A potential source of disparities in access to information. Patient Education and Counselling, 2011; Vol. 82, Issue 1: 63-68.

14. Brown R, Butow PN, Boyer MJ and Tatersall MHN. Promoting patient participation in the cancer consultation: evaluation of a prompt sheet and coaching in question asking. British Journal of Cancer 1999; Vol. 80: 242–248

15. Dimoska A, Tattersall M.H.N, Butow PN, Shepherd H. Can a "prompt list" empower cancer patients to ask relevant questions. Cancer 2008; Vol. 113, Issue 2: 225-237.

16. Butow PN, Dunn SM, Tattersall MHN, and Jones QJ. Computer-based interaction analysis of the cancer consultation. British Journal of Cancer 1995; Vol. 71: 1115-1121.

17. Street RL Information giving in medical consultations: The influence of patients' communicative styles and personal characteristics. Social Science and Medicine 1991; Vol 32. Issue 5: 541-548.

18. Street RL, Gordon HS, Ward MM, Krupat E, Kravitz RL. Patient participation in medical consultations: Why some patients are more involved than others. Medical Care 2005; Vol 43, No. 10: 960-969.

19. Collins S, Drew P, Watt I, and Entwistle V. 'Unilateral' and 'bilateral' practitioner approaches in decision-making about treatment. Social Science and Medicine 2005; 61: 2611-2627.

20. Perakyla A, Communicating and responding to diagnosis in Heritage J, and Maynard D. (eds.) Communication in Medical Care. 2006: 214-247.

21. Pomerantz A, and E. Sean Rintel. Practices for reporting and responding to test results during medical consultations: enacting the roles of paternalism and independent expertise. Discourse Studies 2004; Vol. 6 (1): 9-26.

22. Heritage J, and Maynard D. Communication in Medical Care: Interaction between Primary Care Physicians and Patients. 2006. Cambridge: Cambridge University Press.

## Copyright/licence for publication



## Competing interests

All authors have completed the ICMJE uniform disclosure form at www.icmje.org/coi_disclosure.pdf (available on request from the corresponding author) and declare: no support from any organisation for the submitted work; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years; no other relationships or activities that could appear to have influenced the submitted work."

## Contributorship statement

All authors contributed to the research study. As PI AT led the study design with contributions from GM and LF. GM and LF led the data collection and analysis with contributions from AT. The first draft of the paper was prepared by GM and then subsequently all authors contributed to data interpretation and revisions to the manuscript. All authors had full access to the data derived from the study and can take full responsibility for the integrity of the data and the accuracy of the data analysis.

## Data sharing

There is no additional data available

## Ethics approval

This paper is an outcome from a study funded by the NIHR Research for Patient Benefit Programme. The funding body did not partake in the design of the study, collection, analysis and interpretation of data, writing and submission of the article for publication. The study received ethical approval from the Nottingham research ethics committee 2 ID: 09/H0408/34. All participants in the study gave informed consent before taking part. All authors are independent

from the funding body. Each had had full access to all of the data in the study and can take responsibility for the integrity of the data and the accuracy of the data analysis

This paper presents independent research funded by the National Institute for Health Research (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number PB-PG-0807-14122). The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health.

# Please wait...

If this message is not eventually replaced by the proper contents of the document, your PDF viewer may not be able to display this type of document.

You can upgrade to the latest version of Adobe Reader for Windows®, Mac, or Linux® by visiting http://www.adobe.com/products/acrobat/readstep2.html.

For more assistance with Adobe Reader visit http://www.adobe.com/support/products/acrreader.html.

# Please wait...

If this message is not eventually replaced by the proper contents of the document, your PDF viewer may not be able to display this type of document.

You can upgrade to the latest version of Adobe Reader for Windows®, Mac, or Linux® by visiting http://www.adobe.com/go/reader_download.

For more assistance with Adobe Reader visit http://www.adobe.com/go/acrreader.

# Please wait...

If this message is not eventually replaced by the proper contents of the document, your PDF viewer may not be able to display this type of document.

You can upgrade to the latest version of Adobe Reader for Windows®, Mac, or Linux® by visiting http://www.adobe.com/go/reader_download.

For more assistance with Adobe Reader visit http://www.adobe.com/go/acrreader.

BMJ open

# Patient initiated questions: how can doctors encourage them and improve the consultation process? A qualitative study



| | |
|---|---|
| Journal: | *BMJ Open* |
| Manuscript ID: | bmjopen-2013-003112.R2 |
| Article Type: | Research |
| Date Submitted by the Author: | 28-Jun-2013 |
| Complete List of Authors: | Murtagh, Ged; Imperial College London, Surgery and Cancer<br>Furber, Lynn; University of Leicester, Department of Cancer Studies and Molecular Medicine<br>Thomas, Anne; Leicester Royal Infirmary, Department of Cancer Studies and Molecular Medicine |
| Primary Subject Heading: | Communication |
| Secondary Subject Heading: | Oncology |
| Keywords: | QUALITATIVE RESEARCH, ONCOLOGY, MEDICAL EDUCATION & TRAINING |



Note: The following files were submitted by the author for peer review, but cannot be converted to PDF. You must view these files (e.g. movies) online.

New_patients1.3approved[1].docm
Follow_up_patients1.3approved[1].docm

# Patient initiated questions: how can doctors encourage them and improve the consultation process? A qualitative study

Dr. GM Murtagh,[1] Dr L Furber[2] Dr. AL Thomas[3]

[1] Senior Lecturer in Clinical Communication, Division of Surgery, Department of Surgery and Cancer, St Mary's Campus, Imperial College London, South Wharf Road, London W2 1BL
g.murtagh@imperial.ac.uk

[2] Senior Nurse Researcher, Department of Cancer Studies and Molecular Medicine
Robert Knighton Clinical Sciences Building, University of Leicester, Leicester Royal Infirmary, Leicester LE2 7LX

[3] Reader and Consultant in Medical Oncology, Department of Cancer Studies and Molecular Medicine, Leicester Royal Infirmary
Leicester LE 1 5WW

**Correspondence to:**

Dr. G.M. Murtagh
Division of Surgery, Department of Surgery and Cancer, St Mary's Hospital,
Imperial College London, South Wharf Road, London W2 1BL
g.murtagh@imperial.ac.uk

**Manuscript word count** 3,505
**Abstract word count:** 237

## Abstract

**Objective:** To investigate the circumstances under which patients initiate direct questions in oncology consultations

**Design:** Conversation analysis of 47 consultations between oncologists and cancer patients

**Setting:** An oncology clinic at a teaching hospital in the East Midlands.

**Participants:** 16 Oncologists and 67 cancer patients

**Outcome measure:** Patient initiated direct questions

**Results:** On the whole patients' direct questions are designed to seek specific information regarding, the cancer itself, treatment options or their experience of symptoms. When patients do ask direct questions they typically follow the announcement of test results where some reference to the details of those results, is provided. More specifically, there appears to be a relation between showing the patient their scan/x-ray results, patient involvement and patient initiated direct questions. Higher levels of patient initiated direct questions were clustered around occasions where doctors provided information and explanations of test results (twelve consultations) sometimes with direct reference to scan or x-ray results (seven consultations).

**Conclusions:** This study highlights the importance of careful explanation of diagnostic evidence as a factor contributing to increased patient involvement. More specifically, the findings suggest

that, when appropriate, invoking diagnostic evidence (e.g. scan or x-ray results) is an effective way of increasing levels of patient question asking. Doctors need to be able to encourage patient question asking to ensure that patients have at their disposal an important means through which they can determine their information needs. Although these results come from a study of oncology consultations, this finding may be transferable to other clinical contexts.

## Article Summary

- In cancer care patient question asking can significantly influence the provision of information from the doctor.
- The paper extends the existing research into communication in cancer care by reporting on distinctive patterns of communication behaviour which influence, in this case, patient question asking.

## Key Messages

- The frequency of direct questions initiated by patients in oncology consultations is relatively low.
- Explicating test results alongside diagnostic evidence increases the chances of patient initiated direct questions in oncology consultations.
- This finding has implications for understanding how doctors can encourage patient questions within cancer care and, potentially, other clinical settings.

## Strengths and Limitations of this study

- The strength of the study is that it targets actual instances of question asking behaviour in relation to other situational variables in the consultation.

- The study is limited by its sole reliance on audio recordings of consultations. Consequently, other aspects of social interaction, e.g. eye contact, bodily comportment etc which can also have a significant influence on the content of the consultation, have not been included.

## Introduction

One of the main problems oncologists face in the consultation is the difficulty of accurately gauging the patient's information needs.[1,2] Studies have examined patient preferences for information provision and involvement[1,3,4,5] and have shown, among other things, that patients do want specific information concerning their illness.[4,5] However, patients' information needs are not static and there can be significant variations between patients in terms of their preferences for the timing, content and detail of information they require. Such variations may change during the course of an illness and even during the course of a single consultation depending on the type of information a patient receives.[1] Consequently, patients' attempts to elicit information from doctors also varies. These contingencies indicate a real need to understand more about the conditions under which patients actively seek information and, more specifically, the kinds of communication behaviours patients use to seek out information. Among these behaviours, question asking is key, as it can be used as a basic form of information seeking.[6] When patients ask questions it allows them to shape their own levels of involvement[8] and handle the contingencies of information exchange.[9] In addition, patient question asking has been linked to improved information provision.[8,10] Moreover, patients who receive an answer to their question demonstrate better psychological adjustment following the consultation than those who ask questions but don't receive a response.[16, 17]

These findings still beg the question, how and when do patients ask questions? In the context of cancer care, studies have shown that direct questions (alongside indirect cues) occur most often during the treatment phase of the consultation[11]; that companions who accompany patients, tend to ask more questions than patients particularly in relation to treatment and diagnsosis[12]; that ethnic and racial differences between patients can reflect differences in levels of question asking and direct question asking[13]; that question prompt lists can encourage patient question asking particularly in relation to prognosis and diagnosis.[14,15]

These studies provide valuable direction in understanding some of the factors behind patient question asking in cancer care. However, there is still a lot that is unknown about the specific situational variables which underpin and shape patient question asking in relation to the doctor's communication behaviours. The extent to which patients initiate information seeking, in the first place, is often contingent on the doctor's communicative style. The import of this lies in the fact that when patients seek information (e.g. through asking questions), doctors typically respond in more informative and accommodative ways, [18] simply because patient questions are one of the ways in which patients establish their information needs. The purpose of this study was to capture the interactional and situational variables that occur alongside patient initiated questions to establish how and when patients are more inclined to initiate direct questions.

## Methods

The study was carried out in a large UK Cancer Centre. LF recruited patients (with different types of cancers) attending the oncology department (n=77) as well as a mix of oncology consultants and specialist registrars. Both newly diagnosed and follow up patients were recruited to ensure maximum variability in our sample group. Following each consultation patients were invited to complete a satisfaction questionnaire and interviews were conducted with the patients by LF shortly after their consultation. **Each of the interviews were analysed to identify common themes across the data until saturation was reached. Patient consent was obtained before their consultation was recorded and before collecting questionnaire data. This paper reports on the recordings of the consultation data only.**

We audio recorded 47 consultations which were then transcribed and analysed using conversation analysis,[22] a method of analysis which details characteristics of speech exchange including pauses, pace and intonation etc (the transcription symbols used to indicate these characteristics are provided in table 1). In each consultation we identified the number of patient initiated questions which arose. We then examined the location of these questions which allowed us to identify clusters around diagnostic news delivery. We also noted, however, that in other consultations patient initiated questions were minimal or absent on occasions of diagnostic news discussion. The led us to question if there was a relation between the doctor's communication behaviour and the patient's response when doctor and patient talked about test results. Using this as our focal point we identified 30 of the 47 consultations where the relation between style of diagnostic news delivery. (elaborate/restricted) and patient response/involvement (patient

initiated questions/no patient initiated questions) was most clear. The paper reports on a sample from that selection of 30. Transcription and analysis was carried out by GM. Subsequent analyses were carried out by GM, AT and LF. Any disagreements regarding interpretation of the data were resolved through discussion and by revisiting the data. Inclusion Criteria: Patients over the age of eighteen, having been diagnosed with cancer, aware of their diagnosis and willing to participate in the study. Exclusion criteria: Any patient unable to consent for themselves, patients with a cognitive impairment and patients who do not speak fluent English.

**Analysis**

For the purposes of analysis we defined a direct question as that which is initiated solely by the patient, without a verbal prompt ('Do you have any questions?') from the doctor and which targets a specific topic. The consultations were examined with a view to identifying some of the systematic and recurrent properties of delivering news of test results and the patient's response. More specifically, we examined how styles of news delivery shape patients' responses, in particular their levels of question asking.

**Transcription symbols**

| | |
|---|---|
| º º | Talk marked by the degree sound indicates words that are softly spoken |
| (.) | A full stop in brackets indicates a micro pause |
| (1.0), (0.5) | indicates silence in seconds and tenths of seconds |
| [Okay | |

| | |
|---|---|
| [Yes | Talk which is preceded by a square bracket indicates overlap in speech between two different speakers |
| = | Talk marked with the equals sign at the end of one line and the beginning of another indicates no pause between the end of one utterance and the start of another |

**Results**

Our focussed sample of 30 consultations in total came to 451.30 mins, just over 7.5 hours of consultation time with the average length of the consultation at 15.04 mins. In 7 out of the 30 consultations (just under 60 mins of consultation time) the patients did not ask any questions. In the remaining 23 consultations there were 76 instances of patients asking questions (avg. 2.5 direct patient questions per consultation). However patients' questions arose in different ways. For example, in 5 out of those 23 consultations (22%) patients' questions came at the end (within 3-4 mins of the end of the consultation) again following a prompt from the doctor. In 6 out of the 23 consultations (26%) there is evidence of indirect or embedded questions arising at different junctures of the consultation following a prompt from the doctor. In 12 of the 23 consultations, (52%) patient initiated direct questions occur specifically in relation to discussion of test results. In 7 of these 12 consultations (58%) patient initiated question asking occurs following a careful explanation of test results and diagnostic evidence e.g. the doctor's use of scan or x-rays. In only two consultations did the patient decline to ask a question following an invitation to do so from

the doctor.

