A quality evaluation of the clinical practice guidelines on breast cancer using the RIGHT checklist

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Background: Breast cancer is the most frequent type of cancer in women. The methodological quality of clinical practice guidelines (CPGs) on breast cancer has been shown to be heterogeneous. The aim of our study was to evaluate the quality of breast cancer CPGs published in years 2018-2020, using the Reporting Items for Practice Guidelines in Healthcare (RIGHT) checklist.

Methods: We searched Medline (via PubMed), Chinese National Knowledge Infrastructure (CNKI), Wanfang and Chinese Biomedical Literature (CBM) as well as websites of guideline organizations for CPGs on breast cancer published between 2018 and 2020. We used the RIGHT checklist to evaluate the reporting quality of the included guidelines by assessing whether the CPGs adhered to each item of the checklist and calculated the proportions of appropriately reported RIGHT checklist items. We also presented the adherence reporting rates for each guideline and the mean rates for each of the seven domains of the RIGHT checklist.

Results: A total of 45 guidelines were included. Eighteen (40.0%) guidelines had an overall reporting rate below 50% and only three (6.7%) reported more than 80% of the items. The domains “Basic information” and “Background” had the highest reporting rates (75.9% and 62.5%, respectively). The mean reporting rates of the domains “Evidence”, “Recommendation”, “Review and quality assurance”, “Funding and declaration and management of interests” and “Other information” were 42.7%, 53.0%, 33.3%, 45.0%, and 44.4%, respectively.

Conclusions: The reporting quality varied among guidelines for breast cancer, showing the need for improvement in reporting the contents. Guideline developers should pay more attention to reporting the evidence, review and quality assurance, and funding and declaration and management of interests in future.

Keywords: Breast cancer; clinical practice guideline; Reporting Items for Practice Guidelines in Healthcare checklist (RIGHT checklist); reporting quality

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Introduction

In 2020, about 19.2 million new cases of cancer and 10.0 million cancer-related deaths occurred worldwide. Breast cancer, accounting for approximately two million new cases annually and about 685,000 deaths every year, is the most frequent type of cancer in women (1). Older age, genetic predisposition, prolonged exposure to estrogens, Western-style diet, obesity and alcohol consumption are the main factors increasing the risk of breast cancer (2). During the past decades, promising new methods to decrease morbidity and mortality rates, such as molecular targeted therapy and immunotherapy have been developed (3). Despite so, the survival rate of breast cancer varies substantially across the world (4,5).

Clinical practice guidelines (CPGs) are statements including recommendations that aim to improve the prognosis of patients and harmonize the provision of effective health care. High-quality guidelines should deploy objective approaches for analyzing the evidence to underpin the recommendations and provide clear and comprehensive recommendations to reduce the gap between research and clinical practice. Several studies have shown that the use of guidelines in clinical practice can improve the quality of medical care, and ultimately, the outcomes of patients (6,7).

Previous evaluations of guidelines for breast cancer treatment have revealed that their methodological quality was heterogeneous (8,9). The adherence to guideline recommendations among clinicians was also unsatisfactory (10). In addition to the lack of awareness and unfamiliarity with guidelines (11), some clinicians also questioned the evidence that was used to make the recommendations (12). Therefore, promoting the quality of CPGs is critical to achieving a high quality of medical care.

As guidelines are usually updated periodically, continuous evaluation of guidelines to find the flaws in the recently developed guidelines can offer useful advice for guideline developers. In the past, most guideline evaluations have used the Appraisal of Guidelines, Research and Evaluation (AGREE) II, a recognized instrument for evaluating the quality of guidelines. However, as the assessment of the methodology and reporting were done together in the AGREE II instrument, it had only limited value in evaluating specifically the reporting quality. In 2016, the international Reporting Items for practice Guidelines in Healthcare (RIGHT) Working Group developed a reporting tool for practice guideline in health care, the RIGHT checklist, to assist developers in reporting guideline (13). To our knowledge, RIGHT checklist has so far been used for the evaluation of CPGs on breast cancer treatment only (14). We therefore aimed to assess the reporting quality of CPGs published in the years 2018-2020, concerning all aspects of breast cancer care, including screening, treatment, supportive care and risk-reduction.

