

Attitude and practice of the health care professionals towards the clinical practice guidelines in King Khalid University Hospital in Saudi Arabia

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Keywords

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Abstract

Rationale, aims and objectives To explore the opinion and practice of the health care providers in King Khalid University Hospital (KKUH) towards clinical practice guidelines (CPGs).

Methods A cross-sectional self-reported anonymous survey was distributed to 2225 health care professionals working in KKUH clinical departments.

Results The response rate was 56.5%. The respondents had a positive attitude towards CPGs; 90% thought that CPG unify patients' care and 96% agreed that CPGs improve the quality of services provided. The respondents' practice in using CPGs concurred with their attitude and opinion. A total of 86.3% agreed that CPGs changed the way they manage their patients and 71.8% agreed with the statement that they have already used CPGs in the management of the patients. Compared to nurses, physicians were significantly less likely to use CPGs in practice ($P < 0.05$); moreover, the practice of using guidelines differs significantly according to the years of experience, with 71% of respondents with experience of 15 years or more using CPGs in the management of their patients, compared to 60% among respondents with less years of experience ($P < 0.05$).

Conclusion The health care providers at KKUH have positive practice and attitude towards CPGs in general, which could positively influence the future introduction and implementation of evidence-based CPGs.

Introduction

Clinical practice guidelines (CPGs) are 'systematically developed statements to assist practitioners and patients' decisions about appropriate health care for specific circumstances' [1].

The use of CPG is appealing to the clinicians and health service managers, due to the expected improvement in the quality of health service, consistency of patients care and cost saving [2]. However, successful implementation and adherence to CPGs is influenced by opinion and the attitude of the practitioners towards the guidelines [3].

The objective behind conducting this survey was to explore the opinion and practice of the health care professionals in King Khalid University Hospital (KKUH) in the use of CPGs.

Methods

King Khalid University Hospital is a tertiary referral centre. Due to the limited number of national guidelines, the clinical departments

of the hospital develop their own guidance or the individual professional follows certain guidance from a credible organization related to his or her specialty.

In most of the cases, the CPGs adopted by the department or the professionals lack the approved systematic methodology for guideline adaptation and implementation as well as a clear plan for reviewing and updating of the guidance as new evidence emerges.

The hospital is following a plan for health services' reform to meet the requirements of accreditation by Accreditation Canada. Part of the services' reform includes the use of evidence-based guidance in the clinical departments. The Chair of Evidence-Based HealthCare and Knowledge Translation has been commissioned by the quality and development department in the hospital to oversee the adaptation and the implementation of evidence-based CPGs.

A cross-sectional self-reported survey was distributed to 2225 health care professionals working in KKUH clinical departments including physicians, nurses, pharmacies, dentists, dieticians, physiotherapists and technicians.

The survey is composed of 24 questions, which were developed after review of the literature for publications addressing similar objectives of this study [4,5]. The survey was piloted on 10 health care providers and modified according to their feedback and then distributed by internal post to all eligible health care providers.

The first section of the survey covered the demographic as well as the professional characteristics of the respondents such as: age, gender, years of experience, professional title and the clinical affiliation.

The second section assessed the respondent’s practice in using CPGs, for example, ‘CPG have influenced the way I care for my patients’. And, the third and last section assessed the opinions and attitude of health care professional towards CPGs, for example, ‘CPGs are good educational tools’.

To evaluate the three last domains, we used five-level Likert scale of how strongly respondents agreed with the statement listed in the survey, namely: strongly agree, agree, neither, disagree and strongly disagree.

We developed an overall measure of the respondents’ attitude, opinions and practice towards guidelines by summing ordinal scale ratings regarding positive views about guidelines (strength of the agreement with the statement such as, guidelines are good educational tools) and the inverse of ordinal ratings regarding negative views (such as: guidelines diminish health care practitioner clinical freedom) excluding the statements which were neither positive nor negative. The internal consistency coefficient (Cronbach’s alpha) was used to measure the consistency of the responses.