We noted a number of variations in the way in which doctors deliver test results. Our main finding, however, is that patients are more inclined to initiate direct questions when doctors deliver results with direct reference to the diagnostic evidence e.g. x-rays or scans. To exemplify this we identified two types of information delivery each resulting in different types of patient response, the most marked difference being levels of patient initiated question asking. In delivery type 1, test results were delivered in a very general way without elaboration (Restricted delivery - e.g. 'your scan results are fine'). With this type of delivery patient initiated questions were absent or minimal. In delivery type 2 (Elaborate delivery - 'your scan shows that...') the doctor elaborated or explained the test results sometimes invoking the scan or the x-ray to do so. This type of delivery typically positively influenced levels of patient involvement in the consultation and prompted more patient initiated direct questions and consequently more information provision from the doctor.

**Restricted delivery**

**Table 1**

**0 patient initiated questions**

1. Doctor: The CT scan result is here (0.5) and that was
2. basically normal erm nothing to suggest any new no new
3. glands you have got some changes on your erm (4.0) lungs
4. from(.) previous radiotherapy (0.5)uhm (1.5) so that's your
5. CT scan and I'm just trying to find the (0.5) lung function
6. tests(.) when did you have those done
7. Patient: (2.0) had them done
8. Husband: Two weeks ago

**Table 2**

**0 initiated patient questions**

1. Doctor: Okay (.) um (0.5) scan result was fine
2. Patient: Good
3. Doctor: Good okay an everything's stable on the in the
4. bones
5. Patient: Right

**Table 3**

**0 patient questions**

1. Doctor: Your scan shows everything is the same
2. Patient: Good
3. Doctor: So that's very good

**Table 4**

**1 patient initiated question**

1. Doctor: And you've had an echocardiogram of your heart an
2. that's all fine
3. Patient: Is it [okay
4. Doctor: [you had that done on?
5. Patient: °Last Friday°
6. Doctor: Last Friday that's all fine (.) no problems so
7. that's good news could I er examine you

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 1 delivery. In each case the results are delivered in a general, non-specific way characterised by a general clinical assessment, 'fine', 'normal' or 'no change'. In each case this type of delivery produces a minimal response from the patient. It seems that this is partly to do with the fact that the general delivery projects a paternalistic approach where the doctor presents his/her interpretation of the results as the authoritative one, without any specific reference to further

details of the findings.[21] Consequently, the patient is invited to accept the diagnostic judgement of the doctor and the general, non-specific explanation of the results is reflected in the general, non-specific response provided by the patient.[19] In almost a third of the sample, apart from the sequence in table 4, the patient does not question or inquire further into the results following the type 1 delivery. In table 4 the patient does ask a question, but again this is presented in a general form 'is it okay?' again reflecting the general way in which the results of the echocardiogram is presented. However, later on following a physical examination the patient targets back on this assessment, after a physical examination, following a prompt from the doctor.

1. Doctor: Is there anything you wanted to ask at all?
2. Patient: I did want to ask about my heart function
3. Doctor: Ya sure
4. Patient: I know you said the echocardiograms are oka:y
5. Doctor: Yes
6. Patient: but has it (.) erm deteriorated at all[through
7. Doctor: [no no

**Elaborate delivery**

**Table 1**

**1patient initiated question**

1. Doctor: The head scan, the CT and the MRI show that there
2. is something in the bones but what is unusual is that it
3. seems to be more on the right hand side than the left and I
4. think it was the left eye you were having problems with?
5. Patient: (0.5) Don't they cross?
6. Doctor: Well sometimes if it's more of a visual problem
7. they do cross yeah

In this sequence there are two distinctive features which appear to shape the patient's response. Firstly, the doctor delivers the findings from the scan and produces an expression of uncertainty regarding which eye the patient was having problems with. Secondly, there is a half second pause following the delivery which not only provides the patient with the opportunity to respond but also scope to negotiate the nature of that response.

**Table 2**

**5 patient initiated questions**

1. Doctor: Your scan shows that things are very much the
2. same, maybe slightly bigger but literally by 4mm both in
3. the chest and in the bowel
4. Patient: Is it possible for me to see the scan?
5. Doctor: Yes, these are your lungs, that's your heart

6. Patient: Where's the tumor?
7. Doctor: That's it
8. Patient: It's there? So when I saw it previously it was
9. about that size?
10. Doctor: It's only a couple of centimetres most
11. Patient: As small as that? In fact it's smaller
12. than when I first came about walnut size
13. Doctor: It doesn't really say how big it was
14. initially
15. Patient: So it would be about like that wouldn't it?
16. Doctor: Yeah
17. Patient: It was on the lymph gland, is that the lymph
18. gland?
19. Doctor: No that's your bowel that's the tumor and
20. that's your bowel there and that's your aneurism
21. they've measured it for you 55 mm

In this sequence the results are delivered and carefully explicated with the inclusion of numerical data specifying the size of the cancerous growth (lines 1-3). This provides the patient with a precise frame of reference regarding the cancer. Interestingly in this case the patient, in response, asks to see the scan (line 4). The doctor then identifies the patient's lungs and heart providing the relevance for the proximal distance of the tumour from the lungs and heart. The patient (line 6)

then asks about the location of the tumour, its size (lines 8-9, 11) and finally asks about the lymph gland (line 17-18).

**Table 3**

**2 patient initiated questions**

```
1. Doctor: The scan is very much the same erm there hasn't
2. been um any obvious problems there is quite a lot of
3. fibrosis still but that's to be expected so fibrosis is
4. healing and scarring
5. Patient: Where's that?
6. Doctor: Umm both in the air in the central areas you know
7. where all the problems originally were with the
8. swallowing so in the central area and in the tummy um (2.0)
9. °let me tell you exactly°
10. Patient: Was that there before?
11. Doctor: They've said there's an increase in the volum
12. of that fibrosis
13. Patient: So basically that's scar tissue, is that what
14. you're saying?
```

This delivery of diagnostic news starts out almost as a type 1 delivery ('The scan is very much the same') but then goes on to point out that fibrosis is still present which is 'to be expected'. The doctor then explains the term fibrosis and the patient responds (line 5) by asking where it is.

When the doctor explains the location of the fibrosis, the patient asks if it was present before. The doctor then refers to the report regarding the increase in fibrosis and the patient (line 13) then presents a gloss of the meaning of the news which is posed as a question.

**Table 4**

**5 patient initiated questions**

```
1. Doctor: So they've reported it as stable disease basically
2. nothing new to find there are some lymph nodes in your
3. pelvis but there's nothing different from that
4. Patient: Just where exactly?
5. Doctor: Did you want to look at your scan you [can
6. Patient:                                      [Will I be
7. able to tell from that?
8. Doctor: Well we can look at it together
9. Patient: Yeah
10. Doctor: (3.0) So this is your pelvis
11. Patient: Right
12. Doctor: This is your right hip and that is your left
13. hip=
14. Patient: =Mhm
15. Doctor: And then you've got some lymph nodes that are
16. predominantly on the on the right hand side
17. Patient: Yes right so the other side is what they
```

18. should look like is it?
19. Doctor: Yeah you've got some tiny lymph nodes there
20. they're normally a centimeter and a half is as big as
21. you'd expect them to be normally
22. Patient: Right
23. Doctor: You have got some higher up as well
24. Patient: So that's more into the tummy?
25. Doctor: Yeah
26. Patient: Dya think it is possible that thee enlarged
27. (.) lymph nodes could be (0.5) pressing on a ne::rve
28. [or
29. Doctor: [Sometimes they can do ya ya

The diagnostic news in this delivery specifies the fact that there 'are some lymph nodes'. In response the patient asks 'where' exactly' (line 6). The doctor then asks the patient if they would like to look at their scan. Interestingly the patient's next question ('will I be able to tell from that'?) at line 7 manifests the knowledge-competence gap between doctors and patients. This may partly account for why doctors do not always invite patients to look at scan/x-ray results and why patients do not always ask to see them when they are available. The doctor's response ('we can look at it together') bridges this gap by inviting the patient to examine the scan jointly allowing the doctor to identify, for the patient, key anatomical structures whilst also allowing the patient to inquire further.

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 2 delivery. In these sequences the results are delivered alongside a clinical assessment which either includes a numerical reading or further explication of the findings. When results are delivered in this way, patients tend to engage with the doctor. An important consequence of this is higher levels of patient involvement including more patient initiated questions.

## Discussion

In the main, consultations covered topics such as treatment, the progression of the cancer itself and the symptoms experienced by the patient. Not all topics were addressed in every consultation and doctors varied in how they dealt with each topic. We found that generally patients' actual levels of involvement in the consultation were relatively low and patients varied in how active they were in seeking information. We also found that, on the whole, patients seemed disinclined to ask questions or show communication behaviours designed to elicit information. This finding is consistent with much earlier research into this topic.[6,17]

In relation to discussions of test results between doctor and patient, the data appear to indicate that there may be a connection between the way in which the results are delivered and the occurrence of patient initiated direct questions. That is to say, the plainer announcement of diagnostic results ('your scan is fine' - Type 1), which does not include sharing the diagnostic evidence projects a more paternalistic approach implicit in which, the patient is expected to accept the diagnostic judgement of the doctor. It is also characterised by a general explanation of

the results which is reflected in the general response provided by the patient.[19] In contrast the Type 2 delivery is much more accommodative of patient input. Moreover, the invocation of the scan or the x-ray, where appropriate, appears to be significant in encouraging patient involvement and consequently patient initiated direct questions. Incorporating and explaining the evidence appears to be interpreted by patients as an opportunity to contribute to the consultation and establish their information needs in an environment within which the patient's queries/opinions are welcomed. Unless the patient has specifically requested not to see scans or x-rays, this would appear to be an effective way of encouraging patient involvement generally and increasing levels of patient question asking. Consequently, patients are then able to establish and satisfy their information needs in a timely and effective way.

In cases where patients did ask more questions, there was no significant increase in consultation length and no patient refused the offer of looking at examination results. The examples presented above were carefully selected because they display the most marked variation in consultation style highlighting clear contrasts between the two types of delivery.

A number of different types of intervention have been used in cancer care to help facilitate patient involvement. For example, question prompt lists have been used quite widely, but their actual implementation in consultations is not always straightforward and their rates of success do vary.[15] Moreover, we found in our study, that even when patients entered the consultation with question lists, they often left the consultation without having asked the questions they came prepared for.

The finding that when the doctor elaborates or explicates findings from the evidence, this can increase levels of patient involvement has been identified previously in a study of primary care consultations. [20] Clearly there are important differences between an oncology consultation and a primary care consultation. However, in relation to consulting behaviours, in both settings there appear to be striking similarities. That is to say, careful explication of diagnostic findings can encourage patient involvement such as, in this case, question asking, which in turn can enable patients to establish their information needs. Further research in this are demands a closer investigation of what Frankel[9] has described as the 'presuppositional grounds upon which the communication situation itself rests'. This would then allow us to identify other consulting behaviours doctors can utilise to encourage patient involvement.

There may be a number of reasons why patients are disinclined to ask questions following the 'your scan result is fine' type of announcement. The minimal responses identified may not actually be conditioned solely by the type of announcement of test results but may also be a consequence of patient preference or information needs at that particular moment. As noted, in Type 1, table 4 the patient targets back on a general assessment of the echocardiogram as 'okay'. This clearly merits further empirical investigation.

**Conclusion**

Currently there is good research evidence indicating that patient initiated question asking should be encouraged. Doctors need to be able to encourage patient question asking to ensure that patients have at their disposal an important means through which they can determine and express their information needs. This study confirms the findings from previous studies showing that levels of patient initiated questions in Oncology are relatively low. Our study suggests that patient initiated question asking can be encouraged through timely and deliberate information giving which incorporates an explanation and display of test results. The findings at this stage are only suggestive and further exploration is required to establish their actual significance. Studies which involve closer examination of the actual interactional episodes between doctors and patients are required to provide a deeper understanding of patient initiated questions and the situational variables which may influence them.

.

## References


1. Butow P.N., Maclean M, Dunn S.M., Tatersall M.H.N., Boyer M.J. The dynamics of change: Cancer patients' preferences for information, involvement and support. Annals of Oncology 1997; 8: 857-863.
2. Gattellari M, Butow P.N., Tattersall M.H.N. Sharing decisions in cancer care. Social Science and Medicine 2001; 52: 1865-1878.
3. Leydon G.M., Boulton M, Moynihan C, Jones A, Mossman J, Boudioni M, et al. Cancer patients' information needs and information seeking behaviour: in-depth interview study. BMJ 2000; 320: 909-913.
4. Jenkins V., Fallowfield L., Saul J. Information needs of patients with cancer: results from a large study in UK cancer centres. British Journal of Cancer 2001; 84: 48-51.
5. Cox A., Jenkins V., Catt S., Langridge C., and Fallowfield L. Information needs and experiences: An audit of UK cancer patients. European Journal of Oncology Nursing. 2006; Vol. 10 Issue 4 263-272.
6. Beisecker A.E. and Beisecker T.D. Patient information seeking behaviours when communicating with doctors. Medical Care. 1990; Vol. 28, No. 1: 19-28
7. Cegala D, Marinelli T and Post D. The effect of patient communication skills training on compliance. Archives of Family Medicine. 2000; 9: 957-964.
8. Street R.L. and Millay B. Analysing patient participation in medical encounters. Health Communication. 2001; Vol. 13, Issue 1: 61-73

9. Frankel R, Talking in interviews: a dispreference for patient initiated questions in physician-patient encounters. In Psathas G, (ed.) Interaction Competence. Lanham, MD: University Press of America, 1990: 231-261

10. Cegala D, Street R.L., and Clinch R.C. The impact of patient participation on physicians' information provision during a primary care medical interview. Health Communication, 2007; Vol. 21, Issue 2: 177-185.

11. Butow P.N. et al. Oncologists reactions to cancer patients' verbal cues. Psycho-oncology. Vol. 11, Issue 1 2002; 47-58.

12. Eggly S. et al. Information seeking during "bad news" oncology interactions: Question asking by patients and their companions. Social Science and Medicine, 2006; 63: 2974-2985.

13. Eggly S. et al. Variation in question asking during cancer clinical interactions: A potential source of disparities in access to information. Patient Education and Counselling, 2011; Vol. 82, Issue 1: 63-68.