Methods

Search strategy

We systematically searched Medline (via PubMed), Chinese National Knowledge Infrastructure (CNKI), Chinese Biomedical Literature Database (CBM), and Wan Fang Database for CPGs on breast cancer. We also searched the websites of the following guideline associations, governmental and international health agencies, and oncological societies: the World Health Organization (WHO), National Comprehensive Cancer Network (NCCN), Guidelines International Network (GIN), Scottish Intercollegiate Guidelines Network (SIGN) and the National Institute for Health and Care Excellence (NICE), as well as of the European Society for Medical Oncology (ESMO), the American Society of Clinical Oncology (ASCO) and the Chinese Society of Clinical Oncology (CSCO). All databases were searched from January 1, 2018 to December 1, 2020, and the languages were restricted to Chinese and English. The search terms included Breast Neoplasms, breast neoplasm*, breast cancer, Breast, Guideline, Practice Guideline, guideline*, guidance* and recommendation*. The full search strategy for PubMed was shown in Supplementary Appendix 1.

Inclusion and exclusion criteria

We included CPGs and recommendations for breast cancer published in Chinese or English between 2018 and 2020. If multiple releases of the same CPG were available, we only included the latest version. The topic of the guidelines and recommendations was strictly limited to breast cancer; guidelines focusing on other cancers or disease that included recommendations related to breast cancer were excluded. Guidelines that were developed by the same organization and covered different aspects of the same topic clearly forming a series were combined and considered as one guideline.

RIGHT checklist

We used the RIGHT checklist to evaluate the reporting
quality of the included guidelines. The checklist consists of 22 items, further divided into 35 sub-items. The items encompass the following domains: basic information (items 1 to 4), background (items 5 to 9), evidence (items 10 to 12), recommendations (items 13 to 15), review and quality assurance (items 16 and 17), funding and declaration and management of interests (items 18 and 19), and other information (items 20 to 22).

Screening and data collection

The search results were imported into the Endnote library (version X9.1). Two investigators (Hanqiong Zhou, Xuan Wu) independently screened first the titles and abstracts of the records, and then the full texts of the potentially relevant guidelines to determine the eligibility for inclusion according to the pre-defined criteria. Disagreements were discussed and resolved together with another investigator (Qiming Wang).

The included CPGs were divided between two groups of two researchers (Hanqiong Zhou, Cheng Cheng, Xuan Wu, Jing Han). Both investigators from the group extracted the data from the included guidelines independently. The title, developer, country of publication, journal or website of publication, and publication year were extracted. For each CPG, each sub-item of the RIGHT checklist was evaluated as “reported”, “not reported” or “not applicable”. “Reported” refers to a complete or partial presentation of the relevant information, and “not reported” means that the information is totally missing. “Not applicable” was used if the item did not need to be evaluated. The extracted data were cross-checked within each group. Disagreements were settled by face-to-face discussion, and another researcher was consulted in case of any unsolved conflicts.

Statistical analysis

We calculated the overall reporting rate of each guideline as the proportion of all sub-items that were rated as “reported”. We also present the reporting rates of each sub-item (i.e., the proportion of CPGs for which the sub-item was rated “reported”), and the mean reporting rates of items within each domain. We used a one-way analysis of variance (ANOVA) to test whether the overall mean reporting rate differed between guidelines published in the years 2018, 2019 and 2020. All analyses were performed using SPSS V.26.0.

Results

Search results

We identified 916 records from the literature databases and 29 records from guideline websites and other additional sources. Sixty-seven records were excluded as duplicates, and 878 records were considered to be potentially relevant. After screening the titles, abstracts and full-texts, a total of 45 guidelines were included (Figure 1). Seventeen guidelines developed by the Sir Ganga Ram Hospital group (India), three guidelines developed by Brazilian Ministry of Health and five guidelines developed by the Japanese Breast Cancer Society were combined and assessed as single guidelines, respectively.

Basic characteristics of included guidelines

Sixteen (35.6%) guidelines were developed in the United States and 14 (33.3%) in Europe (four by multinational European societies, four in Germany, three in Spain, and two in Italy, one in the United Kingdom). The remaining CPGs were from China (n=7, 15.6%), India (n=2, 4.4%), Brazil (n=2, 4.4%), Canada (n=1, 2.2%), Japan (n=1, 2.2%) and Malaysia (n=1, 2.2%); one guideline was developed by a multinational society from Asia (n=1, 2.2%). The majority of the guidelines were published in journals; five (11.1%) CPGs were only published on the website of the developer. Eighteen (40.0%) guidelines were published in 2020, nine (20.0%) in 2019, and 18 (40.0%) in 2018. (Table 1)

Reporting quality

Eighteen (40.0%) guidelines had an overall reporting rate below 50%. Only three (6.7%) had a reporting rate higher than 80%. In the domains “Basic information” and “Background”, most of the guidelines had relatively high reporting rates. The mean reporting rates of these two domains over all guidelines were 75.9% and 62.5%, respectively. In the domains of “Evidence”, “Recommendation”, “Funding and declaration and management of interests” and “Other information”, the mean reporting rates were 42.7%, 53.0%, 45.0%, and 44.4%, respectively. The domain “Review and quality assurance” had clearly the lowest reporting rate (33.3%) (Figure 2).

