Guidelines forthe management of hepatitis C in general practice: a semi-qualitative interview survey of GPs' views regarding content and implementation

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ABSTRACT

Background Hepatitis C is a common infection among people who attend GPs for methadone maintenance treatment.

Aim To determine the views of GPs towards clinical guidelines for the management of hepatitis C among current or former injecting drug users in advance of their implementation.

Methods A purposive sample of 14 GPs (10% of the total prescribing methadone at the time the guidelines were developed) was invited to review a pre-publication draft of the guidelines and interviewed regarding content, presentation, perceived barriers to implementation and suggested interventions to facilitate effective implementation of the guidelines.

Results GPs indicated the guidelines were useful but suggested aspects of presentation should be clarified. Organisational issues were identified as the principal barriers to effective implementation, with the provision of additional nursing support the principal intervention suggested to facilitate implementation.

Conclusions Interviewing intended recipients may be an important step in ensuring clinical practice guidelines are effectively implemented.

INTRODUCTION

Hepatitis C (HCV) is an important issue for people who are addicted to opiate drugs.The infection has a high prevalence,[13] with a large proportion of those who become infected subsequently developing chronic liver disease,[4] cirrhosis[5] and hepatocellular carcinoma.[6]

Over 13000 people in the Dublin area are estimated to be using illicit opiate drugs.[7] The facilities for treating opiate misuse in the area have expanded over the last five years,[8] with general practice increasingly involved in providing treatment services, similar to other countries.[9-10]

Recognising that hepatitis C would pose a problem for general practice in years to come, it was decided in early 2001 to develop a set of clinical guidelines that would act as a resource for GPs in their care of patients who use these drugs.The guidelines were developed by a multidisciplinary group selected to reflect the diverse range of medical and paramedical professionals involved in the care of patients infected with, or at risk of becoming infected with, HCV.The development and content of these guidelines are described separately."

It must be recognised that publication of such guidelines does not necessarily result in their advice being followed in clinical practice.[12-13] To facilitate the effective implementation of guidelines many interventions have been described in a variety of settings.These include: educational programmes,[14] audit and feedback,[15] academic detailing,[16] computerised decision-making support systems[17] and nursing specialists.[18] The evidence to support the effectiveness of each strategy, whether used alone or in combination is, however, still equivocal.[M o 9]

It seems likely that for any implementation strategy to be successful, it must adopt both educational and organisational approaches. In a review of the last 20 years of research on guideline implementation in The Netherlands, Grol suggests that "multi-faceted interventions targeting different barriers to change are more likely to be effective."[20]

The same author has described an approach that can effectively translate evidence into practice. Following the development of a set of guidelines, obstacles to implementation are identified through the analysis of a target group of clinicians and the setting in which the guidelines are to be implemented. New interventions are therefore designed, linked to these obstacles and an implementation plan is developed and adopted. This process is continuous, with the results of any evaluation feeding-back on each stage (see Figure i).[2,

This paper describes the views of such a 'target group' of GPs regarding content, presentation, perceived barriers to implementation, and effective strategies to facilitate implementation of the recently developed guidelines for the management of HCV among patients on methadone maintenance treatment in general practice."

METHODS

A total of 139 CPs were providing methadone maintenance in the ERHA area at the time of the study. Fourteen (10% of total) were purposively selected from this sample to be representative of all GPs in the area who prescribe methadone in terms of: gender, location of practice, and number of patients for whom they provide methadone maintenance (see Table 1). Each GP was sent a draft copy of the guidelines prior to its dissemination and asked to review it in terms of: content, layout, perceived barriers to implementation and suggestions to facilitate implementation in his or her own practice.

Each GP was contacted at a pre-arranged time by a member of the research team, who administered a semi-structured interview (see Table 2). During the interview, they were asked to assign a quantitative score to the usefulness of the guidelines and to the perceived usefulness of a selection of implementation strategies. Other quantitative data included practice details and whether they felt any part of the guidelines was inappropriate.

GPs were also asked to provide more detailed answers in response to open-ended questions regarding the content and layout of the guidelines, perceived barriers to implementation of the guidelines in their practice, and suggestions for effective implementation of the guidelines in their practice.

