

Health Status and Health-seeking Behaviour of Jamaican Men Fifty-five years and Over

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ABSTRACT

Objective: The Caribbean including Jamaica is undergoing rapid population ageing with implications for health service planning and delivery. Such planning should take into account gender differentials. This study describes and analyses the health status and health-seeking behaviour of men 55 years and over in Jamaica.

Method: A quantitative cross-sectional survey employing cluster sampling techniques was utilized to recruit 2000 men, 55 years and older, in the parish of St Catherine, Jamaica. A 126-item questionnaire was administered and standard instruments utilized to assess functional status.

Results: Respondents (74%) rated their health status as excellent/good. Few men were highly dependent with regard to Activities of Daily Living with incontinence being a major concern. Medication management and shopping were the major Instrumental Activities of Daily Living domains where assistance was needed. Depression was associated with non-involvement in community/social organizations and not being in physical contact with their children.

Major health conditions reported were cancers (16%), kidney/bladder conditions (12.7%), hypertension (9.2%) diabetes (6.5%) and prostate problems (7.3%). Most men (67.6%) had not visited a health provider in the year prior to the survey; 17.1% had been hospitalized after age 55 years. Only 35% of men ever had a prostate check/examination and 8.2% of men eligible for drug benefits under the Jamaica Drugs for the Elderly Programme registered for that programme.

Conclusion: There is need to focus on older men's health and ensure that primary prevention and early interventions reach middle-aged and older men while improving health literacy. Taking programmes to 'where men are', is suggested – the bars, race track and sports events. Gender and age-specific research should reduce gender disparities in health among older persons in Jamaica.

Keywords: Health-seeking behaviour, health status, Jamaica, older men

Estado de Salud y Comportamiento de Búsqueda de Salud de los Hombres Jamaicanos con Cincuenta y Cinco o más Años de Edad

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RESUMEN

Objetivo: El Caribe, incluyendo Jamaica, está pasando por un proceso de rápido envejecimiento de la población que reviste implicaciones para la planificación y el ofrecimiento de los servicios de salud. Tal planificación debe tomar en cuenta las diferencias de género. Este estudio describe y analiza el estado de salud y el comportamiento de búsqueda de salud de hombres de 55 y más años en Jamaica.

Método: Un estudio transversal cuantitativo que emplea técnicas de muestreo por conglomerados fue utilizado para reclutar a 2000 hombres – de 55 años de edad y más – en el distrito de Saint Catherine, Jamaica. Una encuesta de 126 ítem fue administrada y se usaron instrumentos estándar a fin de evaluar el estado funcional.

Resultados: Los encuestados (74%) calificaron su estado de salud como excelente/bueno. Pocos hombres fueron altamente dependientes con respecto a las "actividades de la vida cotidiana", siendo la incontinencia una preocupación principal. El tratamiento medicamentoso y el ir de compras fueron

los dominios principales de las actividades instrumentales de la vida cotidiana, en los que se requiere asistencia. La depresión estaba asociada con la no involucración en las organizaciones sociales de la comunidad, y la falta de contacto físico con sus niños.

Las principales condiciones de salud reportadas fueron los cánceres (16%), las condiciones de riñón/vejiga (12.7%), la hipertensión (9.2%), la diabetes (6.5%), y problemas de próstata (7.3%). La mayor parte de los hombres (67.6%) no había visitado un proveedor de salud en el año previo a la encuesta. El 17.1% habían sido hospitalizados después de cumplidos los 55 años de edad. Sólo 35% de los hombres habían tenido alguna vez chequeo de la próstata, y sólo 8.2% de los hombres elegibles para los beneficios de medicamentos bajo el llamado "Jamaica Drugs for the Elderly Programme", se habían inscrito en este programa.

Conclusión: *Es necesario prestar atención a la salud de los hombres más viejos, y asegurar que la prevención primaria y las intervenciones tempranas lleguen a los hombres de edad mediana y a los más viejos, mejorando al mismo tiempo la educación para la salud. Se sugiere llevar los programas a 'dónde los hombres están', es decir, a los bares, las pistas de carrera, y los eventos deportivos. Las investigaciones de género y específicas de la edad, deben reducir las disparidades de género en la salud entre las personas más viejas en Jamaica.*

Palabras claves: Comportamiento de búsqueda de salud, estado de salud, Jamaica, hombres más viejos

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INTRODUCTION

Increasingly, the thrust of public health is in promoting health beyond the clinician-patient encounter to include health-seeking and health promoting behaviour (1). Consequently, as public health meets gerontology/geriatrics, it is recognized that for interventions to be effective, the social aspects of behavioural interventions, the sociocultural context in which health occurs and how health-seeking actions are influenced in 'old age' have to be considered (1, 2). Age-specific health promotion in later life coupled with chronic disease management is critical in addressing the health concerns of older persons.

