

KNOWLEDGE AND PERCEPTION OF NIGERIAN MEN 40 YEARS AND ABOVE REGARDING PROSTATE CANCER

LA CONNAISSANCE ET LA PERCEPTION DES NIGERIAN DE L'AGE 40 ET PLUS CONCERNANT LE CANCER DE PROSTAT

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Abstract

Background: Carcinoma of the prostate is now the most commonly diagnosed male cancer worldwide.

However, knowledge and perception of Nigerian men about the disease has not been fully investigated.

Aim: To determine the level of awareness about prostate cancer among men 40 years and older in Ibadan, Southwestern Nigeria.

Methods: Four focus group discussions were used to obtain information from 29 randomly- selected Nigerian men, aged 40 years and above, about their knowledge of the common causes of morbidity and mortality among men of their age group as well as prostatic diseases and their perceived causes. In-depth interviews were then conducted among 656 participants using questionnaires.

Results: Generally, the respondents and discussants were unaware of the prostate gland and its diseases; whilst relatively few knew about carcinoma of the prostate and most were ignorant of the symptoms of the disease. Among discussants and respondents who knew about the gland, most thought that benign and malignant prostatic diseases were long-term complications of promiscuity and sexually transmitted infections. All the participants were interested in receiving information about all aspects of carcinoma of the prostate.

Conclusions: These results indicate that a large proportion of adult Nigerian men are ignorant of the prostate gland and its diseases in general, and carcinoma of the prostate in particular. There is therefore the need for community awareness programs on prostatic diseases in our locality.

Keywords: Prostate cancer, Poor knowledge and awareness, Awareness programs, Early detection, Ibadan, Nigeria.

Résumé

Arrière-plan: Carcinome de prostate est maintenant le cancer le plus commun et diagnostiqué dans le monde entier. Néanmoins, la connaissance et la perception des nigériens de la maladie n'ont pas encore bien étudiées.

But: Déterminer le niveau de la conscience du cancer de prostate parmi les nigériens de l'âge de 40 et plus à Ibadan, au sud-ouest du Nigeria.

Méthodes: Quatre groupes de discussion ont été utilisés pour obtenir des informations de 29 nigériens sélectionnés au hasard, de l'âge de 40 plus pour savoir leur connaissance des causes communes de la morbidité et la mortalité de leur même âge autant que des maladies prostatiques et leurs causes perçues. Des interviews profondes ont été effectuées parmi 656 participants en utilisant des questionnaires.

Résultats: En général, les participants et les participants n'étaient pas au courant de la glande prostate et ses maladies; tandis que relativement, un peu des participants étaient ignorants des symptômes de cette maladie. Parmi les participants, et les participants qui avaient la connaissance de la glande, la plupart d'eux ont pense que les maladies prostatiques douces et malines étaient des complications de longue durée de la promiscuité est des infections sexuellement transmises. Tous les participants sont intéressés pour recevoir de l'information de tous les aspects du carcinome du prostate.

Conclusions: Les résultats indiquent qu'une grande proportion des adultes Nigériens étaient ignorants de la glande prostate et ses maladies en général, et le carcinome de prostate en particulier. Donc, il y a un besoin des programs de conscience dans la communauté concernant des maladies prostatiques dans notre endroit.

Mots Clés: Cancer de Prostate, Pauvre Connaissance et Conscience, Programs de Conscience, Détection Précoce, Ibadan, Nigeria.

Introduction

Carcinoma of the prostate (CaP) is major health problem among middle-aged and elderly men in developed and developing countries. The disease is now the most commonly diagnosed cancer among men in the United States, Nigeria and Jamaica, and the second leading cause of cancer-related male deaths in the United States¹. Prostate cancer has a higher incidence, a more aggressive course and a higher mortality in black men when compared to their white counterparts⁵. These disparities persist and despite abundant research, findings continue to be inconclusive about the reasons and the best methods to decrease them⁶.

According to previous studies in African-Americans, this group of men lack information about the prostate and are more likely to present late with the disease^{7,8}. They were also reluctant to have digital rectal examination and prostate specific antigen tests and had little or no knowledge about these examinations⁹. In all of these studies, it was established that the hesitancy towards the early detection and treatment of prostate cancer detected in these men could be associated with cultural issues within their community and a lack of health awareness directly tailored towards them^{7,8,9}. This attitude has undoubtedly contributed to their late presentation and the relatively high mortality rate from the disease observed in this subpopulation.

