Review

Relevance to family practice of English-language guidelines on breast, colorectal and prostate cancer: a review

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Abstract

\textbf{Background.} GPs regard cancer guidelines as useful yet criticise their limited applicability to the primary care setting.

\textbf{Objectives.} To determine the extent to which English-language breast, colorectal and prostate cancer guidelines contain recommendations that are relevant to GPs and to find out which of the GPs’ roles in cancer care the recommendations refer to.

\textbf{Methods.} Evidence- and consent-based English-language breast, colorectal and prostate cancer guidelines were searched for in guideline databases and selected guideline providers’ web pages, and checked against inclusion and exclusion criteria. Relevant recommendations were identified, extracted and examined. The involvement of GPs in guideline development as well as whether they were named as a target group was further investigated.

\textbf{Results.} Of the 65 identified guidelines, 35 were eligible and contained recommendations applicable to GPs. GPs were directly involved in the development of the majority of only breast cancer guidelines and were explicitly named as a target group in fewer than 50\% of guidelines. The majority of recommendations dealt with patient-physician communication, with a focus on cancer therapy. Rarer procedural recommendations predominantly concentrated on follow-up/survivorship care. Less than one-third of all relevant recommendations concerned diagnosis. Only breast cancer guidelines provided a high number of recommendations on transitions between primary and secondary care.

\textbf{Conclusion.} Greater consideration of GPs would increase their acceptance of guidelines, promote delivery of high-quality cancer care and clarify responsibilities between cancer care providers. The GP’s role in cancer diagnosis is not appropriately reflected in cancer guideline recommendations.

Key words. Cancer, general practice, guidelines, policy, primary health care, review.

Introduction

GPs play an important role across the entire cancer care continuum (1) and this role is being increasingly appreciated internationally (2).
Klabunde et al. (4) investigated GPs’ involvement in cancer care and compared it with that of specialists. While the provision of specific cancer treatment and therapeutic decision making are for the most part performed by specialists, GPs tend to be responsible for providing general medical care (4). GPs refer cancer patients to specialists, provide psychosocial support (1,5) and help their patients weigh up the pros and cons of treatment options (6–8). They also manage complications in cancer and cancer therapies (3) and are involved in follow-up (9) and advanced cancer care (10).

In order to fulfil these various responsibilities, appropriate guidelines with recommendations that are of relevance to GPs are needed (9). The majority of GPs regard guidelines as useful (11–13). However they also point out that guidelines have often been developed by tertiary and secondary care specialists and are therefore applicable to general practice to only a limited degree (14,15).

Furthermore, they say that by transferring evidence from population-based studies, guidelines tend to neglect the complexity of an individual patient’s situation, with its multiple diagnoses, side effects and patient preferences (16,17). Concordantly, almost all GPs in a UK survey indicated that it is necessary to adapt guidelines to reflect the needs of their patients (13).

Recently, Siebenhofer et al. revealed that only a small percentage of German cancer guidelines clearly addressed GPs as a target group, and less than half involved GPs in their development (18). For this reason, we also decided to explore the extent to which GPs are taken into consideration in English-language cancer guidelines.

Our primary aim was to investigate whether English-language breast, colorectal and prostate cancer guidelines contain specific recommendations that directly or indirectly address GPs, and whether GPs were involved in the development of these guidelines. In addition we determined whether GP-relevant recommendations deal mainly with patient–physician consultations, or concern diagnostic and therapeutic procedures carried out by the GP, and explored which of the GPs’ roles in cancer care the recommendations predominantly refer to.

Methods

In order to answer our research questions, we identified published guidelines that satisfied the following inclusion criteria: guidelines had to be (i) written in the English language, (ii) concerned with breast, colorectal or prostate cancer care in adults (including primary prevention and screening), (iii) potentially relevant to outpatient and primary care-centered health care and (iv) evidence- and consent-based and more or less comparable with the standards of the German Association of Scientific Medical Societies S3 guidelines. The final inclusion criteria was satisfied when all systematic development elements had been taken into consideration (19). The guideline search was restricted to breast, colorectal and prostate cancers, as we only wanted to include cancers that are prevalent in the general population in order to ensure their practical relevance to GPs.