Possible opinions and attitude scores range from 6 to 30 (30 is the most positive), and practice scores range from 4 to 20 (20 is the best use of guidelines).

Statistical analysis

Descriptive statistic was used to analyse the responses to each item. Further analysis was conducted to determine the existence of association between respondents’ demographic and professional characteristics and their opinions and practice towards CPGs. We grouped the responses into three groups: nurses, physicians and the rest of the professionals’ responses being grouped in one category as ‘other’. The three groups were compared in respect to their opinions, attitude and practice of using CPGs.

The Student’s *t*-test was used to compare continuous variables and chi-squared test was used when appropriate. *P*-value of less than 0.05 is considered significant. spss for windows (Release 16.0; SPSS, Chicago, IL, USA) was used for analysis.

Results

The response rate was 56.5%. A total of 1268 surveys were retained and 1257 were analysed; eight were excluded from the analysis because they were duplicates and three because they were missing most of the data. Of the total number of surveys distributed to the physicians the response rate was 25%, and of those distributed to the nurses the response was 71.5%.

The internal consistency coefficient (Cronbach’s alpha) for the scale was 0.67.

The demographic data for the respondents are shown in Table 1. Most of the respondents were nurses (72.9%) and hence

Table 1 Demographic characteristic of the respondents

Characteristics	% of respondents (n = 1257)
Gender	
Female	975 (77.5)
Male	282 (22.5)
Age (years)	
25–35	549 (43.7)
36–45	337 (26.8)
46–55	305 (24.3)
>55	66 (5.2)
Profession	
Physician	191 (15)
Nurse	916 (72.9)
Others	150 (12)
Pharmacist	38 (3.0)
Dentist	21 (1.7)
Physiotherapist	20 (1.6)
Dietician	8 (0.6)
Technician	63 (5.0)
Years of experience	
0–1	128 (10.2)
2–6	238 (18.9)
7–10	199 (15.8)
11–15	244 (19.4)
>15	448 (35.6)

the predominance of the female gender (77.9%). Over 50% of the responding health professionals were between 36 and 55 years of age, and 55% had 11 or more years of clinical experience.

Most of the respondents had a positive attitude and opinion about the use of guidelines in clinical decision making (Fig. 1). More than 90% of the respondents thought that CPGs are effective in unifying and improving the quality of patients’ care and a similar percentage agreed that guidelines are good educational tools and convenient source of advice (Fig. 1).

However, only 73% of respondents were confident that CPG are unbiased statements and about 88% believed that following CPG will not restrict their judgment in choosing the right management for their patients (Fig. 1).

Less than 50% of the respondents agree that practice should be based on scientific evidence all the time and less than 60% agreed that CPGs could be applied to their patients’ management (Fig. 1).

Respondents’ practice in using CPG is shown in Fig. 2. About 60% of the health care providers in this survey had at least one copy of CPG for their use in the management of their patients. The practice of using guidelines differs significantly according to the years of experience; 72% of respondents with experience of 15 years or more used CPGs in the management of their patients, compared to 60% among respondents with less years of experience (*P* < 0.05).

Respondents who were involved in developing clinical guidance (CPGs, integrated clinical pathways or protocols) were more likely to have used them in practice as compared to the respondents who were not involved (71.1% vs. 54%); this difference was significant (*P* < 0.05).

