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WEST AFRICAN JOURNAL OF MEDICINE

ORIGINAL ARTICLE

Quest to Improve Management of Prostate Cancer in West Africa: Development of a Clinical Audit Tool

Quête pour Améliorer la Prise en Charge du Cancer de la Prostate en Afrique de l'Ouest : Développement d'un Outil d'Audit Clinique

[1,2]*S. O. Osaghae

ABSTRACT

In 2010 and during the following decade, two guidelines were published for the management of prostate cancer in West Africa. A key recommendation of the guidelines was the need for the development of a Clinical Audit Tool which should help surgeons and institutions to identify the gaps between the recommended standards and current practice. In this paper, a Clinical Audit Tool, WAPCAT, was developed to facilitate and implement the audit process for the management of Prostate cancer in a West African healthcare institution. **WAJM 2022; 39(11): 1205–1208.**

Keywords: Prostate Cancer, Clinical audit, Standards, Audit Tool, West Africa.

RÉSUMÉ

En 2010 et au cours de la décennie suivante, deux directives ont été publiées pour la gestion du cancer de la prostate en Afrique de l'Ouest. Une recommandation clé de ces directives était la nécessité de développer un outil d'audit clinique qui devrait aider les chirurgiens et les institutions à identifier les écarts entre les normes recommandées et la pratique actuelle. Dans cet article, un outil d'audit clinique, le WAPCAT, a été développé pour faciliter et mettre en œuvre le processus d'audit pour la gestion du cancer de la prostate dans un établissement de santé d'Afrique de l'Ouest. **WAJM 2022; 39(11): 1205–1208.**

Mots clés: Cancer de la prostate, Audit clinique, La norme, Outil d'audit, Afrique de l'Ouest.

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INTRODUCTION

Prostate cancer is a relatively common malignancy and cause of morbidity and mortality in West African black men. Several studies have reported higher prevalence and adverse outcomes within this sub-group.[1,2] Some studies have underlined the problem of late presentation, inadequate unreliable diagnostic testing, lack of skills and drugs for the appropriate treatment of prostate cancer.[3,4] To improve access to effective diagnosis and treatment of prostate cancer with the aim of improving quality of care and outcomes, a consensus conference of urologists under the auspices of West African College of Surgeons, WACS developed indigenous guideline for the diagnosis and treatment of Prostate cancer; the first in 2010[5] with an update working document in 2019[3] suitable for local adaptation as required. The benefit of the guideline are to serve as an instrument for institutional and surgeon review of the resources required for effective management, including the knowledge and skills required for management, of prostate cancer, and stimulus for audit, research and clinical trials.

One major recommendation of the West African prostate cancer guideline [3,5] was the need to develop a tool to be used by surgeons and institutions to achieve audit of the structure, process of delivery of care and outcomes in management of prostate cancer. The main benefit is to identify the current levels of service provision in a West African setting and determine the gaps to be bridged. This paper sets out to describe the contextualized clinical audit process for the management of prostate cancer in the West African Healthcare setting.

Definition of Audit and the Need for Clinical Audit Tool in Prostate Cancer Management

Clinical Audit is an aspect of clinical governance which is used by healthcare institutions to monitor the delivery of patient care services. The aim is to determine if the structure and process of delivery of healthcare and the outcomes achieved are fit for purpose and meet evidence-based best practice. The National Institute for Health and Clinical Excellence (NICE) UK defined Clinical Audit as "a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change. Aspects of the structure, processes, and outcomes of care are selected and systematically evaluated against explicit criteria. Where indicated, changes are implemented at an individual, team, or service level and further monitoring is used to confirm improvement in healthcare delivery".[6]

Stages in the Clinical Audit Cycle

Based on the NICE definition, the five stages of clinical audit cycle are illustrated in Figure 1.