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Introduction

Le carcinome de prostate est un problème majeur de santé parmi les entre deux âges et les âges dans les pays développés et en voie de développement¹. Le cancer est maintenant la maladie la plus diagnostiquée parmi les hommes aux Etats-Unis², au Nigeria³ et le Jamaïque⁴, et la deuxième cause majeure des maladies de la mort des hommes aux Etats-Unis¹. Le cancer de prostate a un grand incident, une piste agressive de mortalité parmi les noirs quand on le compare à leurs homologues, c'est-à-dire, les blancs⁵. Ces disparités continuent en dépit des recherches abondantes, les résultats continuent d'être peu concluant des raisons et les meilleures méthodes de les⁶ réduire.

Selon les recherches antérieures dans les endroits franco-africains, ce groupe des hommes manquent de l'information de prostate et sont probablement d'être tard avec la maladie^{7,8}. Aussi, ils étaient hésitants d'avoir l'examen de rectal digital et des examens antigènes spécifiques et ont eu un peu de connaissance de ces examens⁹. Dans toutes ces recherches, c'était établi que la hésitation vers la détection précoce et du traitement du cancer de prostate découvert dans ces hommes pouvaient être associés aux problèmes culturels dans leur communauté et le manque de la conscience de santé directement dirigé vers eux^{7,8,9}. Cette attitude a n'en pas douter contribué à leur tard présentation et relativement un grand taux de mortalité de la maladie observée dans cette petite population.

Au Nigeria, l'âge mean des patients du cancer de prostate pendant les diagnoses a été déclaré d'être 68.3 ans, tandis que le risque national du cancer de prostate était 2% de tous les patients avec la plupart des hommes diagnostiqués aux étapes avancées de la maladie¹⁰. La tard détection et la direction du cancer de prostate à travers un examen systématique (avec l'examen rectal digital) et

In Nigeria, the mean age of prostate cancer patients at the time of diagnosis has been reported to be about 68.3 years, while the national prostate cancer risk was put at 2% of all patients with most men being diagnosed with advanced stages of the disease¹⁰. The early detection and management of CaP through routine screening (with digital rectal examination (DRE) and the prostate specific antigen (PSA) test) and improved access to care have translated to improved long-term outcome for most patients in developed countries¹¹. The stage of the disease at diagnosis is one of the most important predictors of survival from prostate carcinoma. In the United States, the 5-year survival rates for local and regional prostatic cancers are 92% and 82% respectively, compared to 28% for those diagnosed at a distant stage¹². In Nigeria, 75% of patients present with locally advanced or metastatic diseases, and mortality due to CaP has been reported to be as high as 64% within two years of diagnosis¹⁰.

However, despite increasing high incidence of the disease in Nigeria, and the importance of early detection in carcinoma of the prostate survival, there is little literature on the knowledge and perception of adult men in the country about the malignancy and their awareness about screening tests for its early detection. Furthermore, it is of importance to the physician to understand the existing understanding, beliefs and perceptions about this disease in his local environment so as to add to current knowledge while correcting wrong information.

This study was carried out to determine the level of awareness about carcinoma of the prostate among adult men in Ibadan, Nigeria as a part of a larger study of the elderly. The town of Ibadan in southwestern Nigeria is adjudged the third largest city in size in the country and is the capital city of Oyo state. According to 2006 census figures, the population of the city was about 1.2 million (of a population of 5,591,589 for Oyo State¹³).

Ethical Approval: This study was approved by the University of Ibadan/ University College Hospital, Ibadan Ethics Committee.

le test de l'antigène du prostate spécifique et amélioration de l'accès ont résulté à longue durée pour la plupart des patients dans les pays développés¹¹. L'étape de la maladie pendant les diagnostics est l'un des facteurs importants de la survie du carcinome prostate. Aux Etats-Unis, le taux de la survie de cinq ans pour les cancers prostatiques régionaux et locaux sont 92% et 82% respectivement, comparé à 28% pour ceux qui sont diagnostiqués trop tard. Au Nigeria, 75% des patients qui ont des maladies métastatiques et localement avancées, et la mortalité du au cancer de prostate a augmenté à 64% pendant deux ans de diagnostics.

Néanmoins, en dépit de grande incidence croissant de la maladie au Nigeria, et l'importance de la détection précoce de la survie du carcinome de prostate, il y a un peu de littérature sur la connaissance et a perception chez les hommes adultes dans le pays en ce qui concerne la conscience des examens pour la détection précoce. De plus, c'est important au médecin de comprendre les croyances et les perceptions de cette maladie dans son endroit afin d'ajouter à la connaissance existante en corrigeant les fausses informations.

Cette étude a été effectuée pour déterminer le niveau de la conscience du carcinome de prostate parmi les hommes adultes à Ibadan, Nigeria en tant que partie d'une grande étude parmi les adultes. La ville Ibadan, au sud-ouest du Nigeria est considérée comme la troisième grande ville dans le pays et c'est la capitale de l'état d'Oyo. Selon la censure de 2006, la population de la ville était en environ 1,2 million (hors de 5, 591,589 comme la population de l'état d'Oyo).

