Original Article

A reporting quality evaluation of the clinical practice guidelines for bladder cancer based on the RIGHT checklist

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Background: The Reporting Items for Practice Guidelines in Healthcare (RIGHT) checklist was developed to improve the reporting quality in clinical practice guidelines (CPGs). CPGs could provide the recommendations for key clinical issues with alternative care options and adherence to them could improve the outcomes. And, high reporting quality CPGs can assist health workers to incorporate the best evidence into the individual practice. There is no evaluation study on the reporting quality of CPGs in bladder cancer (BLCA). This study assessed the reporting quality of CPGs on BLCA and provided new insights for the development of CPGs in this disease.

Methods: We conducted a systematic search in multiple literature databases, including PubMed, Wanfang, China National Knowledge Infrastructure (CNKI) and China Biology Medicine (CBM) as well as the medical associations and websites of guideline development organizations. Relevant CPGs published between January 2017 and December 2021 were identified. Four trained investigators independently screened the extracted documents to include all eligible CPGs and evaluated whether the items in the RIGHT checklist were reported in each CPG. Subsequently, the reporting rate of each CPG and item, as well as the mean reporting rate of each domain in the RIGHT checklist was calculated.

Results: A total of 23 CPGs related to BLCA were finally included, of which, 22 guidelines were written in English and 1 was published in Chinese. The mean reporting rate of the included CPGs was approximately 65%. The reporting rates of the items in each RIGHT domain were 77% for basic information domain, 75% for recommendations domain, 72% for evidence domain, 69% for background domain, 43% for funding and declaration and management of interest domain, 35% for review and quality assurance domain, and 41% for other information domain. The reporting rate was determined as the mean value in Office Excel 2019.

Conclusions: The reporting quality of BLCA CPGs related to the domains of funding and declaration and management of interest domain, review and quality assurance domain, and other information domain is poor and warrants improvement in the future.

Keywords: Bladder cancer (BLCA); clinical practice guideline (CPG); Reporting Items for Practice Guidelines in Healthcare (RIGHT); reporting quality; improvement

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Introduction

Bladder cancer (BLCA) is a common malignancy, with over 430,000 new cases diagnosed and nearly 170,000 BLCA-related deaths worldwide annually (1). As the 6th most common cancer and the 9th leading cause of cancer-related death, BLCA is about 4 times more common in men, with the median age at diagnosis being 69 years. The incidence of BLCA varies globally, with the highest rate reported in Europe and North America (2,3). There are many risk factors associated with BLCA, although many cases are diagnosed without any apparent exposure to these factors. Tobacco smoking is the most common exposure contributing to the increased incidence of BLCA in Western countries (4).

Generally, clinical practice guidelines (CPGs) always summarize the latest available evidence for the management of patients in a format which is easy for clinicians to apply. According to a systematic review of the latest literature, trustworthy CPGs are developed by a multidisciplinary expert panel, provide ratings on the quality of the evidence and the strength of the recommendations, and consider patient values (5,6). The CPGs are not only a source of information for physicians, but also for policymakers, insurance agencies, continuing education programs, and information for making high-quality decisions for patients (7). Since CPG is an important tool to provide evidence-based protocols in clinical practice and improve the outcomes of patients, and the development of CPGs is essential in promoting high-quality, evidence-based, and safe patient care, some leading urology organizations are increasingly aware of the importance of CPGs and invest a lot of resources in developing and disseminating them. Unlike system review, cost analysis and decision model, the CPGs provide clear recommendations designed to directly influence patients, clinicians, and decision makers and are also becoming the basis for care quality indicators, which may affect the reimbursement of urologists, as well as the remuneration of performance indicators. As expected, the CPGs from different organizations should take the consistent, high-quality methods to achieve similar clinical recommendations. Unfortunately, the quality of CPGs methods developed by different professional organizations varies greatly, reflecting the specific users, financial resources, and target audience of each organization. Thus, the reporting quality of the CPGs developed by different organizations varies greatly.

Various oncology and urology societies have developed CPGs regarding the optimal strategies for screening, diagnosis, treatment, and follow-up of patients with BLCA, thereby providing guidance for healthcare professionals. Indeed, empirical evidence has shown that adherence to CPGs can improve patient outcomes (8). However, the reporting quality of CPGs is believed to be poor (9). Therefore, in 2017, the international RIGHT (Reporting Items for Practice Guidelines in Healthcare) Working Group produced a checklist to help guideline developers report CPGs, support peer reviewers and editors of journals when considering the guideline reports, and assist healthcare professionals comprehend and implement guidelines (10). The RIGHT checklist has been applied to evaluate the reporting quality of CPGs on many diseases (11-15). There is no evaluation study on the reporting quality of the CPGs in BLCA. This study used the RIGHT checklist to assess the reporting quality of CPGs related to the screening, diagnosis, treatment, and management of

Highlight box

Key findings

- The reporting quality of the clinical practice guidelines (CPGs) on bladder cancer (BLCA) published in the last 5 years was moderate and needs improvement.