Opinion and Attitude of Health Care Professionals Towards Clinical Practice Guidelines

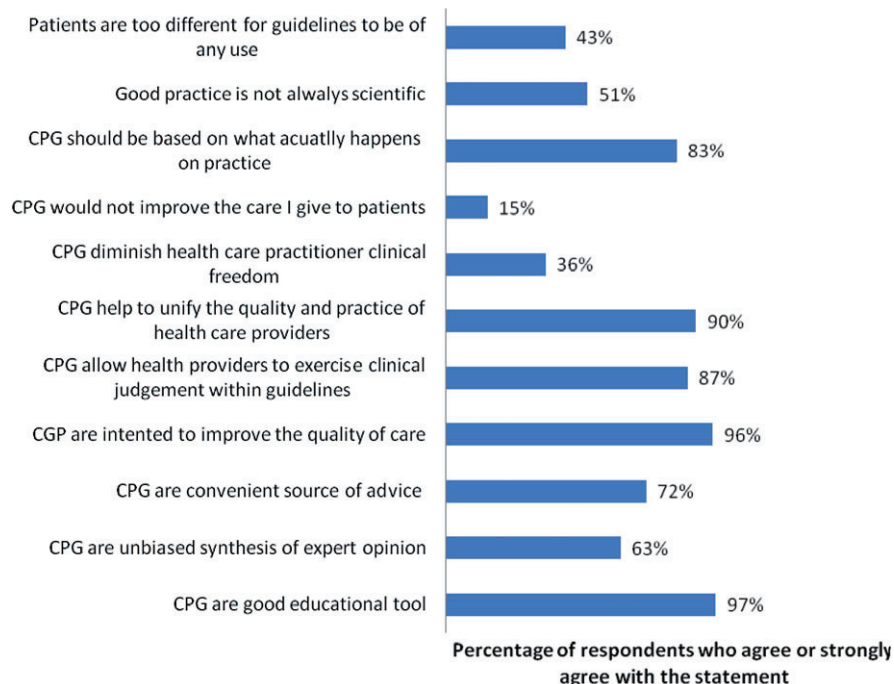


Figure 1 Opinion and attitude of health care professionals towards clinical practice guidelines (CPG).

Respondents' Practice in Using Guidelines for Patients' Management

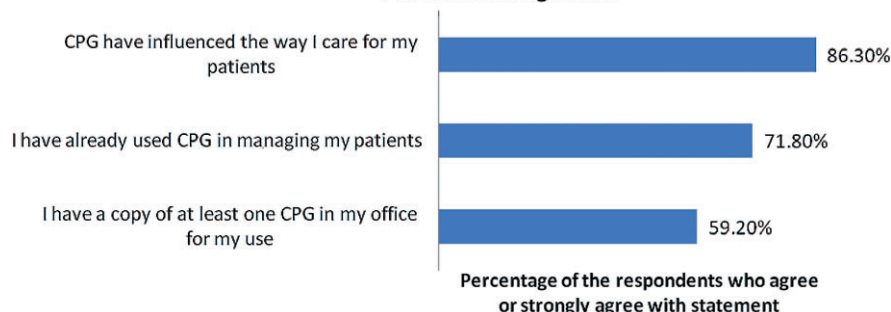


Figure 2 Respondents' practice in using clinical practice guidelines (CPG) for patients' management.

When the three groups of health care professionals (physicians, nurses and other practitioners) were compared in respect to their attitude towards CPGs, similar number of physicians and nurses had positive attitude towards CPGs (69% and 67% respectively); however, both groups had significantly higher percentage of professionals with positive attitude towards CPGs than the other health care professionals (53%; $P = 0.001$).

When comparing the practice of using CPGs in the three groups of professionals (physicians, nurses and other practitioners), higher percentage of nurses used CPGs than the physicians and the other health care professionals (67%, 59.9% and 60% respectively); however, the difference was not significant ($P = 0.052$).

There was a significant association between the positive attitude and good practice among all respondents ($P < 0.05$).

Discussion

Prior to designing a strategy for implementation of CPGs, the attitude and the opinions of the health care professionals should be explored, since sceptical opinions influence the implementation of guidance negatively either directly or indirectly by creating unfavourable environment of lack of support from peers and seniors [6]. The Chair conducted this survey as a preliminary step for the introduction of CPGs to KKHU.

The response rate of 56.5% in this study is similar to other studies [7–9].