Approbation Ethique: Cette étude est approuvée par la comite des éthiques de University of Ibadan/University College Hospital, Ibadan.

Methods

Focus Group Discussion:

Four focus group discussions (FGDs) were held with randomly-selected volunteers aged 40 years and above in Ibadan, Southwestern Nigeria. The volunteers were representative of the indigenous population and the different socio-economic groups' class. They were selected from a pool of volunteers by a ballot system to ensure randomness and lack of bias. The study team obtained informed consent from each of the discussants who were then given a serial number for anonymity. The demographic characteristics of the discussants were obtained before commencing the FGDs. Using a pre-tested FGD guide translated into Yoruba (the local language), the discussants were asked questions about their knowledge of common causes of morbidity and mortality among men of their age group, their knowledge about the prostate, its diseases and their perceived causes. The discussions were moderated by a rapporteur and the proceedings were recorded with the aid of a tape recorder. These discussions were held in English or the local language (Yoruba), to ensure that the participants understood the questions and were comfortable with expressing themselves for this purpose. All interviews were conducted in large well-lit and well-ventilated rooms with comfortable chairs and under conditions of strict privacy in order to ensure participant privacy and also to encourage the participants to be freer with their responses to questions. The interviewer utilized pretested questionnaires that had both English and Yoruba translations which acted as an interview guide and answers were sought for questions in the language the participant was most comfortable with. Each of the interview sessions lasted about 45 minutes.

Prostate Cancer Survey:

Following the FGDs, the second part of the study was done by surveying men participating in a health screening exercise carried out in the same community in Nigeria. An informed consent was obtained prior to the survey and

Méthodes

Groupes Cibles de Discussion

A Ibadan, au sud-ouest du Nigéria, quatre groupes cibles de l'âge 40 et plus ont été sélectionnés au hasard. Ils étaient les volontaires et représentants de la population indigène des différents groupes socio-économiques. Ils ont été sélectionnés par vote sans préjugé. L'équipe de recherche a obtenu le consentement de chaque participant qui a reçu numéro de série pour identification. Les caractéristiques démographiques des participants ont été obtenues avant le commencement de la recherche.

Utilisant un guide de groupe cible déjà mis à l'épreuve et traduit en Yoruba (la langue maternelle des participants), les participants ont été posés des questions sur leur connaissance en ce qui concerne les causes communes de la morbidité et la mortalité parmi les hommes de leur âge, leur connaissance de prostate, ses maladies et ses causes perçues. Les discussions ont été modérées par un rapporteur et les événements ont été enregistrés au magnétophone. Ces discussions ont été effectuées en anglais et en langue maternelle (Yoruba), pour confirmer que les participants comprennent les questions et pour être confortable en s'exprimant. Toutes les interviews ont eu lieu dans une grande ambiance, bien éclairée et aérée avec des chaises confortables et sous les conditions d'intimité stricte pour qu'ils répondent bien aux questions de recherche dans leur langue de choix. Chaque session de l'interview a duré 45 minutes.

Etude du Cancer de Prostate

Suivant les groupes cibles de discussions, la deuxième partie a été effectuée par une étude des hommes participants aux examens de santé dans la même communauté au Nigeria. Un consentement bien informé a été obtenu avant l'étude et chacun des participants a reçu

each of the participants was given a patient identifier number to maintain anonymity. The men were all aged 40 and above, and were from different socioeconomic backgrounds. Out of 700 questionnaires that were sent out, 656 men responded with correct and full information as specified in the questionnaires. Data were obtained using a pre-tested semi-structured questionnaire on participants' socio-demographic characteristics, beliefs, knowledge and screening practices related to CaP.

Results

Focus Group Discussion:

Twenty-nine men participated in the focus group discussions and their mean age was 61.4 9 years. The profile of their occupation is shown in Table 1. Most of the discussants were ignorant of the existence of the prostate and this was even more apparent in one of the groups where none of the men knew about the gland. In the other three groups, a few men had knowledge of the prostate gland, and among these, some thought that prostatic diseases were long term complications of gonorrhoea and other infections of the urinary tract.

The diseases that were considered common in older men by discussants in all the groups were hypertension, diabetes mellitus and body/joint pains (Table 2). Urinary obstruction, as a complication of sexually transmitted infections (STIs) earlier in life, was also mentioned as a major health problem among men in this age group. Benign prostatic hyperplasia (BPH), and not prostate carcinoma, was alluded to as a major health problem in one group. Furthermore, according to the discussants, the diseases considered to be primarily responsible for mortality in this age group were cardiovascular diseases such as hypertension and stroke (Table 3). Diabetes mellitus and urinary obstruction were also perceived to be major causes of mortality. Prostatic diseases (as

un numéro d'indentification. Les hommes ont 40 ans et plus, et ils viennent des différentes classes socio-économiques. Hors de 700 questionnaires administrés, 656 hommes ont répondu avec des correctes et pleines informations tel quel est dans les questionnaires. Les données ont été obtenues à travers des questionnaires, mis à l'épreuve et structures, sur les caractéristiques sociodémographiques, les croyances la connaissance et l'épreuve pratique des participants, associés au cancer de prostate.

