Sexual healthcare knowledge, attitudes, and practices among primary care physicians in Trinidad and Tobago

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ABSTRACT

Background: Our understanding of healthcare professionals' competence level in both their sexual history taking practices and their attitudes in addressing sexual health concerns of patients in middle and old age is lacking. This research aimed to assess primary care physicians' (PCPs) knowledge, attitudes, and sexual healthcare practices toward patients who are ≥45 years in Trinidad and Tobago. Materials and Methods: A self-reported survey instrument assessing clinical sexual health knowledge, attitudes, and practices was administered nationwide to all registered PCPs (n = 155) in the public healthcare service. Descriptive and inferential statistical analyses were conducted using STATA. Results: PCPs, who were foreign medical graduates, middle-aged, male, and worked in urban centers, had improved odds of discussing sexual health with middle-aged and older patients. PCPs with any training in sexual health communication or sexual history taking were three times more likely to initiate a sexual health discussion or take a sexual history. Over 90% of physicians reported taking a sexual history only if the discussion was patient initiated and over 50% of PCPs indicated they will not ask these older patients about their sexual orientation, sexual partners, sexual abuse, or violence. Conclusions: Even though PCPs reported having a positive willing attitude toward offering sexual health care to these patients, they had a low level of knowledge of sexual function in later life and inconsistent sexual history taking practices. There is a great need for training physicians on sexual health communication and history taking and on sexual function in older adults.

Keywords: Caribbean, knowledge attitudes and practices, middle age, old age, primary care, sexual health, sexual history taking, Trinidad and Tobago

Introduction

Primary care (PC) is often the first point of contact for patients with sexual health problems.¹ With the rising prevalence of sexual dysfunction (SD) in middle- and old-aged persons,² management of such sexual concerns should be covered in PC. However, PC is known to be a resource poor setting with limited availability of sexual healthcare services for older people.³ “Youth” is associated with sexuality (conditioned by popular media) which may contribute to the ageist views shared by some Primary Care Physicians (PCPs) that sex becomes less important with age, and older people are sexually less desirable or incapable.⁴ Sexual ageism is also reinforced by the natural age-based decline in sexual function.⁵ PCPs with such ageist beliefs about sexuality justify why for sexual health, they focus on patients of reproductive age, for pregnancy, sexually transmitted infections (STIs), and contraception.⁶ To them, sexual health is a valid topic to discuss with younger, but not older patients because sexual priorities become irrelevant as patients age.⁷

Apart from ageist views about sex, PCPs avoid discussing sex with their older patients for further age-related reasons, but these evoke discomfort and fear. Age discrepancy between PCPs and patients can influence a sexual history consultation: with

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Materials and Methods

This quantitative paper is part of an overarching mixed methods study with a sequential exploratory design that consists of a qualitative and quantitative arm. The qualitative arm explored PCPs attitudes towards sexuality and sexual health care of middle-aged and older patients and this data was collected by conducting 'one to one' semi structured interviews with 35 PCPs from public and private sector. These interviews generated two types of qualitative data: interviewer field notes and transcripts of the interviews. The data received was analysed using Framework analysis and a grounded theory approach and the results informed the design of the survey instrument.

Data collection

In April 2012, an anonymous, self-completion questionnaire survey package (with a study questionnaire, study information sheet, and consent form) was manually distributed to 155 PCPs recruited from 106 health centres nationwide. The questionnaire was developed to investigate how PCPs’ characteristics were associated with their sexual health knowledge, attitudes and care practices with middle-aged and older patients. Each vignette was followed by at least three questions aimed to assess PCPs knowledge (determine a correct diagnosis), attitudes (comfort level discussing sexual health with the patient) rated on a Likert scale; and practices (preferred diagnostic/treatment approaches) Following were sections 3-4, which were general questions about PCPs attitudes towards sexual health care and sexual history taking and their preferences to undertake further training in sexual health.

Development of survey instrument

As far as could be determined from our review of the literature, there are no existing validated tools for assessing PCPs’ KAP towards sexual health in middle-aged and older adults available. Therefore, the survey style, sections especially the clinical scenarios and KAP questions were developed using published literature, and shared experiences in interviews with PCPs from the qualitative phase of the study. For section 2, the rationale for using the vignette style to present clinical scenarios followed by a series of relative questions is very similar to the format used in continuing medical education (CME), a style that is familiar with most clinicians. Each clinical scenario contained the following fundamental criteria: a clearly stated patient gender, a patient of middle or old age, and presenting complaints with an identifiable sexual health prognosis.

Originally the researcher initiated an online survey dissemination strategy guided by Cochrane’s methodology to increase response rate of research using online or postal services. The survey tool was printed and manually distributed to each recruited physician. Ethical approval was obtained from the ethics committee of...
the London School of Hygiene and Tropical Medicine, and the Ministry of Health, of Trinidad and Tobago.

Data analysis

Multivariable statistical analysis was carried out using SPSS version 21 and Stata12 to answer hypotheses generated for this study. Predictive analyses presented in the form of scores, odds ratios (ORs) and P values were calculated by means of logistic regression models.