14. Brown R, Butow PN, Boyer MJ and Tatersall MHN. Promoting patient participation in the cancer consultation: evaluation of a prompt sheet and coaching in question asking. British Journal of Cancer 1999; Vol. 80: 242–248

15. Dimoska A, Tattersall M.H.N, Butow PN, Shepherd H. Can a "prompt list" empower cancer patients to ask relevant questions. Cancer 2008; Vol. 113, Issue 2: 225-237.

16. Butow PN, Dunn SM, Tattersall MHN, and Jones QJ. Computer-based interaction analysis of the cancer consultation. British Journal of Cancer 1995; Vol. 71: 1115-1121.

17. Street RL Information giving in medical consultations: The influence of patients' communicative styles and personal characteristics. Social Science and Medicine 1991; Vol 32. Issue 5: 541-548.

18. Street RL, Gordon HS, Ward MM, Krupat E, Kravitz RL. Patient participation in medical consultations: Why some patients are more involved than others. Medical Care 2005; Vol 43, No. 10: 960-969.

19. Collins S, Drew P, Watt I, and Entwistle V. 'Unilateral' and 'bilateral' practitioner approaches in decision-making about treatment. Social Science and Medicine 2005; 61: 2611-2627.

20. Perakyla A, Communicating and responding to diagnosis in Heritage J, and Maynard D. (eds.) Communication in Medical Care. 2006: 214-247.

21. Pomerantz A, and E. Sean Rintel. Practices for reporting and responding to test results during medical consultations: enacting the roles of paternalism and independent expertise. Discourse Studies 2004; Vol. 6 (1): 9-26.

22. Heritage J, and Maynard D. Communication in Medical Care: Interaction between Primary Care Physicians and Patients. 2006. Cambridge: Cambridge University Press.

## Copyright/licence for publication



## Competing interests

All authors have completed the ICMJE uniform disclosure form at www.icmje.org/coi_disclosure.pdf (available on request from the corresponding author) and declare: no support from any organisation for the submitted work; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years; no other relationships or activities that could appear to have influenced the submitted work."

## Contributorship statement

All authors contributed to the research study. As PI AT led the study design with contributions from GM and LF. GM and LF led the data collection and analysis with contributions from AT. The first draft of the paper was prepared by GM and then subsequently all authors contributed to data interpretation and revisions to the manuscript. All authors had full access to the data derived from the study and can take full responsibility for the integrity of the data and the accuracy of the data analysis.

## Data sharing

There is no additional data available

## Ethics approval

This paper is an outcome from a study funded by the NIHR Research for Patient Benefit Programme. The funding body did not partake in the design of the study, collection, analysis and interpretation of data, writing and submission of the article for publication. The study received ethical approval from the Nottingham research ethics committee 2 ID: 09/H0408/34. All participants in the study gave informed consent before taking part. All authors are independent

from the funding body. Each had had full access to all of the data in the study and can take responsibility for the integrity of the data and the accuracy of the data analysis

This paper presents independent research funded by the National Institute for Health Research (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number PB-PG-0807-14122). The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health.

# Patient initiated questions: how can doctors encourage them and improve the consultation process? A qualitative study

Dr. GM Murtagh,[1] Dr L Furber[2] Dr. AL Thomas[3]

[1] Senior Lecturer in Clinical Communication, Division of Surgery, Department of Surgery and Cancer, St Mary's Campus, Imperial College London, South Wharf Road, London W2 1BL
g.murtagh@imperial.ac.uk

[2] Senior Nurse Researcher, Department of Cancer Studies and Molecular Medicine
Robert Knighton Clinical Sciences Building, University of Leicester, Leicester Royal Infirmary, Leicester LE2 7LX

[3] Reader and Consultant in Medical Oncology, Department of Cancer Studies and Molecular Medicine, Leicester Royal Infirmary
Leicester LE 1 5WW

**Correspondence to:**

Dr. G.M. Murtagh
Division of Surgery, Department of Surgery and Cancer, St Mary's Hospital,
Imperial College London, South Wharf Road, London W2 1BL
g.murtagh@imperial.ac.uk

**Manuscript word count** 3,505
**Abstract word count:** 237

## Abstract

**Objective:** To investigate the circumstances under which patients initiate direct questions in oncology consultations

**Design:** Conversation analysis of 47 consultations between oncologists and cancer patients

**Setting:** An oncology clinic at a teaching hospital in the East Midlands.

**Participants:** 16 Oncologists and 67 cancer patients

**Outcome measure:** Patient initiated direct questions

**Results:** On the whole patients' direct questions are designed to seek specific information regarding, the cancer itself, treatment options or their experience of symptoms. When patients do ask direct questions they typically follow the announcement of test results where some reference to the details of those results, is provided. More specifically, there appears to be a relation between showing the patient their scan/x-ray results, patient involvement and patient initiated direct questions. Higher levels of patient initiated direct questions were clustered around occasions where doctors provided information and explanations of test results (twelve consultations) sometimes with direct reference to scan or x-ray results (seven consultations).

**Conclusions:** This study highlights the importance of careful explanation of diagnostic evidence as a factor contributing to increased patient involvement. More specifically, the findings suggest

that, when appropriate, invoking diagnostic evidence (e.g. scan or x-ray results) is an effective way of increasing levels of patient question asking. Doctors need to be able to encourage patient question asking to ensure that patients have at their disposal an important means through which they can determine their information needs. Although these results come from a study of oncology consultations, this finding may be transferable to other clinical contexts.

## Article Summary

- In cancer care patient question asking can significantly influence the provision of information from the doctor.
- The paper extends the existing research into communication in cancer care by reporting on distinctive patterns of communication behaviour which influence, in this case, patient question asking.

## Key Messages

- The frequency of direct questions initiated by patients in oncology consultations is relatively low.
- Explicating test results alongside diagnostic evidence increases the chances of patient initiated direct questions in oncology consultations.
- This finding has implications for understanding how doctors can encourage patient questions within cancer care and, potentially, other clinical settings.

## Strengths and Limitations of this study

- The strength of the study is that it targets actual instances of question asking behaviour in relation to other situational variables in the consultation.

- The study is limited by its sole reliance on audio recordings of consultations. Consequently, other aspects of social interaction, e.g. eye contact, bodily comportment etc which can also have a significant influence on the content of the consultation, have not been included.

## Introduction

One of the main problems oncologists face in the consultation is the difficulty of accurately gauging the patient's information needs.[1,2] Studies have examined patient preferences for information provision and involvement[1,3,4,5] and have shown, among other things, that patients do want specific information concerning their illness.[4,5] However, patients' information needs are not static and there can be significant variations between patients in terms of their preferences for the timing, content and detail of information they require. Such variations may change during the course of an illness and even during the course of a single consultation depending on the type of information a patient receives.[1] Consequently, patients' attempts to elicit information from doctors also varies. These contingencies indicate a real need to understand more about the conditions under which patients actively seek information and, more specifically, the kinds of communication behaviours patients use to seek out information. Among these behaviours, question asking is key, as it can be used as a basic form of information seeking.[6] When patients ask questions it allows them to shape their own levels of involvement[8] and handle the contingencies of information exchange.[9] In addition, patient question asking has been linked to improved information provision.[8,10] Moreover, patients who receive an answer to their question demonstrate better psychological adjustment following the consultation than those who ask questions but don't receive a response.[16, 17]

These findings still beg the question, how and when do patients ask questions? In the context of cancer care, studies have shown that direct questions (alongside indirect cues) occur most often during the treatment phase of the consultation[11]; that companions who accompany patients, tend to ask more questions than patients particularly in relation to treatment and diagnsosis[12]; that ethnic and racial differences between patients can reflect differences in levels of question asking and direct question asking[13]; that question prompt lists can encourage patient question asking particularly in relation to prognosis and diagnosis.[14,15]

These studies provide valuable direction in understanding some of the factors behind patient question asking in cancer care. However, there is still a lot that is unknown about the specific situational variables which underpin and shape patient question asking in relation to the doctor's communication behaviours. The extent to which patients initiate information seeking, in the first place, is often contingent on the doctor's communicative style. The import of this lies in the fact that when patients seek information (e.g. through asking questions), doctors typically respond in more informative and accommodative ways, [18] simply because patient questions are one of the ways in which patients establish their information needs. The purpose of this study was to capture the interactional and situational variables that occur alongside patient initiated questions to establish how and when patients are more inclined to initiate direct questions.

## Methods

The study was carried out in a large UK Cancer Centre. LF recruited patients (with different types of cancers) attending the oncology department (n=77) as well as a mix of oncology consultants and specialist registrars. Both newly diagnosed and follow up patients were recruited to ensure maximum variability in our sample group. Following each consultation patients were invited to complete a satisfaction questionnaire and interviews were conducted with the patients by LF shortly after their consultation. **Each of the interviews were analysed to identify common themes across the data until saturation was reached. Patient consent was obtained before their consultation was recorded and before collecting questionnaire data. This paper reports on the recordings of the consultation data only.**

We audio recorded 47 consultations which were then transcribed and analysed using conversation analysis,[22] a method of analysis which details characteristics of speech exchange including pauses, pace and intonation etc (the transcription symbols used to indicate these characteristics are provided in table 1). **In each consultation we identified the number of patient initiated questions which arose. We then examined the location of these questions which allowed us to identify clusters around diagnostic news delivery. We also noted, however, that in other consultations patient initiated questions were minimal or absent on occasions of diagnostic news discussion. The led us to question if there was a relation between the doctor's communication behaviour and the patient's response when doctor and patient talked about test results. Using this as our focal point we identified 30 of the 47 consultations where the relation between style of diagnostic news delivery.**

**(elaborate/restricted) and patient response/involvement (patient initiated questions/no patient initiated questions) was most clear.** The paper reports on a sample from that selection of 30. **Transcription and analysis was carried out by GM. Subsequent analyses were carried out by GM, AT and LF. Any disagreements regarding interpretation of the data were resolved through discussion and by revisiting the data. Inclusion Criteria: Patients over the age of eighteen, having been diagnosed with cancer, aware of their diagnosis and willing to participate in the study. Exclusion criteria: Any patient unable to consent for themselves, patients with a cognitive impairment and patients who do not speak fluent English.**

**Analysis**

For the purposes of analysis we defined a direct question as that which is initiated solely by the patient, without a verbal prompt ('Do you have any questions?') from the doctor and which targets a specific topic. The consultations were examined with a view to identifying some of the systematic and recurrent properties of delivering news of test results and the patient's response. More specifically, we examined how styles of news delivery shape patients' responses, in particular their levels of question asking.

**Transcription symbols**

| | |
|---|---|
| º º | Talk marked by the degree sound indicates words that are softly spoken |
| (.) | A full stop in brackets indicates a micro pause |

| | |
|---|---|
| (1.0), (0.5) | indicates silence in seconds and tenths of seconds |
| [Okay | |
| [Yes | Talk which is preceded by a square bracket indicates overlap in speech between two different speakers |
| = | Talk marked with the equals sign at the end of one line and the beginning of another indicates no pause between the end of one utterance and the start of another |

**Results**

Our focussed sample of 30 consultations in total came to 451.30 mins, just over 7.5 hours of consultation time with the average length of the consultation at 15.04 mins. In 7 out of the 30 consultations (just under 60 mins of consultation time) **the patients did not ask any questions**. In the remaining 23 consultations there were 76 instances of patients asking questions (avg. 2.5 direct patient questions per consultation). **However patients' questions arose in different ways. For example,** in 5 out of those 23 consultations (22%) patients' questions came at the end (within 3-4 mins of the end of the consultation) **again** following a prompt from the doctor. In 6 out of the 23 consultations (26%) there is evidence of indirect or embedded questions arising at different junctures of the consultation following a prompt from the doctor. In 12 of the 23 consultations, (52%) patient initiated direct questions occur specifically in relation to discussion of test results. In 7 of these 12 consultations (58%) patient initiated question asking occurs

following a careful explanation of test results and diagnostic evidence e.g. the doctor's use of scan or x-rays. In only two consultations did the patient decline to ask a question following an invitation to do so from the doctor.

We noted a number of variations in the way in which doctors deliver test results. Our main finding, however, is that patients are more inclined to initiate direct questions when doctors deliver results with direct reference to the diagnostic evidence e.g. x-rays or scans. To exemplify this we identified two types of information delivery each resulting in different types of patient response, the most marked difference being levels of patient initiated question asking. In delivery type 1, test results were delivered in a very general way without elaboration (**Restricted delivery** - e.g. 'your scan results are fine'). With this type of delivery patient initiated questions were absent or minimal. In delivery type 2 (**Elaborate delivery** - 'your scan shows that...') the doctor elaborated or explained the test results sometimes invoking the scan or the x-ray to do so. This type of delivery typically positively influenced levels of patient involvement in the consultation and prompted more patient initiated direct questions and consequently more information provision from the doctor.

**Restricted delivery**

**Table 1**

**0 patient initiated questions**

1. Doctor: The CT scan result is here (0.5) and that was
2. basically normal erm nothing to suggest any new no new
3. glands you have got some changes on your erm (4.0) lungs
4. from(.) previous radiotherapy (0.5)uhm (1.5) so that's your
5. CT scan and I'm just trying to find the (0.5) lung function
6. tests(.) when did you have those done
7. Patient: (2.0) had them done
8. Husband: Two weeks ago

**Table 2**

**0 initiated patient questions**

1. Doctor: Okay (.) um (0.5) scan result was fine
2. Patient: Good
3. Doctor: Good okay an everything's stable on the in the
4. bones
5. Patient: Right

**Table 3**

**0 patient questions**

1. Doctor: Your scan shows everything is the same
2. Patient: Good
3. Doctor: So that's very good

**Table 4**

**1 patient initiated question**

1. Doctor: And you've had an echocardiogram of your heart an
2. that's all fine
3. Patient: Is it [okay
4. Doctor: [you had that done on?
5. Patient: °Last Friday°
6. Doctor: Last Friday that's all fine (.) no problems so
7. that's good news could I er examine you

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 1 delivery. In each case the results are delivered in a general, non-specific way characterised by a general clinical assessment, 'fine', 'normal' or 'no change'. In each case this type of delivery produces a minimal response from the patient. It seems that this is partly to do with the fact that the general delivery projects a paternalistic approach where the doctor presents his/her interpretation of the results as the authoritative one, without any specific reference to further

details of the findings.[21] Consequently, the patient is invited to accept the diagnostic judgement of the doctor and the general, non-specific explanation of the results is reflected in the general, non-specific response provided by the patient.[19] In almost a third of the sample, apart from the sequence in table 4, the patient does not question or inquire further into the results following the type 1 delivery. In table 4 the patient does ask a question, but again this is presented in a general form 'is it okay?' again reflecting the general way in which the results of the echocardiogram is presented. However, later on following a physical examination the patient targets back on this assessment, after a physical examination, following a prompt from the doctor.