Resultats

Quatre Groupes Cibles de Discussion

Vingt-neuf hommes ont participé dans le groupe de discussion cible et leur âge mean était 61.4+9 ans. Le profil de leur occupation est montré à la Table 1. La plupart des participants étaient ignorants de l'existence de prostate et c'était très apparent dans l'un des groupes où aucun homme ne savait de la glande. Dans les autres trois groupes, un peu d'hommes ont eu la connaissance de la glande prostate, et parmi eux, quelques-uns ont pensé que les maladies prostatiques étaient des complications de gonorrhée à longue durée et des autres infections urinaires.

Ces maladies considérées communes dans les adultes par les participants dans tous les groupes étaient hypertension, diabète mellites et les douleurs du corps/articulation (Table 2). Une obstruction urinaire, en tant que complication des infections sexuellement transmises très tôt dans la vie, a été aussi mentionnée comme un problème majeur de santé parmi les hommes dans ce groupe de même âge. L'hyperplasie prostatique douce, et pas carcinome prostatique, a été mentionnée directement comme un problème majeur de santé dans l'un des groupes. De plus, selon les participants, les maladies considérées primaires qui sont responsables pour la mortalité dans ce groupe de même âge étaient des maladies cardiaques telles qu'hypertension et attaque (Table 3). Les diabète mellites et l'obstruction urinaire ont été aussi perçues comme les

Table 1: Profile of Focus Group Discussants

	n	%	N=29
Age			
40-49	4	13.8	
50-59	5	17.2	
60-69	14	48.3	
70-79	6	20.7	
Occupation			
Retired	14	48.3	
Trader / Artisan	5	17.2	
Manager/Engineer	10	34.5	

Table 2: Free listing of perceived common diseases of men by group

Group 1	Group 2	Group 3	Group 4
Arthritis/ backache	Hypertension	Hypertension	Hypertension/Stroke
Hypertension	Hernia	Tremors	Impaired vision
Diabetes	Impaired vision	Urinary tract	Arthritis
Impaired vision	Urinary tract	obstruction	Backache
	obstruction	Body aches and pain	

Table 3: Free Listing of Discussants' Perceived Common Causes of Mortality Among Men

Group 1	Group 2	Group 3	Group 4
Heart attack	Hernia	Poorly-managed	Diabetes
Hypertension leading	Prostate gland diseases	diabetes mellitus	Stroke
to stroke	Hypertension	Stroke	Hypertension
Diabetes mellitus		Urinary tract	
		obstruction	

Table 4: Demographic details of Participants in the Community-Based Prostate Diseases Survey

Index	Total		Age-decade group												p value
	No	%	40-49		50-59		60-69		70-79		80+				
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	
Participants	656	100	115	17.5	280	42.7	175	26.7	66	10.1	20	3.0			
Marital Status															
Never married	13	2.0	3	2.6	7	2.5	2	1.2	0	0	1	5.3			
Married	583	90.5	107	93.9	249	90.2	157	92.4	56	86.2	14	73.7			
Separated/Divorced	28	4.4	3	2.6	12	4.3	7	4.1	4	6.2	2	10.5			
Widowed	20	3.1	1	0.9	8	2.9	4	2.1	5	7.7	2	10.5			
Completed School															
High															
No	369	56.2	51	44.3	168	60	94	53.7	46	69.7	16	80		0.001	
Yes	287	43.8	64	55.7	112	40	81	46.3	20	30.3	4	20			
Med. Examt															
Yes	383	58.4	49	42.6	184	65.7	102	58.3	39	59.1	9	45.0			
No	273	41.6	66	57.4	96	34.3	73	41.7	27	40.9	11	55.0		<0.0001	
*BMI															
<25	390	73.6	66	66	194	75.5	93	72.1	26	83.9	11	84.6			
25-29.9	121	22.8	28	28	53	20.6	34	26.4	5	16.1	1	7.7			
≥30	19	3.6	6	6	10	3.9	2	1.6	0	0	1	7.7			

distinct from, or as a cause of urinary obstruction) were only mentioned as a cause of mortality by a few persons in one group consisting mostly of well-educated men. Indeed, one discussant deemed CaP a significant cause of death among men in Nigeria.