The mean (± standard deviation) overall reporting rate of the guidelines was 54.9%±25.7%. Nine sub-items (1a, 1c, 3,
4, 7a, 7b, 13a, 19a and 20) were reported by more than 80% of the CPGs. Fifteen sub-items were reported by less than half of the guidelines: only less than 10% of the guidelines reported the sub-items 10b (outcome selection and sorting) and 18b (describing the role of funders in the different stages of guideline development) (Figure 3).

**Subgroup analysis**

The mean (± standard deviation) overall reporting rates of the guidelines published in 2018, 2019 and 2020 were 54.3%±17.1%, 56.5%±21.3%, and 54.6%±16.5%, respectively. The results of one-way ANOVA analysis showed no association between the reporting quality of guidelines and the year of publication (P=0.951).

**Discussion**

This is the first comprehensive evaluation of the reporting quality of guidelines that covering the full range of breast cancer care. And we finally assessed 45 guidelines in breast cancer using RIGHT checklist. The reporting quality of practice guidelines for breast cancer published in the years 2018 to 2020 tended to be low. Eighteen out of the 45 assessed guidelines complied with less than half of the items of the RIGHT checklist. We found only three guidelines that reported more than 80% of the items. Items related to the basic information of the guideline and the background section were however reported relatively well.

In the domain “Evidence”, the sub-item 10b, concerning outcome selection and sorting, was reported very rarely. One reason for this result may be that in most guidelines
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<td>5th ESO-ESMO international consensus guidelines for advanced breast cancer (ABC 5) (15)</td>
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<td>2020</td>
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<td>Adjuvant endocrine therapy in premenopausal patients with hormone receptor-positive early breast cancer: Evidence evaluation and GRADE recommendations by the Italian Association of Medical Oncology (AIOM) (16)</td>
<td>AIOM</td>
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<td>European Journal of Cancer</td>
<td>2018</td>
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<td>AGO Recommendations for the Diagnosis and Treatment of Patients with Early Breast Cancer: Update 2018 (17)</td>
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<td>2020</td>
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<td>Interdisciplinary Screening, Diagnosis, Therapy and Follow-up of Breast Cancer. Guideline of the DGGG and the DKG (S3-Level, AWMF Registry Number 032/0450L, December 2017)—Part 1 with Recommendations for the Screening, Diagnosis and Therapy of Breast Cancer (28)</td>
<td>DGGG and DKG</td>
<td>Germany</td>
<td>Geburtshilfe und Frauenheilkunde</td>
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<td>Interdisciplinary Screening, Diagnosis, Therapy and Follow-up of Breast Cancer. Guideline of the DGGG and the DKG (S3-Level, AWMF Registry Number 032/0450L, December 2017)—Part 2 with Recommendations for the Therapy of Primary, Recurrent and Advanced Breast Cancer (29)</td>
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<td>Geburtshilfe und Frauenheilkunde</td>
<td>2018</td>
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<td>Neoadjuvant therapy for breast cancer treatment: an expert panel recommendation from the Brazilian Society of Breast Surgeons 2018 (30)</td>
<td>SBM</td>
<td>Brazil</td>
<td>Breast Cancer Research and Treatment</td>
<td>2018</td>
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<td>Giuseppe Curigliano</td>
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<td>Recommendations on prevention and screening for breast cancer in Hong Kong (33)</td>
<td>CEWG</td>
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<td>Recommendations on screening for breast cancer in women aged 40–74 years who are not at increased risk for breast cancer (34)</td>
<td>Canadian Task Force on Preventive Health Care</td>
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<td>SEOM clinical guidelines in advanced and recurrent breast cancer (2018) (35)</td>
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<td>Practical consensus recommendation developed by India (37-53)</td>
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<td>Guidelines for early detection developed by Brazil (54-56)</td>
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<td>Clinical practice guideline developed by Japan (57-61)</td>
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<td>Integrative Therapies During and After Breast Cancer Treatment: ASCO Endorsement of the SIO Clinical Practice Guideline (63)</td>
<td>ASCO</td>
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<td>Journal of Clinical Oncology</td>
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<td>Management of Hereditary Breast Cancer: American Society of Clinical Oncology, American Society for Radiation Oncology, and Society of Surgical Oncology Guideline (64)</td>
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<td>Journal of Clinical Oncology</td>
<td>2020</td>