Several social and biological determinants have been postulated as having direct or indirect influences on health. Age has been identified as one of the important determinants of health (3). Gender is another (3–5) and as such there has been increasing attention to the role of gender in influencing health behaviour and healthcare (3, 6). There is a growing body of interest and research that suggest that men are less likely than women to identify their current health status and seek appropriate healthcare (3).

Males and females have differing health experiences and needs beyond the accepted genitourinary ones (7, 8). Risk-taking behaviour is higher in males whereas health-promoting behaviour is higher in females (9, 10). It has been observed that some social experiences which influence health such as violence, accidents and war are male dominated (10). These experiences are linked to gender differences which begin early in life during the socialization process (11, 12).

Men's health incorporates issues, conditions or determinants that affect their quality of life and for which different responses are required for males to experience optional social, economic and physical health (4, 7). The

World Health Organization (4) has argued the need to pay attention to older men noting that, traditionally, health discussions were usually synonymous with women's issues.

There are additional reasons to examine older men's health. Caribbean populations are ageing and 2025 population projections imply an increasing demand for health and long term care service (Table 1). There are slightly over two million men over 60 years of age in the region – an average of 10% of the male population which is projected to increase to 21.6% by 2050 (13). Across the Caribbean, women live 5–6 years longer than men (13). Reports within and without the region attest to gender differences in health and life expectancy with the leading disease in older men being cardio-vascular (14, 15)

There are also gender differences in living arrangements of older persons with implications for availability of care (16, 17). The prevalence of certain preventable cancers including colon cancers is higher in men and there are health conditions such as prostate and low testosterone that affect only men. Nevertheless, studies report that medical systems overlook men (18). The use of primary and secondary healthcare differs by gender with evidence that men are using the primary health services far less than females (19), but hospital admission and discharge rates are equal for males and females (14).

An important concept in considering the health of older men is health literacy which influences health-seeking behaviour (20, 21). Health literacy influences the ability to make appropriate health choices as it is related to understanding the disease and possible choice of prevention and treatment. Additionally, factors influencing health service utilization are gender-determined with strong sociocultural influences (22, 23). Men equate illness with weakness and this influences them not to seek healthcare (24–26).

Table 1: Ageing in the Caribbean: Projected demographic indices 2025

| | Projected composition as a % of population | | Sex ratio per 100 females | Life expectancy at birth by sex | | Life expectancy at 60 years |
|---------------------|--|--------|---------------------------|---------------------------------|--------|-----------------------------|
| | Male | Female | | Male | Female | |
| Caribbean | 14.5 | 17.7 | 79.5 | 68.8 | 74.8 | 21.8 |
| Barbados | 23.1 | 27.2 | 82.3 | 77.2 | 82.2 | 22.5 |
| Belize | 9.9 | 10.5 | 95.2 | 75.7 | 79.5 | 22.3 |
| Guyana | 12.1 | 17.8 | 60.8 | 59.6 | 68.7 | 20.1 |
| Haiti | 6.2 | 8.7 | 68.3 | 61.1 | 66.9 | 19.3 |
| Jamaica | 13.0 | 15.9 | 80.3 | 76.8 | 81.2 | 22.9 |
| St Lucia | 10.4 | 13.7 | 75.1 | 74.5 | 79.8 | 21.3 |
| Trinidad and Tobago | 18.4 | 21.6 | 82.1 | 76.1 | 81.1 | 21.9 |

Source: ECLAC 2004

The need for age-specific approaches to health promotion is already well accepted and, *eg* baby-friendly hospital initiatives and age-friendly cities initiatives. Similarly, there is an emergent imperative to focus on older men's health issues (4, 27). Given the importance of health across the lifespan, in particular older men's health and the ageing of Caribbean people, this study sought to describe the health and health-seeking behaviour of older men in Jamaica.

