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Review Article

Sexuality and Sexually Transmitted Disease Awareness in the Older Adult

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Abstract

The increased incidence of Sexually Transmitted Diseases (STDs), resulting from unsafe sexual practices by older adults is rising dramatically. Several factors compound the risks older adults face practicing safe sex. These arise from both patient and nurse related issues. Older adults have social and perception factors as well as natural physiological age-related changes adding to their physical risks. A lack of awareness on the part of both patients and nurses on clinical signs and symptoms of STDs specific to older populations adds another facet to the issue. This prevents older adults from seeking care promptly and contributes to missed cues by nurses in both general and advanced practice. Misconceptions of older adults sexuality and sexual practices by healthcare professionals including nursing students, contributes to their low screening and education despite the self-acknowledged importance nurses give this role in their patient care. A multiple choice written survey of University of Florida Bachelor of Science in Nursing degree students (BSN) assessed student baseline knowledge on older adults sexuality and STDs. Student demographic data was assessed to explore any relationships for stronger performance on clinical survey questions by students related to student gender, age, or clinical experience level. The survey results support the incorporation of adult sexuality and STD material into nursing curriculum foci at any levels of study, namely undergraduate level. By taking the lead on acknowledging this professional shortcoming, then adapting at early stages of nursing education and development, we can implement known success strategies in acore area of nursing strength holistic care.

Keywords: Sexually transmitted disease; Older adult; Aging

Introduction

The demographic shift related to Baby Boomers and their anticipated entry into the healthcare system is well documented [1,2]. The generation that experienced the sexual revolution in their youth now stands poised to experience another aspect of sexuality and sexual freedom. Sexually transmitted diseases (STDs) from unsafe sexual practices are rising dramatically amongst older adults [3,4]. Several factors compound the risks older adults face practicing safe sex. These arise from patient and nurse related issues. A lack of awareness by both parties of the clinical signs and symptoms of STDs in the older adult prevents their prompt care. Older adults have social and perception factors as well as physiological age-related changes adding to their risks [5-8]. This contributes to missed cues on the part of nurses in both general and in advanced practice [9]. Misconceptions of older adult sexuality and sexual practices by healthcare professionals adds to their low screening and education despite the self-acknowledged importance nurses give this role in their patient care [10-13]. As noted by Jeffers and DiBartolo, [14] "Nurses can advocate for the development and implementation of educational initiatives to increase awareness of STDs among older adults".

Problem statement

There is a lack of training on sexually transmitted disease (STD) and screening in nursing curriculum specific to the older adult populations and their associated special needs regarding sexual health and education. Nursing knowledge deficits in the areas of sexuality and STDs specific to the growing numbers of the older adult population puts them at greater risk for the growing problem of STDs. This problem is compounded by current changes in pharmaceutical advances and physiological aging changes (lubrication, dexterity, vision, and immune system decreases).

Significance for health care

The degree of sexual activity enjoyed into later years is well documented [6,15,16]. Oral sex has been documented at approximately 30% and 60% for ages 57-64 and 75-85, respectively [6]. Beyond age 50 adults remain sexually active but report low use of condoms and low perceptions of STD risk [17,18,15]. Increasing STDs in older adults have been studied and some estimates show that Human Immunovirus (HIV) rates are increasing faster for those over age 50 than under age 40 and by 2015 half of those infected with HIV will be over age 50 [18,19]. [20]Additionally, older adults are left out of major STD studies and STD educational materials [21,22].

Physiological changes of aging

Several physiological age-related changes affecting sexual activity include: hypertension, diabetes, Parkinson's disease, and arthritis among others [7]. Most commonly recognized with growing media

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and direct-to-consumer drug marketing is erectile dysfunction [8,23].The effects of aging impact the ability to ejaculate, either delayed or premature, and penile distensibility [24]. For women, a common effect of aging aside from the cessation of fertility, relates to vaginal dryness and an increased susceptibility to tissue injury which facilitates STD transmission [25-27]. Natural immune system decreases, vision changes, reduced dexterity from Parkinson's or arthritis and generally low condom use, further increasing risks for STDs in older adults [28].

