

review title

Interventions before consultations for helping patients address their information needs (Kinnersley et al 2007)

focus of the review

The aim of this Cochrane review was to assess the effects of interventions delivered to patients prior to consultations intended to help them express and address their particular information needs during consultations.

Most studies included in the review investigated the effects of single interventions, some were complex. Interventions included:

- **Written materials** eg. question prompt sheet, or patient agenda form with questions
- **Coaching** eg. brief prompting strategy
- **Audiotape** of previous consultation encouraging patients to identify questions
- **Coaching plus written materials**
- **Coaching plus computer programme**
- **Coaching plus written materials plus video**

key results of the review

This review shows that interventions to help people address their information needs in consultations, compared to control:

- Increases **question asking** during consultations
- May increase **patient participation** in the consultation
- Improves **patient satisfaction**

This review also shows there is currently no evidence to suggest that interventions for addressing information needs increase **length of consultations**, compared with control.

This review does not show the effects of interventions for addressing information needs during consultations, compared to control, on:*

- **Consultation outcomes** (eg. patient anxiety, knowledge)
- **Consultation process** (eg. provision of information)
- **Service outcomes** (eg. use of health services, clinician satisfaction)
- **Potential harms and adverse effects**

* (because studies have not yet been done, or do not fulfil the review authors' selection criteria, or the included studies did not measure the outcome)

this bulletin summarises a Cochrane systematic review

the first part of the bulletin is a summary of the review

the evidence table in the second part contains more detail of the review

this evidence bulletin is provided by The Cochrane Consumers & Communication Review Group

EVIDENCE BULLETIN

12 NOVEMBER 2007

summary of
the review

Background to the review

Patients often express the need for more or more relevant information from clinicians. Patients have information needs that vary with circumstances and time. Doctors should be flexible enough to respond to this and tailor information to individual patient requirements.

Providing information to patients affects their experience of consultations with doctors –it can affect satisfaction and understanding, for example, and has been associated with positive effects on outcomes including compliance, physiological status and quality of life, and health service outcomes such as hospital length of stay. On the other hand, benefits of consultations may be reduced by provision of inappropriate information or failure to give information.

The type, amount and quality of the information provided by clinicians can be improved, with specific training for example. However this may present a challenge to resources and its effectiveness may depend on clinicians' willingness to participate. Alternatively, or additionally, interventions can be directed to patients to help them express their information needs and address them in consultations.

Methods to encourage patient question asking and to improve patient participation and information seeking skills have been identified in this review. These include coaching sessions prior to consultation, written materials (eg. questions prompt sheet) and video.

Studies included in the review

Thirty three studies were included in the review; they were randomised controlled trials including 8,244 participants. Seventeen studies were from the USA, seven from the UK, four from Australia, two from the Netherlands, two from Canada and one from Indonesia.

Patient populations were varied. Thirteen studies reported on patients from primary care or family medicine, nine reported on

cancer patients, two studies reported on patients with diabetes, two on patients with cardiac problems, and two on patients with obstetric or gynaecological problems. One study each reported on mixed outpatients, on women attending family planning clinics, on women attending a well baby clinic, on children attending a paediatric clinic, or on patients with peptic ulcers.

The majority of studies reported on patients consulting physicians (30 studies), two studies reported on patients consulting either physicians or nurses, and one reported on consultations with family planning care providers.

Focus of interventions; context

The studies included in this review focus on interventions for patients before consultations that aim to help them with their information needs during consultations. While consumers (individual patients, carers and patient representatives) are the primary focus of interventions, in a minority of studies interventions are also directed to providers.

Interventions were concerned with patients' consideration and expression of their needs in relation to question asking, the amount and type of information required, how to express their needs in consultation, overcoming communication barriers during a consultation and how to check their understanding of information provided to them with the clinician. The most common interventions were question checklists and patient coaching.

In the majority of studies interventions were delivered in the waiting room immediately before the consultation. In others they were delivered some time before the consultation (mostly by post). One study included interventions delivered by community-based training, and another study sent one group the intervention by post a few days before the consultation while a second group received a different intervention at the clinic on the day of the consultation.

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summary of
the review
continued

Description of interventions, outcomes

Of interventions targeting patients, 26 studies reported on single interventions (some with multiple components) and 7 reported on multiple interventions. Five studies also targeted clinicians who received an intervention that aimed to improve their ability to elicit questions from the patient and/or to enable them to answer patients' questions more effectively.