1. Doctor: Is there anything you wanted to ask at all?
2. Patient: I did want to ask about my heart function
3. Doctor: Ya sure
4. Patient: I know you said the echocardiograms are oka:y
5. Doctor: Yes
6. Patient: but has it (.) erm deteriorated at all[through
7. Doctor: [no no

**Elaborate delivery**

**Table 1**

**1patient initiated question**

1. Doctor: The head scan, the CT and the MRI show that there
2. is something in the bones but what is unusual is that it
3. seems to be more on the right hand side than the left and I
4. think it was the left eye you were having problems with?
5. Patient: (0.5) Don't they cross?
6. Doctor: Well sometimes if it's more of a visual problem
7. they do cross yeah

In this sequence there are two distinctive features which appear to shape the patient's response. Firstly, the doctor delivers the findings from the scan and produces an expression of uncertainty regarding which eye the patient was having problems with. Secondly, there is a half second pause following the delivery which not only provides the patient with the opportunity to respond but also scope to negotiate the nature of that response.

**Table 2**

**5 patient initiated questions**

1. Doctor: Your scan shows that things are very much the
2. same, maybe slightly bigger but literally by 4mm both in
3. the chest and in the bowel
4. Patient: Is it possible for me to see the scan?
5. Doctor: Yes, these are your lungs, that's your heart

6. Patient: Where's the tumor?
7. Doctor: That's it
8. Patient: It's there? So when I saw it previously it was
9. about that size?
10. Doctor: It's only a couple of centimetres most
11. Patient: As small as that? In fact it's smaller
12. than when I first came about walnut size
13. Doctor: It doesn't really say how big it was
14. initially
15. Patient: So it would be about like that wouldn't it?
16. Doctor: Yeah
17. Patient: It was on the lymph gland, is that the lymph
18. gland?
19. Doctor: No that's your bowel that's the tumor and
20. that's your bowel there and that's your aneurism
21. they've measured it for you 55 mm

In this sequence the results are delivered and carefully explicated with the inclusion of numerical data specifying the size of the cancerous growth (lines 1-3). This provides the patient with a precise frame of reference regarding the cancer. Interestingly in this case the patient, in response, asks to see the scan (line 4). The doctor then identifies the patient's lungs and heart providing the relevance for the proximal distance of the tumour from the lungs and heart. The patient (line 6)

then asks about the location of the tumour, its size (lines 8-9, 11) and finally asks about the lymph gland (line 17-18).

**Table 3**

**2 patient initiated questions**

```
1. Doctor: The scan is very much the same erm there hasn't
2. been um any obvious problems there is quite a lot of
3. fibrosis still but that's to be expected so fibrosis is
4. healing and scarring
5. Patient: Where's that?
6. Doctor: Umm both in the air in the central areas you know
7. where all the problems originally were with the
8. swallowing so in the central area and in the tummy um (2.0)
9. °let me tell you exactly°
10. Patient: Was that there before?
11. Doctor: They've said there's an increase in the volum
12. of that fibrosis
13. Patient: So basically that's scar tissue, is that what
14. you're saying?
```

This delivery of diagnostic news starts out almost as a type 1 delivery ('The scan is very much the same') but then goes on to point out that fibrosis is still present which is 'to be expected'. The doctor then explains the term fibrosis and the patient responds (line 5) by asking where it is.

When the doctor explains the location of the fibrosis, the patient asks if it was present before. The doctor then refers to the report regarding the increase in fibrosis and the patient (line 13) then presents a gloss of the meaning of the news which is posed as a question.

**Table 4**

**5 patient initiated questions**

```
1. Doctor: So they've reported it as stable disease basically
2. nothing new to find there are some lymph nodes in your
3. pelvis but there's nothing different from that
4. Patient: Just where exactly?
5. Doctor: Did you want to look at your scan you [can
6. Patient:                                      [Will I be
7. able to tell from that?
8. Doctor: Well we can look at it together
9. Patient: Yeah
10. Doctor: (3.0) So this is your pelvis
11. Patient: Right
12. Doctor: This is your right hip and that is your left
13. hip=
14. Patient: =Mhm
15. Doctor: And then you've got some lymph nodes that are
16. predominantly on the on the right hand side
17. Patient: Yes right so the other side is what they
```

18. should look like is it?
19. Doctor: Yeah you've got some tiny lymph nodes there
20. they're normally a centimeter and a half is as big as
21. you'd expect them to be normally
22. Patient: Right
23. Doctor: You have got some higher up as well
24. Patient: So that's more into the tummy?
25. Doctor: Yeah
26. Patient: Dya think it is possible that thee enlarged
27. (.) lymph nodes could be (0.5) pressing on a ne::rve
28. [or
29. Doctor: [Sometimes they can do ya ya

The diagnostic news in this delivery specifies the fact that there 'are some lymph nodes'. In response the patient asks 'where' exactly' (line 6). The doctor then asks the patient if they would like to look at their scan. Interestingly the patient's next question ('will I be able to tell from that'?) at line 7 manifests the knowledge-competence gap between doctors and patients. This may partly account for why doctors do not always invite patients to look at scan/x-ray results and why patients do not always ask to see them when they are available. The doctor's response ('we can look at it together') bridges this gap by inviting the patient to examine the scan jointly allowing the doctor to identify, for the patient, key anatomical structures whilst also allowing the patient to inquire further.

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 2 delivery. In these sequences the results are delivered alongside a clinical assessment which either includes a numerical reading or further explication of the findings. When results are delivered in this way, patients tend to engage with the doctor. An important consequence of this is higher levels of patient involvement including more patient initiated questions.

## Discussion

In the main, consultations covered topics such as treatment, the progression of the cancer itself and the symptoms experienced by the patient. Not all topics were addressed in every consultation and doctors varied in how they dealt with each topic. We found that generally patients' actual levels of involvement in the consultation were relatively low and patients varied in how active they were in seeking information. We also found that, on the whole, patients seemed disinclined to ask questions or show communication behaviours designed to elicit information. This finding is consistent with much earlier research into this topic.[6,17]

In relation to discussions of test results between doctor and patient, the data appear to indicate that there may be a connection between the way in which the results are delivered and the occurrence of patient initiated direct questions. That is to say, the plainer announcement of diagnostic results ('your scan is fine' - Type 1), which does not include sharing the diagnostic evidence projects a more paternalistic approach implicit in which, the patient is expected to accept the diagnostic judgement of the doctor. It is also characterised by a general explanation of

the results which is reflected in the general response provided by the patient.[19] In contrast the Type 2 delivery is much more accommodative of patient input. Moreover, the invocation of the scan or the x-ray, where appropriate, appears to be significant in encouraging patient involvement and consequently patient initiated direct questions. Incorporating and explaining the evidence appears to be interpreted by patients as an opportunity to contribute to the consultation and establish their information needs in an environment within which the patient's queries/opinions are welcomed. Unless the patient has specifically requested not to see scans or x-rays, this would appear to be an effective way of encouraging patient involvement generally and increasing levels of patient question asking. Consequently, patients are then able to establish and satisfy their information needs in a timely and effective way.

In cases where patients did ask more questions, there was no significant increase in consultation length and no patient refused the offer of looking at examination results. The examples presented above were carefully selected because they display the most marked variation in consultation style highlighting clear contrasts between the two types of delivery.

A number of different types of intervention have been used in cancer care to help facilitate patient involvement. For example, question prompt lists have been used quite widely, but their actual implementation in consultations is not always straightforward and their rates of success do vary.[15] Moreover, we found in our study, that even when patients entered the consultation with question lists, they often left the consultation without having asked the questions they came prepared for.

The finding that when the doctor elaborates or explicates findings from the evidence, this can increase levels of patient involvement has been identified previously in a study of primary care consultations. [20] Clearly there are important differences between an oncology consultation and a primary care consultation. However, in relation to consulting behaviours, in both settings there appear to be striking similarities. That is to say, careful explication of diagnostic findings can encourage patient involvement such as, in this case, question asking, which in turn can enable patients to establish their information needs. Further research in this are demands a closer investigation of what Frankel[9] has described as the 'presuppositional grounds upon which the communication situation itself rests'. This would then allow us to identify other consulting behaviours doctors can utilise to encourage patient involvement.

There may be a number of reasons why patients are disinclined to ask questions following the 'your scan result is fine' type of announcement. The minimal responses identified may not actually be conditioned solely by the type of announcement of test results but may also be a consequence of patient preference or information needs at that particular moment. As noted, in Type 1, table 4 the patient targets back on a general assessment of the echocardiogram as 'okay'. This clearly merits further empirical investigation.

**Conclusion**

Currently there is good research evidence indicating that patient initiated question asking should be encouraged. Doctors need to be able to encourage patient question asking to ensure that patients have at their disposal an important means through which they can determine and express their information needs. This study confirms the findings from previous studies showing that levels of patient initiated questions in Oncology are relatively low. Our study suggests that patient initiated question asking can be encouraged through timely and deliberate information giving which incorporates an explanation and display of test results. The findings at this stage are only suggestive and further exploration is required to establish their actual significance. Studies which involve closer examination of the actual interactional episodes between doctors and patients are required to provide a deeper understanding of patient initiated questions and the situational variables which may influence them.

.

## References


1. Butow P.N., Maclean M, Dunn S.M., Tatersall M.H.N., Boyer M.J. The dynamics of change: Cancer patients' preferences for information, involvement and support. Annals of Oncology 1997; 8: 857-863.
2. Gattellari M, Butow P.N., Tattersall M.H.N. Sharing decisions in cancer care. Social Science and Medicine 2001; 52: 1865-1878.
3. Leydon G.M., Boulton M, Moynihan C, Jones A, Mossman J, Boudioni M, et al. Cancer patients' information needs and information seeking behaviour: in-depth interview study. BMJ 2000; 320: 909-913.
4. Jenkins V., Fallowfield L., Saul J. Information needs of patients with cancer: results from a large study in UK cancer centres. British Journal of Cancer 2001; 84: 48-51.
5. Cox A., Jenkins V., Catt S., Langridge C., and Fallowfield L. Information needs and experiences: An audit of UK cancer patients. European Journal of Oncology Nursing. 2006; Vol. 10 Issue 4 263-272.
6. Beisecker A.E. and Beisecker T.D. Patient information seeking behaviours when communicating with doctors. Medical Care. 1990; Vol. 28, No. 1: 19-28
7. Cegala D, Marinelli T and Post D. The effect of patient communication skills training on compliance. Archives of Family Medicine. 2000; 9: 957-964.
8. Street R.L. and Millay B. Analysing patient participation in medical encounters. Health Communication. 2001; Vol. 13, Issue 1: 61-73

9. Frankel R, Talking in interviews: a dispreference for patient initiated questions in physician-patient encounters. In Psathas G, (ed.) Interaction Competence. Lanham, MD: University Press of America, 1990: 231-261

10. Cegala D, Street R.L., and Clinch R.C. The impact of patient participation on physicians' information provision during a primary care medical interview. Health Communication, 2007; Vol. 21, Issue 2: 177-185.

11. Butow P.N. et al. Oncologists reactions to cancer patients' verbal cues. Psycho-oncology. Vol. 11, Issue 1 2002; 47-58.

12. Eggly S. et al. Information seeking during "bad news" oncology interactions: Question asking by patients and their companions. Social Science and Medicine, 2006; 63: 2974-2985.

13. Eggly S. et al. Variation in question asking during cancer clinical interactions: A potential source of disparities in access to information. Patient Education and Counselling, 2011; Vol. 82, Issue 1: 63-68.

14. Brown R, Butow PN, Boyer MJ and Tatersall MHN. Promoting patient participation in the cancer consultation: evaluation of a prompt sheet and coaching in question asking. British Journal of Cancer 1999; Vol. 80: 242–248

15. Dimoska A, Tattersall M.H.N, Butow PN, Shepherd H. Can a "prompt list" empower cancer patients to ask relevant questions. Cancer 2008; Vol. 113, Issue 2: 225-237.

16. Butow PN, Dunn SM, Tattersall MHN, and Jones QJ. Computer-based interaction analysis of the cancer consultation. British Journal of Cancer 1995; Vol. 71: 1115-1121.

17. Street RL Information giving in medical consultations: The influence of patients' communicative styles and personal characteristics. Social Science and Medicine 1991; Vol 32. Issue 5: 541-548.

18. Street RL, Gordon HS, Ward MM, Krupat E, Kravitz RL. Patient participation in medical consultations: Why some patients are more involved than others. Medical Care 2005; Vol 43, No. 10: 960-969.

19. Collins S, Drew P, Watt I, and Entwistle V. 'Unilateral' and 'bilateral' practitioner approaches in decision-making about treatment. Social Science and Medicine 2005; 61: 2611-2627.

20. Perakyla A, Communicating and responding to diagnosis in Heritage J, and Maynard D. (eds.) Communication in Medical Care. 2006: 214-247.

21. Pomerantz A, and E. Sean Rintel. Practices for reporting and responding to test results during medical consultations: enacting the roles of paternalism and independent expertise. Discourse Studies 2004; Vol. 6 (1): 9-26.

22. Heritage J, and Maynard D. Communication in Medical Care: Interaction between Primary Care Physicians and Patients. 2006. Cambridge: Cambridge University Press.

## Copyright/licence for publication



## Competing interests

All authors have completed the ICMJE uniform disclosure form at www.icmje.org/coi_disclosure.pdf (available on request from the corresponding author) and declare: no support from any organisation for the submitted work; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years; no other relationships or activities that could appear to have influenced the submitted work."