Pharmaceutical Factors

With increased age come increased comorbid conditions and their frequently associated drug therapies. Of the several common conditions associated with increased age, major drug treatments that affect sexuality include: anti-hypertensive drugs (beta blockers and diuretics) and erectile dysfunction (ED)drugs. The advent of drugs enhancing male sexual function such as sildenafil (Viagra ™) and tadalafil (Cialis ™) have provided relief for men suffering from the detrimental side effects of anti-hypertensive's as well as other drugs. Just as patients are commonly educated and warned on the risks associated with warfarin (Coumadin™) anti-coagulant use, equal education needs to be provided with the use of ED meds. Emerging data now shows a relationship between erectile dysfunction (ED) drug use and STD rates [29]. As the American population ages and remains sexually active but uninformed of their risks, nursing in particular has an opportunity to maximize the potential benefits of preventative action. Fostering an understanding and increased degree of comfort in nurse sat all levels to address this sensitive and personal issue as part of the education process, supports optimal patient health throughout the lifespan. The inconsistent adherence to nationally vetted STD screening and counseling guidelines contributes to the inherent risks older adult already experience for STDs [30,10,11].

Theoretical Foundation

The Health Belief Model (HBM) is the theoretical foundation for this review and applied study goal. The core principles of HBM are well suited to preventative healthcare and implementing the research-based results and solutions for STDs in older populations. The contributing factors related to the problem apply to both nurses and patients. Both nurses and older adults fail to grasp the impact of their perceptions of susceptibility, severity, and consequences. In terms of the HBM, both patients and nurses need a better understanding of the benefits expected from taking the desired action; and barriers to action [31]. For the older adult, that action is safe sexual practices and for nursing it is unbiased and comprehensive screening and education.

Critical Review of Pertinent Literature

An exploration of the resulting increased STD rate amongst older adult populations identified several root causes. These were grouped into two main categories: those attributable to the older adult patient population and those related to nursing professionals. As previously discussed, population demographics, STD knowledge, common pharmaceutical treatment, and physiological changes inherent to the aging body lend to increased risks for STDs. The nursing healthcare professional contributes an age related prejudice of older adult sexuality, personal embarrassment, and inadequate training to address this specific aspect of patient care. The Reference Matrix in (Appendix A) provides a review of studies on the germane factors mentioned. Also presented are studies on assessment tools that have been used in evaluating the perceptions of sexuality in the older adult: Sexual Attitudes and Beliefs (SABS) and Aging Sexual Knowledge and Attitudes Scale (ASKAS). Also listed is a set of validation studies of these tools along with research supporting the implication of education in nursing curricula on sexuality and STDs in older populations strengthening the argument for incorporating some degree of training into the nursing curriculum on this topic.

Nursing

A low STD screening rate of older adults by healthcare professionals has been noted in several studies [17,32,9,25]. Additionally, nurses showed a failure to screen or educate older adults due to personal embarrassment, lack of confidence, or training and education in the subject [30-35]. Several studies also identified a perception by nurses that older patients do not want to be asked about their sexual activities which is contradicted by studies of older patients themselves [10,11]. Clinical symptoms such as confusion, weight loss, and fatigue may mask an STD and be mistaken as health issues common to the older adult, delaying proper diagnosis and thus timely treatment [36,37]. One study identified an acknowledgement that despite feeling that it is within the nursing scope and responsibility of providing holistic care, nurses avoid discussing sexuality with older patients [12]. It is by way of fully comprehending the influencing factors that are inherent to the target population and those which are within in the realm of the nursing professional that a suitable study was devised. For the reasons presented, sexuality and STD awareness in older populations is a necessity in healthcare and this begins with those who would educate the patients. Data is growing which shows a lack of consistent evaluation and education on this topic by nurses as well as the general healthcare industry. These studies show what many individuals privately acknowledge: a discussion with older patients on sexuality and sexual practices as they relate to STDs is an uncomfortable and difficult process [38]. Assessment and recognition of STDs requires clinical awareness of the older adult related factors described [39]. Although not an evaluation of students, two Cochrane Reviews supported instruction in critical appraisal skills for professionals in healthcare environments [40-41]. Several studies show the success of STD counseling when provided consistently to patients in reducing their risky sexual behavior [42-44]. The ASKA and SABSinstruments have been used successfully to evaluate attitudes and perceptions, of healthcare professionals. Repeated studies showed the strong assessment validity of these tools [46,47]. The longer 61 question ASKAS or shorter 12 question Liker scale SABS instruments have both been translated tested and retested with high quality validity as accurate assessment tools [47]. Equally, a growing body of research provides support for the validity of healthcare staff perception assessment tools and the incorporation of some amount of training and education to nursing curricula [48,7,38,13]. When presented with scenarios of older adult sexuality, a 2013 study by Lochlainn found college students felt they were "less acceptable and less appropriate". These findings echoed the recommendations over a decade earlier by McKelvey et al [38]. In1999 due to similar findings: The connection between deficient sex knowledge and negative attitudes suggests that increased time devoted to sex education in the medical and nursing