SUBJECTS AND METHODS

Quantitative and qualitative methods were used to gather the information for the study. The parish of St Catherine was chosen for the study as it has features (urban/rural, social, economic and demographic) typical of Jamaica (28, 29). The Statistical Institute of Jamaica (STATIN) assisted with both determination and identification of the sample. The population of men 55 years and over in St Catherine was 33 674 and a sample size of 2000 was identified as representative. The 162 enumeration districts (EDs) which make up the parish were used as the sample frame cluster sampling method with probability proportional to population size used to select 40 EDs, each ED being a cluster. Within each cluster, 50 persons were interviewed beginning at a randomly selected starting point and going house to house in a north easterly direction until 50 interviews were completed. All men 55 years and over in a house were interviewed. Men suffering from severe psychiatric or cognitive impairment were excluded.

Data collection was done using a specifically designed questionnaire which was pretested in August Town (a urban, low income community with similar population structure) on men 55 years and older. Six focus groups were created; three urban and three rural, and questions were asked as determined by the objectives to identify themes and issues with regard to health status and health-seeking behaviour. The information obtained was combined with the information from a companion study (26) and used to develop the study questionnaire.

Standard instruments previously used in studies of the elderly in Jamaica (30) were used including the Folstein Mini Mental Status Examination, the Katz tool to assess Activities of Daily Living (31, 32), the Lawton and Brody's tool to assess the Instrumental Activities of Daily Living (33) and the Centre of Epidemiological Scale for Depression (CES-D) (34).

Data were collected over a two-month period and entered into SPSS database. Ethical approval for the study was obtained from the Faculty of Medical Sciences/UHWI Ethics Committee, University of the West Indies, Mona, Jamaica.

RESULTS

Demographic profile

The sample comprised 2000 men ages 55–93 years with a mean age of 67 years. There was equal rural – urban distribution. The majority (51%) was married and 88.2% identified themselves as head of household. Less than 1% lived alone and 66% lived with two or more persons. Educational levels were low – the majority (over 80%) had only either basic or all-age school level education as their highest level of education. Seventy-four per cent were retired or not working and 34% of those not working reported that they stopped working for health reasons (Table 2).

The majority (84.6%) were fully independent with regard to physical function as measured by the six main and basic domains of the Activities of Daily Living – bathing, toileting, dressing, continence, feeding and transfer. Of the 309 men reporting difficult with at least one activity, 50% was due to problems with continence. In assessing the higher domains *via* the Instrumental Activities of Daily Living (IADLs), most men were fully independent (53.4%) and 35.4% in all but one. The two domains needing most assistance were management of medication and shopping (Fig. 1). Only 6.8% were in need of assistance with three or more IADLs. Increasing age was statistically associated with increasing dependency.

Table 2: Demographic characteristics of the sample

| Characteristic | Urban (n = 981) | Rural (n = 1019) | Chi-square p value |
|--------------------------|--------------------|---------------------|-----------------------|
| | [n, (%)] | [n, (%)] | |
| <i>Age Group(yrs)</i> | | | |
| | | | <i>p = N.S.</i> |
| 55–59 | 232 (23) | 237 (23) | |
| 60–64 | 197 (20) | 216 (21) | |
| 65–69 | 184 (18) | 190 (18) | |
| 70–74 | 165 (18) | 180 (17) | |
| 75–80 | 99 (10) | 90 (8) | |
| 80+ | 104 (11) | 106 (10) | |
| <i>Education</i> | | | |
| | | | <i>p = 0.005</i> |
| No formal Education | 103 (10) | 97 (9) | |
| Basic School | 567 (57) | 537 (52) | |
| Primary/All Age | 261 (26) | 296 (29) | |
| Secondary/High | 22 (2) | 57 (5) | |
| Trade /Vocational | 11 (1) | 12 (1) | |
| Certificate/ Diploma | 10 (1) | 13 (1) | |
| Bachelors | 7 (1) | 7 (1) | |
| <i>Marital Status</i> | | | |
| | | | <i>p = 0.002</i> |
| Single | 359 (37) | 327 (32) | |
| Married | 506 (51) | 524 (51) | |
| Separated | 54 (6) | 58 (6) | |
| Widowed | 62 (6) | 110 (11) | |
| <i>Head of Household</i> | | | |
| | | | <i>p = N.S.</i> |
| Self | 866 (88) | 89 (88) | |
| Partner | 88 (6) | 64 (6) | |
| Children | 26 (3) | 37 (4) | |
| Parents/Siblings | 24 (2) | 12 (1.2) | |
| Employer | 7 (7) | 9 (9) | |
| <i>House Ownership</i> | | | |
| | | | <i>p = 0.001</i> |
| Yes | 355 (36) | 469 (46) | |