What is known and what is new?

- The Reporting Items for Practice Guidelines in Healthcare (RIGHT) checklist was developed to improve the reporting quality in CPGs. CPGs could provide the recommendations for key clinical issues with alternative care options and adherence to them could improve the outcomes. And, high reporting quality CPGs assist health workers to incorporate the best evidence into the individual practice. Here, we assessed the reporting quality of CPGs on BLCA and provided new insights for their development.

What is the implication, and what should change now?

- The BLCA guideline developers should adhere to the RIGHT checklist and pay more attention to reporting the domains, including funding source and role of the funding agency, review and quality assurance, and other information.

BLCA, that were published in English or Chinese between January 2017 and December 2021.

Methods

Literature search

We systematically and comprehensively searched the following databases, governmental health agencies, guideline development organizations, and oncological societies to identify relevant CPGs published between January 2017 and December 2021: PubMed, Chinese Wanfang, Chinese National Knowledge Infrastructure, World Health Organization (WHO) (https://www.who.int), National Comprehensive Cancer Network (NCCN) (https://www.nccn.org), Guidelines International Network (GIN) (https://g-i-n.net), Scottish Intercollegiate Guidelines Network (SIGN) (https://www.sign.ac.uk), National Institute for Health and Care Excellence (NICE) (https://www.nice.org.uk), European Society for Medical Oncology (ESMO) (https://www.esmo.org), American Society of Clinical Oncology (ASCO) (https://www.asco.org), and the Chinese Society of Clinical Oncology (CSCO) (http://www.csco.org.cn/cn/index.aspx). The American Urological Association (AUA) (https://www.auanet.org), Society of Urologic Oncology (SUO) (https://suonet.org/home.aspx), European Association of Urology (EAU) (https://uroweb.org), International Consultation on Urologic Diseases (ICUD) (http://icud.info), International Bladder Cancer Network (IBCN) (http://ibcnweb.net), International Bladder Cancer Group (IBCG) (https://www.ibcg.info), and Canadian Urological Association (CUA) (https://www.cua.org) guidelines were also reviewed. Searches were limited to the period January 2017 to December 2021. The general search terms comprising both free text words and Medical Subject Headings (MeSH) included bladder neoplasms, guideline, and guidance and recommendation. Individual reference lists were reviewed for additional relevant references.

Eligibility criteria and study selection

The CPGs on the screening, diagnosis, treatment, and management of BLCA patients that were published either on publicly available websites or in peer-reviewed journals from January 2017 and December 2021 in Chinese or English were included. Protocols, summaries, and translations, as well as the older versions of CPGs where an updated edition was available, were excluded. In addition, the CPGs on other topics related to BLCA, and CPGs for which the full texts could not be retrieved were also excluded.

All the retrieved documents were imported into the EndNote library. Subsequently, four trained researchers independently screened the titles, abstracts, and full texts of the retrieved records according to the predefined inclusion and exclusion criteria. Disagreements among the researchers in the screening process were resolved via discussion or consultation with another experienced researcher.

The RIGHT checklist and data collection

The RIGHT checklist includes 22 key items, some of which are further divided into several sub-items, giving rise to a total of 35 items, with explanations and detailed descriptions. The 35 items which are essential for good reporting of CPGs were divided into 7 domains, including 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) (Table S1).

Prior to data collection, researchers had been trained to use the RIGHT checklist to ensure that the assessment criteria were adopted consistently. Two trained researchers screened for the relevant information from the eligible CPGs independently. The title, developer, year of publication, country or union of development, and journal or website of publication, as well as the evidence classification and grading system were extracted. In this study, most items of the RIGHT checklist were assessed using a dichotomous scale approach ("Reported" or "Not Reported"). "Reported" was defined as reporting the relevant information in whole or in part, and "Not Reported" was defined as the complete absence of relevant information. Moreover, if an item does not apply to the CPG, it was designated as "Not applicable". The extracted checklist data were further cross-checked within each researcher. Similarly, disagreements among the researchers were resolved via discussion or consultation with another experienced researcher.

Statistical analysis

The reporting rate of each CPG was calculated (the number of reported items divided by the total number of items).

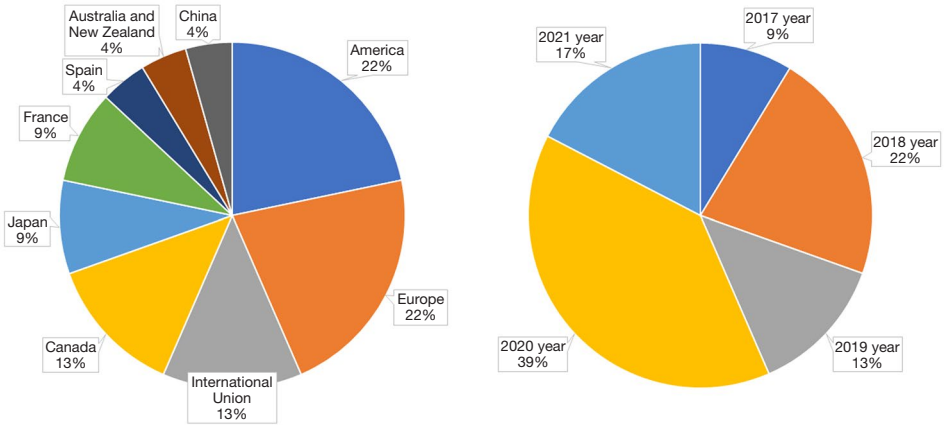

Figure 1 The distribution of the clinical practice guidelines related to bladder cancer according to country and year.