curricula is indicated. Didactic instruction could be combined with simulated patient interviews in which students practice taking sexual histories under supervision. This approach has been shown to be quite effective in improving the rate at which practicing doctors take sexual histories. It would also offer an opportunity to discuss with students how their attitudes toward sexual behavior affect patient care. (p. 265). To this end, a brief 10 clinical question survey of University of Florida graduating BSN students allowed a snapshot of baseline knowledge in the area of older adult's sexuality and STDs.

Project Description

Purpose

As stated in the University of Florida's, College of Nursing Strategic Plan, the University of Florida, is one of the best public research universities in the United States. Consistent with the university's position of national preeminence, the College of Nursing has the tri-partite mission of teaching, research, and service. The College of Nursing is commitment to maintaining their reputation for excellence in academic programs; enhancing leadership in research that improves quality of life for individuals and families, promoting population health, which impacts nursing practice. In congruence with the College of Nursing's Strategic Vision, the knowledge obtained from this research is aimed at meeting all set forth missions of the College of Nursing by exploring knowledge levels of a group of our undergraduate nursing students; utilize the results to determine if curriculum change is indicated in our undergraduate nursing program. Therefore, the purpose of this study was to assess the knowledge level of graduating BSN students at the University of Florida in the areas of STDs and sexuality in the older adult as well as the student's knowledge of the associated factors relating to older adults sexuality and STDs.

Design

A single occasion, anonymous multiple-choice written survey of seven student demographic questions and ten clinical questions was designed by the authors and reviewed by UF nursing faculty. The reviewers included: three graduate nursing faculty members who specialized in adult nursing and one faculty member who specialized in nursing education. Two of the reviewers were also instructors of the target class.

Description of population

Fifty seven University of Florida senior level BSN students.

Method

On February 2014, one University of Florida NUR 4748 (senior level BSN) class was offered the opportunity to take an anonymous written multiple-choice survey during a class break. The natures of the study and participant expectations were briefed to volunteers prior to survey administration. Surveys were completed in a classroom and returned to the researchers on the same day. There were no identifiers on the surveys and collections of all surveys were performed in class. All returned surveys were collected by a course faculty & place by her in a sealed envelope which was then immediately delivered to the researchers. No compensation was offered. Fifty eight surveys and informed consent sheets were returned by students, one survey and informed consent was returned blank thus not used in this study. This study was approved by the University of Florida Institutional Review Board (IRB). A 01 approval was obtained prior to completion of the surveys.

Variables

Student demographic variables (survey items) collected included: gender, age, experience working with the older adult population, experience working with STD counseling, and experience working with both older adult populations & STD counseling. Clinical questions assessing student knowledge included: survey questions focused on the older adult population demographics (questions#1,2),older adult sexuality(questions#3,4), STD prevalence in older adults (question #6), CDC guidelines regarding STDs (question #5), older adult physiology as related to risk factors contributing to STDs (questions #7-10).

Specific aims

The specific aims of this study were:

1. Assess if students of one particular gender perform better on clinical questions.

2. Assess if students of a particular age group perform better on clinical questions.

3. Assess if students with experience in older adults care perform better on clinical questions.

4. Assess if students with experience in STD patient education perform better on clinical questions.

Results

Survey results were collected and analyzed using SSPS software to assess baseline knowledge of sexuality and STDs in older adults. Data was broken down to investigate areas of knowledge strength and any relationship to student demographics (any relationship between male/female/younger/older/more or less nursing experience to knowledge base). Of the fifty seven total useable surveys, three respondents were males and all respondents were of the same age group (20-25 yrs). Only one person had experience with both older adults and STD counseling. Owing to these small sample sizes, credible evaluations could not be made for gender and age variables. A Mann-Whitney U test (non-parametric test equivalent to the t-test) was run for the small sample groups, yielding a p-value that was not significant. Overall performance on the clinical questions was poor with scores ranging from 20% to 70% and a mean score of 4.42. No differences in knowledge were found between those who had any experience working with populations over age 65 and those that had no experience with older adults. Although no significant relationships were found to exist between student survey scores and their experience with older adult care or STD counseling, all four highest scores were by students with work experience.