N.S. = not statistically significant at 5% level

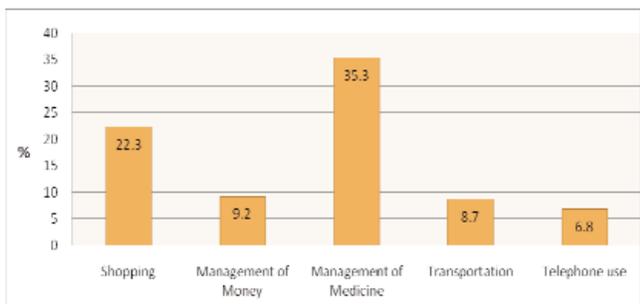


Fig. 1: Percentage dependency by Instrumental Activity of Daily Living (IADL) skills (n = 2000).

The majority (78%) were cognitively functional, having performed well on the mini-mental test. With regard to depression screening, 82.4% of men scored normal, 11.1% fell into the mildly depressed category and 6.5% into the significantly depressed category (Fig. 2). Being depressed was significantly associated with a lack of participation in social clubs and/or church. There were 7.7% of those who were not members of social clubs or community groups or

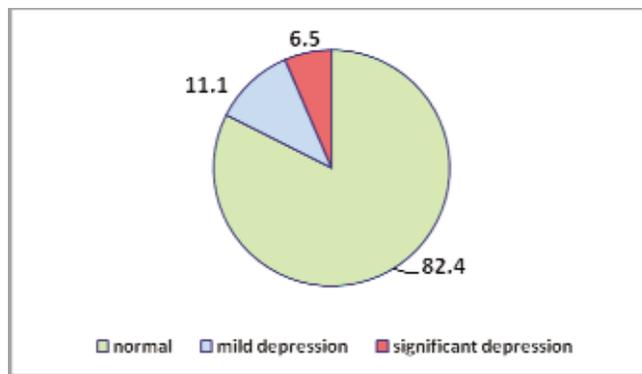


Fig. 2: Percentage distribution of levels of depression (n = 2000).

who were not in physical contact with their children who screened positive for depression *vis-à-vis* 4.2% for men who were.

Self-reported health

Men perceived themselves as being in good health; 55% rated their health as good, 26% fair and 19% excellent. Increasing age was not a factor in self-reported health status (Table 3). There were no statistically significant differences in self-reported health status by geographic location or marital status.

Table 3: Percentage distribution of self-reported health status by residence and age-group

| Variables | Excellent Health (n = 357) | Good Health (n = 1038) | Fair Health (n = 480) | p-value |
|-------------------------|-------------------------------|---------------------------|--------------------------|---------|
| <i>Residence</i> | | | | |
| Urban | 44.8 | 50.4 | 48.5 | N.S. |
| Rural | 55.2 | 49.6 | 51.5 | |
| <i>Age Groups(yrs.)</i> | | | | |
| 55-59 | 20.4 | 24.1 | 24.2 | N.S. |
| 60-64 | 18.2 | 22.4 | 19.4 | |
| 65-69 | 19.6 | 19 | 18.5 | |
| 70-74 | 21.0 | 16 | 16.7 | |
| 75-79 | 10.6 | 8.5 | 10.0 | |
| 80+ | 10.1 | 10.1 | 11.3 | |

N.S. = not statistically significant at 5% level

The self-reported prevalences of diseases were low with cancer (16%) being number one and kidney/bladder disease (12%) number two. Hypertension (9%) was only third in the reported illnesses while 7.3% reported prostate problems and 6.5% reported having diabetes. Eighty per cent of those reporting cancer had been diagnosed within twelve months of the study. Since their 55th birthday, 17.1% had been hospitalized at least once. The leading causes of hospital admissions were problems related to the prostate (28%) diabetes (12%), hypertension (18%) and stroke (18%) [Fig. 3].

