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Original Research

Canadian Primary Care Physicians' Attitudes Toward Understanding Clinical Practice Guidelines for Diabetes Screening

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ABSTRACT

Objectives: The Canadian Task Force on Preventive Health Care (CTFPHC) produces guidelines for Canadian physicians regarding screening and prevention. To better appreciate the barriers to and facilitators of guideline adherence, we sought to explore physicians' views of guidelines in general and their understanding of this CTFPHC diabetes screening guideline in particular because they pertain to screening and positive treatment.
Methods: We included Canadian physicians (N=10) who agreed to be interviewed regarding their use of guidelines as part of practice, focusing on the CTFPHC 2012 diabetes screening guideline. Individual semistructured interviews explored primary care physicians' experiences and perspectives on the use, relevance and feasibility of guidelines as part of practice, approaches to screening for diabetes, and suggestions for improving guidelines.
Results: Overall, physicians recognized the need for guidelines and the benefits of using Grading of Recommendations Assessment, Development and Evaluation (GRADE) methods in the guideline development process. Physicians also noted several barriers to guideline adherence, including the lack of opportunity for physicians to provide input during guideline formulation, insufficient guidance on interpreting GRADE's weak or conditional recommendations, and feasibility issues concerning using risk calculators. The predominant challenge raised by physicians was the unclear guidance for pharmacologic interventions; all respondents were unclear about the guidelines' implicit assumption that screen-positive patients would be treated with statins and aspirin (ASA).
Conclusions: These interviews suggest the need for greater clarity in guideline recommendations, including clarification of the quality of evidence ratings and the strength of recommendation grading. Our low participation rate raises the issue of representativeness; replication in samples with greater willingness to participate would be desirable.

Mots clés :
dépistage du diabète
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RÉSUMÉ

Objectifs : Le Groupe d'étude canadien sur les soins de santé préventifs (GECSSP) élabore des lignes directrices destinées aux médecins canadiens au sujet du dépistage et de la prévention. Pour mieux comprendre les obstacles et les facilitateurs du respect des lignes directrices, nous avons cherché à explorer les opinions des médecins sur les lignes directrices en général et leur compréhension de ces lignes directrices sur le dépistage du diabète du GECSSP, notamment parce qu'elles portent sur le dépistage et le traitement approprié.
Méthodes : Nous avons inclus les médecins canadiens (N=10) qui ont accepté d'avoir un entretien au sujet de leur utilisation des lignes directrices dans le cadre de la pratique en portant notre attention sur les lignes directrices de 2012 sur le dépistage du diabète du GECSSP. Les entretiens individuels semi-structurés ont examiné l'expérience et les points de vue des médecins de premier recours sur l'utilisation, la pertinence et la faisabilité des lignes directrices dans le cadre de la pratique, les approches en matière de dépistage du diabète et les suggestions d'amélioration des lignes directrices.

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Résultats : Dans l'ensemble, les médecins ont reconnu la nécessité des lignes directrices et les avantages de l'utilisation des méthodes GRADE (Grading of Recommendations Assessment, Development and Evaluation) dans le processus d'élaboration des lignes directrices. Les médecins ont également noté plusieurs obstacles au respect des lignes directrices, dont le manque d'opportunité des médecins à offrir leur contribution durant la formulation des lignes directrices, des conseils insuffisants sur la façon d'interpréter les recommandations faibles ou conditionnelles de GRADE, et les questions de faisabilité quant à l'utilisation des calculateurs de risque. La principale difficulté soulevée par les médecins était le manque de clarté des conseils portant sur les interventions pharmacologiques; tous les répondants ne comprenaient pas clairement l'hypothèse implicite des lignes directrices selon laquelle les patients dont le résultat du dépistage est positif seraient traités par statines et aspirine (AAS).
Conclusions : Ces entretiens montrent la nécessité d'une plus grande clarté des lignes directrices, y compris la clarification de la qualité de la cotation des données probantes et la force de la classification des recommandations. Notre faible taux de participation soulève la question de la représentativité; la répétition en échantillons qui démontrent un plus grand empressement à participer serait souhaitable.