Data were analysed using Statistical Packages for the Social Sciences (SPSS) version 8.0. Qualitative

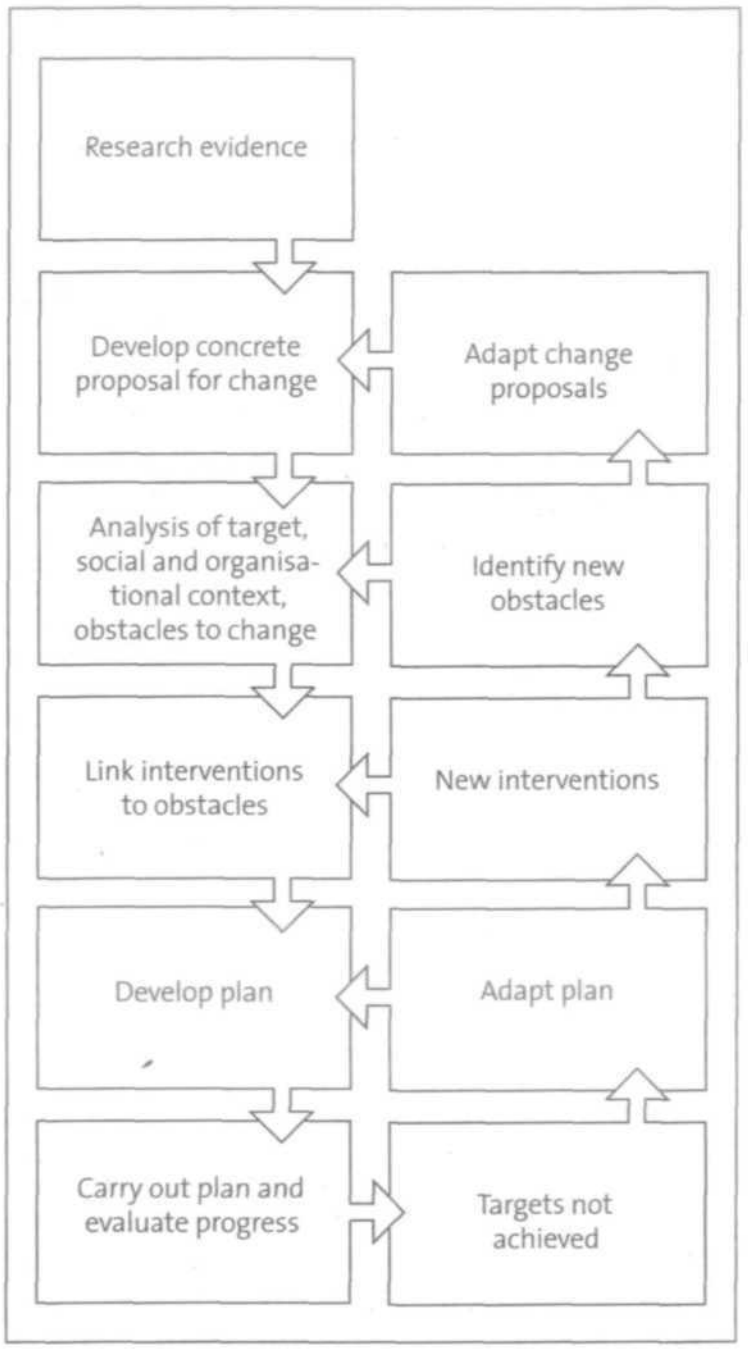

Figure 1 — THE IMPLEMENTATION OF RESEARCH EVIDENCE (FROM GROL, 1997).[21]

answers in response to open-ended questions were recorded in shorthand at the time of the interview and subsequently transcribed in full. The transcripts were analysed manually line-by-line by two independent researchers, and a category code applied to each section of meaningful text."

RESULTS

Eight of the participating GPs (57%) worked in a practice with practice nursing support. The median number of patients attending each GP for methadone maintenance at the time of the interview was eight (range 0-44, mean 14).

When asked to assign a score to the usefulness of the guidelines (where 4=very useful and 1 = not at all useful), the mean score given by the interviewees was 3.5 (range three to four, median 3.5).