Limitations

Due to limited number of male subjects (3) no gender relationship could be reliably assessed with scores. Due to the uniformity of subjects' ages (all participants age 20-25), no age related relationship

could be reliably assessed with scores. In addition, the interpretation of the term "elders" used on the survey was possibly taken to mean "adult" without age reference. Of the 27 "Yes" answers to work experience with patient populations that were "older adults/over age 65", five further self defined themselves as "hospital" workers.

Conclusions

Although no statistically significant results were found, in general the students did not perform well on older adult sexuality, demographic, or STD questions, regardless of experience. Despite the small total sample, this study does help identify areas for potential improvement in the BSN curriculum regarding older adult sexuality and STD education, symptom recognition, and assessment. Existing research on the growing problem of STDs in the older adult has highlighted a knowledge deficit among nursing students relating to the increased risk factors older adult patients have with STDs. It is incumbent upon the healthcare professional to address this multi-faceted problem with every patient, regardless of age. To that end, a program for nursing students of didactic and practical exercises to improve their knowledge and comfort will help them improve patient screening and education abilities.

Future Directions

The deeply personal nature of sexuality and the knowledge gap among nurses, coupled with increasing risk factors among older adult patients, impacts a growing segment of the population. In the state of Florida national healthcare issues involving older adults are only amplified due to the high proportion of older citizens' state wide. Attention grabbing headlines on STDs such as the HIV incidence rates rising in people over 50 faster than those under 40 are a call to action [49]. Last month the U.S. Census Bureau released data showing the fastest growing metro area in the nation was The Villages retirement community in Sumter county Florida [50]. This is sobering when considered with the other recent national media coverage of the Villages retirement community: where STD rates have skyrocketed [51,52]. For the state of Florida especially, the outlook is one of consistent increases in STD rates infolder adult populations [23,24]. Increasingly, BSN and Advanced Practice nurses are at the forefront of patient care. Incorporating education on sexuality and safe sexual practices of older populations into the BSN curriculum will help improve knowledge levels and comfort, reducing embarrassment with this sensitive topic. This can translate into nursing practice with improved patient education and screening. Waterman, as cited by Lochlainn& Kenny [7], reported "that college students were more surprised and more disgusted by incidents of sexuality of those who were [age] 70 to 75 than those who were [age] 30 to 35" (p. 3). Recommendations have been made to integrate into nursing curricula sexuality training and education in some form [38].The Leicester-Warwick Medical School (LWMS) model for students has at its core three sessions of three hours each covering human sexuality and discussion [48]. As recommended by Jeffers and DiBartolo [14], this material in healthcare curricula helps counter the prejudice and stereotypes that exist about older adult sexuality. A potential adjustment to the University of Florida's curriculum might incorporate one of the described assessment tools specifically designed to assess perceptions of older adults sexuality and training to practice the skills of discussing sexuality with patients. Of the barriers patients face to receiving quality care, we have complete control over one obstacle they face: overcoming our own fear sand providing evidence based care, we fulfill our duty to all patients confidently and without prejudice.