## Contributorship statement

All authors contributed to the research study. As PI AT led the study design with contributions from GM and LF. GM and LF led the data collection and analysis with contributions from AT. The first draft of the paper was prepared by GM and then subsequently all authors contributed to data interpretation and revisions to the manuscript. All authors had full access to the data derived from the study and can take full responsibility for the integrity of the data and the accuracy of the data analysis.

## Data sharing

There is no additional data available

## Ethics approval

This paper is an outcome from a study funded by the NIHR Research for Patient Benefit Programme. The funding body did not partake in the design of the study, collection, analysis and interpretation of data, writing and submission of the article for publication. The study received ethical approval from the Nottingham research ethics committee 2 ID: 09/H0408/34. All participants in the study gave informed consent before taking part. All authors are independent

from the funding body. Each had had full access to all of the data in the study and can take responsibility for the integrity of the data and the accuracy of the data analysis

This paper presents independent research funded by the National Institute for Health Research (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number PB-PG-0807-14122). The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health.

# Please wait...

If this message is not eventually replaced by the proper contents of the document, your PDF viewer may not be able to display this type of document.

You can upgrade to the latest version of Adobe Reader for Windows®, Mac, or Linux® by visiting http://www.adobe.com/products/acrobat/readstep2.html.

For more assistance with Adobe Reader visit http://www.adobe.com/support/products/acrreader.html.

# Please wait...

If this message is not eventually replaced by the proper contents of the document, your PDF viewer may not be able to display this type of document.

You can upgrade to the latest version of Adobe Reader for Windows®, Mac, or Linux® by visiting http://www.adobe.com/go/reader_download.

For more assistance with Adobe Reader visit http://www.adobe.com/go/acrreader.

# Please wait...

If this message is not eventually replaced by the proper contents of the document, your PDF viewer may not be able to display this type of document.

You can upgrade to the latest version of Adobe Reader for Windows®, Mac, or Linux® by visiting http://www.adobe.com/go/reader_download.

For more assistance with Adobe Reader visit http://www.adobe.com/go/acrreader.

BMJ open

# Patient initiated questions: how can doctors encourage them and improve the consultation process? A qualitative study



| | |
|---|---|
| Journal: | *BMJ Open* |
| Manuscript ID: | bmjopen-2013-003112.R3 |
| Article Type: | Research |
| Date Submitted by the Author: | 10-Jul-2013 |
| Complete List of Authors: | Murtagh, Ged; Imperial College London, Surgery and Cancer<br>Furber, Lynn; University of Leicester, Department of Cancer Studies and Molecular Medicine<br>Thomas, Anne; Leicester Royal Infirmary, Department of Cancer Studies and Molecular Medicine |
| Primary Subject Heading: | Communication |
| Secondary Subject Heading: | Oncology |
| Keywords: | QUALITATIVE RESEARCH, ONCOLOGY, MEDICAL EDUCATION & TRAINING |



Note: The following files were submitted by the author for peer review, but cannot be converted to PDF. You must view these files (e.g. movies) online.

New_patients1.3approved[1].docm
Follow_up_patients1.3approved[1].docm

# Patient initiated questions: how can doctors encourage them and improve the consultation process? A qualitative study

Dr. GM Murtagh,[1] Dr L Furber[2] Dr. AL Thomas[3]

[1] Senior Lecturer in Clinical Communication, Division of Surgery, Department of Surgery and Cancer, St Mary's Campus, Imperial College London, South Wharf Road, London W2 1BL
g.murtagh@imperial.ac.uk

[2] Senior Nurse Researcher, Department of Cancer Studies and Molecular Medicine
Robert Knighton Clinical Sciences Building, University of Leicester, Leicester Royal Infirmary, Leicester LE2 7LX

[3] Reader and Consultant in Medical Oncology, Department of Cancer Studies and Molecular Medicine, Leicester Royal Infirmary
Leicester LE 1 5WW

**Correspondence to:**

Dr. G.M. Murtagh
Division of Surgery, Department of Surgery and Cancer, St Mary's Hospital,
Imperial College London, South Wharf Road, London W2 1BL
g.murtagh@imperial.ac.uk

**Manuscript word count** 3,505
**Abstract word count:** 237

## Abstract

**Objective:** To investigate the circumstances under which patients initiate direct questions in oncology consultations

**Design:** Conversation analysis of 47 consultations between oncologists and cancer patients

**Setting:** An oncology clinic at a teaching hospital in the East Midlands.

**Participants:** 16 Oncologists and 67 cancer patients

**Outcome measure:** Patient initiated direct questions

**Results:** On the whole patients' direct questions are designed to seek specific information regarding, the cancer itself, treatment options or their experience of symptoms. When patients do ask direct questions they typically follow the announcement of test results where some reference to the details of those results, is provided. More specifically, there appears to be a relation between showing the patient their scan/x-ray results, patient involvement and patient initiated direct questions. Higher levels of patient initiated direct questions were clustered around occasions where doctors provided information and explanations of test results (twelve consultations) sometimes with direct reference to scan or x-ray results (seven consultations).

**Conclusions:** This study highlights the importance of careful explanation of diagnostic evidence as a factor contributing to increased patient involvement. More specifically, the findings suggest

that, when appropriate, invoking diagnostic evidence (e.g. scan or x-ray results) is an effective way of increasing levels of patient question asking. Doctors need to be able to encourage patient question asking to ensure that patients have at their disposal an important means through which they can determine their information needs. Although these results come from a study of oncology consultations, this finding may be transferable to other clinical contexts.

## Article Summary

- In cancer care patient question asking can significantly influence the provision of information from the doctor.
- The paper extends the existing research into communication in cancer care by reporting on distinctive patterns of communication behaviour which influence, in this case, patient question asking.

## Key Messages

- The frequency of direct questions initiated by patients in oncology consultations is relatively low.
- Explicating test results alongside diagnostic evidence increases the chances of patient initiated direct questions in oncology consultations.
- This finding has implications for understanding how doctors can encourage patient questions within cancer care and, potentially, other clinical settings.

## Strengths and Limitations of this study

- The strength of the study is that it targets actual instances of question asking behaviour in relation to other situational variables in the consultation.

- The study is limited by its sole reliance on audio recordings of consultations. Consequently, other aspects of social interaction, e.g. eye contact, bodily comportment etc which can also have a significant influence on the content of the consultation, have not been included.

## Introduction

One of the main problems oncologists face in the consultation is the difficulty of accurately gauging the patient's information needs.[1,2] Studies have examined patient preferences for information provision and involvement[1,3,4,5] and have shown, among other things, that patients do want specific information concerning their illness.[4,5] However, patients' information needs are not static and there can be significant variations between patients in terms of their preferences for the timing, content and detail of information they require. Such variations may change during the course of an illness and even during the course of a single consultation depending on the type of information a patient receives.[1] Consequently, patients' attempts to elicit information from doctors also varies. These contingencies indicate a real need to understand more about the conditions under which patients actively seek information and, more specifically, the kinds of communication behaviours patients use to seek out information. Among these behaviours, question asking is key, as it can be used as a basic form of information seeking.[6] When patients ask questions it allows them to shape their own levels of involvement[8] and handle the contingencies of information exchange.[9] In addition, patient question asking has been linked to improved information provision.[8,10] Moreover, patients who receive an answer to their question demonstrate better psychological adjustment following the consultation than those who ask questions but don't receive a response.[16, 17]

These findings still beg the question, how and when do patients ask questions? In the context of cancer care, studies have shown that direct questions (alongside indirect cues) occur most often during the treatment phase of the consultation[11]; that companions who accompany patients, tend to ask more questions than patients particularly in relation to treatment and diagnsosis[12]; that ethnic and racial differences between patients can reflect differences in levels of question asking and direct question asking[13]; that question prompt lists can encourage patient question asking particularly in relation to prognosis and diagnosis.[14,15]

These studies provide valuable direction in understanding some of the factors behind patient question asking in cancer care. However, there is still a lot that is unknown about the specific situational variables which underpin and shape patient question asking in relation to the doctor's communication behaviours. The extent to which patients initiate information seeking, in the first place, is often contingent on the doctor's communicative style. The import of this lies in the fact that when patients seek information (e.g. through asking questions), doctors typically respond in more informative and accommodative ways, [18] simply because patient questions are one of the ways in which patients establish their information needs. The purpose of this study was to capture the interactional and situational variables that occur alongside patient initiated questions to establish how and when patients are more inclined to initiate direct questions.

## Methods

The study was carried out in a large UK Cancer Centre. LF recruited patients (with different types of cancers) attending the oncology department (n=77) as well as a mix of oncology consultants and specialist registrars. Both newly diagnosed and follow up patients were recruited to ensure maximum variability in our sample group. Following each consultation patients were invited to complete a satisfaction questionnaire and interviews were conducted with the patients by LF shortly after their consultation. **Each of the interviews were analysed to identify common themes across the data until saturation was reached. Patient consent was obtained before their consultation was recorded and before collecting questionnaire data. This paper reports on the recordings of the consultation data only.**

We audio recorded 47 consultations which were then transcribed and analysed using conversation analysis,[22] a method of analysis which details characteristics of speech exchange including pauses, pace and intonation etc (the transcription symbols used to indicate these characteristics are provided in table 1). **In each consultation we identified the number of patient initiated questions which arose. We then examined the location of these questions which allowed us to identify clusters around diagnostic news delivery. We also noted, however, that in other consultations patient initiated questions were minimal or absent on occasions of diagnostic news discussion. The led us to question if there was a relation between the doctor's communication behaviour and the patient's response when doctor and patient talked about test results. Using this as our focal point we identified 30 of the 47 consultations where the relation between style of diagnostic news delivery**

**(elaborate/restricted) and patient response/involvement (patient initiated questions/no patient initiated questions) was most clear. From this sample of 30 we selected 8 examples (discussed below) which in our view provided the strongest indication of how the style of delivery of news/results can influence patient involvement/questions. This sample of 8 also allows us to demonstrate most clearly the contrast between the two different styles of delivery, restricted and elaborate. Transcription and analysis was carried out by GM. Subsequent analyses were carried out by GM, AT and LF. Any disagreements regarding interpretation of the data were resolved through discussion and by revisiting the data. Inclusion Criteria: Patients over the age of eighteen, having been diagnosed with cancer, aware of their diagnosis and willing to participate in the study. Exclusion criteria: Any patient unable to consent for themselves, patients with a cognitive impairment and patients who do not speak fluent English.**

## Analysis

For the purposes of analysis we defined a direct question as that which is initiated solely by the patient, without a verbal prompt ('Do you have any questions?') from the doctor and which targets a specific topic. The consultations were examined with a view to identifying some of the systematic and recurrent properties of delivering news of test results and the patient's response. More specifically, we examined how styles of news delivery shape patients' responses, in particular their levels of question asking.

**Transcription symbols**

| | |
|---|---|
| º º | Talk marked by the degree sound indicates words that are softly spoken |
| (.) | A full stop in brackets indicates a micro pause |
| (1.0), (0.5) | indicates silence in seconds and tenths of seconds |
| [Okay | |
| [Yes | Talk which is preceded by a square bracket indicates overlap in speech between two different speakers |
| = | Talk marked with the equals sign at the end of one line and the beginning of another indicates no pause between the end of one utterance and the start of another |



## Results

Our focussed sample of 30 consultations in total came to 451.30 mins, just over 7.5 hours of consultation time with the average length of the consultation at 15.04 mins. In 7 out of the 30 consultations (just under 60 mins of consultation time) **the patients did not ask any questions**. In the remaining 23 consultations there were 76 instances of patients asking questions (avg. 2.5 direct patient questions per consultation). **However patients' questions arose in different ways. For example,** in 5 out of those 23 consultations (22%) patients' questions came at the end (within 3-4 mins of the end of the consultation) **again** following a prompt from the doctor. In 6 out of the 23 consultations (26%) there is evidence of indirect or embedded questions arising at

different junctures of the consultation following a prompt from the doctor. In 12 of the 23 consultations, (52%) patient initiated direct questions occur specifically in relation to discussion of test results. In 7 of these 12 consultations (58%) patient initiated question asking occurs following a careful explanation of test results and diagnostic evidence e.g. the doctor's use of scan or x-rays. In only two consultations did the patient decline to ask a question following an invitation to do so from the doctor.

We noted a number of variations in the way in which doctors deliver test results. Our main finding, however, is that patients are more inclined to initiate direct questions when doctors deliver results with direct reference to the diagnostic evidence e.g. x-rays or scans. To exemplify this we identified two types of information delivery each resulting in different types of patient response, the most marked difference being levels of patient initiated question asking. In delivery type 1, test results were delivered in a very general way without elaboration (**Restricted delivery** - e.g. 'your scan results are fine'). With this type of delivery patient initiated questions were absent or minimal. In delivery type 2 (**Elaborate delivery** - 'your scan shows that...') the doctor elaborated or explained the test results sometimes invoking the scan or the x-ray to do so. This type of delivery typically positively influenced levels of patient involvement in the consultation and prompted more patient initiated direct questions and consequently more information provision from the doctor.

**Restricted delivery**

**Table 1**

**0 patient initiated questions**

1. Doctor: The CT scan result is here (0.5) and that was
2. basically normal erm nothing to suggest any new no new
3. glands you have got some changes on your erm (4.0) lungs
4. from(.) previous radiotherapy (0.5)uhm (1.5) so that's your
5. CT scan and I'm just trying to find the (0.5) lung function
6. tests(.) when did you have those done
7. Patient: (2.0) had them done
8. Husband: Two weeks ago

**Table 2**

**0 initiated patient questions**

1. Doctor: Okay (.) um (0.5) scan result was fine
2. Patient: Good
3. Doctor: Good okay an everything's stable on the in the
4. bones
5. Patient: Right

**Table 3**

**0 patient questions**

1. Doctor: Your scan shows everything is the same
2. Patient: Good
3. Doctor: So that's very good

**Table 4**

**1 patient initiated question**

1. Doctor: And you've had an echocardiogram of your heart an
2. that's all fine
3. Patient: Is it [okay
4. Doctor: [you had that done on?
5. Patient: °Last Friday°
6. Doctor: Last Friday that's all fine (.) no problems so
7. that's good news could I er examine you

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 1 delivery. In each case the results are delivered in a general, non-specific way characterised by a general clinical assessment, 'fine', 'normal' or 'no change'. In each case this type of delivery

produces a minimal response from the patient. It seems that this is partly to do with the fact that the general delivery projects a paternalistic approach where the doctor presents his/her interpretation of the results as the authoritative one, without any specific reference to further details of the findings.[21] Consequently, the patient is invited to accept the diagnostic judgement of the doctor and the general, non-specific explanation of the results is reflected in the general, non-specific response provided by the patient.[19] In almost a third of the sample, apart from the sequence in table 4, the patient does not question or inquire further into the results following the type 1 delivery. In table 4 the patient does ask a question, but again this is presented in a general form 'is it okay?' again reflecting the general way in which the results of the echocardiogram is presented. However, later on following a physical examination the patient targets back on this assessment, after a physical examination, following a prompt from the doctor.