Two GPs felt part of the content of the guidelines was inappropriate: one stating the guidelines should

Table i

SAMPLE OF GPs WHO ADVISED ON CONTENT AND IMPLEMENTATION OF GUIDELINES COMPARED TO ALL GPS IN ERHA AREA PROVIDING METHADONE MAINTENANCE TREATMENT

CHARACTERISTIC		'TARGET GROUP' OF GPS	ALL GPS PRESCRIBING METHADONE	CHI[1] (P VALUE)
Gender	Male	**12**	**109**	0.09 (0.77)
	Female	**2**	3O	
No. of patients on methadone in practice	0-14 ('level one')	**8**	**95**	0.04 (0.84)
	15 or more ('level two')	**4**	**44**	
Area of practice	South Western Area Health Board	**6**	**69**	0.93 (0.63)
	East Coast Area Health Board	**4**	25	
	Northern Area Health Board	**4**	**45**	

Table 2

EXAMPLE OF INTERVIEW SCHEDULE USED

The following questions relate to the document
Hepatitis C among drug users in Ireland - a guide to management in general practice.

1. How useful do you think the guidelines would be in supporting your clinical practice? (Score out of 4, where 4 = very useful, 3 = useful, 2 = somewhat useful, and 1 = not at all useful.)
2. In what ways could the content of the guidelines be improved? (please list three)
3. Do you feel any part of these guidelines is inappropriate? (yes/no) If yes, please identify (list)
4. In what ways could the layout be improved? (please list three)
5. Over the coming 12 months, we hope to disseminate these guidelines to GPs. Based on your experience of caring for these patients, what barriers would prevent you from implementing these guidelines? (list)
6. What implementation strategies would help *you* implement the guidelines in your everyday practice? (list)
7. The following are a number of strategies that have been used in the past to implement guidelines such as these. Please rate the usefulness of each in helping you to successfully implement these guidelines, scoring each out of 4 (where 4 = very useful, 3 = useful, 2 = somewhat useful, and i = not at all useful).
   - Audit and feedback
   - Educational programmes
   - Computerised decision-making support
   - A designated nurse to liaise with hospital services
   - Academic detailing
8. Do you have any additional comments?
9. In which Health Board Area do you practise? (Southwest/East Coast/Northern)
10. How many patients are currently receiving methadone maintenance treatment at your practice?
11. Do you have a practice nurse? (yes/no)
12. Please indicate your gender? (male/female)

concern the GP's role after a patient has started to receive antiviral therapy and one stating that a recommendation concerning benzodiazepine use was too restrictive. The other 12 felt the guidelines were appropriate.

When asked to comment on 'ways in which the content of the guidelines could be improved,' a total of 13 themes were identified, the principal being: provide a glossary of terms, simplify the text, and add more information about the management of other bloodborne viruses and pharmacotherapy for hepatitis C.

When asked to comment on 'ways in which the layout could be improved,' a total of six themes were identified, the principal being: text simplification, an accompanying single sheet presentation featuring the main points, and better use of diagrams.

When asked to identify the major barriers to the guidelines being implemented in their practice, the CPs identified a total of seven themes, the principal being: lack of resources at a practice level, attitudes of GPs and of patients towards HCV.and lack of time on the part of GPs.

When asked to suggest strategies that would help implement the guidelines in their practice, the GPs identified a total often themes, the principal being: the provision of additional nursing support, the presentation of the guidelines in a more convenient format and raised awareness of hepatitis C and related issues at a practice level.

When asked to score a selection of implementation strategies with regard to how useful they felt each would be in helping them to implement the guidelines in their practice (where 4 = very useful and 1 = not at all useful), audit and feedback scored highest, (median score of 3.5), followed by educational programmes (median score of 3.0), academic detailing (median score of 3.0), a designated nurse to liaise with hospital services (median score of 2.5) and computerised decision making support system (median score of 2.0).

DISCUSSION

The small number of GPs interviewed in this study is a source of some methodological concern. However, it was our intention that access to the guidelines would be restricted until such a time as they and their implementation strategy had been subjected to proper evaluation. Inclusion in the target group, where possible, would exclude GPs from subsequently participating in any such evaluation exercise.