References

1. U.S. Census Bureau.The older population: 2010. Census Briefs 2011.
2. Delafuente JC.The silver tsunami is coming: Will pharmacy be swept away with the tide? American Journal of Pharmaceutical Education.2019;73: 1.
3. Centers for Disease Control. Sexually transmitted diseases surveillance, 2008.
4. Minichiello V, Rahman S, Hawkes G, Pitts M. STI epidemiology in the global older population: Emerging challenges. Perspectives in Public Health. 2012; 132:178-181.
5. Centers for Disease Control. CDC Sexually Transmitted Diseases Treatment Guidelines, 2010.
6. Lindau S, Schumm P, Laumann E, Levinson W, O'Muircheartaigh C, Waite, L. A study of sexuality and health among older adults in the United States. The New England Journal of Medicine. 2007; 357: 762-74.
7. Lochlainn MN, Kenny RA. Sexual activity and aging. Journal of the American Medical Directors Association. 2013; 14: 565-572.
8. Wylie K, KenneyG. Sexual dysfunction and the ageing male. Maturitas. 2009; 65; 23-27.
9. Olivi M, Santana RG, Mathias TADF. Behavior, knowledge and perception of risks about sexually transmitted diseases in a group of people over 50 years old. Revista Latino-Americana de Enfermagem.2008; 16: 679-685.
10. Maes CA, LouisM. Nurse Practitioners' sexual history-taking practices with adults 50 and older. The Journal for Nurse Practitioners.2011; 7: 216-222.
11. Magnan ME, Reynolds KE, Galvin EA. Barriers to addressing patient sexuality in nursing practice. Medsurg Nursing. 2005; 14: 282.
12. Quinn C, Happell B, Browne G.Talking or avoiding? Mental health nurses views about discussing sexual health with consumers. International Journal of Mental health Nursing. 2011; 20: 21-28.
13. Saunamäki N, Andersson M, Engström M. Discussing sexuality with patients: Nurses' attitudes and beliefs. Journal of Advanced Nursing. 2010; 66: 1308-1316.
14. Jeffers LA, DiBartolo MC. Raising health care provider awareness of sexually transmitted disease in patients over age 50. Medsurg Nursing: Official Journal of the. Academy of Medical-Surgical Nurses. 2011; 20: 285-290.
15. SchickV, HerbenickD, Reece M, Sanders SA, Dodge B, Middlestadt SE, Fortenberry JD. Sexual behaviors, condom use, and sexual health of Americans over 50: Implications for sexual health promotion for older adults. The Journal of Sexual Medicine. 2010;73: 15-329.
16. Taylor A, Gosney MA. Sexuality in older age: Essential considerations for healthcare professionals. Age and Ageing. 2011; 40: 538-543.
17. Adekeye OA, Heiman HJ, Onyeabor OS, Hyacinth HI. The new invincibles: HIV screening among older adults in the US. PloS one. 2012; 7: e43618.
18. Sankar A, Nevedal A, Neufeld S, Berry R, Luborsky M. What do we know about older adults and HIV? A review of social and behavioral literature. AIDS care. 2011; 23: 1187-1207.
19. Luther VP, Wilkin AM. HIV infection in older adults. Clinical Geriatric Medicine. 2007; 23: 567–83.
20. High KP, Effros, RB, Fletcher CV, Gebo K, Halter JB, Hazzard WR, Woolard NF. Workshop on HIV infection and aging: what is known and future research directions. Clinical Infectious Diseases.2008; 47: 542-553.
21. Levy B, Ding L, Lakra D, Kosteas J, Niccolai L. Older persons' exclusion From sexually transmitted disease risk-reduction clinical trials. Sexually Transmitted Diseases. 2007; 34: 541-544.
22. Orel NA, Wright JM, Wagner J. Scarcity of HIV/AIDS risk-reduction materials

argeting the needs of older adults among state departments of public health. The Gerontologist .2004; 44: 693-696.

23. Rosman L, Cahill JM , McCammon SL, and Sears SF. Sexual health concerns in patients with cardiovascular disease. Circulation. 2014; 129: e313-e316.

24. Corona G, Rastrelli G, Maseroli E, Forti G, Maggi M. Sexual function of the ageing male. Best Practice & Research Clinical Endocrinology & Metabolism. Elsevier. 2013; 27:581-601.

25. Idso C. Sexually transmitted infection prevention in newly single older women: a forgotten health promotion need. The Journal for Nurse Practitioners. 2009; 5: 440-446.

26. Levine GN, Steinke EE, Bakaeen FG, Bozkurt B, Cheitlin MD, Conti JB, et al.(2012). Sexual activity and cardiovascular disease a scientific statement from the American Heart ssociation. Circulation. 2012; 125: 1058-1072.

27. Laumann EO, Nicolosi A, Glasser DB, Paik A, Gingell C, Moreira E, Wang T. Sexual problems among women and men aged 40–80 y: Prevalence and correlates identified in the Global Study of Sexual Attitudes and Behaviors. International Journal of Impotence Research. 205; 17: 39-57.

28. Baumhäkel M, Schlimmer N, Kratz M, Hacket G, Jackson G, Böhm, M. Cardiovascular risk, drugs and erectile function–a systematic analysis. International Journal of Clinical Practice. 2011; 65: 289-298.

29. Jena AB, Goldman DP, Kamdar A, Lakdawalla DN, Lu Y. Sexually transmitted diseases mong users of erectile dysfunction drugs: analysis of claims data. Annals of Internal Medicine. 2010; 153: 1-7.

