The Views of Registered Nursing Students from Different Cultures on Attitude and Knowledge Regarding Elderly Sexuality

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Abstract: The aim of this study is to investigate the knowledge and the attitude of registered nursing students regarding elderly sexuality, in order to raise the awareness of sexual needs of the aging. This study also aims to identify attitude towards elderly sexuality among registered nursing students from different cultural backgrounds. The research questions of this thesis are:
What is the attitude towards elderly sexuality among students from different cultural backgrounds? To what extent does registered nursing students’ knowledge influence on attitude towards elderly sexuality?

The quantitative method using a questionnaire has been used utilizing descriptive statistics as a method of analyzing. The main finding shows that over 50% of the students present negative attitudes and limited knowledge toward elderly sexuality. The students that have more knowledge reflect a more positive attitude toward elderly sexuality. The students who are further along in their studies are predicted with a more acceptance of elderly sexuality but show a restrictive attitude towards sexual needs of the cognitively impaired elderly, and students with living grandparents hold a more positive attitude; however deeply religious students hold a more negative attitude.

Language: English Key words: Elderly sexuality, attitude, knowledge, culture, nursing students
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Appendices
1. Introduction
As the global population is becoming aged, there has been increasing attention paid to sexual need among older people. In Kivelä, Pahkala and Honkakoski’s study (1986 cited in Walan and Nielsen, 1990) which was conducted in Finland, the researchers pointed out that elderly people above 60 sometimes experienced sexual desire. Walan and Nielsen’s (1990) study about sexual expression of elderly people in Stockholm reported men and women 60-80 years old still having intercourse with decreased frequency with age.

However, staff in long term care facilities were found having insufficient knowledge and often negative attitudes towards sexual needs of elderly (Walker and Harrington, 2002). Younger nurses with less than 5 years working experience with older people reported a more negative and restrictive attitude towards elderly sexuality (Bouman, Archelus and Benbow, 2007). Nursing personnel often reported feeling confused, embarrassed, helpless, and angry when they discovered that residents were having sexual activity in the facility. Yet medical students and undergraduates have also reported feeling discomfort in visualizing elderly couples engaged in kissing, masturbating, or intercourse (Loue, 2005).

While in a nursing home setting, lacking a partner was considered as the primary reason for older people being sexually inactive. Women have longer life expectancy by approximately 7 years compared with men, and traditionally women marry men on the average 4 years older, making widowhood last about 11 years. Thus, establishing relationships within an elderly care facility and solitary sexual expression of older people to fulfill sexual needs ought to be understood and accepted (Hajjar and Kamel, 2003a).
Though attitude and knowledge regarding elderly sexuality has been discussed throughout years and across countries, researches related to attitude and culture are quite limited. The respondents consider culture as a vital determinant to students’ attitude that cannot be laid aside. The current study sought to examine registered nursing students’ attitude and knowledge towards elderly sexuality, and secondly to explore the relationship between attitude and knowledge as well as between attitude and culture.
2. Aim
The aim of this study is to investigate the knowledge and attitude of registered nursing students regarding elderly sexuality, in order to raise the awareness of sexual needs of the aging. This study also aims to identify attitude towards elderly sexuality among registered nursing students from different cultural backgrounds.

3. Research Questions and Hypothesis

3.1 Research Questions
- What is the attitude towards elderly sexuality among students from different cultural backgrounds?
- To what extent does registered nursing students’ knowledge influence attitude towards elderly sexuality?

3.2 Hypothesis
- Those students with deeper religious beliefs do not have better attitude than more secular students.
- Students who are further along in their studies have better knowledge and attitude.
- Students with more knowledge have better attitude than those who have less knowledge.
- Students who have living grandparents have better attitude than those who do not have living grandparents.
4. Literature Review

CINAHL, EBSCO and SPRINGER LINK were the three main resources for searching the scientific articles. Elderly sexuality, attitude, knowledge and culture background were the main search key words. By combining the key words the respondents found literature from the years 1959 to 2010. From these articles the respondents could compare how people’s attitude towards elderly sexuality changed over time from country to country.

4.1 Knowledge of Elderly¹ Sexuality

Sexuality is a human basic need throughout life regardless of age. However, stereotypically thinking, sexuality is attributed to the young, healthy, and beautiful, and the elderly are asexual beings.

4.1.1 Sexual Health

Sexual health is individually defined and wholesome if it leads to intimacy. However, it is easy to overlook the sexual needs and health issues of older adults. The American Association of Retired Persons (AARP) conducted a survey on sexuality in 1999 and followed with another study in 2004. The results showed that increasing numbers of older adults are seeking out information about sexuality and treatment for sexual problems (Touhy and Jett, 2010, pp.374-403).

About 2/3 of older men and 1/2 of older women view a satisfying sexual life as an important factor in quality life. 90% of men and 85% of women state that a good sexual relationship with a spouse or partner plays a key role in happiness. Moreover, researchers emphasize that “Sexuality is a vital aspect to consider in the care of the older person regardless of the setting. All older people have a need to express sexual

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¹ At the moment, there is no United Nations standard numerical criterion for elderly people, the UN agreed 60+ years to refer to the older population (WHO, 2011).
feels, whether the individuals are healthy and active or frail” (Touhy and Jett, 2010, pp.374-403).

4.1.2 Sexual Dysfunction
Age brings changes in biological dimensions which prevents older people from wanting or being able to have satisfying sexuality. Erectile dysfunction is an important factor influencing sexual activity in elderly institutionalized men. Additionally, declining testosterone in elderly men leads to decreased libido. In women, postmenopausal estrogen deficiency may result in dyspareunia. According to Hajjar and Kamel (2003a), 15% of the men gave inability to perform as the reason they ended sexual activity. 19% of both men and women reported poor health as the reason they ended sexual activity.

There are existing medications designed to aid sexual arousal and function and older adults have been encouraged to monitor their falling levels of libido and sexual activity through one or another form of treatment. Viagra, which was seen as one solution to malfunction in vascular flowing to the penis, is one kind of PDE-5 inhibitor and erectile drugs. The testosterone treatment was to enhance the libido and Viagra could help the mechanics but not with desire. However, most testosterone prescriptions were given to 45-65 year-old men, not to men over 65 (Marshall, 2008).

Poor health associated with age may also result in sexual dysfunction. Deafness may affect intimate relationships and associate with privacy issues in sexual activity.

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2 Erectile is the ability of erection (Dirckx, 1997, p.298).
3 Estrogen is a hormone produced by the ovary, placenta, testes, and possible the adrenal cortex and certain plants to stimulate secondary sexual characteristics (Dirckx, 1997, p.303).
4 Dyspareunia is painful sexual intercourse (Dirckx, 1997, p.264).
5 Testosterone is a hormone produced in the testicles to develop and maintain male characteristics (Crowther, Kavanagh, and Ashby, 1995, p.1234).
Osteoarthritis\textsuperscript{6} may make sexual intercourse painful or uncomfortable. Colostomies, catheters and continence problems may lead to shame and dirty feelings that make couples sleep apart (Benbow and Jagus, 2002).