Duplicates and guidelines that gave no clear recommendations were excluded (e.g. if recommendations were not clearly identified as such or no information was provided indicating the strength of a recommendation). If two or more versions of the same guideline existed, the most recent one was used. If the only available guideline was an expired version, this was also included.

Data sources, search strategy and identification of guidelines

As our aim was to retrieve as many English-language breast, colorectal and prostate cancer guidelines as possible without necessarily intending our search to be comprehensive, we decided on a subset of sources from which we expected the highest yield. The guideline search was performed by the Evidence-Based Medicine (EBM) Review Center in Graz, which did not have open access to the Guidelines International Network (G-I-N) database. As full texts could be obtained via the international guideline database provided by the German Agency for Quality in Medicine—which is no longer available—and the web pages of two European—the National Institute for Health and Clinical Excellence (NICE) and the Scottish Intercollegiate Guidelines Network—and two non-European guideline providers—the National Guideline Clearinghouse and the web pages of the New Zealand Ministry of Health, where the guidelines of the no longer existent New Zealand Guidelines Group can be found, these sources were searched first. In a second step the EBM review centre searched the G-I-N database for additional relevant guidelines.

Details on the sources, the search terms used, and hit rates can be found in Supplement A. All searches were conducted by one investigator from 19–22 February, 2013. One researcher checked potentially relevant guidelines identified as a result of the search to ensure they satisfied the inclusion and exclusion criteria described above.

Data extraction and data synthesis

General information extracted from the guidelines was the date of publication, whether GPs were directly involved in the development of the guideline and guideline validity at the time of the search. Individual recommendations that were specifically directed towards GPs, or that, at least in principle, could be followed by GPs, were identified and extracted.

Extracted recommendations were classified according to whether the implementation of the recommendation by a GP was likely to take the form of communication with the patient or to be a procedural measure. Communication recommendations were, for example, an explanation, or the provision of information, to both cancer patients and their relatives. Both communication and procedural recommendations were classified according to whether they referred to ‘prevention/screening’, ‘diagnosis’, ‘therapy’ or ‘follow-up/survivorship’. Within the subcategory ‘follow-up/survivorship’, GP-relevant recommendations on ‘transitions between primary and secondary care’ and on ‘psychosocial/palliative care’ were identified and analyzed.

Results

General characteristics of eligible studies

Of the 65 identified guidelines, 12 were excluded, either because they were duplicates or because the author had already replaced them. Of the 53 remaining documents, 13 did not fulfil the inclusion criteria (see Fig. 1 and Supplement B) either because they were directed at persons with an increased risk of developing cancer, they were clearing reports, not guidelines at all, not evidence- and consensus-based, dealt only with a single clinical problem, or were not published in the English language. Five documents that contained relevant subject matter were excluded because they contained no clearly flagged recommendations, or indications of relative importance, that could have been helpful to GPs (Fig. 1 and Supplement B). Overall, 35 of 40 English-language guidelines—13 breast, 12 colorectal and 10 prostate cancer guidelines—contained recommendations of relevance to GPs and these were considered in the present manuscript (Table 1). Of the included 35 guidelines, 12 were from the UK, 11 from the USA and 1–3 from Canada, New Zealand, Australia, Malaysia, Spain, Belgium and the Netherlands.

GPs were directly involved in the development of 8 of the 13 (62%) breast, 4 of the 12 (33%) colorectal and 4 of the 10 (40%) prostate cancer
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For the remaining guidelines, GPs were either not involved or no information was available. Dates of publication ranged from 2002 to 2012 for breast, 2004 to 2012 for colorectal and 2002 to 2013 for prostate cancer guidelines. Sixty nine percentage of breast, 75% of colorectal and 50% of prostate cancer guidelines were still valid.