The mean reporting rates for each domain (the average of reporting rates for items in each domain) for all CPGs was also calculated. The reporting rates of the items were calculated as the number of reporting guidelines divided by the total number of guidelines. The analyses were conducted using Office Excel 2019.

Results

The search identified a total of 567 records, 536 of which remained after duplicates were removed. After screening the titles and abstracts, 513 records were excluded. Finally, after a full-text review, 23 CPGs related to BLCA were included for further analyses.

Characteristics of the included CPGs

Out of the 23 CPGs, 5 (22%) were developed in America and published primarily by AUA, SUO, NCCN, and the American College of Radiology (ACR). Five (22%) CPGs were published by European collaborations or organizations, 3 (13%) by international organizations or collaborations, and 3 (13%) in Canada. The remaining CPGs were developed by multidisciplinary expert panels or independent domestic research institutions from Japan (n=2), France (n=2), Spain (n=1), Australia and New Zealand (n=1), and China (n=1). Three (13%) CPGs were published only on specific websites by the developer, and 20 CPGs were retrieved from relevant journals. Two guidelines (9%) were published in 2017, 5 (22%) in 2018, 3 (13%) in 2019, 9 (39%) in 2020, and 4 (17%) in 2021. A total of 16 guidelines (70%) described methods for assessing the certainty of the body of evidence, 8 (35%) used the GRADE system approach, and 8 (35%) used the custom grading system approach (*Figure 1* and *Table 1*).

Overall reporting rate of the included CPGs

The overall reporting rates of the RIGHT checklist items in the 23 CPGs ranged from 31% to 89%, with a mean of 65%. There were 14 CPGs (61%) with a reporting rate above 60%, and 6 CPGs (26%) with a reporting rate lower than 60% (*Figure 2*).

Reporting rate of each domain

Among the 7 domains in the RIGHT checklist, the mean reporting rate of the "basic information" domain was highest (77%), and the mean reporting rate of the "review and quality assurance" domain was the lowest (35%). The mean reporting rates of the other domains were 75% for recommendations, 72% for evidence, 68% for background, 43% for funding and declaration and management of interests, and 41% for other information (*Figure 3*).

Reporting rate of each item

The reporting rates of the items were calculated as the number of reporting guidelines divided by the total number of guidelines (Table S2) (10). Items 3 (abbreviations and acronyms), 7b (describe any subgroups that are given special consideration in the guideline), and 13a (provide clear, precise, and actionable recommendations) were reported by all included CPGs. No guidelines reported

Table 1 Characteristics of the included guidelines

Serial number	Title	Year of publication	Reporting rate	Developer	Country or region	Journal or website of publication
1	ACR Appropriateness Criteria® Pretreatment Staging of Muscle-Invasive Bladder Cancer (16)	2018	66%	ACR	America	*Journal of the American College of Radiology*
2	ACR Appropriateness Criteria® Post-Treatment Surveillance of Bladder Cancer: 2021 Update (17)	2021	69%	ACR	America	*Journal of the American College of Radiology*
3	Clinical Practice Guidelines for Bladder Cancer 2019 edition by the Japanese Urological Association: Revision working position paper (18)	2020	80%	JUA	Japan	*International Journal of Urology*
4	Clinical Practice Guidelines for Bladder Cancer 2019 update by the Japanese Urological Association: Summary of the revision (19)	2020	80%	JUA	Japan	*International Journal of Urology*
5	EAU Guidelines on Non-Muscle-invasive Urothelial Carcinoma of the Bladder: Update 2016 (20)	2017	83%	EAU	Europe	*European Urology*
6	EAU-ESMO Consensus Statements on the Management of Advanced and Variant Bladder Cancer-An International Collaborative Multistakeholder Effort: Under the Auspices of the EAU-ESMO Guidelines Committees (21)	2020	89%	EAU-ESMO	Europe	*European Urology*
7	European Association of Urology Guidelines on Muscle-invasive and Metastatic Bladder Cancer: Summary of the 2020 Guidelines (22)	2021	74%	EAU	Europe	*European Urology*
8	European Association of Urology Guidelines on Non-muscle-invasive Bladder Cancer (TaT1 and Carcinoma in Situ) - 2019 Update (23)	2019	71%	EAU	Europe	*European Urology*
9	FROGG Patterns of Practice Survey and Consensus Recommendations on Radiation Therapy for MIBC (24)	2020	54%	FROGG	Australia and New Zealand	*Journal of Medical Imaging and Radiation Oncology*
10	GEC-ESTRO/ACROP Recommendations for Performing Bladder-sparing Treatment with Brachytherapy for Muscle-invasive Bladder Carcinoma (25)	2017	34%	GEC-ESTRO/ ACROP	Europe	*Radiotherapy and Oncology*
11	Recommendations for Follow-up of Muscle-invasive Bladder Cancer Patients: A Consensus by the International Bladder Cancer Network (26)	2018	57%	IBCN	Internationality	*Urologic Oncology*
12	Recommendations for Planning and Delivery of Radical Radiotherapy for Localized Urothelial Carcinoma of the Bladder (27)	2021	71%	Jonathan *et al*.	France	*Radiotherapy and Oncology*
13	Risk-adapted Management of Low-grade Bladder Tumours: Recommendations from the International Bladder Cancer Group (IBCG) (28)	2020	60%	IBCG	Internationality	*BJU International*
14	Role of Radiotherapy in the Management of Bladder Cancer: Recommendations of the French Society for Radiation Oncology (29)	2022	37%	SFRO	France	*Cancer Radiotherapie*