1. Doctor: Is there anything you wanted to ask at all?
2. Patient: I did want to ask about my heart function
3. Doctor: Ya sure
4. Patient: I know you said the echocardiograms are oka:y
5. Doctor: Yes
6. Patient: but has it (.) erm deteriorated at all[through
7. Doctor: [no no

**Elaborate delivery**

**Table 1**

**1patient initiated question**

1. Doctor: The head scan, the CT and the MRI show that there
2. is something in the bones but what is unusual is that it
3. seems to be more on the right hand side than the left and I
4. think it was the left eye you were having problems with?
5. Patient: (0.5) Don't they cross?
6. Doctor: Well sometimes if it's more of a visual problem
7. they do cross yeah

In this sequence there are two distinctive features which appear to shape the patient's response. Firstly, the doctor delivers the findings from the scan and produces an expression of uncertainty regarding which eye the patient was having problems with. Secondly, there is a half second pause following the delivery which not only provides the patient with the opportunity to respond but also scope to negotiate the nature of that response.

**Table 2**

**5 patient initiated questions**

1. Doctor: Your scan shows that things are very much the
2. same, maybe slightly bigger but literally by 4mm both in

3. the chest and in the bowel
4. Patient: Is it possible for me to see the scan?
5. Doctor: Yes, these are your lungs, that's your heart
6. Patient: Where's the tumor?
7. Doctor: That's it
8. Patient: It's there? So when I saw it previously it was
9. about that size?
10. Doctor: It's only a couple of centimetres most
11. Patient: As small as that? In fact it's smaller
12. than when I first came about walnut size
13. Doctor: It doesn't really say how big it was
14. initially
15. Patient: So it would be about like that wouldn't it?
16. Doctor: Yeah
17. Patient: It was on the lymph gland, is that the lymph
18. gland?
19. Doctor: No that's your bowel that's the tumor and
20. that's your bowel there and that's your aneurism
21. they've measured it for you 55 mm

In this sequence the results are delivered and carefully explicated with the inclusion of numerical data specifying the size of the cancerous growth (lines 1-3). This provides the patient with a precise frame of reference regarding the cancer. Interestingly in this case the patient, in response,

asks to see the scan (line 4). The doctor then identifies the patient's lungs and heart providing the relevance for the proximal distance of the tumour from the lungs and heart. The patient (line 6) then asks about the location of the tumour, its size (lines 8-9, 11) and finally asks about the lymph gland (line 17-18).

**Table 3**

**2 patient initiated questions**

```
1. Doctor: The scan is very much the same erm there hasn't
2. been um any obvious problems there is quite a lot of
3. fibrosis still but that's to be expected so fibrosis is
4. healing and scarring
5. Patient: Where's that?
6. Doctor: Umm both in the air in the central areas you know
7. where all the problems originally were with the
8. swallowing so in the central area and in the tummy um (2.0)
9. °let me tell you exactly°
10. Patient: Was that there before?
11. Doctor: They've said there's an increase in the volum
12. of that fibrosis
13. Patient: So basically that's scar tissue, is that what
14. you're saying?
```

This delivery of diagnostic news starts out almost as a type 1 delivery ('The scan is very much the same') but then goes on to point out that fibrosis is still present which is 'to be expected'. The doctor then explains the term fibrosis and the patient responds (line 5) by asking where it is. When the doctor explains the location of the fibrosis, the patient asks if it was present before. The doctor then refers to the report regarding the increase in fibrosis and the patient (line 13) then presents a gloss of the meaning of the news which is posed as a question.

**Table 4**

**5 patient initiated questions**

```
1. Doctor: So they've reported it as stable disease basically
2. nothing new to find there are some lymph nodes in your
3. pelvis but there's nothing different from that
4. Patient: Just where exactly?
5. Doctor: Did you want to look at your scan you [can
6. Patient:                                      [Will I be
7. able to tell from that?
8. Doctor: Well we can look at it together
9. Patient: Yeah
10. Doctor: (3.0) So this is your pelvis
11. Patient: Right
12. Doctor: This is your right hip and that is your left
13. hip=
14. Patient: =Mhm
```

15. Doctor: And then you've got some lymph nodes that are
16. predominantly on the on the right hand side
17. Patient: Yes right so the other side is what they
18. should look like is it?
19. Doctor: Yeah you've got some tiny lymph nodes there
20. they're normally a centimeter and a half is as big as
21. you'd expect them to be normally
22. Patient: Right
23. Doctor: You have got some higher up as well
24. Patient: So that's more into the tummy?
25. Doctor: Yeah
26. Patient: Dya think it is possible that thee enlarged
27. (.) lymph nodes could be (0.5) pressing on a ne::rve
28. [or
29. Doctor: [Sometimes they can do ya ya

The diagnostic news in this delivery specifies the fact that there 'are some lymph nodes'. In response the patient asks 'where' exactly' (line 6). The doctor then asks the patient if they would like to look at their scan. Interestingly the patient's next question ('will I be able to tell from that'?) at line 7 manifests the knowledge-competence gap between doctors and patients. This may partly account for why doctors do not always invite patients to look at scan/x-ray results and why patients do not always ask to see them when they are available. The doctor's response ('we can look at it together') bridges this gap by inviting the patient to examine the scan jointly

allowing the doctor to identify, for the patient, key anatomical structures whilst also allowing the patient to inquire further.

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 2 delivery. In these sequences the results are delivered alongside a clinical assessment which either includes a numerical reading or further explication of the findings. When results are delivered in this way, patients tend to engage with the doctor. An important consequence of this is higher levels of patient involvement including more patient initiated questions.

**Discussion**

In the main, consultations covered topics such as treatment, the progression of the cancer itself and the symptoms experienced by the patient. Not all topics were addressed in every consultation and doctors varied in how they dealt with each topic. We found that generally patients' actual levels of involvement in the consultation were relatively low and patients varied in how active they were in seeking information. We also found that, on the whole, patients seemed disinclined to ask questions or show communication behaviours designed to elicit information. This finding is consistent with much earlier research into this topic.[6,17]

In relation to discussions of test results between doctor and patient, the data appear to indicate that there may be a connection between the way in which the results are delivered and the occurrence of patient initiated direct questions. That is to say, the plainer announcement of

diagnostic results ('your scan is fine' - Type 1), which does not include sharing the diagnostic evidence projects a more paternalistic approach implicit in which, the patient is expected to accept the diagnostic judgement of the doctor. It is also characterised by a general explanation of the results which is reflected in the general response provided by the patient.[19] In contrast the Type 2 delivery is much more accommodative of patient input. Moreover, the invocation of the scan or the x-ray, where appropriate, appears to be significant in encouraging patient involvement and consequently patient initiated direct questions. Incorporating and explaining the evidence appears to be interpreted by patients as an opportunity to contribute to the consultation and establish their information needs in an environment within which the patient's queries/opinions are welcomed. Unless the patient has specifically requested not to see scans or x-rays, this would appear to be an effective way of encouraging patient involvement generally and increasing levels of patient question asking. Consequently, patients are then able to establish and satisfy their information needs in a timely and effective way.

In cases where patients did ask more questions, there was no significant increase in consultation length and no patient refused the offer of looking at examination results. The examples presented above were carefully selected because they display the most marked variation in consultation style highlighting clear contrasts between the two types of delivery.

A number of different types of intervention have been used in cancer care to help facilitate patient involvement. For example, question prompt lists have been used quite widely, but their actual implementation in consultations is not always straightforward and their rates of success do vary.[15] Moreover, we found in our study, that even when patients entered the consultation with

question lists, they often left the consultation without having asked the questions they came prepared for.

The finding that when the doctor elaborates or explicates findings from the evidence, this can increase levels of patient involvement has been identified previously in a study of primary care consultations. [20] Clearly there are important differences between an oncology consultation and a primary care consultation. However, in relation to consulting behaviours, in both settings there appear to be striking similarities. That is to say, careful explication of diagnostic findings can encourage patient involvement such as, in this case, question asking, which in turn can enable patients to establish their information needs. Further research in this are demands a closer investigation of what Frankel[9] has described as the 'presuppositional grounds upon which the communication situation itself rests'. This would then allow us to identify other consulting behaviours doctors can utilise to encourage patient involvement.

There may be a number of reasons why patients are disinclined to ask questions following the 'your scan result is fine' type of announcement. The minimal responses identified may not actually be conditioned solely by the type of announcement of test results but may also be a consequence of patient preference or information needs at that particular moment. As noted, in Type 1, table 4 the patient targets back on a general assessment of the echocardiogram as 'okay'. This clearly merits further empirical investigation.

## Conclusion

Currently there is good research evidence indicating that patient initiated question asking should be encouraged. Doctors need to be able to encourage patient question asking to ensure that patients have at their disposal an important means through which they can determine and express their information needs. This study confirms the findings from previous studies showing that levels of patient initiated questions in Oncology are relatively low. Our study suggests that patient initiated question asking can be encouraged through timely and deliberate information giving which incorporates an explanation and display of test results. The findings at this stage are only suggestive and further exploration is required to establish their actual significance. Studies which involve closer examination of the actual interactional episodes between doctors and patients are required to provide a deeper understanding of patient initiated questions and the situational variables which may influence them.

.

## References


1. Butow P.N., Maclean M, Dunn S.M., Tatersall M.H.N., Boyer M.J. The dynamics of change: Cancer patients' preferences for information, involvement and support. Annals of Oncology 1997; 8: 857-863.
2. Gattellari M, Butow P.N., Tattersall M.H.N. Sharing decisions in cancer care. Social Science and Medicine 2001; 52: 1865-1878.
3. Leydon G.M., Boulton M, Moynihan C, Jones A, Mossman J, Boudioni M, et al. Cancer patients' information needs and information seeking behaviour: in-depth interview study. BMJ 2000; 320: 909-913.
4. Jenkins V., Fallowfield L., Saul J. Information needs of patients with cancer: results from a large study in UK cancer centres. British Journal of Cancer 2001; 84: 48-51.
5. Cox A., Jenkins V., Catt S., Langridge C., and Fallowfield L. Information needs and experiences: An audit of UK cancer patients. European Journal of Oncology Nursing. 2006; Vol. 10 Issue 4 263-272.
6. Beisecker A.E. and Beisecker T.D. Patient information seeking behaviours when communicating with doctors. Medical Care. 1990; Vol. 28, No. 1: 19-28
7. Cegala D, Marinelli T and Post D. The effect of patient communication skills training on compliance. Archives of Family Medicine. 2000; 9: 957-964.
8. Street R.L. and Millay B. Analysing patient participation in medical encounters. Health Communication. 2001; Vol. 13, Issue 1: 61-73

9. Frankel R, Talking in interviews: a dispreference for patient initiated questions in physician-patient encounters. In Psathas G, (ed.) Interaction Competence. Lanham, MD: University Press of America, 1990: 231-261

10. Cegala D, Street R.L., and Clinch R.C. The impact of patient participation on physicians' information provision during a primary care medical interview. Health Communication, 2007; Vol. 21, Issue 2: 177-185.

11. Butow P.N. et al. Oncologists reactions to cancer patients' verbal cues. Psycho-oncology. Vol. 11, Issue 1 2002; 47-58.

12. Eggly S. et al. Information seeking during "bad news" oncology interactions: Question asking by patients and their companions. Social Science and Medicine, 2006; 63: 2974-2985.

13. Eggly S. et al. Variation in question asking during cancer clinical interactions: A potential source of disparities in access to information. Patient Education and Counselling, 2011; Vol. 82, Issue 1: 63-68.

14. Brown R, Butow PN, Boyer MJ and Tatersall MHN. Promoting patient participation in the cancer consultation: evaluation of a prompt sheet and coaching in question asking. British Journal of Cancer 1999; Vol. 80: 242–248

15. Dimoska A, Tattersall M.H.N, Butow PN, Shepherd H. Can a "prompt list" empower cancer patients to ask relevant questions. Cancer 2008; Vol. 113, Issue 2: 225-237.

16. Butow PN, Dunn SM, Tattersall MHN, and Jones QJ. Computer-based interaction analysis of the cancer consultation. British Journal of Cancer 1995; Vol. 71: 1115-1121.

17. Street RL Information giving in medical consultations: The influence of patients' communicative styles and personal characteristics. Social Science and Medicine 1991; Vol 32. Issue 5: 541-548.

18. Street RL, Gordon HS, Ward MM, Krupat E, Kravitz RL. Patient participation in medical consultations: Why some patients are more involved than others. Medical Care 2005; Vol 43, No. 10: 960-969.

19. Collins S, Drew P, Watt I, and Entwistle V. 'Unilateral' and 'bilateral' practitioner approaches in decision-making about treatment. Social Science and Medicine 2005; 61: 2611-2627.

20. Perakyla A, Communicating and responding to diagnosis in Heritage J, and Maynard D. (eds.) Communication in Medical Care. 2006: 214-247.

21. Pomerantz A, and E. Sean Rintel. Practices for reporting and responding to test results during medical consultations: enacting the roles of paternalism and independent expertise. Discourse Studies 2004; Vol. 6 (1): 9-26.

22. Heritage J, and Maynard D. Communication in Medical Care: Interaction between Primary Care Physicians and Patients. 2006. Cambridge: Cambridge University Press.

## Copyright/licence for publication



## Competing interests

All authors have completed the ICMJE uniform disclosure form at www.icmje.org/coi_disclosure.pdf (available on request from the corresponding author) and declare: no support from any organisation for the submitted work; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years; no other relationships or activities that could appear to have influenced the submitted work."