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<td>Recommendations on Disease Management for Patients with Advanced Human Epidermal Growth Factor Receptor 2—Positive Breast Cancer and Brain Metastases: ASCO Clinical Practice Guideline Update (66)</td>
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<td>Journal of Clinical Oncology</td>
<td>2018</td>
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<td>Role of Patient and Disease Factors in Adjuvant Systemic Therapy Decision Making for Early-Stage, Operable Breast Cancer: Update of the ASCO Endorsement of the Cancer Care Ontario Guideline (67)</td>
<td>ASCO</td>
<td>United States</td>
<td>Journal of Clinical Oncology</td>
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<td>Selection of Optimal Adjuvant Chemotherapy and Targeted Therapy for Early Breast Cancer: ASCO Guideline Update (68)</td>
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<td>United States</td>
<td>Journal of Clinical Oncology</td>
<td>2021</td>
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<td>Systemic Therapy for Patients with Advanced Human Epidermal Growth Factor Receptor 2—Positive Breast Cancer: ASCO Clinical Practice Guideline Update (69)</td>
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<td>United States</td>
<td>Journal of Clinical Oncology</td>
<td>2018</td>
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<td>Use of Biomarkers to Guide Decisions on Adjuvant Systemic Therapy for Women with Early-Stage Invasive Breast Cancer: ASCO Clinical Practice Guideline Update Integration of Results From TAILORx (70)</td>
<td>ASCO</td>
<td>United States</td>
<td>Journal of Clinical Oncology</td>
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<td>Use of Endocrine Therapy for Breast Cancer Risk Reduction: ASCO Clinical Practice Guideline Update (71)</td>
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<td>Journal of Clinical Oncology</td>
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<td>Early breast cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment, and follow-up (72)</td>
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<td>NCCN guidelines version 1.2020 Breast Cancer Screening and Diagnosis (74)</td>
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<td><a href="https://education.nccn.org/">https://education.nccn.org/</a></td>
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<td>Updated Breast Cancer Surveillance Recommendations for Female Survivors of Childhood, Adolescent, and Young Adult Cancer from the International Guideline Harmonization Group (75)</td>
<td>ASCO</td>
<td>United States</td>
<td>Journal of Clinical Oncology</td>
<td>2020</td>
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<td>Chinese Advanced Breast Cancer Consensus Guideline 2020 (CABC3) (77)</td>
<td>China Medical Women's Association Breast Center</td>
<td>China</td>
<td>Oncology Progress</td>
<td>2020</td>
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<td>Early and locally advanced breast cancer: diagnosis and management (79)</td>
<td>NICE</td>
<td>United Kingdom</td>
<td><a href="https://www.nice.org.uk/guidance">https://www.nice.org.uk/guidance</a></td>
<td>2018</td>
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<td>Management of Breast Cancer (80)</td>
<td>MaHTAS</td>
<td>Malaysia</td>
<td><a href="https://g-i-n.net/library/new-international-guidelines-library">https://g-i-n.net/library/new-international-guidelines-library</a></td>
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ESO, European School of Oncology; ESMO, European Society for Medical Oncology; AIOM, Associazione Italiana di Oncologia Medica; AGO, German Gynecological Oncology Group; CACA, Chinese Anti-Cancer Association; ACR, American college of radiology; NHC, National Health Commission of the People's Republic of China; ASBrS, American Society of Breast Surgeons; CACA-CBCS, Chinese Anti-Cancer Association, Committee of Breast Cancer Society; DGGG, German Society for Gynecology and Obstetrics; DKG, German Cancer Society; SBM, Brazilian Society of Breast Surgeons; KSMO, Korean Society of Medical Oncology; CEWG, Cancer Expert Working Group on Cancer Prevention and Screening; SEOM, Spanish Society of Medical Oncology; ASCO, American Society of Clinical Oncology; NCCN, National Comprehensive Cancer Network; CSCO, Chinese Society of Clinical Oncology; NICE, National Institute for Health and Care Excellence; MaHTAS, Malaysian Health Technology Assessment Section.
most attention was focused on the length of survival of the patients, and hence other important outcomes were neglected. However, other outcomes, such as adverse effects of anti-tumor drugs, also have a great impact on the quality of life. Anti-tumor treatment may result in a series of consequences, such as premature menopause and impaired fertility, which in turn can cause several medical and psychological problems (81,82). Therefore, young breast cancer patients in particular, may be at risk of overtreatment if the outcome selection focused mainly on the expected length of survival. In other words, depending on the choice of outcomes which were selected for making the recommendation, the benefits and harms of the recommendation may not be accurately depicted. Hence, the process of outcomes selection and sorting should be fully explained to the user in a transparent manner.