Table 1 (*continued*)

Table 1 (*continued*)

Serial number	Title	Year of publication	Reporting rate	Developer	Country or region	Journal or website of publication
15	SEOM Clinical Guideline for Treatment of Muscle-invasive and Metastatic Urothelial Bladder Cancer (2018) (30)	2019	63%	SEOM	Spain	Clinical & Translational Oncology
16	SIU-ICUD Recommendations on Bladder Cancer: Systemic Therapy for Metastatic Bladder Cancer (31)	2019	49%	SIU-ICUD	Internationality	*World Journal of Urology*
17	Treatment of Non-Metastatic Muscle-Invasive Bladder Cancer: AUA/ASCO/ASTRO/SUO Guideline (2020) (32)	2020	71%	AUA/ASCO/ASTRO/SUO	America	*AUA website*
18	Diagnosis and Treatment of Non-Muscle Invasive Bladder Cancer: AUA/SUO Guideline (2020) (33)	2020	71%	AUA/SUO	America	*AUA website*
19	Treatment Strategy for Newly Diagnosed T1 High-grade Bladder Urothelial Carcinoma: New Insights and Updated Recommendations (34)	2018	60%	Zachary *et al*.	Canada	*European Urology*
20	Canadian Urological Association Guideline on the Management of Non-muscle-invasive Bladder Cancer - Full-text (35)	2021	66%	CUA	Canada	*CUAJ-Canadian Urological Association Journal*
21	Canadian Urological Association Guideline: Muscle-invasive Bladder Cancer (36)	2019	60%	CUA	Canada	*CUAJ-Canadian Urological Association Journal*
22	Evidence-based Clinical Practice Guidelines for the Treatment and Monitoring of Non-muscle Invasive Bladder Cancer in China (2018 standard edition) (37)	2019	89%	CRHA-UPC	China	*Modern Journal of Urology*
23	Bladder Cancer, Version 3.2020, NCCN Clinical Practice Guidelines in Oncology (38)	2020	31%	NCCN	America	*Journal of the National Comprehensive Cancer Network*

ACR, American College of Radiology; JUA, Japanese Urological Association; EAU, European Association of Urology; ESMO, European Society for Medical Oncology; FROGG, Faculty of Radiation Oncology Genito-Urinary Group; GEC-ESTRO/ACROP, Groupe Européen de Curiethérapie-European Society for Radiotherapy and Oncology/Advisory Committee on Radiation Oncology Practice; IBCN, International Bladder Cancer Network; IBCG, International Bladder Cancer Group; SFRO, French Society of Radiation Oncology; SEOM, Spanish Society of Medical Oncology; SIU, Société Internationale d'Urologie; ICUD, International Consultation on Urologic Diseases; AUA, American Urological Association; ASCO, American Society of Clinical Oncology; ASTRO, American Society for Radiation Oncology; SUO, Society of Urologic Oncology; CUA, Canadian Urological Association; CRHA-UPC, Chinese Research Hospital Association - Urology Professional Committee; NCCN, National Comprehensive Cancer Network.