The main source of information on benign and malignant diseases of the prostate, for the few discussants aware of them, was through contact with people who had suffered from the diseases. Other sources of information included the television, radio and books. As pertaining to the frequency of the diseases in the population, most of the discussants thought BPH and CaP were rare in Nigeria, however in one group a few persons felt that the diseases were common, but that because they were usually not discussed openly, most people were ignorant of their existence. Similarly, most of the discussants were not knowledgeable about the symptoms of either BPH or CaP, but the few who had knowledge of the diseases thought supra-pubic swelling and difficulty in passing urine were related to prostatic diseases.

The causes of, and risk factors for, prostate cancer were unknown to most of the discussants, but a few thought promiscuity in early adulthood and previous history of STIs could be risk factors. Methods of diagnosis of the disease were also unknown to most of the discussants, but a few supposed it could be detected early through regular medical check ups and specialist care. In terms of where to seek treatment for the disease, it was agreed in all the groups that treatment was best sought at orthodox medical hospitals.

All the participants were interested in receiving information about all aspects of carcinoma of the prostate (CaP) i.e. risk factors/causes, prevention/early detection, signs/symptoms

causes majeures de la mortalité. Les maladies prostatiques (comme une forme distincte, ou une cause d'obstruction urinaire) ont été mentionnées en tant que cause de la mortalité par quelques-uns dans l'un des groupes comprenant surtout les lettrés. Voire, l'un des participants a mentionné le cancer de prostate en tant qu'une cause majeure de mortalité parmi les hommes nigériens.

La source majeure de l'information des maladies douces et malines de prostate, selon la conscience de quelques participants était un contact avec les gens qui ont souffert des maladies. D'autres sources de l'information incluent la télévision, la radio et les livres. Concernant la fréquence des maladies dans la population, la plupart des participants ont pensé que l'hyperplasie douce prostatique et le cancer de prostate sont rares au Nigéria, néanmoins, dans l'un des groupes, peu de gens ont opiné que les maladies étaient communes, mais parce que les gens ne la discutent pas dans le public, la plupart des gens sont ignorants de leur existence.

Surtout, la plupart des participants n'ont pas la connaissance des symptômes de l'hyperplasie douce prostatique ou du cancer de prostate, mais peu de gens qui ont été au courant des maladies ont pensé que l'enflure supra-pubien et la difficulté d'uriner associée aux maladies prostatiques. Les causes de, et les facteurs de risque, du cancer de prostate étaient inconnus à la plupart des participants, mais quelques-uns ont pensé que la promiscuité pendant l'adulte et l'histoire antérieure des infections sexuellement transmises pourraient être des facteurs de risque.

Les méthodes des diagnoses de la maladie étaient aussi inconnues à la plupart des participants, mais quelques-uns ont suppose qu'elle pourrait être découverte tôt à travers des examens médicaux réguliers et un soin spécialiste. En ce qui concerne où traiter la maladie, tous les groupes étaient d'accord que le traitement aux hôpitaux médicaux orthodoxes était le meilleur. Tous les participants sont intéressés à recevoir des informations à propos de tous les aspects du carcinome de prostate. C'est-à-dire, les facteurs de risques/les causes, la prévention/la détection précoce, les signes/les symptômes et le traitement. La façon la plus

and treatment. The preferred mode of dissemination of the information included handbills, media talk shows and talks in churches/mosques.

Prostate Cancer Survey:

Six hundred and fifty six (656) men participated in the study. Of these, 115 (17.5%) men were between 40-49 years, 280 (42.7%) between 50-59 years, 175 (26.7%) were between 60-69, 66 ranged between 70-79, and 20 above 80 years (Table 4). Majority, 583 (90.5%) were married, 13 (2%) had never been married, 28 (4.4%) were separated or divorced, while 20 (3.1%) were widowers. Information on educational background revealed that 287 (43.8%) had a High School education (Table 4).

Awareness of the prostate and prostate cancer

Forty-three percent of the respondents (283), had prior knowledge of the prostate gland while 190 (29%) had heard of prostate cancer. In contrast, a larger proportion (58%) of them had knowledge of other cancers and 336 (51.2%) men had heard of urinary problems in old age. The main sources of information about prostate carcinoma among the respondents who knew of the disease were mostly obtained from radio (33%), health workers (23.8%), friends/family/colleagues, and the television (33%, 23.8%, 19%, and 19.5%). Other sources of information mentioned include newspapers (13%), with other sundry sources accounting for 3.2%.

1. Knowledge of Prostate cancer

Sexually Transmitted Infections (STIs) and sexual promiscuity were considered the main risk factor for prostate cancer by some of the respondents (17.9%). Sexual promiscuity was also considered another major risk factor (17.1%), while old age (9.9%), family history (7.2%), and being from the African race (3.4%) were considered risks by only a small proportion of the respondents. Less than a third of the respondents (31.7%) were aware of

préférée pour rendre public des informations inclut les affiches, les présentations au media et les présentations aux églises et mosquées.