Interestingly, there is one study which was the first study to investigate the relation between frequency of sexual intercourse and the risk of stroke and coronary heart disease (CHD). Fatal stroke and CHD events were showed to be more common in those people that had low frequency of sexual intercourse (Ebrahim, et al., 2002). Furthermore, in Chen, Zhang and Tan’s (2009) study, it was shown that patients with cardiovascular disease may experience coital death during sexual activities. However, the chance was very low, even far less than that associated with anger or heavy physical exercise.

4.1.3 Sexual Expression

Turner and Adams (1988) reported changing in preferred sexual activity over time was common and affected by physical changes in both men and women. Sexuality exists throughout life in one form or another. Sexual activity in older adults is not different from sexual activities among younger adults. In Walan and Nielsen’s research (1990), 61\% of the participants express sexuality through intercourse, mutual sexual stimulation (other than intercourse), and masturbation.

Ehrenfeld, et al.(1999) in the study of sexuality among institutionalized elderly with dementia found sexual behavior to be mostly heterosexual and ranged from love and caring (holding hands, giving and taking) to romance (kiss, hug) and outright eroticism. The sexual goal among the young may be the physical act of penile-vaginal

\textsuperscript{6} Osteoarthritis is a painful disease of the body joints that causes them to swell and become stiff (Crowther, Kavanagh, and Ashby, 1995, p.819).
intercourse, sexuality in the elderly may take the form of affection, romance, companionship, personal grooming, touch, and the need to feel attractive and masculine or feminine. In other words, elderly sexuality is any activity that portends the sensation of ‘feeling loved’ (Hajjar and Kamel, 2003a).

In Hajjar and Kamel’s study (2003b), 1/4 of a nursing home’s residents were labeled to have behavioral problems because of inappropriate sexual behaviors which are mostly frequent among cognitively impaired nursing home residents. These behaviors included using sexually explicit language, inappropriate sexual acts like exposing genitalia or inappropriately touching a staff member, and implied sexual behavior, such as reading pornographic material or making requests for unnecessary condom changes. Behaviors between staff and residents, such as hugging or kissing on the cheek, were acceptable by the staff.

4.2 Attitude towards Elderly Sexuality
Elderly who display any form of sexual expression have appeared to be influenced by the attitude presented by other age cohorts, including the middle-aged children and health care professionals (Brown, 1989). Early in 1959, researchers started to investigate the people’s attitude toward elderly sexuality. Golde and Kogan (1959) used sentence completions to access 100 college students’ attitude towards elderly. There was one item about elderly and sex. After accessing the college students’ attitude, the authors found that almost all students thought that for older people sex was “negligible, unimportant”; companionship may stir up pleasant memories rather than sex.

Nearly 20 years later, Latorre and Kear (1977) used a sample of 80 undergraduates and 40 staff members, who were asked to read accounts in which the age of stimulus person varied. After analyzing the data, the researchers found that sexual activity by
the older people was rated as significantly less credible and less moral than sexual activity by younger persons.

The students’ attitude gradually changed. Darmrosch (1982) investigated the attitude of senior baccalaureate nursing students toward elderly sexuality and used case descriptions about 68-year-old people who lived in a nursing home and nursing students as samples to investigate. Half of the students read the person was sexually active, no mention of sexual activity for the remaining half. The result clearly showed that students viewed the sexually active older people as significantly more mentally alert, cheerful, and better adjusted, and as someone students would like the patient to be. However, in residential and nursing homes there may be a lack of privacy, the environment may be designed with no recognition of residents’ sexual needs and the staff may be disapproving (Hajjar and Kamel, 2003a). Suggestions about providing a private room, no interrupting when doors are closed, and allowing residents to have sexually explicit materials in their room have been mentioned as means to improve privacy and an atmosphere accepting sexual activity (Touhy and Jett, 2010, pp.374-403).

Sexual behavior in dementia may have an entirely different meaning to elderly. The demented patient may not be having sexual thoughts as expressing a desire for intimacy or reassurance. Similarly, the cognitively impaired patient may not be aware of his or her surroundings, may misidentify another resident or caregiver as their spouse, and display inappropriate behavior (Hajjar and Kamel, 2003b). In Loue’s (2005) study, clinical staff are often uneasy with residents’ sexual behavior which in all likelihood would bring legal action against them and the nursing home. Furthermore, they fear that the participation of a cognitively impaired resident in sexual activity may not be voluntary.
One research relevant to cognitively impaired elderly sexuality was conducted by Allen, Petro and Phillips (2009) and concerned factors that influence young adults’ attitude and knowledge of elderly women’s sexuality. The author used descriptive methodology in an online survey. 606 undergraduate students responded to the survey and the results showed that the elderly’s health status proves important in determining young adults’ acceptance. The young adults expressed lower acceptance and more doubt only when the elderly was described as cognitively impaired.

Not just investigating students’ attitude but also care staff’s, a survey conducted among nursing staff investigated what patient behaviors were identified as sexual and how nurses reacted to them. The result showed that only hugging and kissing on the cheek were identified as acceptable sexual behavior (Szasz, 1983).

Homosexual elderly persons face even more particular challenges concerning sexuality like lacking family support and encountering difficulties to forge a new partnership. Homosexuality was far less accepted, there were even hostile attitudes that homosexual individuals may see their sexuality as a matter of secret shame or grief. Although future generations are likely to be more accepting of homosexuality, seeking help and support yet may be more difficult for them (Benbow and Jagus, 2002).

Glass, et al. (1986) conducted a research to examine the relationship between knowledge and attitude of nursing staff toward elderly sexuality. After analyzing the data, the author found the more knowledgeable nurses were, the more restricted their attitude was.

Bouman, Arcelus and Benbow (2007) conducted a research about care staff’s attitude toward elderly sexuality. 495 care staff participated and answered the questionnaire. The data was analyzed by using a computer program which was called Statistical
Package for the Social Sciences (SPSS). The results showed that people of young age and less working experience than older people are predictive of a more negative and restrictive attitude.

4.3 Different Attitudes and Knowledge of Elderly Sexuality in Different Cultures
Religious beliefs, family relationship and school education etc. play roles in how much students receive sexual knowledge. Frequent religious participations, disharmonious family relationship and lower school education in sexual knowledge will reduce the amount of knowledge about elderly sexuality among nursing students. Meanwhile, registered nursing students’ knowledge of elderly sexuality proved to be an irreplaceable factor when the respondents investigated students’ attitude toward elderly sexuality (Mc Kelvey, et al., 1999).