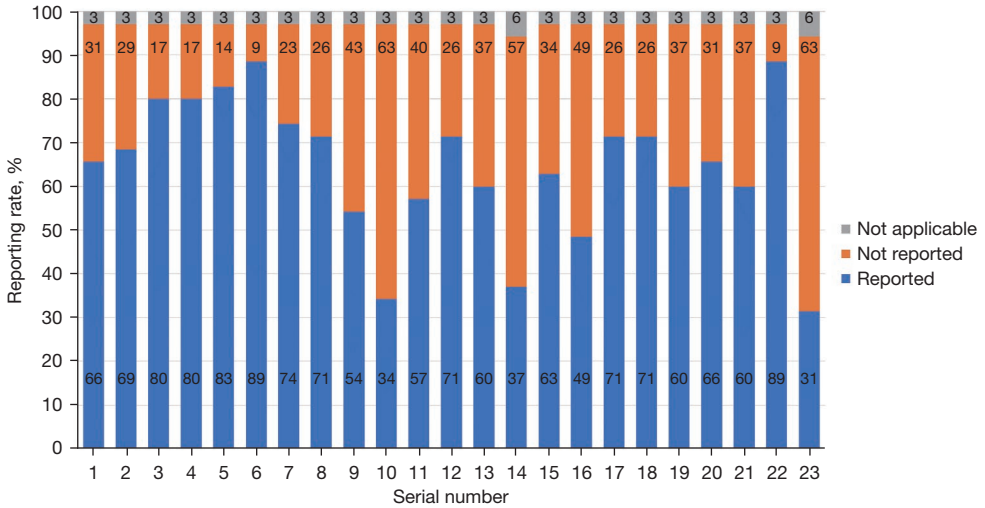

Figure 2 The reporting rates in each guideline calculated based on the RIGHT checklist. RIGHT, Reporting Items for Practice Guidelines in Healthcare.

Figure 3 The reporting rates in each domain of the RIGHT checklist. RIGHT, Reporting Items for Practice Guidelines in Healthcare.

item 18b (describe the role of funder in the different stages of guideline development and in the dissemination and implementation of the recommendations). There were 7 sub-items (1a, 4, 9a, 9b, 13b, 14c, and 19a) with reporting rates between 80% and 100%, 13 sub-items (1c, 2, 5, 6, 7a, 10a, 10b, 11a, 11b, 12, 13c, 15, and 19b) with rates between 60% and 80%, and 11 items (1b, 8a, 8b, 14a, 14b, 16, 17, 18a, 20, 21, and 22) with rates lower than 60% (*Figure 4*).

Reporting the quality of CPGs produced in different countries or unions

The mean reporting rate of the CPGs was 62% in America, 70% in Europe, 80% in Japan, 63% in Canada, 54% in France, 54% in Australia and New Zealand, 63% in Spain, and 55% in international union (*Figure 5*).

Discussion

To the best of our knowledge, this is the first study to comprehensively assess the reporting quality of CPGs on the health care of patients with BLCA using the RIGHT checklist. A total of 23 eligible CPGs were evaluated. While developing a guideline is a rigorous and labor-intensive process, almost all the guidelines on BLCA were developed by an organization of multidisciplinary experts, which guarantees the credibility and comprehensiveness of the guidelines. All but 3 CPGs were extracted through the