Of the **single interventions** in included studies, 20 of 26 were based on a single component:

- Written materials (15 studies) eg. question prompt sheet containing 49 frequently asked questions; and patient agenda form asking patients to identify questions they wanted to ask;
- Coaching (4 studies) eg. brief prompting strategy to ask questions of interest to patients;
- Audiotape of previous consultation (1 study) encouraging patients to listen and identify further questions.

The remaining 6 studies used interventions with multiple components:

- Coaching plus written materials (4 studies) eg. Coaching—patients asked by researcher to think about the type of information they needed to decide best treatment, plus list of frequently asked questions reviewed and questions identified, given information pack and shown where to find answers to questions, and further questions added to list.
- Coaching plus computer programme (1 study) eg. Coaching/computer programme—patients used computer programme to identify their preferred decisional roles, then completed questionnaire on computer to identify information needed. Nurse then coached patient in using computer print outs in the consultation to gather information.
- Coaching plus written materials plus video (1 study) eg. 10 minute video and workbook to encourage question asking and to write down questions; practice question asking with research assistant.

Of the **multiple interventions** (7 studies):

- Written materials were compared with written materials plus coaching (1 study), or brief advice on question asking (1 study) eg. 14 page workbook encouraging patient to list topics they wanted to discuss and summary of points in booklet, patients encouraged to organise thoughts and ask questions;
- One study compared a brief message about question asking, with interview to identify questions and a third arm of coaching;
- Two studies compared two different forms of written materials;
- One study compared two forms of coaching;
- One study compared written materials with a brief message about question asking.

Outcomes of interest in included studies related to three major domains:

- **Consultation process outcomes** (such as patient question asking, patient participation);
- **Consultation outcomes** (including the two sub-domains, patient health outcomes (such as anxiety) and patient care outcomes (such as patient satisfaction, knowledge)); and,
- **Service outcomes** (the effects of interventions on providers and health services as a whole, such as consultation length, provider satisfaction).

What the review shows: summary of key findings

Increase in question asking, satisfaction

There is sufficient evidence from trials that interventions for addressing information needs, compared with control, were associated with increased question asking in consultations (14 trials, 2,020 participants); and increased patient satisfaction (17 trials, 3,316 participants).

Increase in participation

There is some evidence from trials that patients receiving interventions to address information needs, compared with control, showed increased participation in consultations (8 studies of 14).

No increase in consultation length

There is some evidence from trials that length of consultations where patients received interventions to address information needs did not increase, compared with control.

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the review
continued

What the review does not show

Insufficient evidence from trials

There is insufficient evidence from trials to decide between interventions to address information needs and control with respect to **anxiety** when measured either before or after the consultation, **patient knowledge** and **clinician satisfaction**.

Review authors noted that none of the included studies assessed patients' satisfaction with knowledge provided, confidence and ability to cope, use of health services, lifestyle or behavioural outcomes, provision of information, or clinicians' perceptions of the intervention.

Harms and adverse effects

Authors also noted that none of the included studies reported harms.

Conclusions

Authors concluded there were limited benefits for patients of interventions that aimed to help them get the information they needed during consultations. However patients seemed to ask more questions in consultations following interventions, and there were some benefits of question prompt sheets and coaching.

Further research is needed to explore aspects of information exchange, for example the nature and quality of patient questions during consultation, how long before consultations should patients receive information, whether patients feel more anxious prior to consultation as a result of the intervention, and the nature of training provided to clinicians.

Different patients require information at different times and in different circumstances and clinicians need to be flexible enough or respond to patient needs. Information exchange and decision making should be shared and there is growing interest in assisting patient participation in consultations.

Review authors stated that a large number of patients consult clinicians in both primary care and hospital settings; that the benefits of improved patient information needs have

been demonstrated, and yet there is no regular implementation of strategies to assist patients address their information needs.

Recommendations from authors

Authors recommend further well-designed and clearly reported trials in this field. Such trials should address the types and quality, as well as the quantity, of the information obtained by patients (eg. by considering the content and quality of questions). Trials should also report clearly on potential harms or negative effects of the interventions, such as increased anxiety or psychological distress; and should assess the potential for harms in particular patient groups (eg. anxiety in patient with cancer).