4.3.1 Sexual Knowledge and Culture
McKelvey, et al. (1999) made a study of sexual knowledge and attitude among medical and nursing students. The aim of this study was assessing background and sociodemographic variable, knowledge of human sexuality and sexual knowledge among medical and nursing students. The researchers collected data by using questionnaires. A noticeable relationship was found between certain students’ backgrounds, sociodemographic variable and sexual knowledge. The background variable most strongly related to sexual knowledge was the frequency of attendance at religious services of any religious denomination during the past month. Students who were three times or more frequent church participants showed negative attitudes and have lower sexual knowledge scores. Moreover, no sexual experience, lower family salary, gender and nationality are other factors affecting low sexual knowledge.
Hillman and Stricker (1996) conducted one study about adult college students of different age groups using an elderly sexuality knowledge scale. They found out that higher age of students was accompanied by increased knowledge about elderly sexuality. In the total sample of 24 college students, a greater and wider knowledge of students was related to more permissive attitudes toward elderly sexuality. Remarkably, some participants in contact with their grandparents moderated this relationship, while those without grandparental contact presented a non-significant knowledge regarding elderly sexuality.

These findings suggest that future studies of younger nursing students’ attitude toward elderly sexuality should assess grandparental contact and relationship characteristics. For instance, students who are infrequently in contact with grandparents or even whose grandparents died before they were born may have less knowledge of elderly sexuality. This brings to light an increasing need to reconsider the commonly held assumption that greater knowledge of elderly sexuality is associated exclusively with more permissive attitudes. Furthermore, the using of a moderator\(^7\) methodology in attitudes and knowledge relationship appears essential in order to understand inconsistent findings (Hillman and Stricker, 1996).

Cultural backgrounds diversity affects nursing students' knowledge and awareness towards elderly sexuality. The open level of discussing elderly sexuality and sexual education influenced students’ knowledge and attitudes towards elderly sexuality. On one hand, students from countries like Denmark have already gained knowledge of sexuality and health when they were 12-13 years old. The sexuality education consisted of biological information, sexually transmitted diseases, contraception and some emotional issues. After absorbing this knowledge, students have learnt and

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\(^7\) A moderator is a variable that differentially predicts the relationship between two variables, representing an interaction (Ghiselli, 1956; Ghiselli, 1963; Hillman and Stricker, 1996).
understood the basic physical theory of sexuality and the lifelong sexual needs (Parker, Wellings and Lazarus, 2009). On the other hand, students living in culturally conservative countries may be embarrassed, panicking or ignorant when encountering with this kind of situations during their practice.

4.3.2 Attitude towards Elderly Sexuality and Culture

Tseng and Lin (2006) did a research in China; the result shows that there are three elements that hamper the addressing of elderly sexuality: the social values, a lack of policies regarding sexual issues and insufficient in-service training in the education. It is significant that caregivers could develop strategies and nursing plans for expressing appropriate elderly sexual behavior.

Steele (1998) reported that there still exist considerable prejudices and ignorance concerning elderly sexuality rights and needs in UK. Caregivers or nursing professionals do not talk about elderly sexuality in the hospital. The caring and rehabilitation of sexuality are provided with low or no priority. It is considered a taboo to discuss elderly sexuality in a public place. This kind of attitude will affect students’ notions about elderly sexuality.

Piras and Sansoni (1997) aimed to identify elderly sexuality problems in two nursing homes and how much caregivers are aware of and care for sexuality-related problems affecting the elderly in Italy. Researchers found that the awareness of caregivers regarding elderly sexuality is extremely rare. Institutionalized elderly felt uncomfortable because of loneliness and difficulty in communicating and finding new partners.
Russell, Cherry, Patricia and Tinashe (2010) did a survey in Australian elderly nursing homes and found that residents have positive experiences due to the rights of sexual expression. Some health care facilities had formal policies or training programs for nurses in place. The lack of policy guidelines and training in sexual caring leads to inconsistent and uncertain nursing practice.

Hatice, Emine, Sevinc and Halise (2010) controlled one study regarding how nursing students’ barriers impact the evaluation of the sexual problems that occur due to diseases or treatment of patients. Researchers observed that third-year students and fourth-year students have similar difficulties regarding evaluation and counseling of patients’ sexuality. It is forbidden to talk about sexuality in the Turkish culture and discussion of sexuality is not widely spread. During practice, half of the third-year students did not give sexuality counseling to patients. Moreover, students are not allowed to discuss issues like elderly sexuality although they believe it is useful and responsible to patients’ health. Nursing students did not trust their nursing diagnostic abilities regarding sexual problems of patients but they obtained information about sexual problems as a result of illness or treatment. Researchers found that nursing students do not trust themselves, feel constrained and have not enough time given to discuss residents’ sexual concerns. Additionally, residents do not expect nurses to discuss these issues.
5. Theory Framework

Sexual needs among elderly are usually poorly understood by health professionals due to inappropriate attitude, insufficient knowledge, and a culturally conservative mindset. To guide the thesis, the respondents chose Peplau’s (1988) interpersonal relations theory which emphasizes paying attention to patients’ needs, understanding what gives rise to shift of patients’ behavior and thus forming the relationship of nurse and patient as a continuum. Peplau described the nursing process as “educative and therapeutic when nurse and patient can come to know and respect each other, as persons who are alike, and yet, different, as persons who share in the solution of the problems” (Peplau, 1998, p.9).

Human needs are expressed in behavior that has as its goal security or satisfaction of wants, desires, and wishes. Physical and psychological needs of people for the satisfaction of their want for food, rest, sleep, comfort, companionship and understanding, are extended tasks in nursing situations. Paying attention to the patients’ needs is a way of aiding people to identify what they want and to feel free and strive towards goals that bring satisfaction (Peplau, 1998, pp.73-84).

What is nursing? According to Peplau (1998, pp. 3-16), nursing is not only what it does but what it can and should do. Nursing is a human relationship between an individual and a nurse where a patient is in need of health services and a nurse is educated to recognize and to respond to the needs. Education, medicine, social work, nursing and a host of other professions and social institutions and agencies have their origins in human insights and desires that influence progress in meeting human needs.

The nurse-patient relationship can be represented on a continuum (See Appendix 1, Figure 1), which is characterized by two individuals with separate goals and interests at one end and two persons working together to solve difficulty at the other end. The functions, nursing roles, and skills that demand scientific knowledge and technical
abilities change with moving along the range of the continuum. Since human needs in demand may be overt or subtle, it is necessary that self-insight operates as an essential tool and as a check in all nurse-patient relationships (Peplau, 1998, pp.3-16).

