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GENERAL PRACTITIONERS AND CLINICAL GUIDELINES

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ABSTRACT

Objective: To assess the attitudes of general practitioners in Harare, Zimbabwe, towards the use of clinical practice guidelines (CPG's).

Design: Cross sectional survey.

Setting: General practitioners in private practice within the urban Harare (Zimbabwe) environs.

Subjects: Two hundred and thirty two general practitioners in Harare, Zimbabwe.

Main outcome measures: The response to a questionnaire enlisting attitudes to CPGs.

Results: Questionnaires were sent to 232 general practitioners. Of these, 137 (59.1%) returned a completed questionnaire. Among the respondents, 95.6% felt that general practitioners should be involved in the development of guidelines, 72.6% had read at least one guideline, 65.9% were prepared to use guidelines in their practice, 61.6% thought that guidelines would improve their treatment ability, and 59.7% thought that guidelines would improve their knowledge of disease. 76.5% felt that the government should not legislate, 66.2% felt that guidelines reduce practitioners' flexibility and 57.9% felt that guidelines would not improve their diagnostic ability.

Conclusion: The respondents were, in general, favourably disposed towards CPGs. Most had already read some guidelines, and about two thirds were prepared to use them. Almost all respondents felt that general practitioners should be involved in the development of guidelines for use in general practice. These general practitioners felt that guidelines were likely to help them treat patients than to make a diagnosis. Despite these favourable attitudes, many practitioners felt that guidelines would limit their personal flexibility in caring for patients. Organisations developing or implementing CPGs in general practice should address these concerns.

INTRODUCTION

Clinical practice guidelines (CPGs) are statements, systematically developed, that assist the physician in making decisions about appropriate health care for specific clinical conditions or situations(1). Over the past decade, thousands of guidelines have been developed(2-5). Much of the impetus for their appearance has come from studies that show how the behaviour of practitioners varies enormously, even within small areas of the same country(6,7). More recently, there has been an emphasis on the introduction of guidelines as a method of controlling health care costs(8), enhancing the standards of medical care by improving outcomes(9) and reducing the risk of litigation(10).

Originally, CPGs were developed using peer review and consensus conferences. Recently, more explicit processes, based upon the systematic evaluation of scientific evidence, have led to an explosion of CPGs(11,12). Desirable attributes for good guidelines have been developed(13) and there are also guidelines for reviewing guidelines(14,15).

Despite the tremendous enthusiasm and the great expenditure of time, effort and money to develop guidelines, there are doubts about their effectiveness in medical practice. Several comprehensive reviews (16-18) have revealed that most CPGs have been developed for use in the hospital setting, and that of the minority developed for use in the community, most are concerned with preventive care. Furthermore, most evaluations of CPGs look at the process of care (Did the practitioners do what the guidelines suggested?), rather than the outcome of care (Did the patients actually feel better as a result?). A review of the relevance of most CPGs to common conditions treated in primary care(19) found that out of 91 studies of guidelines for care in the community, only four satisfied the criteria of being done in a clinical care setting, of being applicable to conditions normally treated by general practitioners, of being conducted in a methodologically sound manner and that the use of the CPG resulted in significantly improved patient outcomes. A further concern is that practitioners tend not to comply with guidelines, even if they agree that such guidelines are needed(20).

Most of the effort to date has concentrated on guideline development, and there is uncertainty about how to disseminate CPGs and implement them in medical practice. It is not enough merely to mail copies of guidelines to practitioners; it seems necessary to use predisposing, enabling and reinforcing strategies to make sure that practitioners actually use guidelines(21,22). Many CPGs have been developed and tested in a tertiary care setting, but there has been little effort to do the same in primary care settings. It is conceivable that CPGs might be of more use to general practitioners in practice, because they tend to have less opportunity for continuing medical education and less access to specialist colleagues than do their urban counterparts.

There is a dearth of information on the attitudes of general practitioners toward CPGs, and many questions remain unanswered: What are the greatest concerns about CPGs among general practitioners? What barriers exist to the effective use of CPGs in general practice? What factors should organisations consider when developing, disseminating or implementing CPGs in the general practice setting?

The main objective of this study was to assess the attitudes of general practitioners toward CPGs. More specifically, we wanted to explore the practitioners' knowledge of and familiarity with guidelines, their prior use of CPGs, their satisfaction with and confidence in CPGs, their worries about CPGs and the barriers to the use of CPGs in general practice; in addition, we wanted to determine whether general practitioners felt that they should be involved in the development of CPGs. This study should add to the rather small base of knowledge about the use of CPGs in general practice in Zimbabwe.

MATERIALS AND METHODS

A one-page, self-administered questionnaire was mailed to 235 general practitioners chosen at random (every fourth practitioner) from a database provided by the Zimbabwe College of Primary Care Physicians. The questionnaire was accompanied by a covering letter assuring confidentiality and a stamped return envelope. A second questionnaire was sent to practitioners who

did not respond to the first mailing within three weeks. No further follow up was done.