The two items of the domain “Review and quality assurance”, item 16 indicating whether the draft guideline underwent independent review and item 17 indicating whether the guideline was subjected to a quality assurance process, were both poorly reported. Similar findings have been reported in other topics (83,84). A possible reason is that different guideline developer organizations may have used different reporting standards and protocols during the development process. A previous study has observed that only about half of the items of RIGHT and AGREE checklists were completely overlapping, showing that the contents may be reported differently depending on the instrument the authors used for guidance (85). Additionally, some of the guidelines we have included were developed for the management of patients with breast cancer during the COVID-19 pandemic. Therefore, given this emergent situation, guideline developers may have omitted the independent review and quality assurance because of time concerns (86). However, independent review and quality assurance are the gatekeeper of guideline development, and deficiencies in the review and assurance will inevitably impair the quality and reliability of the guidelines. Therefore, it is crucial that the process of the independent review—or a justification of why it was not performed—is clearly reported in the guideline.

In the domain “Recommendations”, the item 14, concerning the consideration of patients’ values and preferences, costs and resource implications, equity, feasibility and acceptability, was relatively poorly reported. There is no doubt that comprehensive and thoughtful guidelines will enable guideline users to understand and implement recommendations effectively. Although the advantages and disadvantages of different treatment options may seem similar, the outcomes are also strongly dependent on the patient’s values and personal situation, as well as the resources available. Breast cancer, as a life-threatening disease affecting women from all age groups worldwide, demonstrates how effective communication between the patients and clinicians is essential to find the best treatment strategy for each patient. This important aspect, should be considered when developing the guidelines (87,88). Therefore, to better develop the guidelines and improve
Figure 3 Reporting compliance to each sub-item of the RIGHT checklist in the included guidelines. (The descriptions of each sub-item are shown in http://www.right-statement.org/home/extensions). RIGHT, Reporting Items for Practice Guidelines in Healthcare.
the prognosis of patients with breast cancer, guideline developers should also pay particular attention to patients’ values and preferences, as well as the costs and resource implications when formulating the recommendations (89).

Even though AGREE II has been used in previous studies regarding quality evaluation of guidelines, it is widely accepted as the evaluation standard of the methodological quality of guidelines and may not be the optimal tool for evaluation of the reporting quality. The RIGHT checklist, designed to assist developer in reporting guidelines, provides users a clear and comprehensive description of procedures used to develop a guideline, and it became a powerful tool for reporting quality evaluation different from AGREE II. Although our study is not the first to evaluate the reporting quality of guidelines for breast cancer using the RIGHT instrument, it was to our knowledge the first to cover the full range of guidelines related to all aspects of breast cancer care: screening, treatment, supportive care and risk reduction. Furthermore, our findings could provide suggestions for guideline developer, also may promote the use of RIGHT checklist worldwide and improve the quality of future guidelines. However, our study has several important limitations. Firstly, even though the RIGHT checklist has clear explanations and examples that help the reviewers understand each sub-item of the checklist, inherent subjectivity during the evaluation of the reporting quality may still be present. Secondly, the language of our search was restricted to English or Chinese, hence our findings are not necessarily generalizable to guidelines published in other languages.

Questions to be further discussed and considered

Question 1: What impact do you think the low reporting quality of clinical practice guidelines on breast cancer will have on clinicians and clinical practices?

Expert opinion: Dr. Naohiro Ishii
The low reporting quality of clinical practice guidelines may have minimal impact on breast surgery specialists, since they have many opportunities to learn in attending conferences, workshops, and study meetings that focus on breast cancer. However, general surgeons who are not specialized in breast surgery often perform breast cancer medical treatment based mainly on the knowledge obtained by reading clinical practice guidelines. Therefore, the low reporting quality of clinical practice guidelines can decrease the quality of breast cancer medical treatment.