To better understand chronic disease in older men and low rates of reported illness, men were asked about symptoms which are usually associated with hypertension and

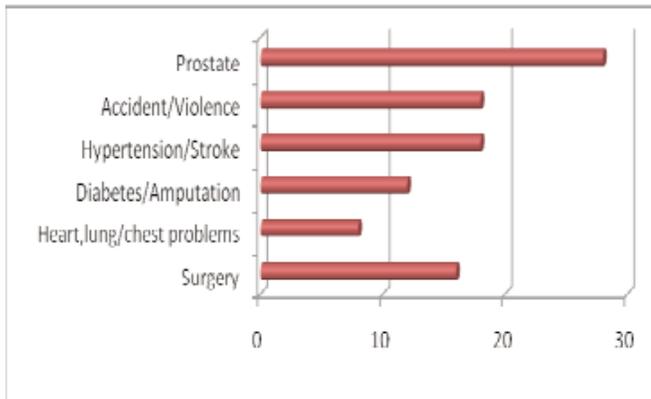


Fig. 3: Distribution of reason for hospitalization since aged 55 years.

diabetes. Symptoms probed for included headaches, dizziness, swollen feet, blurred vision, and shortness of breath (SOB) for hypertension. Among the 943 men not reporting hypertension, 51.6% (487) reported experiencing one symptom commonly associated with hypertension and 192 (20.5%) had 3 or more but only 70 (36.5%) of them had seen a doctor within the last previous year (Table 4).

Table 4: Percentage (%) distribution of self-report of older men diagnosed with diabetes, hypertension, and cancer by location, medication status, visit to health facilities – how recent and accompanied by whom

| Characteristics | Diagnosed with diabetes (Self-report) n = 129 | Diagnosed with hypertension (Self-report) n = 183 | Diagnosed with cancer (Self-report) n = 336 |
|----------------------------------|---|---|---|
| Rural | 44.2 | 60.1 | 48.2 |
| Urban | 55.8 | 39.9 | 51.8 |
| Taking medication | 64.1 | 65.0 | 2.7 |
| Visit private doc. in < year | 26.4 | 47.0 | 19.2 |
| Visit health centre in < year | 26.4 | 19.7 | 17.9 |
| Accompanied by partner/caregiver | 38.0 | 34.4 | 52.1 |

The findings were similar for diabetes when the symptoms of fatigue, frequent urination, weight loss, irritability and excessive thirst were probed for. Of the men surveyed, 805 (40.2%) reported symptoms commonly associated with diabetes with 166 (20%) reporting 3 or more and only one third of the latter mentioned group had visited a health facility/doctor within the past year (Table 4).

When men were asked to identify common complications associated with diabetes and hypertension, backache and hernia were commonly identified as complications of hypertension and diabetes. Among men with diabetes, 35% indicated back pain as a symptom of diabetes compared with 44% of non-diabetic men. Corresponding figures for hernia were 37% and 40% respectively. Among hypertensive men,

32% indicated back pain as a complication of that disease while 43% of non-hypertensive men indicated the same.

Men were questioned on their perceptions of health and what contributes to health. Slightly more than half (53.3%) indicated that good health meant “no sickness”. Diet (37.6%) and exercise (29.6%) were identified as contributing to good health (Fig. 4). Only 5.1% identified ‘checkups’ as contributing to good health.

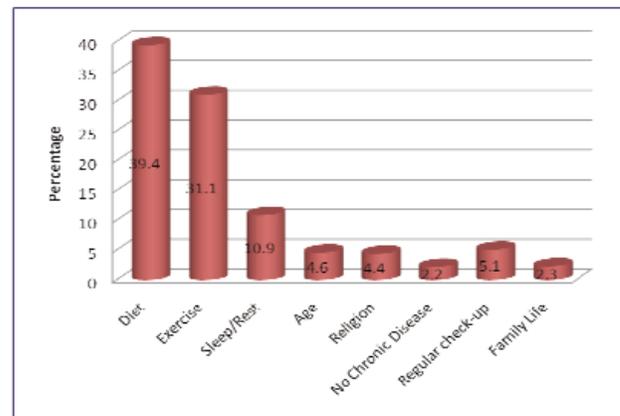


Fig. 4: Older men's report of factors which contribute to men's health status.