Introduction

The United Nations General Assembly recognizes diabetes as an illness with substantial global morbidity, mortality and societal costs (1,2). Long-term consequences of diabetes include microvascular (retinopathy, nephropathy, neuropathy) and macrovascular (stroke, myocardial infarction) complications (3,4). The Public Health Agency of Canada estimated that the economic burden of direct care associated with diabetes is CAN$2.7 billion (5–7).

Approximately 6.8% of the Canadian population has diabetes (7). The Canadian Task Force for Preventive Health Care (CTFPHC) reported that in 2009, approximately 480,000 Canadians (1.4%) met criteria for the diagnosis of diabetes but were unaware that was so (8). It is possible that if aware of their diagnoses, these individuals would be offered and would accept interventions that would favourably alter their long-term health outcomes. Responding to this possibility, the CTFPHC produced the Screening for Type 2 Diabetes Guideline (using GRADE methods to rate the certainty of the evidence [9–11]), which is the focus of the current study.

In order to have their intended effect, guidelines must be interpreted accurately and adhered to by primary care physicians. Existing evidence suggests limited guideline awareness and adherence among primary care physicians (12–18). For example, an american study reported that approximately 50% of patients were not provided the care recommended in guidelines (19). One study exploring guideline implementation in clinical practice found that ambiguity and lack of clarity were perceived as barriers to implementation (20).

The need to understand more about guideline interpretation and adherence in general provided the impetus for this study. To garner this deeper understanding, we chose to focus on guidelines produced by the CTFPH and, in particular, the 2012 CTFPHC diabetes screening guideline (8). For screening guidelines to impact outcomes favourably, guideline developers require different behaviours or management approaches for individuals who screen positive vs. those who screen negative. Modelling studies in which individuals who screen positive would be treated with statins and aspirin (ASA) and those who screen negative or are unscreened would not be so treated provided the basis of the 2012 CTFPHC diabetes recommendations (8) in favour of screening for individuals who are at higher risk. Review of the CTFPHC guideline raised the possibility that the presentation may not have made the nature of the specific management recommendations sufficiently clear. We believed that an exploration of physicians' views of guidelines in general and their understanding of this diabetes guideline in particular, as it pertained to specific patient management, such as the treatment with statins and ASA, would be helpful in improving guidelines.

For this interview study, we sought to address the following questions: 1) What role do primary care physicians perceive for guidelines, particularly CTFPHC guidelines, as part of clinical practice? 2) How do primary care physicians currently deal with screening for diabetes? 3) How do primary care physicians understand and interpret the 2012 CTFPHC diabetes screening guideline? 4) Do clinicians understand the guideline's intended message that the basis for patient management recommendations is the use of statins and ASA in screen-positive but not in other individuals? and 5) What can be done to make guidelines more useful?

Methods

Qualitative research approach

We used a qualitative descriptive approach to report on the primary care physicians' experiences and perceptions regarding guideline recommendations. This approach is used to gain preliminary insight into the physicians' views of a specific topic (in this case, the diabetes screening guideline) (21–30).

The qualitative descriptive approach focuses on summarizing the respondents' own words (24,31). This approach uses low-level inference and as little interpretation as possible (32). Thus, we imposed no preconceived hypotheses or interpretations because we sought to describe physicians' understanding. We used individual, semistructured interviews that were conducted either in person, by telephone or on Skype.

Sampling and recruitment

We applied a purposeful sampling technique (26) that sought information-rich cases until data saturation or information redundancy was reached (that is, no new themes were emerging from the participants' responses) (27). We included licensed primary care physicians practising in or around community of Hamilton, Ontario. Physicians were excluded if they reported that they did not use guidelines as part of practice. We sought diversity in physician and patient demographics, such as gender, length of practice experience, urban vs. periurban practice, patient socioeconomic status and volume of patients seen in practice. We secured physician contact information (telephone and fax details) from the updated Ontario College of Physicians and Surgeons online registry of licensed physicians (http://www.cpso.on.ca/public-register/all-doctors-search). We initiated telephone and fax contact, including 2 follow-up reminders, with a request to respond by e-mail. Following an expression of interest, physicians received study descriptions and consent forms.

One week prior to the scheduled interviews, participating physicians received the relevant diabetes guideline and recommendations, with a request to read the guideline prior to the interview. This ensured that all interviewed physicians were familiar with the