Expert opinion: Dr. Warren M. Rozen
Evidence-based clinical practice guidelines can improve a range of outcomes on a personal level and a public health level, by proving clinicians with optimal approaches that can include up to date research findings, modern techniques and technologies, and can evolve with new data as soon as it becomes available. A low reporting quality of such guidelines may lead to outdated practice on a clinician level, a low concordance of practice between practitioners and can delay changes in public health policy making that may guide the establishment of optimal programs. In a field as specific and rapidly evolving as breast cancer, this can lead to outdated oncologic approaches and poorer outcomes, poor reconstructive outcomes, and mis-direction of appropriate governmental support and focus.

Expert opinion: Dr. Geok Hoon Lim
CPGs of low reporting quality could result in a compromise of patients’ care.

Expert opinion: Dr. Pankaj G. Roy
Low quality could perpetuate clinical practices that may not be patient focused and lack sufficient evidence, potentially resulting in adverse events and/or overtreatment.

Question 2: What do you think are the most important aspects of developing high-quality clinical practice guidelines on breast cancer?

Expert opinion: Dr. Naohiro Ishii
Clinical practice guidelines on breast cancer should be made by groups composed of a variety of medical workers who engage in breast cancer medical care. Additionally, group membership should be balanced between specific specialties.

Expert opinion: Dr. Warren M. Rozen
Clinical practice guidelines require a basis in evidence-based medicine and up-to-date evaluation of clinical practice, developed by an appropriately trained and representative group of authors. This necessitates a panel of experts, who are suitably skilled in evidence-based medicine, current clinical practice, are abreast of advances in the field, and are appropriately skilled in collating and interpreting this data. The support of institutional and/or regional representative bodies is needed, in order to disseminate guidelines that are developed and put them into clinical practice. Such guidelines in breast cancer must be multidisciplinary in nature, and must be flexible, to accommodate changing practice and evidence.

Expert opinion: Dr. Geok Hoon Lim
High quality CPGs should be developed based on robust research studies with the highest level of evidence, such
as data derived from systematic reviews/meta-analysis of randomized controlled trials. However, not all topics can be investigated using randomized controlled trials. In these instances, the CPGs would have to be developed based on the best available data. While it is useful to refer to guidelines for the care of breast cancer patients, it is also crucial not to blindly follow the guidelines, since the treatment of each patient should be individualized, based on various factors such as the patient’s comorbidities, preferences and resource availabilities etc. These factors may not have been studied in the research studies leading to the formulation of the CPGs.

**Expert opinion: Dr. Pankaj G. Roy**
Clinical evidence to support the benefit to the patient and quality assurance

**Question 3: How do you think conflicts of interest in the guidelines should be handled?**

**Expert opinion: Dr. Naohiro Ishii**
The guidelines should have been made under no conflicts of interest. If a member of the guideline committee has specific conflicts of interest related to a certain section, this member should not take charge of the respective section.

**Expert opinion: Dr. Warren M. Rozen**
Conflicts of interest should be declared by all guideline authors at the outset, and if not sufficient to warrant exclusion as an author, should be documented and published within the guidelines. The author group should appropriately represent all aspects of breast cancer care, with no clear group over represented, and ultimate decisions for the guidelines made as a consensus view. If there is an unclear outcome in terms of the inclusion of an author or an author’s view on a particular point, an independent party can aid decision making and be included in the authorship group.

**Expert opinion: Dr. Geok Hoon Lim**
It is important that any conflicts of interest of the guideline developers in the development of CPGs should be declared. Ideally, in such cases, the development of CPGs should be undertaken by an independent experienced third party to avoid bias in the development of CPGs.

**Expert opinion: Dr. Pankaj G. Roy**
As long as there is clear evidence to demonstrate benefit to patient, COI is less of an issue if declared fairly and openly.

**Conclusions**
The evaluation of the guidelines on breast cancer care using the RIGHT checklist revealed that the reporting quality varied among the guidelines, and needs improvement in many aspects. The compliance of the reviewed guidelines to items related to the evidence, review and quality assurance and funding and declaration and management of interests was low. Guideline developers should pay more attention to the correct and transparent reporting of these topics to develop better guidelines in future.

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**Footnote**
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