Etude du Cancer de Prostate:

Six cent cinquante-six (656) hommes ont participé à l'étude. Parmi eux, 115 (17.5%) des hommes avaient 40-49 ans, 280 (42.7%) 50-59 ans, 175 (26.7%) avaient 60-69 ans, 66 de 70-79 ans, et 20 personnes avaient 80 ans et plus (Table 4). La majorité, 583 (90.5%) se sont mariés, 13 (2%) ne se sont jamais mariés, 28 (4.4%) ont été divorcés, tandis que 20 (3.1%) étaient veufs. L'information sur leur niveau de l'éducation a révélé que 287 (43.8) ont fréquenté le lycée (Table 4).

Le Conscient du prostate et du cancer de Prostate

Quarante-trois pourcent des participants (283), ont eu la connaissance précoce de la glande prostate tandis que 190 (29%) ont entendu du cancer de prostate. Au contraire, une grande proportion (58%) des participants ont eu la connaissance d'autres cancers et 336 (51.2%) des hommes ont entendu des problèmes urinaires pendant la vieillesse. Les sources majeures de l'information du carcinome de prostate parmi les participants qui étaient au courant de la maladie étaient surtout obtenues de la radio (33%), les travailleurs de santé (23.8%), les amis/la famille/les collègues, et la télévision (33%, 23.8%, 19% et 19.5%). D'autres sources de l'information mentionnée ont inclut les journaux (13%), avec d'autres diverses sources (3.2%)

1. Connaissance du Cancer de Prostate

Les infections sexuellement transmises et la promiscuité sexuelle ont été considérées comme un autre facteur de risque (17.1%) majeur pour le cancer de prostate, tandis que la vieillesse (9.9%), l'histoire de famille (7.2%), et la race Africaine (3.4%) ont été considérées comme des risques par une petite proportion des participants. Moins un tiers des participants (31.7%) étaient au courant des symptômes associées au Cancer de Prostate,

the symptoms associated with CaP, while 21.2% were aware of difficulty in urination being a symptom and 3.7% of respondents described suprapubic swelling as a symptom. In terms of the appropriate treatment for the disease, 48% were of the opinion that orthodox treatment in the hospital was the best method of treatment for prostate cancer; while a few (4.3%) preferred the traditional form of treatment.

2. Health-seeking behaviour regarding Prostate Cancer

Majority of the respondents had not been evaluated for prostatic disease previously. This as one hundred and forty-one (21.5%) of the respondents had undergone a digital rectal examination (DRE) prior to the screening and 112 (17.1%) had undergone a Prostate Specific Antigen (PSA) test. Interestingly, most of the respondents (81.5%) were interested in receiving information about prostate cancer. Of these 478 (72.6%) were interested in specific information about the specific causes/ risk factors of the disease, 437 men(66.6%) indicated interest in information on the signs and symptoms of the disease, while 433 (66%) were interested in having information on treatment options for the disease. Specific information about prevention of prostate cancer was also considered of relevance by 461 (70.3%), whilst 245 (32.3%) thought information about populations at risk of the disease was important. The preferred modes of information dissemination opined by respondents who required information about prostate cancer were: handbills (44.1%); the radio (32.9%), the television (25.2%), health centres or health workers (30.4%), and religious houses (29%).

Discussion

Although the efficacy of prostate cancer screening in reducing disease mortality in asymptomatic men remains controversial¹⁴, recent reports continue to suggest that early detection is beneficial¹⁵. It is noteworthy to state that past studies have been conflicting on

tandis que 21.2% étaient au courant des difficultés en urination en tant que symptôme et 3.7% des participants ont décrit l'enflure supra pubien en tant que symptôme. Concernant le traitement approprié pour la maladie, 48% ont opiné que le traitement chez les médecins orthodoxes est le meilleur tandis que (4.3%) ont préféré la méthode traditionnel du traitement.

2. Façon de chercher d'être traité du Cancer de Prostate

La majorité des participants n'ont pas été examinés de la maladie prostatique auparavant. Cent quarante et un (21.5%) des participants ont vécu de l'examen rectal digital, avant l'examen de santé et 112 (17.1%) a participé à l'examen de l'Antigène Spécifique de Prostate. Intéressement, la plupart des participants (81.5%) sont intéressés à recevoir l'information du cancer de prostate. De ces 478 (72.6%) sont intéressés à recevoir l'information spécifique des causes spécifiques/facteurs de risques de la maladie, 437 des hommes (66.6%) ont indiqué leur intérêt dans l'information sur les signes et des symptômes de la maladie, tandis que 433 (66%) sont intéressés à recevoir l'information sur les options du traitement pour la maladie. L'information spécifique de la prévention du cancer de prostate a été aussi considérée d'être pertinente par 461 (70.3%), tandis que 245 (32.3%) ont pensé que l'information des populations d'être en risque de la maladie était importante. Le mode de l'information le plus préféré par les participants qui ont eu besoin de l'information du cancer de prostate était: les affiches (44.1%); la radio (32.9%), la télévision (25.2%), les centres de santé ou des travailleurs de santé (30.4%), et les centres religieux (29%).