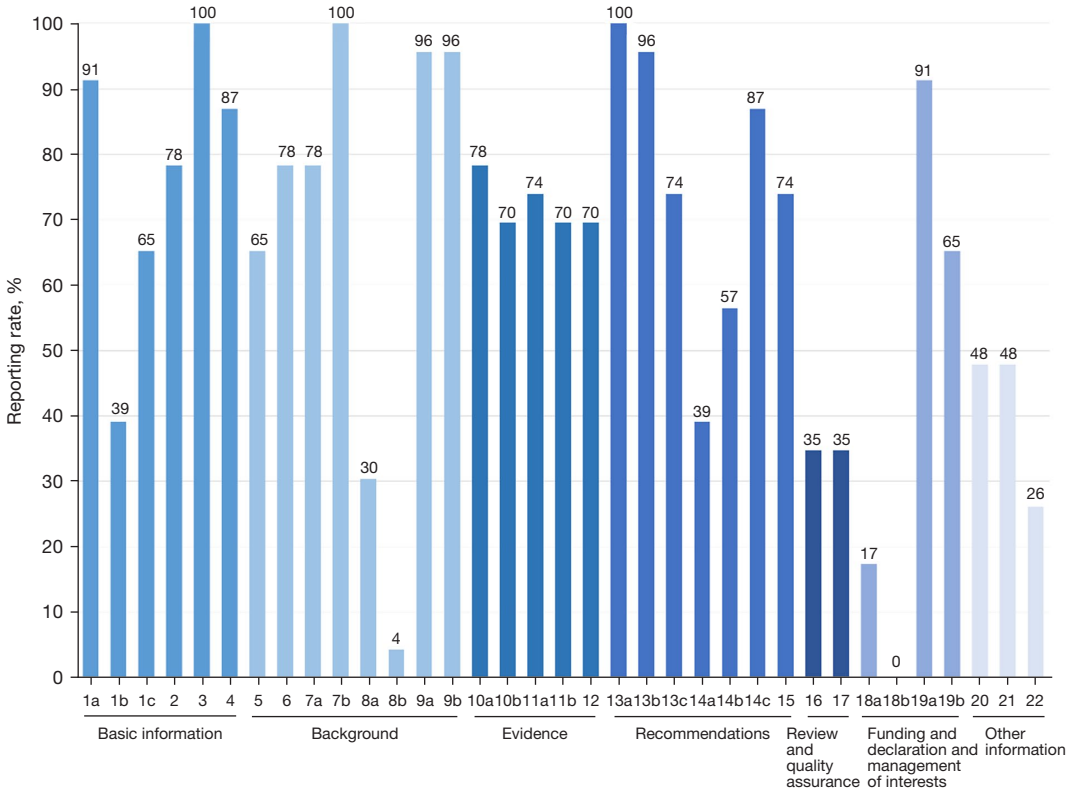

Figure 4 The reporting rates of each item in the RIGHT checklist. RIGHT, Reporting Items for Practice Guidelines in Healthcare.

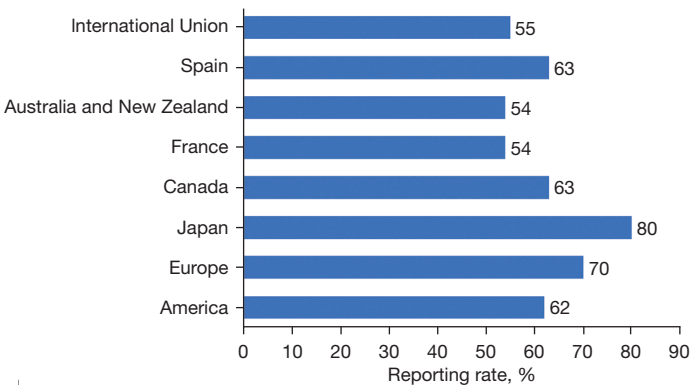

Figure 5 The mean reporting rates of clinical practice guidelines produced in different countries or unions.

literature databases searches. Thus, the electronic databases may be the main source of CPGs on BLCA. Overall, the reporting quality of guidelines on BLCA published from January 2017 to December 2021 tended to be moderate and needs improvement. However, 2 guidelines, developed by EAU-ESMO and China, showed a relatively high adherence to the RIGHT checklist and could therefore be regarded as an example of how to report the CPGs. Of the 23 CPGs included, 14 reported more than 60% of the RIGHT checklist items, however, only 3 of the guidelines reported more than 80% of the items. The items in the basic information and the background domains were reported relatively well in the BLCA guidelines. However, reporting rates of the items regarding the review and quality

assurance and funding and declaration and management of interest domain were relatively lower than that regarding other domains.

For each item, the reporting rate was also highly variable. The causes for the low reporting rate of certain items may play important roles in developing corresponding strategies to further enhance the reporting quality of the CPGs. More than half of the guidelines did not report the publication year in the title of the guidelines (item 1b). While the CPGs are always updated based on systematic review of latest evidence in the field and assessment of the benefits and harms of alternative options, the latest editions consistently incorporated advanced healthcare strategies and provided an up-to-date source of information for high-quality patient decisions. If the CPGs describe the publication year in the title of the guideline, the readers could identify the latest edition directly and quickly. In contrast, all but 8 guidelines described the focus of the CPGs appropriately, such as screening, prevention, diagnosis, treatment, or management others, in the title (item 1c), which could assist readers in finding the correct CPGs.

Most guidelines also did not report the intended main users of the CPGs (such as clinical specialists, primary healthcare providers, public healthcare practitioners, policy-makers, or program managers) and other potential users of the CPGs, nor the settings, such as middle- and low-income countries, primary care, or in-patient facilities. Not reporting the target countries or settings in the guidelines (item 8) could be difficult for healthcare practitioners or clinicians to assess the applicability of the guideline.

For the rationale or explanation of the recommendations (item 14), an accurate description of the rationale is important to thoroughly understand and balance the 'pros and cons' of different interventions in the target population. And in clinical practice, clinicians always need to develop treatment strategies for specific patients. Thus, the high-quality CPGs should always provide relative information on the appropriateness of recommendations in any clinical situation (39). Furthermore, it is notable that the values and preferences of the target population, as well as the cost and resource implications in the formulation of each recommendation (item 14a/b) were poorly reported, which was consistent with the results in the guideline evaluation regarding other topics (40,41).

The items 16 and 17 regarding review and quality assurance had a reporting rate less than 40%. The independent review as well as the quality assurance after development of a guideline could enhance the rigor, which may make the developed guidelines more convincing. In addition, it is noted that the information of the funding source(s) was only reported in less than 20% of the guidelines. Correspondingly, the role of the funding body in the different stages of guideline development and in the dissemination and implementation of the recommendations (item 18b) were not reported in any guidelines. The lack of information regarding the role of the funding agency may be due to the fact that developers are often not directly involved in the dissemination or implementation of CPGs (42). However, the independence of the guideline development may be questioned without transparent report of the funding source. Previous similar studies assessing the reporting rates of CPGs on other topics also demonstrated this reporting deficiency (11,13,43).