## Contributorship statement

All authors contributed to the research study. As PI AT led the study design with contributions from GM and LF. GM and LF led the data collection and analysis with contributions from AT. The first draft of the paper was prepared by GM and then subsequently all authors contributed to data interpretation and revisions to the manuscript. All authors had full access to the data derived from the study and can take full responsibility for the integrity of the data and the accuracy of the data analysis.

## Data sharing

There is no additional data available

## Ethics approval

This paper is an outcome from a study funded by the NIHR Research for Patient Benefit Programme. The funding body did not partake in the design of the study, collection, analysis and interpretation of data, writing and submission of the article for publication. The study received ethical approval from the Nottingham research ethics committee 2 ID: 09/H0408/34. All participants in the study gave informed consent before taking part. All authors are independent

from the funding body. Each had had full access to all of the data in the study and can take responsibility for the integrity of the data and the accuracy of the data analysis

This paper presents independent research funded by the National Institute for Health Research (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number PB-PG-0807-14122). The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health.

# Patient initiated questions: how can doctors encourage them and improve the consultation process? A qualitative study

Dr. GM Murtagh,[1] Dr L Furber[2] Dr. AL Thomas[3]

[1] Senior Lecturer in Clinical Communication, Division of Surgery, Department of Surgery and Cancer, St Mary's Campus, Imperial College London, South Wharf Road, London W2 1BL
g.murtagh@imperial.ac.uk

[2] Senior Nurse Researcher, Department of Cancer Studies and Molecular Medicine
Robert Knighton Clinical Sciences Building, University of Leicester, Leicester Royal Infirmary, Leicester LE2 7LX

[3] Reader and Consultant in Medical Oncology, Department of Cancer Studies and Molecular Medicine, Leicester Royal Infirmary
Leicester LE 1 5WW

**Correspondence to:**

Dr. G.M. Murtagh
Division of Surgery, Department of Surgery and Cancer, St Mary's Hospital,
Imperial College London, South Wharf Road, London W2 1BL
g.murtagh@imperial.ac.uk

**Manuscript word count** 3,505
**Abstract word count:** 237

## Abstract

**Objective:** To investigate the circumstances under which patients initiate direct questions in oncology consultations

**Design:** Conversation analysis of 47 consultations between oncologists and cancer patients

**Setting:** An oncology clinic at a teaching hospital in the East Midlands.

**Participants:** 16 Oncologists and 67 cancer patients

**Outcome measure:** Patient initiated direct questions

**Results:** On the whole patients' direct questions are designed to seek specific information regarding, the cancer itself, treatment options or their experience of symptoms. When patients do ask direct questions they typically follow the announcement of test results where some reference to the details of those results, is provided. More specifically, there appears to be a relation between showing the patient their scan/x-ray results, patient involvement and patient initiated direct questions. Higher levels of patient initiated direct questions were clustered around occasions where doctors provided information and explanations of test results (twelve consultations) sometimes with direct reference to scan or x-ray results (seven consultations).

**Conclusions:** This study highlights the importance of careful explanation of diagnostic evidence as a factor contributing to increased patient involvement. More specifically, the findings suggest

that, when appropriate, invoking diagnostic evidence (e.g. scan or x-ray results) is an effective way of increasing levels of patient question asking. Doctors need to be able to encourage patient question asking to ensure that patients have at their disposal an important means through which they can determine their information needs. Although these results come from a study of oncology consultations, this finding may be transferable to other clinical contexts.

## Article Summary

- In cancer care patient question asking can significantly influence the provision of information from the doctor.
- The paper extends the existing research into communication in cancer care by reporting on distinctive patterns of communication behaviour which influence, in this case, patient question asking.

## Key Messages

- The frequency of direct questions initiated by patients in oncology consultations is relatively low.
- Explicating test results alongside diagnostic evidence increases the chances of patient initiated direct questions in oncology consultations.
- This finding has implications for understanding how doctors can encourage patient questions within cancer care and, potentially, other clinical settings.

## Strengths and Limitations of this study

- The strength of the study is that it targets actual instances of question asking behaviour in relation to other situational variables in the consultation.

- The study is limited by its sole reliance on audio recordings of consultations. Consequently, other aspects of social interaction, e.g. eye contact, bodily comportment etc which can also have a significant influence on the content of the consultation, have not been included.

## Introduction

One of the main problems oncologists face in the consultation is the difficulty of accurately gauging the patient's information needs.[1,2] Studies have examined patient preferences for information provision and involvement[1,3,4,5] and have shown, among other things, that patients do want specific information concerning their illness.[4,5] However, patients' information needs are not static and there can be significant variations between patients in terms of their preferences for the timing, content and detail of information they require. Such variations may change during the course of an illness and even during the course of a single consultation depending on the type of information a patient receives.[1] Consequently, patients' attempts to elicit information from doctors also varies. These contingencies indicate a real need to understand more about the conditions under which patients actively seek information and, more specifically, the kinds of communication behaviours patients use to seek out information. Among these behaviours, question asking is key, as it can be used as a basic form of information seeking.[6] When patients ask questions it allows them to shape their own levels of involvement[8] and handle the contingencies of information exchange.[9] In addition, patient question asking has been linked to improved information provision.[8,10] Moreover, patients who receive an answer to their question demonstrate better psychological adjustment following the consultation than those who ask questions but don't receive a response.[16, 17]

These findings still beg the question, how and when do patients ask questions? In the context of cancer care, studies have shown that direct questions (alongside indirect cues) occur most often during the treatment phase of the consultation[11]; that companions who accompany patients, tend to ask more questions than patients particularly in relation to treatment and diagnsosis[12]; that ethnic and racial differences between patients can reflect differences in levels of question asking and direct question asking[13]; that question prompt lists can encourage patient question asking particularly in relation to prognosis and diagnosis.[14,15]

These studies provide valuable direction in understanding some of the factors behind patient question asking in cancer care. However, there is still a lot that is unknown about the specific situational variables which underpin and shape patient question asking in relation to the doctor's communication behaviours. The extent to which patients initiate information seeking, in the first place, is often contingent on the doctor's communicative style. The import of this lies in the fact that when patients seek information (e.g. through asking questions), doctors typically respond in more informative and accommodative ways, [18] simply because patient questions are one of the ways in which patients establish their information needs. The purpose of this study was to capture the interactional and situational variables that occur alongside patient initiated questions to establish how and when patients are more inclined to initiate direct questions.

## Methods

The study was carried out in a large UK Cancer Centre. LF recruited patients (with different types of cancers) attending the oncology department (n=77) as well as a mix of oncology consultants and specialist registrars. Both newly diagnosed and follow up patients were recruited to ensure maximum variability in our sample group. Following each consultation patients were invited to complete a satisfaction questionnaire and interviews were conducted with the patients by LF shortly after their consultation. **Each of the interviews were analysed to identify common themes across the data until saturation was reached. Patient consent was obtained before their consultation was recorded and before collecting questionnaire data. This paper reports on the recordings of the consultation data only.**

We audio recorded 47 consultations which were then transcribed and analysed using conversation analysis,[22] a method of analysis which details characteristics of speech exchange including pauses, pace and intonation etc (the transcription symbols used to indicate these characteristics are provided in table 1). **In each consultation we identified the number of patient initiated questions which arose. We then examined the location of these questions which allowed us to identify clusters around diagnostic news delivery. We also noted, however, that in other consultations patient initiated questions were minimal or absent on occasions of diagnostic news discussion. The led us to question if there was a relation between the doctor's communication behaviour and the patient's response when doctor and patient talked about test results. Using this as our focal point we identified 30 of the 47 consultations where the relation between style of diagnostic news delivery.**

**(elaborate/restricted) and patient response/involvement (patient initiated questions/no patient initiated questions) was most clear.** The paper reports on a sample from that selection of 30. **Transcription and analysis was carried out by GM. Subsequent analyses were carried out by GM, AT and LF. Any disagreements regarding interpretation of the data were resolved through discussion and by revisiting the data. Inclusion Criteria: Patients over the age of eighteen, having been diagnosed with cancer, aware of their diagnosis and willing to participate in the study. Exclusion criteria: Any patient unable to consent for themselves, patients with a cognitive impairment and patients who do not speak fluent English.**

**Analysis**

For the purposes of analysis we defined a direct question as that which is initiated solely by the patient, without a verbal prompt ('Do you have any questions?') from the doctor and which targets a specific topic. The consultations were examined with a view to identifying some of the systematic and recurrent properties of delivering news of test results and the patient's response. More specifically, we examined how styles of news delivery shape patients' responses, in particular their levels of question asking.

**Transcription symbols**

| | |
|---|---|
| º º | Talk marked by the degree sound indicates words that are softly spoken |
| (.) | A full stop in brackets indicates a micro pause |

| | |
|---|---|
| (1.0), (0.5) | indicates silence in seconds and tenths of seconds |
| [Okay | |
| [Yes | Talk which is preceded by a square bracket indicates overlap in speech between two different speakers |
| = | Talk marked with the equals sign at the end of one line and the beginning of another indicates no pause between the end of one utterance and the start of another |

**Results**

Our focussed sample of 30 consultations in total came to 451.30 mins, just over 7.5 hours of consultation time with the average length of the consultation at 15.04 mins. In 7 out of the 30 consultations (just under 60 mins of consultation time) **the patients did not ask any questions**. In the remaining 23 consultations there were 76 instances of patients asking questions (avg. 2.5 direct patient questions per consultation). **However patients' questions arose in different ways. For example,** in 5 out of those 23 consultations (22%) patients' questions came at the end (within 3-4 mins of the end of the consultation) **again** following a prompt from the doctor. In 6 out of the 23 consultations (26%) there is evidence of indirect or embedded questions arising at different junctures of the consultation following a prompt from the doctor. In 12 of the 23 consultations, (52%) patient initiated direct questions occur specifically in relation to discussion of test results. In 7 of these 12 consultations (58%) patient initiated question asking occurs

following a careful explanation of test results and diagnostic evidence e.g. the doctor's use of scan or x-rays. In only two consultations did the patient decline to ask a question following an invitation to do so from the doctor.

We noted a number of variations in the way in which doctors deliver test results. Our main finding, however, is that patients are more inclined to initiate direct questions when doctors deliver results with direct reference to the diagnostic evidence e.g. x-rays or scans. To exemplify this we identified two types of information delivery each resulting in different types of patient response, the most marked difference being levels of patient initiated question asking. In delivery type 1, test results were delivered in a very general way without elaboration (**Restricted delivery** - e.g. 'your scan results are fine'). With this type of delivery patient initiated questions were absent or minimal. In delivery type 2 (**Elaborate delivery** - 'your scan shows that...') the doctor elaborated or explained the test results sometimes invoking the scan or the x-ray to do so. This type of delivery typically positively influenced levels of patient involvement in the consultation and prompted more patient initiated direct questions and consequently more information provision from the doctor.

**Restricted delivery**

**Table 1**

**0 patient initiated questions**

1. Doctor: The CT scan result is here (0.5) and that was
2. basically normal erm nothing to suggest any new no new
3. glands you have got some changes on your erm (4.0) lungs
4. from(.) previous radiotherapy (0.5)uhm (1.5) so that's your
5. CT scan and I'm just trying to find the (0.5) lung function
6. tests(.) when did you have those done
7. Patient: (2.0) had them done
8. Husband: Two weeks ago

**Table 2**

**0 initiated patient questions**

1. Doctor: Okay (.) um (0.5) scan result was fine
2. Patient: Good
3. Doctor: Good okay an everything's stable on the in the
4. bones
5. Patient: Right

**Table 3**

**0 patient questions**

1. Doctor: Your scan shows everything is the same
2. Patient: Good
3. Doctor: So that's very good

**Table 4**

**1 patient initiated question**

1. Doctor: And you've had an echocardiogram of your heart an
2. that's all fine
3. Patient: Is it [okay
4. Doctor: [you had that done on?
5. Patient: °Last Friday°
6. Doctor: Last Friday that's all fine (.) no problems so
7. that's good news could I er examine you

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 1 delivery. In each case the results are delivered in a general, non-specific way characterised by a general clinical assessment, 'fine', 'normal' or 'no change'. In each case this type of delivery produces a minimal response from the patient. It seems that this is partly to do with the fact that the general delivery projects a paternalistic approach where the doctor presents his/her interpretation of the results as the authoritative one, without any specific reference to further

details of the findings.[21] Consequently, the patient is invited to accept the diagnostic judgement of the doctor and the general, non-specific explanation of the results is reflected in the general, non-specific response provided by the patient.[19] In almost a third of the sample, apart from the sequence in table 4, the patient does not question or inquire further into the results following the type 1 delivery. In table 4 the patient does ask a question, but again this is presented in a general form 'is it okay?' again reflecting the general way in which the results of the echocardiogram is presented. However, later on following a physical examination the patient targets back on this assessment, after a physical examination, following a prompt from the doctor.

1. Doctor: Is there anything you wanted to ask at all?
2. Patient: I did want to ask about my heart function
3. Doctor: Ya sure
4. Patient: I know you said the echocardiograms are oka:y
5. Doctor: Yes
6. Patient: but has it (.) erm deteriorated at all[through
7. Doctor: [no no

**Elaborate delivery**

**Table 1**

**1patient initiated question**

1. Doctor: The head scan, the CT and the MRI show that there
2. is something in the bones but what is unusual is that it
3. seems to be more on the right hand side than the left and I
4. think it was the left eye you were having problems with?
5. Patient: (0.5) Don't they cross?
6. Doctor: Well sometimes if it's more of a visual problem
7. they do cross yeah

In this sequence there are two distinctive features which appear to shape the patient's response. Firstly, the doctor delivers the findings from the scan and produces an expression of uncertainty regarding which eye the patient was having problems with. Secondly, there is a half second pause following the delivery which not only provides the patient with the opportunity to respond but also scope to negotiate the nature of that response.