Health-seeking behaviour

The majority of men (67.6%) had not visited a doctor or health facility in the year prior to the survey. The main reason given was the absence of illness (44%), 28.7% used home remedies and 21.9% reported not being able to afford it. Eighteen per cent had visited a private doctor and 20.1% a health centre while 5.1% used both. Even when ill, 50% reported not readily seeking care. Rural men were more proactive than urban men in seeking care when ill.

Even among the men reporting a chronic disease, health service utilization rates, although higher than for the sample, was less than recommended. For example, among self-reported diabetics, less than 50% had accessed care in the previous 12 months. Only 26.4 per cent of this group visited a health centre and private doctor respectively in the last year. A third of both hypertensive and diabetic patients were not taking prescribed medication.

Among hypertensive men, 66.7% had accessed care within the last year; 47% at a private doctor and 19.1% at a health centre, while 0.6% utilized both public and private facilities. Overall, self-reported health status was associated with accessing healthcare. Less persons (11.9%) rating their health as poor reported accessing care compared to persons rating it as good or excellent (18.1%).

Physical access did not appear to be a barrier to utilization as 58.4% were within ten minutes of the health facility and only 24.9% more than half hour. The majority knew the location of the nearest health centre and/or private doctor but more than half (54.9%) did not identify a place,

either hospital or health facility, that they would visit for healthcare. Among the 902 persons who did, more persons would use the Accident and Emergency departments (43.4%), health centres (38.7%) and private doctors (37.3%) as the places to go for healthcare. Persons did identify some health centre-related barriers to accessing care, specifically long waiting time and noise levels. Utilization of the Drugs for the Elderly Programme (JADEP) was low (8.2%) despite 50% of men taking medication especially drugs for arthritis.

Only 35% of the study population had ever had a 'prostate check'. Rural men were equally as likely as urban men to have this check. The most popular reason for not having had a prostate examination was that it had not been recommended by a doctor (41%). 'Fear of the examination' (22%), was the second most commonly cited reason (Fig. 5).

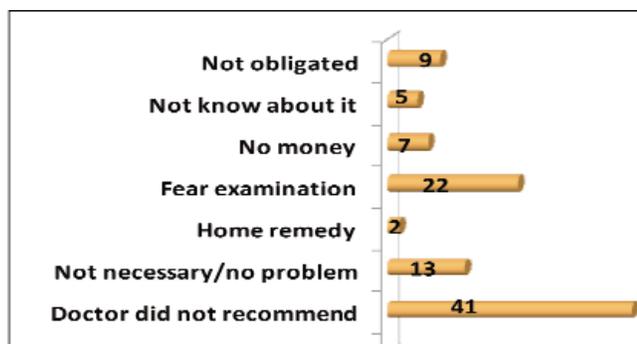


Fig. 5: Frequency (%) of reported reasons for not ever having a prostate examination.

Lifestyle practices

Given that the men identified exercise as important, their involvement in exercise was probed. The majority (68.2%) reported some form of exercise and 38% exercised regularly. Approximately 48% of hypertensive men exercised daily; 37% of the sample reported difficulty with exercise and especially climbing stairs.

Only 12.3% of the men had never smoked with 31.6% currently smoking. Active smokers decreased with age. Twenty-two per cent of the smokers had visited a doctor and 20% went to the health centre in the past year. Over half of the men reporting with heart disease (55.9%) were current smokers. Of the men currently smoking, 50% also reported consuming alcohol.

DISCUSSION

Understanding health-seeking behaviour among older men in Jamaica will be increasingly important given rapid population ageing within the Caribbean. There are implications for programme priorities as well as the generation of appropriate gender-specific responses to this phenomenon. Men (55 years and older) in this study generally reported feeling good about their health. The study findings are in concert with those reported by older men in a recent eight country study using low to middle income countries in Africa and Asia. In

that study, it was also noted that older men had better self-reported health than older females despite the better life expectancy of females (35). Males in the same study also self-reported less disability than females but disability did increase with age. Older Jamaican men's perception of their health as being relatively good in this study corresponds with the 2007 findings of Swain (36), another study from the developing world.

The validity of self-reported health as a proxy measure of actual health status has been the subject of much debate. It may be posited that men might generally report better health to maintain bravado and images of machismo. Rawlins (17) has reported data that show that even men with chronic disease still report good health. It is possible that this is a consequence of early socialization around illnesses where males are taught to be tough even in the face of pain and sickness. Emergent findings from the literature, however, suggest that self-reported health status is increasingly being accepted as a good indicator of health status and good predictor of prevailing apparent morbidity and need for healthcare (35, 36). However, health construed as the perceived absence of overt disease and the continued ability to function may contribute to relative inertia in health-seeking behaviour among older Jamaican men.