In Peplau’s (1998, pp.41-42) interpersonal relations, four overlapping and interlocking phases are considered: orientation, identification, exploitation, and resolution (See Appendix 1, Figure 2). Orientation to the problem leads to expression of needs and feelings. Identification is a way of meeting felt needs and problems by regarding a nurse as a helping person who provides abundant and unconditional care. When initial needs are met, more mature needs arise. Exploiting what nursing situation offers gives rise to the development and improvement of skill in interpersonal relations. Resolution is the movement from a hospital situation to participation in community life which is the end of the nurse-patient relationship and requires the strengthening of the patient’s personality for new social interdependent relationships.

During the period of orientation the patient clarifies his/her whole impression of the problem. The patient participates in the orienting process by asking questions, by trying to find out what he/she needs to know in order to feel secure, and by observing ways in which professional people respond to them. By asking for help, the patient soon begins to feel at home, knowing that his/her wants will be permitted expression and taken care of (Peplau, 1998, pp.18-30).

In the phase of identification, the patient feels that he/she knows what the situation can offer, he/she responds selectively to persons who seem to offer the help needed. The following are three ways in which patients respond during this phase: (1) on the basis of participation or interdependent relations with a nurse; (2) on the basis of independence or isolation from a nurse; (3) on the basis of helplessness or dependence upon a nurse. Quality nursing is achieved when a nurse has insight of both the
psychological feelings and the cultural counter-feelings and attempts to help the patient to experience both with minimum interference of his/her illness (Peplau, 1998, pp.31-37).

A patient will proceed through to the exploitation phase when he/she has identified with a nurse who can recognize and understand the interpersonal relations in the situation. In this phase, the patient exploits and makes full use of the nursing service offered as if they were finding and making sure the service is offered for them (Peplau, 1998, pp.38-41).

As old needs are fully met, they are put aside by the patient himself as the patient enters the final stage of interrelationship - resolution. The stage of resolution implies the gradual freeing from helping people and strengthening of ability to stand more or less alone (Peplau, 1998, pp.17-42).

Peplau’s interpersonal relations theory clarified that knowledge is prerequisite to provide skill, technique and function along the range of continuum and among all phases in the relationship. Meanwhile, paying attention to human needs is a positive attitude which shows respect and accepts patient as who they are, which helps both the nurse and the patient to clarify their goals and to reach common understanding (Peplau, 1998, pp13-14, p.97). With regard to elderly sexuality, attitude and knowledge are implied as essential elements to initiate nursing care regarding elderly sexuality.
6. Research Method

In this thesis, the respondents focused on the specific concepts such as knowledge, attitude, registered nursing students, elderly sexuality and culture. The respondents began with preconceived knowledge about how knowledge and attitude of registered nursing students from different backgrounds and their view on elderly sexuality are interrelated. The respondents used structured procedures and formal instruments to collect the information.

In order to achieve the aim, quantitative research has been chosen for this study. Quantitative research, which is referred to by some as hard science, tends to emphasize deductive reasoning\(^8\), the rules of logic, and the measurable attributes of the human experience. After the respondents submitted the questionnaire and collected the information and the data, the SPSS computer programmer was used to analyze (Polit and Cherly, 2008, p.15).

6.1 The Advantages and Disadvantages of Quantitative Research

There are four advantages of quantitative research. Primarily, quantitative researchers bring out predictions that are tested in the real world by deductive reasoning. Secondly, the quantitative method is logical, progresses through a series of steps, according to a predetermined plan of action. Thirdly, researchers use mechanisms designed to control the study, which involves imposing conditions on the research situation that could lead to minimized bias and maximized accuracy and validity of the condition. Finally, quantitative researchers gather empirical evidence which is rooted in an objective reality. The generalizability of the research means that research findings can be generalized to other individuals than those who participated in the study (Polit and Cheryl, 2008, pp.16-17).

\(^8\) Deductive reasoning is the process of developing specific predictions from general principles (Polit and Cherly, 2008, p.640).
Quantitative research has three disadvantages in this thesis. To begin with, the problem of measurements will be one barrier of the research approach. While the physiological phenomena measurements are appropriately precise, like the blood pressure and body temperature, the psychological phenomena measurements still have not been improved, like hope or self-esteem. Besides, the relatively small portion of nursing students can sometimes obscure insights of researchers. Furthermore, the result of this method does not fully reflect the reality of human experience because of a limited questionnaire sample (Polit and Cheryl, 2008, pp.16-17).

6.2 The Advantages and Disadvantages of Questionnaires

A questionnaire is the method of gathering self-report information from the participants through self-administration of questions in a paper-and-pencil format; sometimes referred to as an SAQ (self-administered questionnaire) (Polit and Cherly, 2008, p.651). The procedure of method is to distribute questionnaires to registered nursing students who complete the closed-end questions concerning elderly sexuality together at the same time. Obviously, participants can easily choose a number as answer in the questionnaires (See Appendix 2a and 2b). Additionally, it is efficient to submit questionnaires in groups and get the data. Questionnaires as a tool have the guarantee of anonymity⁹, particularly when the questions about sexuality are sensitive to some nursing students. It can not only be crucial in achieving candid responses but also can provide a more relaxing and open environment for students to choose the answer from deep inside (Polit and Cheryl, 2008, pp.424-430).

One weakness of questionnaires is that the response rate tends to be higher in face-to-face interviews. The participants in questionnaires may discard or ignore a

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⁹ Anonymity is protection of the participant in a study such that even the research cannot link him or her with the information provided (Polit and Cherly, 2008, p.635).
questionnaire if they are not willing to answer questions regards sexuality. In questionnaires, items that are misinterpreted may go undetected by researchers, and thus the responses may lead to erroneous conclusion. The information obtained from questionnaires tends to be somewhat more superficial, which limits the depth of questioning. Questionnaire participants could skip from one question to another, which could bias the responses (Polit and Hungler, 1995, pp.289-299).

6.3 The Merits and Demerits of Closed-end Questions

A closed-end question is a question that offers participants a set of mutually exclusive and jointly exhaustive alternative replies, from which the one that most closely approximates the “right” answer must be chosen (Polit and Cherly, 2008, p.637). One strong point is that participants have to choose one option that most closely matches the appropriate answer when they respond to closed-end questionnaires. It is often difficult to build and construct but easy to administer and especially to analyze these closed-end items. Compared to open-end questions, closed-end items are more efficient because participants can complete more closed- than open-end questions in a given amount of time. Moreover, closed-end items are also preferred and a suitable choice for participants who are unable to express themselves well verbally. The respondents chose the closed-end questions because it will be the best way for investigating students’ attitude towards elderly sexuality when a number of students may be unwilling and too conservative to discuss the sexual topics (Polit and Cheryl, 2008, pp.414-415).