Results

From a sample of 155 PCPs, the survey achieved a 60% response rate (n = 93). Just over 50% of PCPs who participated were male; under 40 years of age and 60% graduated from a locally based medical university. Around 67% of PCPs reported that they had no formal training in sexual function in later life [Table 1].

Knowledge levels of PCPs

Summarized in Table 2, no PCP attained a full knowledge score of 6, in correctly diagnosing every one of the clinical scenarios. The mean knowledge score attained was 2.27 and more than half (57%; n = 53) of PCPs scored less than 2 out of 6. PCPs who attained higher than the mean knowledge score were 2.43 times more likely to have had formal postgraduate training in sexual function in later life.

Markedly, 19.4% of PCPs indicated that they were never trained in any of the sexual reproductive health (SRH) or sexual health communication topics listed. Furthermore, 42.4% of PCPs were never taught to take a sexual history.

Attitudes of PCPs

Majority of PCPs’ agreed that sexual function in later life was important (96%) and support health promotion in this age group (95%). Yet, a few PCPs agreed that sexual healthcare for those aged 45 + had little relevance to their well-being (11%), not a priority (29%), limited time available to discuss in PC (59%) and not apt taking sexual history from older patients (14%). Data analysis of the first five clinical scenarios (STIs; chronic illness; sexual performance difficulties; surgery; medication), revealed that over 90% of PCPs stated they were generally comfortable discussing sexual health given those patients and their presenting complaints. However, in the sixth clinical scenario only 71% of PCPs were comfortable discussing sex with that patient who presented with a psychosexual problem.

Further analysis [Table 3] into the predictors of PCPs comfort when discussing sex with male middle- and old-aged patients suggests that PCPs must also be male [OR = 4.75; P = 0.00], over 40 years of age (at least middle-aged) [OR = 3.1; P = 0.03] and educated abroad [OR = 4.14; P = 0.01]. When these PCP characteristics were applied in the multivariate model, it was noted that “training in sexual health communication” was also statistically significant and it increased the PCPs odds threefold to be comfortable discussing sexual health with the male patients [OR = 3.19; P = 0.05]. Predictors of comfort with increased odds were found similarly with gender and age concurrence, foreign education, and training is sexual health communication.

Practices: Discussing sex with their middle-aged and older patients

PCPs that attained any training in sexual health communication during their medical education or professional career were three times more likely to discuss sexual health matters with their older patients [OR = 3.15; P = 0.032]. Notably, these odds

| Characteristics | n=93 (%) | Characteristics | n=93 (%) |
|-----------------|----------|-----------------|----------|
| Age groups      |          |                |          |
| <30-year old    | 12       | 12.9            | 56       | 60.3 |
| 30-39           | 44       | 47.3            | 37       | 39.7 |
| 40-49           | 20       | 21.5            | 66       | 71.0 |
| 50-59           | 9        | 9.7             | 27       | 29.0 |
| ≥60-year        | 8        | 8.6             |          |      |
| Gender          |          |                |          |
| Female          | 41       | 44.1            | 41       | 44.1 |
| Male            | 52       | 55.9            | 52       | 55.9 |
| Formal training |          |                |          |
| Yes             | 30       | 32.6            | 26       | 28.0 |
| No              | 62       | 67.4            | 14       | 15.2 |
| Sexual function |          |                |          |
| Yes             | 36       | 39.1            | 33       | 35.5 |
| No              | 56       | 60.9            | 13       | 14.0 |
| Ethnicity       |          |                |          |
| Afro-Trinidadian| 7        | 7.5             | 11       | 11.8 |
| Indo-Trinidadian| 45       | 48.4            | 1        | 1.1  |
| Not from T&T    | 29       | 31.2            | 24       | 25.8 |
increased to almost four times more likely (OR = 3.74; P = 0.032) with multivariable analysis once the other predictors - age, gender, education in abroad, and whether they were recently graduated - were included in the model [Table 4].

Practices: Sexual history taking
Most PCPs commonly asked about their sexual activity and frequency of intercourse (89%), number of sexual partners (93%), condom/contraceptive use, reproductive concerns or history (99%), and STIs and sexual function problems (91%). However, fewer PCPs (≤60%) reported that they would ask their older patients about type of sexual practices, gender, and age of sexual partners and circumstances regarding sexual abuse or violence and markedly <50% of PCPs reported that they would ask about their sexual orientation.

Almost all PCPs (99%) opted to take a sexually history if a sexual health complaint was raised by the patient. Though no statistically significant P values were found in some of the regression models including those that analysed PCPs characteristics and sexual history taking practices, the suggested ORs present the preferred direction of association. Notable PCP's characteristics with stronger directions of association included: training in sexual history taking (OR = 3.37) and working under 10 years in an urban-based clinical practice (OR = 2.32).