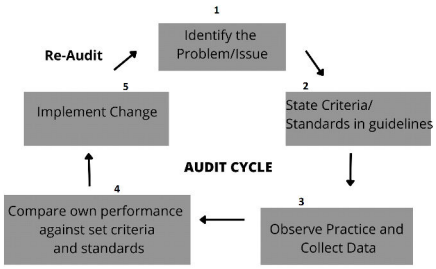

Fig. 1: The Audit Cycle

Stages for Audit of Management of Prostate Cancer

Stage 1: Identification of the problem or issue

The priority aspects to be considered by a urology department setting out to audit its activities are stated in Table 1.

Table 1: Priority Areas for Clinical Audit

Priority Areas for Clinical Audit
1. Screening and diagnosis
2. Clinical staging
3. Histological grading and classification
4. Medical and surgical treatment
5. Surveillance practices following diagnosis and primary treatment
6. Treatment options following relapse or failure of primary treatment
7. Audit and research priorities

Stage 2: Defining Criteria and Standards

The basic standards and optional approaches of care in management of prostate cancer in the priority areas for audit in a West African setting including the criteria to be used for measurements were identified by the guidelines.[3,5]

The key standards recommended (developed through a Delphi consensus technique) were extracted as Guideline Statements. The results of the standards derived from the process is presented in Table 2.

Stage 3: Observation of Practice

Based on the proposed Standards and Criteria in table II, a 20-item questionnaire named "West African Prostate Cancer Audit Tool, (WAPCAT)" was developed (Table 3).

Stage 4: Gap analysis

At this stage, the gap between the current practice and standard criteria stated in Table 11 is measured.

5. Implementation of change and Re-Audit

Based on the gaps identified, an action plan is developed to bridge the deficits. Tasks that need to be done, responsible personnel, time frame, and resources required for implementation are clearly stated. There should be an in-built subsequent process to check that the changes identified to be implemented were achieved and if not the reasons explored.

Issues to Consider for a Successful Clinical Audit

For a clinical audit to be successful, it is important that at the outset the audit sponsor should identify all key stakeholders. To gain their cooperation towards a successful outcome, the aims and objectives of the audit project should be clearly explained and communicated. Importantly, the hospital senior management personnel who will be required to provide the resources required or implement the necessary changes identified must be involved. All the key medical, paramedic and administrative personnel involved in management of prostate cancer should be included in the process to have a good chance of a successful outcome and meaningful impact.

Table 2: Standards and Criteria

Screening/ Diagnosis
1. There should be a programme of screening of asymptomatic men for prostate cancer.
2. PSA testing should be routinely performed in men presenting with lower urinary tract symptoms.
3. PSA test result should be stated by the laboratory in terms of absolute result (against stated reference range)
4. Digital rectal examination should be routinely performed in men presenting with lower urinary tract symptoms
5. The urologist should have confidence in the PSA test results generated from the hospital laboratory.
6. The urologist should consult the chemical pathologist to know the quality assurance issues of the PSA assay used by the hospital laboratory (Quantitative PSA test results should be promptly available and reliable).
7. Prostate biopsy should be performed using Ultrasound-guided method.
8. Biopsy may not be routinely performed before starting treatment in very ill patients presenting with clinical features unequivocally suggestive of metastatic prostate cancer such as very high PSA (multiples of 100), abnormal digital rectal examination and imaging studies (bone scan, CT or MRI). However, if the patient is fit to undergo biopsy and where it is considered that histology report may influence prognostication, risk assessment, disease classification, treatment choice or as part of research, biopsy should be performed.
Grading and Classification
1. Patients newly diagnosed with prostate cancer should have Tumour, Node, Metastasis (TNM) stage, Biopsy Gleason score and International Society of Uropathologists (ISUP) stage stated.
2. All newly diagnosed cases of prostate cancer should be discussed in joint uro-pathology meetings.
Staging
1. All newly diagnosed cases should have staging investigations with either CT, MRI or Bone Scan depending on clinical features.
2. There should be regular multidisciplinary meeting between urologist and oncologist to recommend treatment.
3. All newly diagnosed patients should be categorized into Low, Intermediate and high risk groups.
Treatment
1. The following treatment options based on risk category, co-morbidity status and life expectancy should be available to patients: watchful waiting, active surveillance, radical curative treatment to include open radical prostatectomy, radical radiotherapy, Brachytherapy, and Hormonal treatment.
2. A list of centres offering different treatments and costs should be available.
Follow-up
1. All patients with prostate cancer should have regular outpatient clinic follow-up with routine blood tests including PSA, full blood count and renal function tests, liver function tests and testosterone.
2. All patients on prostate cancer follow-up should have a diary, chart or notebook stating the date of diagnosis, presenting PSA, histology Gleason score, mode of treatment with date of commencement and PSA trends over time.
3. All patients on follow-up for prostate cancer should have their general health status assessed with WHO performance scale (or other measurement instrument) and recorded in the patient diary.
4. All patients with hormone refractory or advanced disease should be referred to an oncologist for joint management.
5. There should be palliative management team to assist with management of terminally ill patients
6. Patients on admission with advanced disease or terminally as well their families should be counselled on the prognosis and life-expectancy. Furthermore, the patients should have access to the pastoral support of a church minister, priest, imam, or others depending on the patient's philosophy, belief or personal wishes.
Audit and Research
1. All patients diagnosed with or under treatment for prostate cancer should be enrolled in Audit and Research programmes funded by the Hospital.