Specific recommendations for GPs

As mentioned above, 35 of the 40 relevant English-language guidelines contained clearly recognisable or marked recommendations (Table 1). GPs were explicitly named as a target group in 38–42% of the investigated breast, colorectal and prostate cancer guidelines, and recommendations were directed towards them. In the remaining guidelines, GPs were either indirectly addressed as a target group, or recommendations were made that were relevant for providers of outpatient health care and were thus, in principle, potentially relevant to GPs as well (Table 1). Breast, colorectal and prostate cancer guidelines contained a total of 323, 404 and 460 GP-relevant recommendations.

GP-relevant recommendations on patient–physician communication and procedural recommendations

The majority of recommendations that were relevant to GPs dealt with patient–physician communication. Figure 2 and Table 2 provide an overview of the recommendations that were of relevance to GPs. For breast and prostate cancer, a respective 68% and 72% of overall recommendations concerned patient–physician communication (Table 2). Only for colorectal cancer were recommendations on patient–physician communication and procedural recommendations to be found in more or less equal measure. Prostate cancer guidelines contained a mean of 33 communication recommendations per guideline, compared to a respective 17 and 16 per breast and colorectal cancer guideline. Colorectal cancer guidelines had a mean of 18 procedural recommendations per guideline, compared to 8 per breast and 13 per prostate cancer guideline.

GP-relevant recommendations on prevention/screening, diagnosis, therapy and follow-up/survivorship

Prevention/screening

Of all GP-relevant recommendations in breast, colorectal and prostate cancer guidelines, 10–14% dealt with communication on prevention/screening. Twenty two percentage of all GP-relevant recommendations in colorectal cancer guidelines referred to prevention/screening procedures, while in breast and prostate cancer guidelines, only 1% of all GP-relevant recommendations dealt with prevention/screening procedures.

Diagnosis

About 7–14% of all GP-relevant recommendations in breast, colorectal and prostate cancer guidelines concerned communication relating to diagnosis, and 2–16% involved diagnostic procedures that might be carried out by the GP. Breast and prostate cancer guidelines focused more on communication relating to diagnosis than on diagnostic procedures (14% and 13% compared to 2% and 4%, respectively). For colorectal cancer guidelines, the relation was reversed, with 7% of all GP-relevant recommendations involving communication relating to diagnosis and 16% to diagnostic procedures.

Therapy

Respective percentages of 40%, 33% and 66% of all GP-relevant recommendations in breast, colorectal and prostate cancer guidelines concerned communication relating to therapy and 1%, 6% and 16% concerned therapeutic procedures that might be carried out by the GP.

Follow-up/survivorship

About 3–4% of all GP-relevant recommendations in breast, colorectal and prostate cancer guidelines dealt with communication linked to follow-up/survivorship and 18–25% with follow-up/survivorship procedures. Ten of the 13 (77%) guidelines on breast cancer contained a total of 53 recommendations on management of transitions between primary and secondary care, whereas 2 of the 12 (17%) colorectal cancer guidelines contained a total of 19, and 4 of the 10 (40%) prostate cancer guidelines a total of 20 recommendations. For all three cancers, only 30–40% of the investigated guidelines contained recommendations on palliative and/or psychosocial care that were of relevance to GPs.

Discussion

Summary of main findings

A search for English-language breast, colorectal and prostate cancer guidelines yielded a total of 65, of which 35 contained
<table>
<thead>
<tr>
<th>Short description of guidelines</th>
<th>Organisation</th>
<th>GP involvement in guideline development</th>
<th>GPs named as target group</th>
<th>Validity</th>
<th>Number of recommendations relevant to GPs</th>
<th>Recommendations on transition between primary and secondary care</th>
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Empty fields in the column 'GP involvement in guideline development' mean there was either no involvement or information on any involvement was unavailable. ACCC, The Cancer Council Australia; ACOG, American College of Obstetricians and Gynecologists; ACRR, American College of Radiology; AHRQ, Agency for Healthcare Research and Quality; Alberta Health Services; American College of Obstetricians and Gynecologists; American Society of Clinical Oncology; ASCO, American Society of Clinical Oncology; ASCRS, American Society of Colon and Rectal Surgeons; AUA, American Urological Association; Education and Research; CCO, Cancer Care Ontario; IKNL, Integraal Kankercentrum Nederland; KCE, Belgian Health Care Knowledge Centre; NZGG, New Zealand Guidelines Group; RCOG, Royal College of Obstetricians and Gynaecologists; SIGN, Scottish Intercollegiate Guidelines Network.