The respondents had a remarkable positive attitude towards guidelines (Fig. 1); this result was noted even when we analysed the responses by the subgroups of nurses and physicians and other

Table 2 Difference in attitude towards and practice of using guidelines between the groups of respondents

Profession	% professionals with positive attitude	% professionals with positive practice
Physicians	67.0	59.2
Nurses	69.5	66.9
Others*	53.4 [†]	60.0 [‡]

*Others = health care professionals other than physicians and nurses, for example, dentist, pharmacists.

[†]Significant difference between percentages of professional with positive attitude in nurses and physicians when compared with others ($P = 0.001$).

[‡]No significant difference between the percentages of professional with positive practice when nurses, physicians and others were compared ($P = 0.052$).

health care professionals (Table 2). However, the respondents were sceptical about CPGs' interference with their autonomy in clinical decision making (37.7%; Fig. 1).

The responses were moderately consistent for all the respondents to the survey (Cronbach's alpha = 0.68); however, we find the negative response to the statement 'Good practice is not always scientifically based' and the statement 'Patients are too different from guidelines to be of any use' rather surprising, since there were positive responses to all attitude statements except for these two (Fig. 1); this might be explained by the negative phrasing of the first statement being confusing (*Good practice is not always scientific*); however, a true response cannot be excluded.

The positive attitude and opinions about guidelines we found in this survey, which has been reported by other studies and among different groups of health care professionals [7,8], with guarded optimism, exclude the attitude as a future barrier to the implementation of CPGs in practice by KKHU health care providers.

The respondents' practice concurred with their attitude and opinion about CPGs; 86.30% of the respondents stated that CPGs have influenced the way they care for their patients and 71.80% had already used guidelines in the management of the patients (Fig. 2). This finding was dissimilar to the findings by other studies where professionals had positive attitude towards CPGs in general but did not use the guidelines in their practice [8]. Moreover and contrary to the findings by other investigators [10,11], our results showed that increasing years of experience, and hence age, is associated with more positive attitude. This might be related to the professionals' experience in using CPGs during their postgraduate specialization training abroad, where the culture of evidence-based practice is more established than in Saudi Arabia, which is mostly applicable to consultants and senior specialists rather than to interns and residents on training. In favour of this explanation is our finding of a significant positive relationship between the involvements of health care providers in developing guidance and using them in practice because the process of developing the guidance increases their confidence in and awareness of the importance of CPGs in practice.

Noteworthy is the higher number of nurses who use CPGs as compared to physicians (Table 2). This finding is in agreement with the results of other studies [12]. This difference between

physicians and nurses might be rooted in the differences in the professional education and training between physicians and nurses or the differences in the responsibilities during practice.

Certain circumstances enhance health care provider use and adherence to certain CPGs, such as when the source of the guideline is a credible and respected body or organization [13], or when there is a consensus about the benefit for the patients [9,13] and when supplies for implementations such as the necessary medicine and equipments are available [12]. Hence, each specific guideline has different potential for adherence according to the perception of the provider about its value and the available resources for its implementation. Therefore, it is rather difficult to extrapolate the future practice of the health care providers in KKHU in using and adhering to guidelines on their responses to this survey since all the statements in the survey were general and not related to a specific CPG. Future studies will be planned to investigate reasons behind non-adherence following implementation of specific CPGs.

The strengths of this study include its exploration of the attitude towards and practice of using CPGs among physicians and other health care providers, the relatively large sample size and response rate which is comparable to that of similar studies.

However, we acknowledge some methodological shortcomings of our study; as the questionnaire relied on the health care providers' self-rated assessment of their own practice and beliefs, respondents might have felt pressured into completing the questionnaire or might have been unwilling to disclose their practice deficiencies and this might have introduced bias due to loss of objectivity. The response rate of the physicians of 25% is low and might affect the external validity of the survey and hence the extrapolation of the results to the whole population of physicians in KKHU.

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