The reported levels of hypertension and diabetes among the sample were low when compared to other surveys. The findings of the Healthy Lifestyle Survey in 2008 which was a community sample reported much higher overall self-reported rates of 42.6% and 54.1% of hypertension for 55–64 and 65–74 years old respectively and 17.9% and 28.7% for diabetes (37). The disparity may be indicative of high levels of undiagnosed and therefore untreated chronic disease in the "older" male population. This is particularly of concern with regard to hypertension ("the silent killer") where subjective feelings of 'being well' may persist despite underlying disease. Sudden, fatal, catastrophic or debilitating outcomes often ensue emphasizing the need for early screening and treatment.

The findings of the study also point to 'prostate problems' being an important issue among the older men surveyed. This study did not distinguish between problems related to prostatic cancer and those related to benign prostatic hypertrophy but are consistent with high incidence of such disease conditions reported in Jamaican men (38). Prostate cancer is the leading cause of cancer in older men and Jamaica has high rates of prostate cancer. Only 35% had ever had a prostate examination despite kidney/bladder conditions being commonly reported as causes of illness. Among the 65% not having a check, 41% said their doctor had not told them to do it and only 22% reported being fearful. This suggests that current media campaigns to persuade men to be screened for prostate cancer are not reaping much success. As masculinity and male identity are intimately adnexed to sexual health in Jamaica, services for older men must cater to prostate health. These include screening for

prostate cancer as well as discussion of the psychosocial aspects of the disease. Peer education and sensitization is an option to be explored.

Men in the study were low users of health services with only about one in three older men accessing care from a doctor or health facility within the last year. The observation is not surprising given that 'check-ups' and use of health services were not popularly identified as contributors to health. The low utilization by older males of primary health-care services, both public and private, in the study argues for novel approaches to improve men's utilization of health services. This represents an area for additional research and for field testing and evaluation of initiatives to enhance the health-seeking behaviour of older men.

It is of concern that less than 50% of those reporting hypertension and diabetes had accessed care. The main reason for not accessing care was not being sick (44%) with only 21.9% reporting inability to afford it. Questions thus arise about the health literacy of older men. Health literacy is critical in assisting persons to make appropriate healthy lifestyle choices including availing themselves of health services. Low levels of health literacy are associated with poor medication compliance and subsequent adverse healthy outcomes because of the inability to understand instructions and less knowledge of the disease process. Persons are less likely to make needed lifestyle adjustments and practice lower levels of self-management (39, 40). The issue of health literacy and its relationship to health-seeking behaviour is further brought to the forefront by two observations: (i) the failure to visit a health provider or facility despite the concurrent existence of three or more possible symptoms of diabetes or hypertension among many older men, and (ii) the pervasive incorrect perception of a hernia as a symptom of these diseases.

The study concurred with an earlier study (30) that the majority of older men in Jamaica are functionally independent. This is indeed desirable as increased functional independence is related to improved quality of life. Nevertheless, some assistance may be needed with medication and shopping to help preserve the quality of life of some older men. There is a role for home help services for such individuals. However, such services are yet to be formally developed in Jamaica. In the interim, informal networks of older persons and community organizations, for example faith-based groups, may be sources of help.

Depression, (severe – 6.5%, mild – 11.6%) was found in the study, with rates comparable to Malaysia, Canada and the USA (41). The men involved in community activities and those who were in physical contact with children reported less depression; a finding similar to that found in the USA study of older men by Fan and Young (42). Consequently, involvement in social activities and the building and maintenance of relationships with children, including visits, throughout the life span is to be recommended and encouraged.

CONCLUSION

The findings presented highlight the importance of focussing on older men's health and providing evidence for policy and programme development. Current services need to ensure that primary prevention and early interventions reach middle-aged and older men. Efforts are needed to improve the health literacy of older men as the study suggests that current programmes are not effective. Taking programmes to 'where men are', is suggested – the bars, race track and sports events. Engaging men in setting priorities and designing services may encourage greater male participation. All efforts need to be supported by appropriate gender and age-specific research which can help reduce gender disparities in health among older persons.

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