Since the NZGG went into voluntary liquidation in mid-2012, the guideline is not up to date and will not be updated anymore.
While GPs play an important role in the provision of emotional support (1) and end-of-life care for their patients (25,26), only a minority of guidelines on all three cancers contained recommendations for GPs on palliative and/or psychosocial procedures. While the involvement of GPs in palliative care has been shown to improve the chances of dying at home and to reduce the number of visits to the emergency department (27–29), GPs reported uncertainty when dealing with physical symptoms (30,31) but said these could have been lessened if guidelines had been available that addressed their specific setting.

The low number of recommendations on transitions between primary and secondary care is also worth mentioning as it supports the view that a clearer allocation of cancer care responsibilities is necessary (2). GPs complain about insufficient information sharing between providers, as well as insufficient care coordination (32). A clearer allocation would improve coordination and communication, especially at the primary–secondary care interface (2). Recently, the NICE clinical guideline on prostate cancer was criticised for not adequately addressing such issues as service organisation and guidance on the symptomatic management of, for example, urinary symptoms and sexual function, as well as the handling of co-morbidities (33).

The results of this study are comparable with those of its forerunner (18) in that GPs were involved in the development of fewer than half the guidelines. Low involvement of GPs in the development of colorectal and prostate cancer guidelines has also been reported by McIntosh et al. (34) and may be one of the reasons why only about 40% of included guidelines directly addressed family practitioners as a target group.
Relevance to family practice of English-language guidelines

Table 2. Mean number of communication and procedural recommendations per breast, colorectal and prostate cancer guidelines (overall and percentage distribution between ‘prevention/screening’, ‘diagnosis’, ‘therapy’ and ‘follow-up/survivorship’)

<table>
<thead>
<tr>
<th></th>
<th>Breast cancer guidelines</th>
<th>Colorectal cancer guidelines</th>
<th>Prostate cancer guidelines</th>
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<tr>
<td>Communication (mean number of recommendations per guideline)</td>
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<tr>
<td>Prevention/screening (%)</td>
<td>17</td>
<td>16</td>
<td>33</td>
</tr>
<tr>
<td>Diagnosis (%)</td>
<td>14</td>
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<tr>
<td>Therapy (%)</td>
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<td>19</td>
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<tr>
<td>Follow-up/survivorship (%)</td>
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<td>56</td>
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<td>Procedural (mean number of recommendations per guideline)</td>
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<td>Prevention/screening (%)</td>
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Conclusions

The role of GPs in cancer care is not appropriately reflected in the development and content of English-language guidelines on breast, colorectal and prostate cancer. The composition of guideline development groups has been reliably demonstrated to influence recommendations (35). It has therefore been suggested that development groups should be multidisciplinary and include all health care professionals involved in the management of patients in different health care settings. Furthermore, guidelines should not only target the audience they were developed for but also any ‘secondary audience’ that may be expected to use them (36).

Primary care associations have started to evaluate guidelines in order to find out whether their recommendations are feasible and of relevance to GPs (6). There have been calls for the more frequent involvement of generalist clinicians in guideline development (6), as well as clearer signposting of whether recommendations that are relevant to primary care rely on evidence that was gathered in a primary or secondary care population (37).

Greater consideration of GPs in cancer guidelines would promote high-quality cancer care by providing advice that is useful for GPs, clarifying responsibilities between different providers and increasing the acceptance of cancer guidelines in primary care (7,16,38).

Supplementary material

Supplementary material is available at Family Practice online.

Acknowledgements

We would like to thank Phillip Elliott, who provided helpful comments on the manuscript.

Declaration

Funding: German Cancer Aid (grant number 110022). The funding organization had no influence on the content and was not involved in conducting, analysing or interpreting the study.

Ethical approval: none.

Conflict of interest: none.

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5. Campbell NC, MacLeod U, Weller D. Primary care oncology: essential if high quality cancer care is to be achieved for all. Fam Pract 2002; 19: 577–8.


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