As a result only a 10% sample was recruited for the purposes of this study. Given the small numbers involved,the sample was selected purposively to be representative of all GPs who provide methadone maintenance in the ERHA area in terms of: gender, location of practice, and number of patients for whom they provide methadone maintenance (seeTable i).The additional finding that 57% worked in a practice with a nurse is higher than most recent estimates,[23] though hardly surprising given the trend for increasingly more practices in Ireland to employ a practice nurse.[u]

The process described in this paper led to significant changes in the presentation of the guidelines and in their implementation strategy. The changes in presentation can be seen in both the published text of the guidelines," and in the accompanying summarised version (see Table 3). The principal barriers to and strategies to facilitate effective implementation were determined to be largely organisational in nature, with the provision of additional nursing support the strategy most commonly suggested. As a result, the practices which participated in the initial implementation of the guidelines were provided with such support, as well as being offered practice based education seminars and a range of patient education materials.

While the majority view was that the content of the guidelines was appropriate, the issues identified as potentially problematic may need to be revisited when subsequent versions of the guidelines are being developed.

To date, much of the published research on implementing guidelines in general practice has evaluated educational programmes, with the evidence supporting their effectiveness unconvincing and equivocal. In one meta-analysis of randomised trials of different educational interventions, Davis et al conclude that 'none of the interventions identified... [i.e. educational materials,formal CME activity, outreach visits, academic detailing, opinion leaders, patient-mediated strategies, audit with feedback, and reminders]... had a substantial effect on practice'.[25]

Within the last five years, the need to tailor guidelines, and their implementation strategy, to the context in which they will be used has been recognised. In addition, it is increasingly recognised that involving intended recipients in all stages of development and implementation leads to a greater sense of ownership and enhanced acceptability of clinical guidelines.[2628]

While data supporting the use of organisational interventions in implementing guidelines are scarce, many commentators have nonetheless highlighted their potential importance/[9 iZ] As Solberg comments: "there has been little attention to the impact of practice systems or organisational support of clinician behaviour, the process by which change is produced, or the role of the practice environmental context within which change is being attempted- new attention to these issues may help us understand and undertake the process of improving medical care delivery."[33]

This paper has described the experience and explored the viability of consulting with a group of CPs prior to implementing a set of guidelines in their practices. With a considerable rise in the number of clinical guidelines being published over the last five years, there is an evident need for more research into strategies that facilitate effective implementation in practice. However, where guidelines to change clinical practice in primary care are concerned, it is likely that involving GPs in the process of development and implementation may lead to more widespread acceptance among practitioners and ultimately to improved patient care.

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Table 3

SUMMARY OF GUIDELINES

Five key areas of management

1. HARM REDUCTION
   a. Advice regarding safe drug using practise
   b. Advice regarding safe sex
   c. Facilitate contact with addiction treatment services
   d. Consider other bloodborne or hepatotoxic viral infections (Hepatitis B screening and/or vaccination, HIV screening, Hepatitis A vaccination)

2. SCREENING FOR HEPATITIS C INFECTION
   a. Pretest discussion
   b. Arrange follow-up after test
   c. If negative, discuss need for continued safe practise and regular follow-up

3. INITIAL MANAGEMENT OF PATIENTS INFECTED WITH HEPATITIS C
   a. Advise on need to reduce, if not abstain from, drinking alcohol
   Jo. Advise on eating healthy diet, avoiding hepatotoxic medications
   c. Advise on safe practise to prevent transmission and/or reinfection
   d. Consider Hepatitis B/A vaccination status
   e. Remember need for psychological support at this time

4. CONSIDER REFERRAL TO HEPATOLOGY UNIT
   a. Decision making should be shared between doctor and patient
   b. Criteria listed below are merely a guide - patient preference regarding referral should be considered

5. CRITERIA WHICH HELP PREDICT IF PATIENT WILL BENEFIT FROM REFERRAL FOR THERAPY
   a. PCR positive
   b. Six months free from non-prescribed opiate (and cocaine) use
   c. No non-prescribed benzodiazepine or tricyclic antidepressant use
   d. Alcohol consumption less than 21 units per week (in males) or 14 units per week (in females)
   e. No significant concurrent psychiatric morbidity or psychosocial problems

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