Associations found between PCPs knowledge, attitudes, and practices
Analyzed and summarized in Table 5 are the suggested associations based on the hypotheses that emerged from the overarching research question: What are the associations between PCPs...
knowledge, attitudes, and practices? The multivariable analysis revealed that PCPs with greater knowledge scores were three times more likely to take a sexual history annually (OR = 3.44; P = 0.03). Other associations were not found to be statistically significant but attained favorable associations as shown in Table 5.

## Discussion

Gender and age concordance, training in sexual health communication, and medical training from a foreign-based medical school were statistically significant predictors for a PCP to be generally comfortable when discussing sexual health with an older patient. PCPs with formal training in sexual functioning in later life were 2.4 times (P = 0.04) more likely to identify more of the sexual health conditions presented in the clinical vignettes in the survey. Perhaps, these scores matched as PCPs reported, 19% of them were never trained in SRH, only 32% were trained in sexual functioning in later life at medical school, and 39% after graduating. About 57% of participating PCPs were not able to correctly identify more than two of the six sexual health conditions prevalent in later life. Of clinical importance were predictors such on training. PCPs trained in sexual history taking were three times more likely to be comfortable diagnostically taking a sexual history from older patients. Only just over 50% of PCPs reported that they would ask these patients about sexual violence, type of sex, gender, or age of their sex partners and <50% ask about sexual orientation.

The study achieved a response rate of 60%, which is a major strength as the trend of response rates usually is much lower for clinician surveys in PC.21-23 However, a limitation of this study was its relatively small sample size. It should be noted that the
total number of PCPs in the entire population was \( n = 175 \) and those who were available (on island and at work) when the survey was disseminated was \( n = 155 \) and they were all targeted and successfully a 60% response rate (\( n = 93 \)) was achieved. When interpreting these results, this should be taken into consideration, and therefore, the direction of association (ORs) for those variables that attained nonstatistically significant \( P \) values should still be considered. Possibly, the purely private PCPs could not be included only because it was not possible to denote the parameters of their sample, if included may have reduced the effects of type 2 error.

If Cochrane’s method remained, the response rate would have been compromised, and as a result, a manual method (though time consuming as it doubled the data collection period as some health centers were in very difficult to access locations and some PCPs just took long to complete the survey) maximized returns and were most effective.[34]

Other limitations could include the fact that the survey was designed using a CME style as well as the fact that the study was endorsed by the local Ministry of Health; these may have influenced participant reporting bias.[35] Additionally, as this study focused primarily on the physicians’ characteristics, notably the patient perspectives and experience on sexual health consultations were not examined here and warrants further research. Previous researchers have reported that physicians lack knowledge in aging on sexual health.[126,27] Perhaps, considerations to address curriculum and training in medical school on sexual health in later life to ensure the inclusion of the impact of aging on sex should be reiterated. In the local setting in Trinidad and Tobago, further examination as to why certain sexual health topics are favored, such as the typical STIs and reproductive health needs to be investigated. Sexual health communication and diagnostic sexual history taking skills needs to be reinforced especially since local graduates account for about 30% of the population. Also, specific to Trinidad and Tobago was the factor that being educated was a predictor of comfort to discuss sexual health with these patients. Not statically significant but the direction of association inferred that PCPs working in urban-based practices were more likely to take a sexual history with their older practices. These findings are unique and warrant further research as it can be concerning as previously mentioned most of the PCPs are locally trained and rural-based communities account for about 30% of the population. Also, investigators have qualitatively studied sex issues in a primary care setting and concluded that addressing sexual histories should be part of routine care.[19] However, in Trinidad and Tobago, this study revealed that <50% of the PCPs ask about sexual orientation and <60% ask about sexual partners and preferences. In addition to the reduced frequency of sexual history taking (as it is dependent on patient initiation), this is coupled with it not being conducted completely as questions are omitted. Not addressing sexual concerns or taking inappropriate diagnostics in sexual health leaves these older patients at greater risk for sexual dysfunction and poorer sexual health-related quality of life.[20] STIs may also be often be misdiagnosed or unrecognized in older adult patients when physicians do not discuss sexual health, frequently far less take a sexual history from them.[29] There is a need to amend primary care policy to include sexual health in later life a priority and future research to attain the private physician sector perspectives as well as the older patients.

**Conclusions**

Training in sexual health education on sexual health in later life at the local medical schools in their compulsory curriculum is critical. This will inevitably develop graduating physicians’ overall knowledge and competence on prevalent sexual health issues among patients in middle and old age. Sessions on sexual health in later life, sexual history taking, and communication need to become available and possibly even mandatory as it is critical for practicing physicians who routinely treat this age group to become up to date. National Health promotion strategies using the media, educational materials, or educational opportunities at the clinics needs to include sex education for those in middle and old age and not only focus on those in reproductive age groups. This may help to decrease taboos associated with sexuality at the community level and decrease the discomfort level faced in the medical consultation as information about sexual concerns at this age become readily available.

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**Authors contributions**

RP contributed to conception, design and data analysis of the study; RP developed the initial draft, and VC revised the manuscript and provided final draft. The final version is approved by both the authors and agrees to be 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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**Conflicts of interest**

There are no conflicts of interest.

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