The major drawback of using the closed-end questions is the possibility of neglected or overlooked potentially important responses. The participants may not express adequate understanding of the issue if they could not find a desirable alternative or they choose the alternative that misrepresents their position. Another disadvantage of closed-end items is that they can be superficial. Some participants may object to being
forced into choosing from response options that do not reflect their opinions exactly (Polit and Cheryl, 2008, pp.414-415).

6.4 Data Analysis: Descriptive Analysis
Almost all researchers use computing statistics\(^\text{10}\). There is one extensive and broad computer program called SPSS. Descriptive statistics are statistics used to describe and summarize data (e.g. means, standard deviations) (Polit and Cheryl, 2008, p.640). In this thesis, the descriptive statistics are explained as pie charts and charts for demographic characteristics of the samples in the questionnaires. Moreover, the correlation charts describe the relationship between nursing students’ knowledge and attitudes towards elderly sexuality.

The descriptive statistics are helpful and useful to make the quantitative research evidence understandable. Descriptive statistics are extremely valuable for communicating information about the study sample. When analyzing the questionnaires, the respondents could simply and clearly figure out the descriptive statistics about the correlation chart to address the research questions (Polit and Cheryl, 2008, pp.574-579).

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\(^{10}\) Statistics is an estimate of a parameter, calculated from sample data (Polit and Cheryl, 2008, p.654).
7. Ethical Consideration

When conducting a scientific nursing research, not only expertise and diligence but also honesty and integrity are needed. The researchers and the reviewers should have an ethical responsibility to recognize and protect the subjects’ human rights (Burns and Grove, 2005, p.176). In this thesis, to follow the ethical principle, the respondents focus on participants’ anonymity, confidentiality, beneficence and obligation in relation to respect.

Burns and Grove mentioned that “Privacy is the right an individual has to determine the time, extent, and general circumstances under which personal information will be shared with or withheld from others” (Burns and Grove, 2005, pp.186-88). Based on the right of privacy, the research participants have the right of anonymity and the right to insure that the data collected will be kept confidential. The complete anonymity means the subject’s identity cannot be linked, even by the researcher (Burns and Grove, 2003, p.172). In this thesis where the respondents investigated nursing students from different cultural backgrounds and their view on attitude and knowledge towards elderly sexuality by giving them a questionnaire. The participants were informed about the purpose of this study, both verbally and in writing. The questionnaire is anonymous and there are no questions that can be used to identify an individual in the questionnaire which will de-identify protected information.

Considering the participants’ right of confidentiality, the information gathered will only be applied for investigating nursing students’ attitude and knowledge of elderly sexuality. Passing on information will not be done to people who are not entitled to receive it. The information may be revealed only in the public interest or with a court order. Data collected will be protected (Dobrowolska, Wroniska, Fidecki and Wysokinski, 2007).
Moreover, beneficence is one of the most fundamental ethical principles. There is no physical or psychological harm to the participants, neither have any potentially dangerous technical equipment or specialized procedures been used. In participating in the study, participants will gain some insight into elderly sexuality and raise awareness of elderly sexual needs. The respondents also considered how comfortable and fearful participants would feel (Polit and Hungler, 1995, pp.119-125).

The obligation of the respondents is respecting participants as individuals and their human rights. Values and spiritual beliefs of the individual are respected. The respondents ensure that the individual receives sufficient information required to decide whether or not to participate in the study. The respondents kept personal information and used judgments confidential in sharing this information (Dobrowolska, Wroniska, Fidecki and Wysokinski, 2007).
8. Implementation of The Study

The implementation of the study was made in both a Swedish and an English nursing program, began with a pilot study of Swedish and English questionnaires. After the pilot study, the respondents delivered all questionnaires to different grade nursing students at Novia University of Applied Sciences, explaining the aim of the study. The questionnaire included a cover letter where instructions were given.

8.1 Pilot Study

Before delivering the questionnaires, the respondents conducted a pilot study to test the availability and feasibility of questions. Pilot study is a small scale study conducted to test the plan and method of a research study. It is intended to guide the planning of a large scale investigation (Lehana, et al., 2010).

The respondents had one voluntary registered nursing student from the English program completing the pilot study on the 17 of May, 2011. It took approximately 7 minutes for the student to answer the questions. Most of the questions are understood, however, the student pointed out four places to improve the language.

The respondents added choice to two questions, in Question 3 and 8; changed a grammatical problem in Question 5; and explained the scale of questions more clearly in order to make the analysis by SPSS easier before conducting the second pilot study (See Appendix 2a).

The second pilot study was carried out on the 25 of May with a nursing student from the Swedish program and it consumed approximately 5 minutes. The student reflected
understanding of the questionnaire except for one grammatical problem in the cover letter. The respondents improved the Swedish language (See Appendix 2b).

After conducting the pilot study, the respondents began to distribute questionnaires to nursing students at Novia University of Applied Sciences. The respondents introduced the title and aim of this study to all the participants. Nursing students from different grades and different countries expressed their own opinion by choosing the answers in the questionnaires. The total number of questionnaires is 54, which includes 6 incomplete questionnaires.
9. Data Analysis and Results

The study computed frequency of demographic data of participants and data regarding knowledge and attitude. The demographic items included age, gender, nationality, religion, marital status, grade, and previous education in a geriatric course, practice or working experience in elderly care facility, and relationship with grandparents. The respondents searched the correlation among demographic variables, knowledge and attitude status by using Spearman’s correlation test. Applied criterion for correlation significance is $p<0.05$.

9.1 Demographic Characteristics

The respondents have sent out 54 questionnaires which were all returned. 6 of them were excluded, as they were not filled out completely. The total returned processible research questionnaires are 48 which means a response rate of 89%.

Most of the participants were European ($n=34, 70.8\%$), female ($n=46, 95.8\%$) aged from 18 to 23($n=36, 75\%$). 87.5% of students identify their religion as Christian, only 12.5% students are of other religion. Among 48 participants, 43 have previous education in a geriatric course (89.6%) while 4 participants have not been practicing in elderly care facility. Demographic characteristics of the sample can be viewed in tables 1-11.
### Age

<table>
<thead>
<tr>
<th>Age Interval</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-23</td>
<td>36</td>
<td>75,0</td>
<td>75,0</td>
<td>75,0</td>
</tr>
<tr>
<td>24-26</td>
<td>4</td>
<td>8,3</td>
<td>8,3</td>
<td>83,3</td>
</tr>
<tr>
<td>27-29</td>
<td>3</td>
<td>6,3</td>
<td>6,3</td>
<td>89,6</td>
</tr>
<tr>
<td>30+</td>
<td>5</td>
<td>10,4</td>
<td>10,4</td>
<td>100,0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>48</strong></td>
<td><strong>100,0</strong></td>
<td><strong>100,0</strong></td>
<td></td>
</tr>
</tbody>
</table>