It is also recommend that further detailed evaluation of interventions be conducted, where clinicians are also trained (in addition to patients) to provide information more readily, to endorse question asking by patients, to assist patients to identify their information needs, and/or to provide information skilfully within consultations.

Authors additionally recommend that trials assess the effects of timing of the interventions relative to the consultation; and that the effects be assessed in a range of population groups. Trials are also needed to assess the effectiveness of the same interventions across different settings. The effects of training in intervention delivery also needs systematic evaluation.

Future trials should consider and report a range of additional outcomes. Trials might report, for example, more fully on: characteristics of the questions asked; the effects of clinicians' responses to question asking by patients and whether clinician training can enhance this; harms, clinical and behavioural outcomes for patients and clinicians; measures of patient-centred care and participation; and health service use outcomes. All outcomes should be assessed in the short and the longer term in order to investigate the durability of any effects of interventions on outcomes of importance to patients, clinicians and health services.

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table and
key to results
on the
following pages

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Funding

This Evidence bulletin is provided by The Cochrane Consumers & Communication Review Group (CC&CRG) with funding from the Helen Macpherson Smith Trust and the Department of Human Services, Victoria, Consumer Participation and Information, Quality and Safety Branch. Bulletins in this series are created for the Health Knowledge Network (HKN) and in support of *Evaluating effectiveness of participation* (EEP) projects.

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The Health Knowledge Network pages will be developing soon, so we will let you know when it happens.

Contacting us

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Full citation for the review:

Kinnersley P, Edwards A, Hood K, Cadbury N, Ryan R, Prout H, Owen D, MacBeth F, Butow P, Butler C. Interventions before consultations for helping patients address their information needs. *Cochrane Database of Systematic Reviews* 2007, Issue 3. Art. No.: CD004565. DOI: 10.1002/14651858.CD004565.pub2.

Full text is available in The Cochrane Library at: www.thecochranelibrary.com



EVIDENCE TABLE

This table is part of an overview created by Dr Rebecca Ryan, at The Consumers & Communication Review Group. It contains detailed data extracted from the review, and was referred to in the creation of the summary on previous pages of this EVIDENCE bulletin. This table uses standardised wording developed by Dr Rebecca Ryan, Cochrane Consumers & Communication Review Group. A key to this wording follows the table and should be used to interpret the data.

Review title: Interventions before consultations for helping patients address their information needs

Authors: Kinnersley P, Edwards A, Hood K, Cadbury N, Ryan R, Prout H, Owen D, MacBeth F, Butow P, Butler C.

Description of main features

Aim: To assess the effects of interventions delivered before consultations and aiming to help patients and/or their representatives to address their information needs through encouraging question asking within consultations, on outcomes for patients, providers and healthcare systems.

Study design:

RCT

Participants:

Included: Patients and/or their carers or representatives, of any age, presenting for one-to-one consultations with doctors or nurses in healthcare settings.

Excluded: People attending activities such as health promotion clinics, either as individuals or in group settings. Studies in which people consulted healthcare professionals other than doctors or nurses were excluded; as were studies of inpatients where a specific consultation was not able to be identified.

Interventions:

Included: Any intervention directed to individual patients, their carers or representatives before a consultation, where the aim of the intervention was to help the person to address their information needs in the consultation. This intention of the intervention could be indicated by interventions that encouraged patients to consider and/or express their information needs by identifying and articulating questions; the amount and type of information required; how their information needs might be expressed within consultations; how barriers to communication within the consultation might be overcome; and how they might be able to check their understanding of information provided in consultations.

Excluded: Interventions provided to patient during consultations (eg. information leaflets, decision aids); symptom diaries not explicitly encouraging identification of information needs in addition to information provision; interventions describing treatment options and the effects of treatments, or providing information about symptoms or illness, unless the aim was to assist patients in identifying their information needs; interventions aiming to improve aspects of communication other than information needs; training and other interventions targeting providers and aiming to encourage changes in consultation behaviours; and interventions aiming to assist people in addressing their information needs outside the consultation.

Comparison arms:

Interventions for addressing information needs versus control (placebo (dummy) intervention or usual care).