Discussion

Bien que l'efficace de l'examen du cancer de prostate en réduisant la mortalité de la maladie dans les hommes asymptomatique soit controversée¹⁴, les rapports récents continuent à suggérer que la détection

the influences of race or socioeconomic background on knowledge, perceptions and beliefs about prostate cancer and early detection^{16,17,18,19}.

Public awareness about the causes, methods of detection, investigation and treatment of diseases are a pre-requisite for their early detection and treatment. There is paucity of literature, using both quantitative and qualitative measures, on the knowledge and perceptions of Nigerian men regarding the prostate and its diseases, including prostate cancer. In these studies, we found out that awareness about diseases of the prostate, especially carcinoma of the prostate (CaP), among discussants in the focus group discussion and respondents in the prostate screening study was low, in contrast to awareness about diseases such as hypertension, diabetes mellitus and arthritis. The high level of awareness about these second group of diseases could be attributed to the fact that they are more prevalent among people of this age group in our community^{20,21}. Indeed it is probable a number of the discussants and respondents were affected by one or more of these diseases. Furthermore, the symptoms of arthritis and diabetes and the sequelae of hypertension are easily identifiable and have been the subject of long-running public health education programs in Nigeria. Another factor of importance is a lack of a national screening program for prostate cancer which has given the impression of a low incidence of the disease in Nigerians^{22,23,24}.

Whilst the poor knowledge about benign and malignant prostatic diseases among our discussants and respondents is in keeping with reports from similar studies in African Americans²⁵, their ignorance of the prostate gland itself was unexpected. This apparent lack of awareness about the gland (and thus its diseases and screening) by most of the participants is probably due to the fact that it is

précoce est benevole¹⁵. C'est nécessaire de dire que les recherches antérieures ont des différents points de vue sur les influences de la race ou la base socioéconomique sur la connaissance, les perception et les croyances du cancer de prostate et la détection précoce^{16,17,18,19}.

La conscience publique des causes, des méthodes de détection, de la recherche et du traitement des maladies sont des critères pour le traitement et la détection précoce. Il y a des travaux antérieurs, utilisant les mesures quantitatives et qualitatives, sur la connaissance et les perceptions des hommes Nigériens en ce qui concerne la prostate et ses maladies, y compris le cancer de prostate. Dans cette recherche, nous avons découvert que le conscient des maladies de prostate, surtout le carcinome de prostate, parmi les participants dans le groupe cible de discussion et les participants dans l'étude de l'examen de prostate était au niveau bas, au contraire au conscient des maladies telles que l'hypertension, les diabètes mellites et l'arthrite. Le haut niveau du conscient de ce deuxième groupe des maladies pourraient être associés au fait qu'ils sont plus prévalent parmi les gens de même âge dans ce groupe dans noter communaute^{20,21}.

Voire, des participants ont été affectés par l'une ou plus de ces maladies. De plus, les symptômes de l'arthrite et des diabètes et l'hypertension sont évidents et ces maladies sont les débats des recherches au Nigeria. Un autre facteur d'importance est le manque de programs d'examen de santé national en ce qui concerne le cancer de prostate qui a montré l'impression de basse incidence de cette maladie parmi les Nigériens^{22,23,24}.

Tandis que la mauvaise connaissance des maladies prostatiques douces et malines parmi les participants selon les études antérieures franco-américaines²⁵, leur ignorance de la glande de prostate était découverte. Ce manque de conscient de la glande par la plupart des participants est probablement du au fait qu'il y a une organe interne qui n'a pas encore identifié

an internal organ that has not been previously identified as a body organ in the local language (Yoruba). Indeed and the word now being used to identify it ('iseto' or 'aseto') literally means 'that which obstructs the flow of urine'. However, recognition of difficulty in urination as a major cause of morbidity in older men by some participants was considered significant. This was notwithstanding the general lack of awareness of the gland, and the non-recognition of association of this symptom with prostatic diseases by those who were aware of the gland. This finding is probably due to the fact that in southwestern Nigeria, diseases are identified by the literal description of their symptoms. Consequently, obstructive uropathy due to prostatic enlargement could be confused with that due to urethral stricture (a complication of poorly treated STIs) due to the knowledge of the fact that difficulty in urination is more commonly seen in men with a previous history of STI. In addition, the identification of urinary obstruction as a cause of mortality by some participants may be explained by the fact that urinary retention occurs as a late event in bladder outflow obstruction due to either urethral strictures or prostatic enlargement, and may be pre-terminal if not treated promptly or effectively.