N=48, 75% of the participants were between the age of 18-23.
2 Gender

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid male</td>
<td>2</td>
<td>4,2</td>
<td>4,2</td>
<td>4,2</td>
</tr>
<tr>
<td>female</td>
<td>46</td>
<td>95,8</td>
<td>95,8</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

N= 48, 95% of the participants were females
### 3 Nationality

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European</td>
<td>34</td>
<td>70.8</td>
<td>70.8</td>
<td>70.8</td>
</tr>
<tr>
<td>African</td>
<td>5</td>
<td>10.4</td>
<td>10.4</td>
<td>81.3</td>
</tr>
<tr>
<td>Asian</td>
<td>8</td>
<td>16.7</td>
<td>16.7</td>
<td>97.9</td>
</tr>
<tr>
<td>Middle Eastern</td>
<td>1</td>
<td>2.1</td>
<td>2.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

N=48, 70.8% of the participants are European
### 4 Religion

<table>
<thead>
<tr>
<th>Religion</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian</td>
<td>42</td>
<td>87,5</td>
<td>87,5</td>
<td>87,5</td>
</tr>
<tr>
<td>Buddhist</td>
<td>2</td>
<td>4,2</td>
<td>4,2</td>
<td>91,7</td>
</tr>
<tr>
<td>Muslim</td>
<td>1</td>
<td>2,1</td>
<td>2,1</td>
<td>93,8</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>6,3</td>
<td>6,3</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

N=48, 87.5% of the participants are Christian
### 5 Degree of religion

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Valid</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>secular</td>
<td>13</td>
<td>27,1</td>
<td>27,1</td>
<td>27,1</td>
</tr>
<tr>
<td>semi-religious</td>
<td>21</td>
<td>43,8</td>
<td>43,8</td>
<td>70,8</td>
</tr>
<tr>
<td>religious</td>
<td>7</td>
<td>14,6</td>
<td>14,6</td>
<td>85,4</td>
</tr>
<tr>
<td>very religious</td>
<td>7</td>
<td>14,6</td>
<td>14,6</td>
<td>100,0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>48</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

N=48, 43.8% of the participants are semi-religious, 27.1% are secular, 14.6% are religious and 14.6% are very religious
### 6 Marital status

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid single</td>
<td>28</td>
<td>58.3%</td>
<td>58.3%</td>
<td>58.3%</td>
</tr>
<tr>
<td>married</td>
<td>9</td>
<td>18.8%</td>
<td>18.8%</td>
<td>77.1%</td>
</tr>
<tr>
<td>cohabitate</td>
<td>10</td>
<td>20.8%</td>
<td>20.8%</td>
<td>97.9%</td>
</tr>
<tr>
<td>widow</td>
<td>1</td>
<td>2.1%</td>
<td>2.1%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

N=48, 58.3% of the participants are single
### Year of nursing study

<table>
<thead>
<tr>
<th>Year</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid first year</td>
<td>11</td>
<td>22.9%</td>
<td>22.9%</td>
<td>22.9%</td>
</tr>
<tr>
<td>second year</td>
<td>23</td>
<td>47.9%</td>
<td>47.9%</td>
<td>70.8%</td>
</tr>
<tr>
<td>third year</td>
<td>13</td>
<td>27.1%</td>
<td>27.1%</td>
<td>97.9%</td>
</tr>
<tr>
<td>fourth year</td>
<td>1</td>
<td>2.1%</td>
<td>2.1%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

N=48, 47.9% of the participants are in their second year, 27.1% are in third year, 22.9% are in first and 2.1% are in fourth year.
8 Previous education in geriatric course

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>yes</td>
<td>43</td>
<td>89,6</td>
<td>89,6</td>
<td>89,6</td>
</tr>
<tr>
<td>ongoing course</td>
<td>3</td>
<td>6,3</td>
<td>6,3</td>
<td>95,8</td>
</tr>
<tr>
<td>I am not sure</td>
<td>2</td>
<td>4,2</td>
<td>4,2</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

N=48, 89.6% of the participants had taken the geriatric course already
9 Practicing or working experience in elderly care facility

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>I never practiced</td>
<td>4</td>
<td>8,3</td>
<td>8,3</td>
</tr>
<tr>
<td></td>
<td>1-5 weeks</td>
<td>4</td>
<td>8,3</td>
<td>16,7</td>
</tr>
<tr>
<td></td>
<td>6-10 weeks</td>
<td>8</td>
<td>16,7</td>
<td>33,3</td>
</tr>
<tr>
<td></td>
<td>11-15 weeks</td>
<td>5</td>
<td>10,4</td>
<td>43,8</td>
</tr>
<tr>
<td></td>
<td>15+ weeks</td>
<td>27</td>
<td>56,3</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>48</td>
<td>100,0</td>
<td>100,0</td>
</tr>
</tbody>
</table>

N=48, 56.3% of the participants have 15+ weeks practicing or working experience in elderly care facility
10 Grandparents

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>yes</td>
<td>35</td>
<td>72.9</td>
<td>72.9</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>13</td>
<td>27.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>48</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

N=48, 72.9% of the participants have living grandparents
### 11 Relationship with grandparents

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>no relationship</td>
<td>2</td>
<td>4.2</td>
<td>5.7</td>
<td>5.7</td>
</tr>
<tr>
<td>good relationship</td>
<td>14</td>
<td>29.2</td>
<td>40.0</td>
<td>45.7</td>
</tr>
<tr>
<td>very good relationship</td>
<td>19</td>
<td>39.6</td>
<td>54.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>72.9</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Missing Onion</td>
<td>13</td>
<td>27.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N=48, 39.6% of the participants have very good relationship with grandparents, 29.2% have good relationship, 27.1% have no idea and 4.2% have no relationship with grandparents.
9.2 Knowledge and Attitude towards Elderly Sexuality

Table 15 showed that most participants disagree with the statement that elderly people with cardiovascular diseases should have less frequent sexual intercourse (58.3%). 72.9% of participants agree that Viagra can enhance libido and sexual desire, 54.2% agree that most testosterone hormone prescriptions are given to men over 65, and 64.6% agree that the reason for painful intercourse among women is cessation of estrogen. However, those 3 statements regarding sexual dysfunction are uncorrected. Yet, over 50% students think elderly people have totally different sexual needs and behavior than the young.