30. Gott M, Hinchliff S, Galena E. General practitioner attitudes to discussing sexual health issues with older people. Social Science & Medicine. 2011; 58: 2093-2103.

31. Hochbaum GM. Public participation in medical screening programs: A socio-psychological study. Public Health Service Publication 572, Washington, DC. Government Printing Office. 1958.

32. Farrell J, Belza B. Are older patients comfortable discussing sexual health with nurses?. Nursing research.2012; 61: 51-57.

33. JaarsmaT, Strömberg A, Fridlund B, De Geest S, Mårtensson J, Moons P, et al. Sexual counseling of cardiac patients: nurses' perception of practice, responsibility and confidence. European Journal of Cardiovascular Nursing. 2010; 9: 24-29.

34. Mahieu L,Van Elssen K, Gastmans C. Nurses' perceptions of sexuality in in stitutionalized elderly: A literature review. International Journal of Nursing Studies. 2011; 48: 1140-1154.

35. Saunamäki N, Engström M. Registered nurses' reflections on discussing sexuality with patients: Responsibilities, doubts and fears. Journal of Clinical Nursing.2013; 23: 531-540.

36. Bonifazi W. Florida's elder population confronts sexually transmitted infections. Global Action on Aging. 2008.

37. Farber KD. Care of the older adult with HIV. The Clinical Advisor.2014;17-47.

38. McKelvey RS, Webb JA, Baldassar LV, Robinson SM, Riley G. Sex knowledge and sexual attitudes among medical and nursing students. Australian and New Zealand Journal of Psychiatry.1999; 33: 260-266.

39. Imparato T, Sanders D. STD prevalence demands clinical awareness. Aging Well. 2012; 5:14.

40. Horsley T, Hyde C, Santesso N, Parkes J, Milne R, Stewart R. Teaching critical appraisal skills in healthcare settings. The Cochrane Library. 2011; 11.

41. Parkes J, Hyde C, Deeks J, Milne R, Pujol-Ribera E, Foz G. Teaching critical appraisal skills in health care settings. Cochrane Database Syst Rev. 2001; 3.

42. Kamb ML, Fishbein M, Douglas Jr JM, Rhodes F, Rogers J, Bolan G, et al. Efficacy of risk-reduction counseling to prevent human immunodeficiency virus and sexually transmitted diseases. Journal of the American Medical Association. 1998; 280: 1161-1167.

43. Ng BE, Butler LM, Horvath T, Rutherford GW. Population-based biomedical sexually transmitted infection control interventions for reducing HIV infection. Cochrane Database of Systematic Reviews. 2011.

44. Lin JS, Whitlock E, O'Connor E, Bauer V. Behavioral counseling to prevent sexually transmitted infections: A systematic review for the US preventive services task force. Annals of Internal Medicine. 2008;149: 497-508.

45. Mahieu L, de Casterlé BD, Van Elssen K, Gastmans C. Nurses' knowledge and attitudes towards aged sexuality: Validity and internal consistency of the Dutch version of Aging Sexual Knowledge and Attitudes Scale. Journal of Advanced Nursing. 2013; 69: 2584-2596.

46. White CB. A scale for the assessment and attitudes and knowledge regarding sexuality in the aged. Archives of Sexual Behavior.1982: 11; 491-502.

47. Reynolds KE, Magnan MA. Nursing attitudes and beliefs toward human sexuality: Collaborative research promoting evidence-based practice. Clinical Nurse Specialist. 2005; 19; 255-259.

48. Dixon Woods M, Regan J, Robertson N, Young B, Cordle C,Tobin M.Teaching and learning about human sexuality in undergraduate medical education. Medical Education.2002; 36: 432-440.

49. Karlovsky M, Lebed B, Mydlo JH. Increasing incidence and importance of HIV/AIDS and gonorrhea among men aged≥ 50 years in the US in the era of erectile dysfunction therapy. Scandinavian Journal of Urology and Nephrology. 2004; 38: 247-252.

50. US. Census Bureau . US Census Bureau population estimates.The 10 fastest growing metro areas from July 1, 2012, to July 1, 2013.

51. Cohen S. Retire to the bedroom sexfest at old timer's hottest spot. New York Post. 2009.

52. Jameson M. Seniors' sex lives are up and so are STD cases around the country. Orlando Sentinel. 2011.

53. Florida Department of Health. Florida Trends and Statistics. 2012.

54. Florida Department of Health. STD trends and statistics. Ten year report by year, age, gender. 2013.

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