The questionnaire contained 13 closed-ended questions. The questions requested a response of "yes," "no" or "unsure," or a response on a five-point Likert scale. Questions requested information about use of CPGs, attitudes toward legislation of CPGs, physician involvement with CPG development, the influence of CPGs on practitioners' knowledge of and ability to diagnose and treat disease, the effect of CPGs on the autonomy and flexibility of practitioners in dealing with patients.

The data were analysed with the Quattro Pro spreadsheet package(25) and SPSS-X for Vax (26). Descriptive statistics were compiled for the answers to the questions and the demographic characteristics of the practitioners. Chi-square analyses were used for proportions, and Spearman's rho coefficient was used as a measure of association (concordance) for ordinal variables. An alpha value of 0.05 was specified for all statistical tests.

RESULTS

Of the 235 surveys mailed, three were returned because the practitioners were no longer in practice at the addresses to which the surveys had been sent. Of the remaining 232 practitioners, 137 (59.1%) returned a completed questionnaire; of these, 104 (75.9%) replied to the first mailing and 33 (24.1%) to the second mailing.

About a quarter of the respondents had never read a CPG or were unsure about using guidelines in their practice (Table 1). Less than half of those who had read a CPG thought that it had affected their practice. There was almost unanimous support for the idea of general practitioner involvement in the development of CPGs but not for legislation of them.

A majority of respondents thought that CPGs would be likely to improve practitioners' knowledge of and ability to treat disease, whereas more than half felt that the use of CPGs would not improve the ability to diagnose diseases (Table 2). The number of respondents who thought that guidelines would improve treatment was significantly greater than the number who thought that guidelines would improve diagnosis (Chi-square = 10.10, $p < 0.002$).

Table 1

Number and percentage of response for questions concerning the use, legislation, reading and development of clinical practice guidelines (CPGs)

Question	Response: number (and % of respondents)			
	No of respondents*	Yes (%)	No (%)	Unsure
Would you use CPG in your practice?	135	89 (65.9)	6 (4.4)	40 (29.6)
Do you think government/HPC's or ZIMA should legislate CPGs	136	17 (12.5)	104 (76.5)	15 (11.0)
Have you ever read a CPG for a particular disease?	135	98 (72.6)	33 (24.4)	4 (3.0)
If yes, did reading the guideline affect your practice?	101	49 (48.5)	36 (35.6)	16 (15.8)
Do you think GPs should be involved in the development of CPGs?	135	129 (95.6)	1 (0.7)	5 (3.7)

*Although 137 practitioners responded to the survey, not all respondents answered every question

Table 2

Physicians' estimation of how CPGs would affect knowledge of and ability to treat and diagnose a particular disease

Question	Response; number (and percentages of respondents)					
	Respondents*	Improve a lot	Improve	No change	Worsen	Worsen a lot
How would CPGs affect your knowledge of a disease?	134	8 (6.0)	72 (39.6)	69 (39.6)	1 (0.7)	0
How would CPGs affect your ability to diagnose a disease?	133	6 (4.5)	50 (37.6)	76 (57.1)	1 (0.8)	0
How would CPGs affect your ability to treat a disease?	133	8 (55.6)	74 (55.6)	48 (36.1)	3 (2.3)	0

*Not all 137 respondents answered every question.

In addition to the formal questionnaire, several practitioners provided additional comments. The most frequent comments were to the advantages of CPGs in that they would standardise the approach to clinical conditions (39 respondents), they represent an easy reference for diagnosis and treatment (22 respondents), and they provide up-to-date learning for practitioners (17 respondents). The most frequently collated disadvantages were that CPGs reduce flexibility or force stepwise treatment (33 respondents), they reduce autonomy and impair the art of clinical medicine (19 respondents), and they artificially categorise patients (16 respondents).

Some questions on the survey tended to be answered in a similar fashion; that is, in some cases, responses on the Likert scales were significantly concordant from one question to another. For example, responses to the statement that the use of CPGs reduces flexibility were concordant with those for the statement that CPGs do not permit practitioners to fully use their individual skills (Spearman's $\rho=0.66$, $p<0.001$). The responses that were significantly concordant are presented in Table 3.

Table 3

Spearman rank correlational analysis for pairs of statement or questions for which there was a significant concordance or agreement with respect to responses

Statement or question pairs	Spearman rho	P
CPGs reduce flexibility in dealing with patients and CPGs do not allow physician to use their clinical skill and experience	0.66	<0.001
Had read a CPG and had used a CPG in practice	0.15	<0.04
Had used a CPG in practice and GPs should be involved in CPG development	0.18	<0.025
CPGs accurately reflect optimal diagnosis and treatment and CPGs would affect ability to diagnose a disease	0.45	<0.001
CPGs accurately reflect optimal diagnosis and treatment and CPGs would affect ability to treat a disease.	0.47	<0.01

Table 4

Spearman rank correlational analysis for pairs of statements or questions for which there was significant discordance or disagreement with respect to responses