From the attitude part the respondents get the results that 60.4% students disagree with the statement that cognitively impaired elderly can have sexual activity with other residents at the same elderly care facility; 66.7% students disagree that sexual activities between the same gender are much acceptable in old age; 68.8% students disagree that elderly care facilities have appropriate privacy for elderly. Most students’ attitude toward elderly sexuality is negative and restrictive. However, 79.2% students would like to receive more knowledge related to elderly sexuality.
12 Viagra can enhance libido and sexual desire

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>strongly disagree</td>
<td>2</td>
<td>4,2</td>
<td>4,2</td>
<td>4,2</td>
</tr>
<tr>
<td>disagree</td>
<td>11</td>
<td>22,9</td>
<td>22,9</td>
<td>27,1</td>
</tr>
<tr>
<td>agree</td>
<td>25</td>
<td>52,1</td>
<td>52,1</td>
<td>79,2</td>
</tr>
<tr>
<td>strongly agree</td>
<td>10</td>
<td>20,8</td>
<td>20,8</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

N=48, 52.1% of the participants present agree with the statement that Viagra can enhance libido and sexual desire
13 Most testosterone hormone prescriptions are given to men over 65

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>strongly disagree</td>
<td>3</td>
<td>6,3</td>
<td>6,3</td>
<td>6,3</td>
</tr>
<tr>
<td>disagree</td>
<td>19</td>
<td>39,6</td>
<td>39,6</td>
<td>45,8</td>
</tr>
<tr>
<td>agree</td>
<td>21</td>
<td>43,8</td>
<td>43,8</td>
<td>89,6</td>
</tr>
<tr>
<td>strongly agree</td>
<td>5</td>
<td>10,4</td>
<td>10,4</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

Most testosterone hormone prescriptions are given to men over 65

N=48, 43.9% of the participants present agree with the statement that most testosterone hormone prescriptions are given to men over 65, 39.6% present disagree, 10.4% present strongly agree and 6.3% present strongly disagree
Natural cessation of postmenopausal estrogen may result in painful intercourse

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>strongly disagree</td>
<td>3</td>
<td>6.3</td>
<td>6.3</td>
<td>6.3</td>
</tr>
<tr>
<td>disagree</td>
<td>14</td>
<td>29.2</td>
<td>29.2</td>
<td>35.4</td>
</tr>
<tr>
<td>agree</td>
<td>22</td>
<td>45.8</td>
<td>45.8</td>
<td>81.3</td>
</tr>
<tr>
<td>strongly agree</td>
<td>9</td>
<td>18.8</td>
<td>18.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

N=48, 45.8% of the participants present agree with the statement that natural cessation of postmenopausal estrogen may result in painful intercourse, 29.2% present disagree, 18.8% present strongly agree and 6.3% present strongly disagree
15 Elderly people with cardiovascular diseases should have less frequent sexual intercourse than healthy elderly people

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly disagree</td>
<td>17</td>
<td>35,4</td>
<td>35,4</td>
<td>35,4</td>
</tr>
<tr>
<td>disagree</td>
<td>11</td>
<td>22,9</td>
<td>22,9</td>
<td>58,3</td>
</tr>
<tr>
<td>agree</td>
<td>15</td>
<td>31,3</td>
<td>31,3</td>
<td>89,6</td>
</tr>
<tr>
<td>strongly agree</td>
<td>5</td>
<td>10,4</td>
<td>10,4</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

N=48, 35.4% of the participants present strongly disagree with the statement that elderly people with cardiovascular diseases should have less frequent sexual intercourse than healthy elderly people, 31.3% present agree, 22.9% present disagree, 10.4% present strongly agree.
16 Elderly people have totally different sexual needs and sexual behavior than young people

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid strongly disagree</td>
<td>11</td>
<td>22.9</td>
<td>22.9</td>
<td>22.9</td>
</tr>
<tr>
<td>disagree</td>
<td>10</td>
<td>20.8</td>
<td>20.8</td>
<td>43.8</td>
</tr>
<tr>
<td>agree</td>
<td>17</td>
<td>35.4</td>
<td>35.4</td>
<td>79.2</td>
</tr>
<tr>
<td>strongly agree</td>
<td>10</td>
<td>20.8</td>
<td>20.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

N=48, 35.4% of the participants present agree with the statement that elderly people have totally different sexual needs and sexual behavior than young people, 22.9% present strongly disagree, 20.8% present strongly agree and 20.8% present disagree.
17 Cognitively impaired elderly people can have sexual activity with other residents at the same elderly care facility

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid strongly disagree</td>
<td>18</td>
<td>37,5</td>
<td>37,5</td>
<td>37,5</td>
</tr>
<tr>
<td>disagree</td>
<td>11</td>
<td>22,9</td>
<td>22,9</td>
<td>60,4</td>
</tr>
<tr>
<td>agree</td>
<td>14</td>
<td>29,2</td>
<td>29,2</td>
<td>89,6</td>
</tr>
<tr>
<td>strongly agree</td>
<td>5</td>
<td>10,4</td>
<td>10,4</td>
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</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

N=48, 37.5% of the participants present agree with the statement that cognitively impaired elderly people can have sexual activity with other residents at the same care facility, 29.2% present agree, 22.9% present disagree and 10.4% present strongly agree
**18 Sexual activities between the same gender are much acceptable in old age**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>strongly disagree</td>
<td>19</td>
<td>39.6%</td>
<td>39.6%</td>
<td>39.6%</td>
</tr>
<tr>
<td>disagree</td>
<td>13</td>
<td>27.1%</td>
<td>27.1%</td>
<td>66.7%</td>
</tr>
<tr>
<td>agree</td>
<td>13</td>
<td>27.1%</td>
<td>27.1%</td>
<td>93.8%</td>
</tr>
<tr>
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<td>3</td>
<td>6.3%</td>
<td>6.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

**Sexual activities between the same gender are much acceptable in old age**

N=48, 39.6% of the participants present strongly disagree with the statement that sexual activities between the same gender are much acceptable in old age, 27.1% present disagree, 27.1% present agree and 6.3% present strongly agree
I feel very comfortable discussing sexuality with my patient

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>48</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
<tr>
<td>strongly disagree</td>
<td>11</td>
<td>22,9</td>
<td>22,9</td>
<td>22,9</td>
</tr>
<tr>
<td>disagree</td>
<td>19</td>
<td>39,6</td>
<td>39,6</td>
<td>62,5</td>
</tr>
<tr>
<td>agree</td>
<td>15</td>
<td>31,3</td>
<td>31,3</td>
<td>93,8</td>
</tr>
<tr>
<td>strongly agree</td>
<td>3</td>
<td>6,3</td>
<td>6,3</td>
<td>100,0</td>
</tr>
</tbody>
</table>

N=48, 39.6% of the participants present disagree with the statement that “I feel very comfortable discussing sexuality with my patient”, 31.3% present agree, 22.9% present strongly disagree and 6.3% present strongly agree.
20 I need more knowledge about sexuality in relation to elderly people