To our knowledge, this is the first study to evaluate the reporting quality of CPGs for BLCA based on the RIGHT checklist. In addition, our findings provided some suggestions for guideline developers to promote the adhere to the RIGHT checklist worldwide, and to improve the reporting quality of the guidelines in the future.

Limitations

There were several limitations to this study. First, a limited cohort of BLCA guidelines were included, of which the first version was published in English or Chinese, while some organizations developed the CPGs on BLCA in other language. Therefore, the results herein may not be necessarily applicable to all CPGs on BLCA published globally. Second, we evaluated most items on a dichotomous scale, while some items were only partially reported in some guidelines. Third, we believe that some items in the checklist may be more important than others, so proportional comparisons that assume each item is equally important for assessing credibility should be interpreted with caution.

Conclusions

The critical evaluation of BLCA guidelines demonstrated that the reporting quality of the CPGs on BLCA published in the last 5 years was moderate and needs improvement. The BLCA guideline developers should adhere to the RIGHT checklist and pay more attention to reporting the domains, including funding source and role of the funding agency, review and quality assurance, and other information, in the future.

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Footnote

Conflicts of Interest: All authors have completed the ICMJE uniform disclosure form (available at https://tau.amegroups.com/article/view/10.21037/tau-22-712/coif). The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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Supplementary

Table S1 RIGHT checklist (10) (http://www.right-statement.org/right-statement/checklist)

Section/topic	No.	Item
Basic information		
Title/subtitle	1a	Identify the report as a guideline, that is, with “guideline(s)” or “recommendation(s)” in the title.
	1b	Describe the year of publication of the guideline.
	1c	Describe the focus of the guideline, such as screening, diagnosis, treatment, management, prevention or others.
Executive summary	2	Provide a summary of the recommendations contained in the guideline.
Abbreviations and acronyms	3	Define new or key terms, and provide a list of abbreviations and acronyms if applicable.
Corresponding developer	4	Identify at least one corresponding developer or author who can be contacted about the guideline.
Background		
Brief description of thehealth problem(s)	5	Describe the basic epidemiology of the problem, such as the prevalence/incidence, morbidity, mortality, and burden (including financial) resulting from the problem.
Aim(s) of the guideline and specific objectives	6	Describe the aim(s) of the guideline and specific objectives, such asimprovements in health indicators (e.g., mortality and disease prevalence), quality of life, or cost savings.
Target population(s)	7a	Describe the primary population(s) that is addressed by the recommendation(s) in the guideline.
	7b	Describe any subgroups that are given special consideration in the guideline.
End- users andsettings	8a	Describe the intended primary users of the guideline (such as primary care providers, clinical specialists, public health practitioners, program managers, and policy-makers) and other potential users of the guideline.
	8b	Describe the setting(s) for which the guideline is intended, such as primary care, low- and middle-income countries, or in-patient facilities.
Guideline development groups	9a	Describe how all contributors to the guideline development wereselected and their roles and responsibilities (e.g., steering group, guideline panel, external reviewer, systematic review team, and methodologists).
	9b	List all individuals involved in developing the guideline, including their title, role(s) and institutional affiliation(s).
Evidence		
Healthcare questions	10a	State the key questions that were the basis for the recommendations in PICO (population, intervention, comparator, and outcome) orother format as appropriate.
	10b	Indicate how the outcomes were selected and sorted.
Systematic reviews	11a	Indicate whether the guideline is based on new systematic reviewsdone specifically for this guideline or whether existing systematic reviews were used.
	11b	If the guideline developers used existing systematic reviews, reference these and describe how those reviews were identified and assessed (provide the search strategies and the selection criteria, anddescribe how the risk of bias was evaluated) and whether they were updated.
Assessment of the certainty of the body of evidence	12	Describe the approach used to assess the certainty of the body ofevidence.
Recommendations		
Recommendations	13a	Provide clear, precise, and actionable recommendations.
	13b	Present separate recommendations for important subgroups if the evidence suggests that there are important differences in factors influencing recommendations, particularly the balance of benefits and harms across subgroups.
	13c	Indicate the strength of recommendations and the certainty of the supporting evidence.
Rationale/explanation for recommendations	14a	Describe whether values and preferences of the target population(s) were considered in the formulation of each recommendation. If yes,describe the approaches and methods used to elicit or identify thesevalues and preferences. If values and preferences were not considered, provide an explanation.
	14b	Describe whether cost and resource implications were considered inthe formulation of recommendations. If yes, describe the specific approaches and methods used (such as cost-effectiveness analysis) and summarize the results. If resource issues were not considered, provide an explanation.
	14c	Describe other factors taken into consideration when formulating the recommendations, such as equity, feasibility and acceptability.
Evidence to decisionprocesses	15	Describe the processes and approaches used by the guideline development group to make decisions, particularly the formulationof recommendations (such as how consensus was defined and achieved and whether voting was used).
Review and quality assurance		
External review	16	Indicate whether the draft guideline underwent independent review and, if so, how this was executed and the comments considered andaddressed.
Quality assurance	17	Indicate whether the guideline was subjected to a quality assurance process. If yes, describe the process.
Funding, declaration and management of interest		
Funding source(s) androle(s) of the funder	18a	Describe the specific sources of funding for all stages of guideline development.
	18b	Describe the role of funder(s) in the different stages of guidelinedevelopment and in the dissemination and implementation of the recommendations.
Declaration andmanagement ofinterest	19a	Describe what types of conflicts (financial and non-financial) were relevant to guideline development.
	19b	Describe how conflicts of interest were evaluated and managed and how users of the guideline can access the declarations.
Other information		
Access	20	Describe where the guideline, its appendices, and other related documents can be accessed.
Suggestions for further research	21	Describe the gaps in the evidence and/or provide suggestions for future research.
Limitations of theguideline	22	Describe any limitations in the guideline development process (suchas the development groups were not multidisciplinary or patients’ values and preferences were not sought), and indicate how these limitations might have affected the validity of the recommendations.