Outcomes:

Included: Outcomes related to three major domains: consultation process outcomes (such as patient question asking, patient participation); consultation outcomes (including the two sub-domains, patient health outcomes (such as anxiety) and patient care outcomes (such as patient satisfaction, knowledge)); and service outcomes (the effects of interventions on providers and health services as a whole, such as consultation length, provider satisfaction).

Number of studies included: 33

Types of studies included: RCT

Number of participants included: 8,244

Meta-analysis performed: Yes; narrative synthesis was performed for all outcomes, data was pooled for meta-analysis where appropriate.

Review methods: Standard Cochrane Collaboration review methods were used, including the following: *a priori* research design provided; extensive searching including searching for unpublished studies and journal handsearching; selection criteria were specified in advance and applied; list of included and excluded studies provided; quality criteria for assessment of included studies were reported and applied; methods of analysis were reported; conflict of interest stated.

Quality:

Included studies: Rated in terms of avoidance of selection bias, performance bias, attrition bias and detection bias. Information on adequacy of randomisation and adequacy of allocation concealment was sought; protection against contamination, blinding of outcome assessors and use of intention-to-treat analysis were assessed. Overall, included trials were of variable quality; more recent studies tended to report more rigorous methods. Of included studies, 6/33 described adequate randomisation methods; 4/33 adequately concealed allocation; 2/2 studies randomised by clinician did not take steps to avoid contamination. Of studies using audio or video tapes to assess consultations, 7/17 reported that outcome assessment was performed blind to group allocation. Authors also note that many studies used self-reported measures which may present only a low risk of ascertainment bias.

**Review AMSTAR rating (out of possible 11): 10 - high quality review.*

Comments: The review methods adequately met all items of the AMSTAR checklist with the exception of the item evaluating assessment of publication bias: the likelihood of publication bias was not explicitly addressed by the review.

Setting: *Country:* USA (17 studies), UK (7), Australia (4), the Netherlands (2), Canada (2) and Indonesia (1). *Intervention:* In the majority of studies (26), interventions were delivered in the waiting room immediately before the consultation; via post some time before the consultation (5 studies); or by community-based training (1 study). In one study patients received the intervention by post a few days before the consultation, another group received a different intervention at the clinic on the day of the consultation.

Recipient: Interventions directed to the consumer. Note that in five studies providers were also targeted: interventions were designed to improve providers' ability to answer patients' questions effectively and/or to enable them to elicit more questions from patients.

Provider: Intervention provider was variable. Many interventions were based on written information materials to be worked through by the patient prior to the consultation. Interventions including non-written components included coaching delivered by nurses or educators, physician endorsement of question asking, and rehearsal of question asking with research assistant. Overall, 30 studies reported on patient consulting physicians; two on consulting physicians and nurses; and one study on family planning care providers.

Format: Intervention format was variable. For interventions directed to patients, 26 studies employed single interventions, the remaining 7 studies reported on multiple interventions. Of the single interventions, 20/26 were based on a single component: written materials (15 studies), coaching (4 studies), or audiotape of previous consultation (1 study); the remaining 6 studies used multiple intervention components: coaching plus written materials (4 studies), coaching plus computer programme (1 study), coaching plus written materials plus video (1 study). Of the multiple interventions (7 studies), written materials were compared with: written materials plus coaching (1 study) or brief advice on question asking (1 study). One study compared a brief message about question asking with interview to identify questions and a third arm of coaching; two studies compared two different forms of written materials; one compared two forms of coaching; one compared written materials with a brief message about question asking. Patient populations were variable and included primary care or family medicine patients (13 studies); patients with cancer (9 studies); patients with cardiac problems (2 studies); patients with obstetric/ gynaecological problems (2 studies); mixed outpatients (1 study); women attending family planning or well baby clinics (1 study each); children attending paediatric clinic (1 study); and patients with peptic ulcers (1 study).