Recent health education strategies in Africa as a whole and Nigeria specifically have focused mainly on HIV/AIDS as well as other infectious diseases; the awareness of which has been reported to be quite high in different populations^{26, 27}. This is mainly due to the extensive media coverage and widespread health information obtainable on the disease. It is also due to a large extent to the Nigerian government's focus on the disease, as well as the attention it receives from various Non-Governmental Organisations and multi-government organizations including the World Health Organisation. This study indicates that there is an urgent need to educate Nigerian men about the risk of CaP and the early detection and screening measures that are

comme une organe du corps dans la langue maternelle (Yoruba). Vraiment, l'organe est appelée ('iseto' or 'aseto') qui signifie celle qui dérange le cours d'urine. Néanmoins, la reconnaissance de la difficulté d'uriner comme une cause majeure de la morbidité parmi les vieux a été considérée signifiante par les participants. Aussi, il y a le manque de conscient de la glande, la non-reconnaissance de l'association de cette symptôme avec les maladies prostatiques par ceux qui ont la conscience de la glande. Cette découverte est probablement due au fait qu'au sud-ouest du Nigeria, les maladies sont identifiées par une description littérale de leurs symptômes. Par conséquent, l'uropathie obstructive due à l'agrandissement prostatique pourrait être confus à la complication de mauvais traitement des infections sexuellement transmises résultant de la mauvaise connaissance du fait que la difficulté d'uriner est commune dans les hommes qui ont eu des infections sexuellement transmises. De plus, l'indentification de l'obstruction urinaire comme cause de mortalité par quelques participants pourrait être expliquée par le fait que la rétention urinaire se produit dans la vessie à cause du strict urétral ou de l'agrandissement prostatique, et pourrait être pré-incurable si ce n'est pas traitée à l'heure ou effectivement.

Les stratégies récentes de santé en Afrique dans l'ensemble et particulièrement au Nigeria, se sont concentre sur le VIH/SIDA autant que d'autres maladies infectieuses qui est la conscience la plus rapportée dans des différentes populations^{26,27}. C'est aussi du à la concentration du gouvernement Nigérian sur la maladie, autant que l'attention reçue des organisations non-gouvernementales et des organisations multi-gouvernementales y compris l'Organisation de la Sante Mondiale. Cette étude suggère qu'il doit y avoir la conscience sur les risques du cancer de prostate chez les hommes Nigériens et sur la détection précoce et des mesures d'examen de sante qui sont disponible actuellement. Les études récentes ont suggéré que la

currently available. This especially as recent studies have suggested that, although there is evidence of a molecular basis for the more aggressive disease in blacks^{28,29,30}, race/ethnicity as an independent predictor of CaP is conditional and dependent on age, stage at diagnosis, and treatment^{31, 32}. Furthermore, radical treatment (prostatectomy) has been shown to result in a similar responsiveness in black and white men with disease of similar stage and grade³¹ whilst treatment of advanced disease in usually of limited benefit on the continent³³. As such, early diagnosis and treatment of the disease can be expected to translate to a reduction in mortality and improved survival in Nigeria.

Conclusion: Our findings suggest that most adult Nigerian men are ignorant of the prostate gland and its diseases in general, and prostate cancer in particular irrespective of their socio-economic status and level of education. Health education programs are therefore required to increase the awareness of the adult men about this major health issue to reduce the health burden due to the disproportionately high morbidity and mortality from the disease of the gland.

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race/l'ethnicité prédit la condition du cancer de prostate dépendant de l'âge, l'étape des diagnoses, et du traitement^{31,32}. De plus, un traitement radical a montre le résultat semblable à la réception parmi le noirs et blancs avec la maladie de l'étape et de classe semblables tandis que le traitement de la maladie avancée à une malédiction limitée dans le continent. Les diagnoses précoces le traitement de la maladie peuvent résulter à la réduction de la mortalité et la survie au Nigeria.

Conclusion: Nos découvertes suggèrent que la plupart des adultes Nigérian sont ignorants de la glande de prostate et ses maladies en général, et le cancer de prostate en particulier malgré leurs statuts économiques et leur niveau de l'éducation. Les programs de l'éducation de sante sont donc nécessaire pour augmenter la conscience des hommes adultes de ce problème majeur de santé pour réduire le fardeau de santé du à la haute morbidité et mortalité de la maladie de la glande.

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