Statement or question pairs	Spearman rho	P
CPGs reduce flexibility in dealing with patient and CPGs accurately reflect optimal diagnosis and treatment	-0.028	<0.002
CPGs do not allow physicians to use their clinical skills and experience and CPGs accurately optimal diagnosis and treatment	-0.34	<0.001
CPGs accurately reduce flexibility in dealing with patients and CPGs would affect knowledge of a disease	-0.35	<0.001
CPGs reduce flexibility in dealing with patients and CPGs would affect ability to diagnose a disease	-0.32	<0.001
CPGs reduce flexibility in dealing with patients and CPGs would affect ability to treat a disease	-0.26	<0.002
CPGs do not allow physicians to use their clinical skills and experience and CPGs would affect knowledge of a disease	-0.37	<0.001
CPGs do not allow physicians to use their clinical skills and experience and CPGs would affect ability to diagnose a disease	-0.28	<0.002
CPGs do not allow physicians to use their clinical skills and experience and CPGs would affect ability to treat a disease	-0.42	<0.001

In addition, some questions seemed to be answered in a significantly dissimilar fashion: responses to some statements were in significant disagreement with responses to other statements. Pairs of statements with responses that were in significant disagreement are presented in Table 4.

DISCUSSION

General practitioners had favourable attitudes toward CPGs in general. Most had already read some guidelines, were prepared to use them and felt that such guidelines would improve doctors' knowledge of disease and ability to treat. An overwhelming majority felt that general practitioners should be involved in developing CPGs to be used in primary care.

Relatively little is known about practitioners' attitudes to CPGs. Only three published reports of mail surveys were found, one involving responses from 1513 US internists(27) and two involving primary care doctors, one in the United States (with 52 respondents)(28) and one in the United Kingdom (with 213 respondents)(29). Each of these surveys, as well as our own, had a response rate of about two thirds, which is typical for a mail survey. Only 23% of US urban practitioners reported using guidelines; they were more confident in guidelines produced by their own professional bodies and younger practitioners were much more favourably disposed to guidelines than were older practitioners(28). British general practitioners were generally in favour of guidelines, 78% of such practitioners having been involved in writing in-house guidelines, and 69% felt that they were effective in improving patient care(29). But even in the United Kingdom, more than a quarter of practitioners were concerned that guidelines would result in "cookbook" medicine(29).

Attitudes to CPGs in Harare were found to be closer to those in the United Kingdom than to those in the United States. It is possible that this difference relates to the timing of the surveys. The US survey(28) was published in 1991, and there has been much activity in the guidelines field since then. Attitudes among US practitioners may have changed in the interim and may now be more in line with our survey and the 1995 British survey(29). At present, Harare general practitioners seem ready for CPGs tailored to their practice or for studies about the best way to implement CPGs in primary care.

Despite the predominantly positive attitudes toward guidelines that we found, there were some consistent reservations. There was less confidence that CPGs would improve diagnostic ability and that they would improve treatment, and many respondents felt a threat to their professional flexibility and application of individual skills to the care of patients. There were also substantial minorities in the order of 40% who felt that their knowledge of disease and their treatment skills would not be improved by the use of guidelines and that, consequently, guidelines would not affect their practice.

Our correlational analyses revealed that respondents' attitudes were fairly consistent from one question to another. There were two camps: a slightly larger group that favoured CPGs and a smaller group that was against guidelines.

In concordance with the guidelines literature, which states that practitioners are more likely to comply with guidelines if they have been involved in their development,(16,30-32) the practitioners who replied positively to statements about CPGs in our survey were also strongly in favour of becoming involved in developing CPGs.

One of the current debates about CPGs is whether the general public should be involved in their development. To date, not enough research has been done to definitively answer this question(33).

There were several limitations to our study. The

survey was cross-sectional, and only 60% of practitioners responded. Although our covering letter to practitioners defined CPGs as consensus statements, which suggest what practitioners should do, we have no way of being certain that all respondents understood the concept in the same way. Because the survey was completely anonymous, rather than confidential, we had no way of obtaining information from the non-respondents to compare with information received from the respondents.

In summary, our survey found that general practitioners in Zimbabwe are, in general, fairly favourably disposed toward CPGs. The consensus was that general practitioners should be working to produce guidelines for their own use and that general practitioners may have doubts about the accuracy of diagnosis and treatment with respect to CPGs. These findings may indicate a problem related to using specialist developed CPGs in primary care. Most practitioners are familiar with CPGs and have used them. There is, however, a degree of scepticism about whether the introduction of guidelines will actually improve patient care. Many felt that their ability to respond creatively to the individual patient may be somewhat hampered by guidelines.

The results of this survey illustrate several important points for individuals planning the development or implementation of CPGs for general practitioners. Those who want general practitioners to test or use CPGs must address the perception that CPGs reduce practitioners' flexibility by emphasising that, as their name implies, CPGs are guidelines only. In the present climate of opinion among general practitioners in Zimbabwe it seems likely that CPGs that concentrate on treatment, rather than diagnosis, are more likely to succeed. Finally, we must remember that the effectiveness of CPGs developed in tertiary care settings or based largely on research conducted in such settings should be examined carefully before and after their dissemination to the general practice setting.

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