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Table S2 The reporting status of the RIGHT checklist items in the included guidelines

Domain	Item	Guidelines (Serial number)																						Reporting rate (%)
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Basic information	1a	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	91
	1b	N	Y	Y	Y	Y	N	Y	Y	N	N	N	N	N	N	Y	N	N	N	N	N	N	Y	Y	39
	1c	Y	Y	N	N	N	Y	N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	65
	2	Y	Y	N	N	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	78
	3	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100
	4	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	N	87
Reporting rate (%)		67	83	67	67	83	83	83	83	83	67	50	83	83	83	100	83	83	83	83	67	50	100	50	
Background	5	Y	Y	N	N	Y	Y	Y	Y	Y	N	Y	N	Y	N	Y	N	Y	Y	Y	Y	Y	N	N	65
	6	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	N	Y	Y	Y	N	Y	Y	N	78
	7a	Y	Y	N	N	Y	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	78
	7b	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100
	8a	Y	Y	Y	Y	N	Y	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	Y	N	30
	8b	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	43
	9a	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	96
	9b	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	96
Reporting rate (%)		88	88	63	63	75	88	75	75	63	50	75	75	75	38	75	50	75	75	75	63	75	88	13	
Evidence	10a	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	Y	Y	N	78
	10b	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	N	Y	Y	N	N	Y	Y	Y	Y	N	70
	11a	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	N	74
	11b	N	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	NA	N	Y	Y	Y	Y	Y	Y	Y	N	70
	12	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	N	N	Y	N	Y	Y	N	Y	Y	Y	Y	70
Reporting rate (%)		80	80	100	100	100	100	100	100	40	0	40	100	80	0	60	60	60	60	80	100	100	100	20	
Recommendations	13a	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100
	13b	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	96
	13c	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	N	N	Y	Y	Y	Y	N	Y	Y	Y	Y	74
	14a	N	N	Y	Y	Y	N	Y	Y	N	N	Y	N	N	N	N	N	Y	Y	N	Y	N	N	N	39
	14b	N	N	Y	Y	Y	Y	Y	Y	N	N	Y	N	Y	N	N	N	Y	Y	N	Y	Y	N	Y	57
	14c	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	87
	15	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	N	Y	N	Y	Y	N	Y	Y	Y	N	74
Reporting rate (%)		71	71	100	100	100	86	100	86	57	29	71	71	71	43	71	57	100	100	29	100	71	71	71	
Review and quality assurance	16	N	N	Y	Y	Y	Y	N	N	Y	N	Y	Y	N	N	N	N	N	N	N	N	N	Y	N	35
	17	N	N	Y	Y	Y	Y	N	N	Y	N	Y	Y	N	N	N	N	N	N	N	N	N	Y	N	35
Reporting rate (%)		0	0	100	100	100	100	0	0	100	0	100	100	0	0	0	0	0	0	0	0	0	100	0	
Funding and declaration and management of interests	18a	N	N	N	N	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	17
	18b	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
	19a	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	91
	19b	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	Y	N	Y	Y	Y	Y	Y	Y	N	65
Reporting rate (%)		50	50	50	50	75	75	50	50	25	25	0	25	25	25	50	25	50	50	75	50	50	75	0	
Other information	20	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	N	N	N	N	N	N	N	N	N	N	Y	Y	48
	21	N	N	Y	Y	N	Y	N	N	N	Y	Y	Y	N	Y	N	N	Y	Y	Y	N	N	Y	N	48
	22	N	N	Y	Y	N	Y	N	N	N	N	N	N	N	N	N	N	Y	Y	N	N	N	Y	N	26
Reporting rate (%)		33	33	100	100	33	100	33	33	0	33	67	33	0	33	0	0	67	33	33	0	0	100	33	
Total reporting rate (%)		66	69	80	80	83	89	74	71	54	34	57	71	60	37	63	49	71	71	60	66	60	89	31	

Y, reported; N, not reported; NA, not applicable.

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