**Table 2**

**5 patient initiated questions**

1. Doctor: Your scan shows that things are very much the
2. same, maybe slightly bigger but literally by 4mm both in
3. the chest and in the bowel
4. Patient: Is it possible for me to see the scan?
5. Doctor: Yes, these are your lungs, that's your heart

6. Patient: Where's the tumor?
7. Doctor: That's it
8. Patient: It's there? So when I saw it previously it was
9. about that size?
10. Doctor: It's only a couple of centimetres most
11. Patient: As small as that? In fact it's smaller
12. than when I first came about walnut size
13. Doctor: It doesn't really say how big it was
14. initially
15. Patient: So it would be about like that wouldn't it?
16. Doctor: Yeah
17. Patient: It was on the lymph gland, is that the lymph
18. gland?
19. Doctor: No that's your bowel that's the tumor and
20. that's your bowel there and that's your aneurism
21. they've measured it for you 55 mm

In this sequence the results are delivered and carefully explicated with the inclusion of numerical data specifying the size of the cancerous growth (lines 1-3). This provides the patient with a precise frame of reference regarding the cancer. Interestingly in this case the patient, in response, asks to see the scan (line 4). The doctor then identifies the patient's lungs and heart providing the relevance for the proximal distance of the tumour from the lungs and heart. The patient (line 6)

then asks about the location of the tumour, its size (lines 8-9, 11) and finally asks about the lymph gland (line 17-18).

**Table 3**

**2 patient initiated questions**

```
1. Doctor: The scan is very much the same erm there hasn't
2. been um any obvious problems there is quite a lot of
3. fibrosis still but that's to be expected so fibrosis is
4. healing and scarring
5. Patient: Where's that?
6. Doctor: Umm both in the air in the central areas you know
7. where all the problems originally were with the
8. swallowing so in the central area and in the tummy um (2.0)
9. °let me tell you exactly°
10. Patient: Was that there before?
11. Doctor: They've said there's an increase in the volum
12. of that fibrosis
13. Patient: So basically that's scar tissue, is that what
14. you're saying?
```

This delivery of diagnostic news starts out almost as a type 1 delivery ('The scan is very much the same') but then goes on to point out that fibrosis is still present which is 'to be expected'. The doctor then explains the term fibrosis and the patient responds (line 5) by asking where it is.

When the doctor explains the location of the fibrosis, the patient asks if it was present before. The doctor then refers to the report regarding the increase in fibrosis and the patient (line 13) then presents a gloss of the meaning of the news which is posed as a question.

**Table 4**

**5 patient initiated questions**

```
1. Doctor: So they've reported it as stable disease basically
2. nothing new to find there are some lymph nodes in your
3. pelvis but there's nothing different from that
4. Patient: Just where exactly?
5. Doctor: Did you want to look at your scan you [can
6. Patient:                                      [Will I be
7. able to tell from that?
8. Doctor: Well we can look at it together
9. Patient: Yeah
10. Doctor: (3.0) So this is your pelvis
11. Patient: Right
12. Doctor: This is your right hip and that is your left
13. hip=
14. Patient: =Mhm
15. Doctor: And then you've got some lymph nodes that are
16. predominantly on the on the right hand side
17. Patient: Yes right so the other side is what they
```

18. should look like is it?
19. Doctor: Yeah you've got some tiny lymph nodes there
20. they're normally a centimeter and a half is as big as
21. you'd expect them to be normally
22. Patient: Right
23. Doctor: You have got some higher up as well
24. Patient: So that's more into the tummy?
25. Doctor: Yeah
26. Patient: Dya think it is possible that thee enlarged
27. (.) lymph nodes could be (0.5) pressing on a ne::rve
28. [or
29. Doctor: [Sometimes they can do ya ya

The diagnostic news in this delivery specifies the fact that there 'are some lymph nodes'. In response the patient asks 'where' exactly' (line 6). The doctor then asks the patient if they would like to look at their scan. Interestingly the patient's next question ('will I be able to tell from that'?) at line 7 manifests the knowledge-competence gap between doctors and patients. This may partly account for why doctors do not always invite patients to look at scan/x-ray results and why patients do not always ask to see them when they are available. The doctor's response ('we can look at it together') bridges this gap by inviting the patient to examine the scan jointly allowing the doctor to identify, for the patient, key anatomical structures whilst also allowing the patient to inquire further.

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 2 delivery. In these sequences the results are delivered alongside a clinical assessment which either includes a numerical reading or further explication of the findings. When results are delivered in this way, patients tend to engage with the doctor. An important consequence of this is higher levels of patient involvement including more patient initiated questions.

## Discussion

In the main, consultations covered topics such as treatment, the progression of the cancer itself and the symptoms experienced by the patient. Not all topics were addressed in every consultation and doctors varied in how they dealt with each topic. We found that generally patients' actual levels of involvement in the consultation were relatively low and patients varied in how active they were in seeking information. We also found that, on the whole, patients seemed disinclined to ask questions or show communication behaviours designed to elicit information. This finding is consistent with much earlier research into this topic.[6,17]

In relation to discussions of test results between doctor and patient, the data appear to indicate that there may be a connection between the way in which the results are delivered and the occurrence of patient initiated direct questions. That is to say, the plainer announcement of diagnostic results ('your scan is fine' - Type 1), which does not include sharing the diagnostic evidence projects a more paternalistic approach implicit in which, the patient is expected to accept the diagnostic judgement of the doctor. It is also characterised by a general explanation of

the results which is reflected in the general response provided by the patient.[19] In contrast the Type 2 delivery is much more accommodative of patient input. Moreover, the invocation of the scan or the x-ray, where appropriate, appears to be significant in encouraging patient involvement and consequently patient initiated direct questions. Incorporating and explaining the evidence appears to be interpreted by patients as an opportunity to contribute to the consultation and establish their information needs in an environment within which the patient's queries/opinions are welcomed. Unless the patient has specifically requested not to see scans or x-rays, this would appear to be an effective way of encouraging patient involvement generally and increasing levels of patient question asking. Consequently, patients are then able to establish and satisfy their information needs in a timely and effective way.

In cases where patients did ask more questions, there was no significant increase in consultation length and no patient refused the offer of looking at examination results. The examples presented above were carefully selected because they display the most marked variation in consultation style highlighting clear contrasts between the two types of delivery.

A number of different types of intervention have been used in cancer care to help facilitate patient involvement. For example, question prompt lists have been used quite widely, but their actual implementation in consultations is not always straightforward and their rates of success do vary.[15] Moreover, we found in our study, that even when patients entered the consultation with question lists, they often left the consultation without having asked the questions they came prepared for.

The finding that when the doctor elaborates or explicates findings from the evidence, this can increase levels of patient involvement has been identified previously in a study of primary care consultations. [20] Clearly there are important differences between an oncology consultation and a primary care consultation. However, in relation to consulting behaviours, in both settings there appear to be striking similarities. That is to say, careful explication of diagnostic findings can encourage patient involvement such as, in this case, question asking, which in turn can enable patients to establish their information needs. Further research in this are demands a closer investigation of what Frankel[9] has described as the 'presuppositional grounds upon which the communication situation itself rests'. This would then allow us to identify other consulting behaviours doctors can utilise to encourage patient involvement.

There may be a number of reasons why patients are disinclined to ask questions following the 'your scan result is fine' type of announcement. The minimal responses identified may not actually be conditioned solely by the type of announcement of test results but may also be a consequence of patient preference or information needs at that particular moment. As noted, in Type 1, table 4 the patient targets back on a general assessment of the echocardiogram as 'okay'. This clearly merits further empirical investigation.

**Conclusion**

Currently there is good research evidence indicating that patient initiated question asking should be encouraged. Doctors need to be able to encourage patient question asking to ensure that patients have at their disposal an important means through which they can determine and express their information needs. This study confirms the findings from previous studies showing that levels of patient initiated questions in Oncology are relatively low. Our study suggests that patient initiated question asking can be encouraged through timely and deliberate information giving which incorporates an explanation and display of test results. The findings at this stage are only suggestive and further exploration is required to establish their actual significance. Studies which involve closer examination of the actual interactional episodes between doctors and patients are required to provide a deeper understanding of patient initiated questions and the situational variables which may influence them.

.

## References


1. Butow P.N., Maclean M, Dunn S.M., Tatersall M.H.N., Boyer M.J. The dynamics of change: Cancer patients' preferences for information, involvement and support. Annals of Oncology 1997; 8: 857-863.
2. Gattellari M, Butow P.N., Tattersall M.H.N. Sharing decisions in cancer care. Social Science and Medicine 2001; 52: 1865-1878.
3. Leydon G.M., Boulton M, Moynihan C, Jones A, Mossman J, Boudioni M, et al. Cancer patients' information needs and information seeking behaviour: in-depth interview study. BMJ 2000; 320: 909-913.
4. Jenkins V., Fallowfield L., Saul J. Information needs of patients with cancer: results from a large study in UK cancer centres. British Journal of Cancer 2001; 84: 48-51.
5. Cox A., Jenkins V., Catt S., Langridge C., and Fallowfield L. Information needs and experiences: An audit of UK cancer patients. European Journal of Oncology Nursing. 2006; Vol. 10 Issue 4 263-272.
6. Beisecker A.E. and Beisecker T.D. Patient information seeking behaviours when communicating with doctors. Medical Care. 1990; Vol. 28, No. 1: 19-28
7. Cegala D, Marinelli T and Post D. The effect of patient communication skills training on compliance. Archives of Family Medicine. 2000; 9: 957-964.
8. Street R.L. and Millay B. Analysing patient participation in medical encounters. Health Communication. 2001; Vol. 13, Issue 1: 61-73

9. Frankel R, Talking in interviews: a dispreference for patient initiated questions in physician-patient encounters. In Psathas G, (ed.) Interaction Competence. Lanham, MD: University Press of America, 1990: 231-261

10. Cegala D, Street R.L., and Clinch R.C. The impact of patient participation on physicians' information provision during a primary care medical interview. Health Communication, 2007; Vol. 21, Issue 2: 177-185.

11. Butow P.N. et al. Oncologists reactions to cancer patients' verbal cues. Psycho-oncology. Vol. 11, Issue 1 2002; 47-58.

12. Eggly S. et al. Information seeking during "bad news" oncology interactions: Question asking by patients and their companions. Social Science and Medicine, 2006; 63: 2974-2985.

13. Eggly S. et al. Variation in question asking during cancer clinical interactions: A potential source of disparities in access to information. Patient Education and Counselling, 2011; Vol. 82, Issue 1: 63-68.

14. Brown R, Butow PN, Boyer MJ and Tatersall MHN. Promoting patient participation in the cancer consultation: evaluation of a prompt sheet and coaching in question asking. British Journal of Cancer 1999; Vol. 80: 242–248

15. Dimoska A, Tattersall M.H.N, Butow PN, Shepherd H. Can a "prompt list" empower cancer patients to ask relevant questions. Cancer 2008; Vol. 113, Issue 2: 225-237.

16. Butow PN, Dunn SM, Tattersall MHN, and Jones QJ. Computer-based interaction analysis of the cancer consultation. British Journal of Cancer 1995; Vol. 71: 1115-1121.

17. Street RL Information giving in medical consultations: The influence of patients' communicative styles and personal characteristics. Social Science and Medicine 1991; Vol 32. Issue 5: 541-548.

18. Street RL, Gordon HS, Ward MM, Krupat E, Kravitz RL. Patient participation in medical consultations: Why some patients are more involved than others. Medical Care 2005; Vol 43, No. 10: 960-969.

19. Collins S, Drew P, Watt I, and Entwistle V. 'Unilateral' and 'bilateral' practitioner approaches in decision-making about treatment. Social Science and Medicine 2005; 61: 2611-2627.

20. Perakyla A, Communicating and responding to diagnosis in Heritage J, and Maynard D. (eds.) Communication in Medical Care. 2006: 214-247.

21. Pomerantz A, and E. Sean Rintel. Practices for reporting and responding to test results during medical consultations: enacting the roles of paternalism and independent expertise. Discourse Studies 2004; Vol. 6 (1): 9-26.

22. Heritage J, and Maynard D. Communication in Medical Care: Interaction between Primary Care Physicians and Patients. 2006. Cambridge: Cambridge University Press.

## Copyright/licence for publication



## Competing interests

All authors have completed the ICMJE uniform disclosure form at www.icmje.org/coi_disclosure.pdf (available on request from the corresponding author) and declare: no support from any organisation for the submitted work; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years; no other relationships or activities that could appear to have influenced the submitted work."

## Contributorship statement

All authors contributed to the research study. As PI AT led the study design with contributions from GM and LF. GM and LF led the data collection and analysis with contributions from AT. The first draft of the paper was prepared by GM and then subsequently all authors contributed to data interpretation and revisions to the manuscript. All authors had full access to the data derived from the study and can take full responsibility for the integrity of the data and the accuracy of the data analysis.

## Data sharing

There is no additional data available

## Ethics approval

This paper is an outcome from a study funded by the NIHR Research for Patient Benefit Programme. The funding body did not partake in the design of the study, collection, analysis and interpretation of data, writing and submission of the article for publication. The study received ethical approval from the Nottingham research ethics committee 2 ID: 09/H0408/34. All participants in the study gave informed consent before taking part. All authors are independent

from the funding body. Each had had full access to all of the data in the study and can take responsibility for the integrity of the data and the accuracy of the data analysis

This paper presents independent research funded by the National Institute for Health Research (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number PB-PG-0807-14122). The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health.

# Please wait...

If this message is not eventually replaced by the proper contents of the document, your PDF viewer may not be able to display this type of document.

You can upgrade to the latest version of Adobe Reader for Windows®, Mac, or Linux® by visiting http://www.adobe.com/products/acrobat/readstep2.html.

For more assistance with Adobe Reader visit http://www.adobe.com/support/products/acrreader.html.

# Please wait...

If this message is not eventually replaced by the proper contents of the document, your PDF viewer may not be able to display this type of document.

You can upgrade to the latest version of Adobe Reader for Windows®, Mac, or Linux® by visiting http://www.adobe.com/go/reader_download.

For more assistance with Adobe Reader visit http://www.adobe.com/go/acrreader.

# Please wait...

If this message is not eventually replaced by the proper contents of the document, your PDF viewer may not be able to display this type of document.

You can upgrade to the latest version of Adobe Reader for Windows®, Mac, or Linux® by visiting http://www.adobe.com/go/reader_download.

For more assistance with Adobe Reader visit http://www.adobe.com/go/acrreader.