CONCLUSION

A clinical audit plan involving observation of the current state of practice against set standards and criteria, gap analysis between the current situation and the desired ideal followed by implementation of the necessary changes, and re-audit after a specified period should help to achieve total quality improvement of the structure, process, and outcomes of the management of prostate cancer.

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Table 3: West Africa Prostate Cancer Audit Tool (WAPCAT) for Observation of Practice

SN	Screening/Diagnosis	1st Audit (Date..) Response/ Comment	Re-Audit (Date …) Response/ Comment	Remarks
1.	Is there a programme of screening of asymptomatic men for prostate cancer?			
2.	Is PSA testing routinely performed in men presenting with lower urinary tract symptoms?			
3.	How is the PSA test result stated by the laboratory?			
4.	Is digital rectal examination routinely performed in men presenting with lower urinary tract symptoms?			
5.	Do you have confidence in the PSA test results generated from your hospital laboratory?			
6.	Do you know the quality assurance issues of the PSA assay used by your hospital laboratory?			
7	How is prostate biopsy performed?			
8.	Do you routinely recommend biopsy in patients with a high PSA (multiples of 100) and hard craggy prostates?			
	Clinical Staging, Grading and Classification			
9.	Following diagnosis of prostate cancer, do you always use a clinical staging system?			
10.	Which staging investigations are available?			
11.	Which pathological grading system is used by your pathologist in the histology report? i. Gleason method: ii. General statement such as well/moderate/poorly differentiated iii. ISUP			
12.	Is there a regular uropathology meeting to discuss/review results?			
13.	Is there a multidisciplinary meeting including urologists, pathologists, radiologists and oncologists to review results and/or recommend treatment?			
14.	Based on available parameters, do you regularly stratify patients into low, moderate or high-risk categories?			
15.	Do you use the WHO performance scale for baseline physical functioning and other performance assessment tools in the domains of geriatrics, psychometrics, cardiovascular and fragility for the patients at diagnosis?			
	Treatment			
16.	Which of the following treatment options based on risk category, co-morbidity and life expectancy are available to patients: i. Watchful waiting (including Expectant management) ii. Active surveillance iii. Radical prostatectomy iv. Radical radiotherapy v. Brachytherapy vi. Medical castration (Hormones) vii. Surgical castration (Orchidectomy) viii. Combination treatment: Radical Prostatectomy + radiation.			
	Follow-up			
17.	Is there a patient diary which is completed at diagnosis and following each review?			
18.	Are the services of an oncologist for palliative management of advanced disease and terminally ill patients available?			
19.	Is there pastoral support for terminally ill patients by a Church Minister, Mosque Imam or others for those who desire it?			
	Audit and Research			
20.	Is there a programme of audit and research on prostate cancer which is sponsored by your hospital?			