*Full text of paper about AMSTAR: http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=ShowDetailView&TermToSearch=17302989&ordinalpos=2&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVDocSum



EVIDENCE TABLE
CONTINUED

Intervention	Results of review
Interventions for addressing information needs versus control	<p><u>Outcomes:</u></p> <p>Sufficient evidence from trials: compared with control, interventions for addressing information needs were associated with increased question-asking in consultations (14 trials, 2,020 participants) (standard mean difference (SMD) 0.27, 95% CI 0.19, 0.36).</p> <p>Some evidence from trials: compared with control, patients receiving interventions to address information needs showed increased participation in consultations (8 studies of 14).</p> <p>Insufficient evidence from trials: to decide between interventions to address information needs and control with respect to anxiety when measured either before or after the consultation.</p> <p>Insufficient evidence from trials: to decide between interventions to address information needs and control with respect to patient knowledge.</p> <p>Some evidence from trials: length of consultations where patients received interventions to address information needs did not increase, compared with control.</p> <p>Sufficient evidence from trials: compared with control, interventions for addressing information needs were associated with increased patient satisfaction (17 trials, 3,316 participants) (SMD 0.09, 95% CI 0.03, 0.16).</p> <p>Insufficient evidence from trials: to decide between interventions to address information needs and control with respect to clinician satisfaction.</p> <p>Insufficient evidence in relation to measurement: authors note that none of the included studies assessed patients' satisfaction with knowledge provided, confidence and ability to cope, use of health services, lifestyle or behavioural outcomes, provision of information, or clinicians' perceptions of the intervention.</p> <p><u>Harms and adverse effects:</u></p> <p>Insufficient evidence in relation to measurement: authors note that none of the included studies reported harms.</p>



KEY TO RESULTS

The table on this page presents the standardised wording that should be used to interpret the data in the results section of the EVIDENCE table on the previous two pages.

SUMMARY STATEMENT	TRANSLATION
<i>Sufficient evidence from trials</i>	<p>Evidence to support conclusions about the effect of the intervention(s) in relation to a specific outcome(s). This includes evidence of an effect in terms of:</p> <ul style="list-style-type: none"> • benefit or • harm. <p>Statistically significant results are considered to represent sufficient evidence to support conclusions, but a judgement of 'sufficient evidence' is also based on the number of trials/ participants included in the analysis for a particular outcome.</p> <p>A grading of 'sufficient evidence' is often based on meta-analysis producing a statistically significant pooled result that is based on a large number of included trials/ participants.</p> <p>This judgement may also be made based on the number of trials and/or trial participants showing a statistically significant result - for example (in a narrative synthesis) a result where 12 studies of a total of 14 for a specific outcome showed a statistically significant effect of an intervention would be considered to represent 'sufficient evidence.'</p>
<i>Some evidence from trials</i>	<p>Less conclusive evidence to make a decision about the effects of a particular intervention(s) in relation to a specific outcome(s).</p> <p>This may be based on narrative syntheses of review results. In this case, the result is qualified according to the findings of the review - for example, 'some evidence (5 studies of 9) reported a positive effect of'</p> <p>{This would be based on a more equivocal set of results than those obtained for 'sufficient evidence' above. For example, while 12/14 statistically significant studies would be classed as 'sufficient evidence', 5/9 statistically significant studies is more equivocal and would be classes as 'some evidence.'}</p> <p>This may also be based on a statistically significant result obtained in a small number of trials; or a statistically significant result obtained from trials with a small number of participants.</p>
<i>Insufficient evidence from trials</i>	<p>Not enough evidence to support conclusions about the effects of the intervention(s) on the basis of the included studies. This should be interpreted as 'no evidence of effect', rather than 'evidence of no effect'.</p> <p>Statistically non-significant results are considered to represent insufficient evidence.</p> <p>Where the number of trials is small, and/or the number of participants included in the trials is small, 'insufficient evidence' might reflect underpowering of the included trials to be able to detect an effect of the intervention.</p> <p>Where the number of trials is large, and/or the number of participants included in these trials is large, 'insufficient evidence' may reflect underlying ineffectiveness of the intervention to affect the outcomes being examined.</p>
<i>Insufficient evidence in relation to measurement</i>	<p>Not enough evidence to support conclusions about the effects of the intervention due to a lack of reporting on the specified outcomes.</p> <p>This can be the result of :</p> <p>(i) the review electing not to report on a particular outcome, or set of outcomes, despite being reported by the included trials; or</p> <p>(ii) the review was not able to report on the outcome, as data for the outcome was not reported by the included trials. Note: used for reporting against outcomes only.</p>
<i>N/A</i>	<p>Not applicable to the outcome category of interest. Note: used for reporting against outcomes only.</p>