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>strongly disagree</td>
<td>3</td>
<td>6,3</td>
<td>6,3</td>
<td>6,3</td>
</tr>
<tr>
<td>disagree</td>
<td>7</td>
<td>14,6</td>
<td>14,6</td>
<td>20,8</td>
</tr>
<tr>
<td>agree</td>
<td>21</td>
<td>43,8</td>
<td>43,8</td>
<td>64,6</td>
</tr>
<tr>
<td>strongly agree</td>
<td>17</td>
<td>35,4</td>
<td>35,4</td>
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</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

N=48, 43.8% of participants present agree with the statement that “I need more knowledge about sexuality in relation to elderly people”, 35.4% present strongly agree, 14.6% present disagree and 6.3% present strongly disagree
21 All elderly care facilities have appropriate privacy for elderly

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
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</tr>
<tr>
<td>strongly disagree</td>
<td>18</td>
<td>37,5</td>
<td>37,5</td>
<td>37,5</td>
</tr>
<tr>
<td>disagree</td>
<td>15</td>
<td>31,3</td>
<td>31,3</td>
<td>68,8</td>
</tr>
<tr>
<td>agree</td>
<td>11</td>
<td>22,9</td>
<td>22,9</td>
<td>91,7</td>
</tr>
<tr>
<td>strongly agree</td>
<td>4</td>
<td>8,3</td>
<td>8,3</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

N=48, 37.5% of the participants present strongly disagree with the statement that “All elderly facilities have appropriate privacy for elderly”, 31.3% present disagree, 22.9% present agree and 8.3% present strongly agree
9.3 Correlation among Knowledge, Attitude on Elderly Sexuality and Students’ Cultural Background

Using Spearman’s correlation test, nursing students who are further along in their studies found to have a more positive attitude towards elderly sexuality and disagree more with the statement that elderly care facilities have appropriate privacy for the residents ($r= -3.43$, $p=0.17$). However, the correlation between students’ grade and attitude towards the sexuality of cognitively impaired elderly was found to be negative ($r=-.305$, $p=.0305$), which means higher grade students have a more restrictive attitude towards sexuality of cognitively impaired elderly.

A significant positive relation was found between students’ view on privacy in elderly care facilities and attitude on elderly sexual need and behavior ($r=0.497$, $p=0.000$). In other words, the more students disagree that elderly people have totally different sexual needs and sexual behavior than that of the young, the more they believe elderly facilities have inappropriate privacy for elderly.

Similarly, students who disagree with the view that elderly with cardiovascular diseases should have less coital sex tend to be more accepting of elderly sexuality between the the same gender ($r=-2.97$, $p=0.041$). This means that the students who have more knowledge present a more permissive attitude. However, factors like age, gender, nationality, marital status and practical experience in elderly care present no significant relationships with attitude.

Nursing students with living grandparents were found to have a more permissive and positive attitude towards sexual life of cognitively impaired elderly people in elderly care facilities ($r=0.289$, $p=0.046$). Meanwhile, degree of religious activity and attitude towards homosexuality in old age were found negatively correlated ($r=-.397$, $p=0.046$).
p=.005), which means students with deeper religious beliefs have a more negative attitude.

### 22 Correlations

<table>
<thead>
<tr>
<th></th>
<th>Degree of religion</th>
<th>Sexual activities between the same gender are much acceptable in old age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of religion</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>48</td>
</tr>
<tr>
<td>Sexual activities between the same gender are much acceptable in old age</td>
<td>Pearson Correlation</td>
<td>-.397**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>48</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

The relation between “degree of religion” and “sexual activities between the same gender are much acceptable in old age” is negative. (r=-.397, p=.005)
### 23 Correlations

<table>
<thead>
<tr>
<th>Year of nursing study</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
<th>Cognitively impaired elderly people can have sexual activity with other residents at the same elderly care facility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year of nursing study</td>
<td></td>
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<td></td>
<td>-0.305*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.035</td>
</tr>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>48</td>
</tr>
<tr>
<td>Cognitively impaired</td>
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<td>-0.305*</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>elderly people can</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>have sexual activity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with other residents</td>
<td>Sig. (2-tailed)</td>
<td>0.035</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>at the same elderly</td>
<td>N</td>
<td></td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>care facility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*. Correlation is significant at the 0.05 level (2-tailed).

The relation between “year of nursing study” and “cognitively impaired elderly people can have sexual activity with other residents at the same elderly care facility” is negative. \( r=-0.305, \ p=0.0305 \)
The relation between “year of nursing study” and “all elderly care facilities have appropriate privacy for elderly” is negative. ($r = -3.43$, $p=0.17$)
Elderly people with cardiovascular diseases should have less frequent sexual intercourse than healthy elderly people.

Sexual activities between the same gender are much acceptable in old age.

<table>
<thead>
<tr>
<th>Elderly people with cardiovascular diseases should have less frequent sexual intercourse than healthy elderly people</th>
<th>Pearson Correlation</th>
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<th>-.297 *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td>.041</td>
</tr>
<tr>
<td>N</td>
<td>48</td>
<td>48</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sexual activities between the same gender are much acceptable in old age</th>
<th>Pearson Correlation</th>
<th>-.297 *</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.041</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>48</td>
<td>48</td>
<td></td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).

The relation between “elderly people with cardiovascular diseases should have less frequent sexual intercourse than healthy elderly people” and “sexual activities between the same gender are much acceptable in old age” is negative. (r=-2.97, p=0.041)
### 26 Correlations

<table>
<thead>
<tr>
<th></th>
<th>Elderly people have totally different sexual needs and sexual behavior than young people</th>
<th>All elderly care facilities have appropriate privacy for elderly</th>
</tr>
</thead>
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<tr>
<td><strong>Elderly people have totally different sexual needs and sexual behavior than young people</strong></td>
<td>Pearson Correlation 1</td>
<td>.497**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>48</td>
</tr>
<tr>
<td><strong>All elderly care facilities have appropriate privacy for elderly</strong></td>
<td>Pearson Correlation .497**</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>48</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

The relation between “elderly people have totally different sexual needs and sexual behavior than young people” and “all elderly care facilities have appropriate privacy for elderly” is positive. (r=0.497, p=0.000)
The relation between “students have living grandparents” and “cognitively impaired elderly people can have sexual activity with other residents at the same elderly care facility” is positive. (r=0.289, p=0.046)
10. Critical Review

The research questions of this study were focused during the whole procedure. The aim of the study is to raise nursing students’ awareness of elderly sexuality. The respondents use nursing students, knowledge, attitude, culture and elderly sexuality as key words when constituting the literature review. After reading through the literature, the respondents chose a quantitative method to conduct the research.

In quantitative research, reliability and validity are two most important criteria for evaluating instruments (Polit and Cherly, 2004, p.443). One more key measurement is the transferability of evidence to practice.

Reliability

Reliability is the degree of consistency or accuracy with which an instrument measures an attribute (Polit and Cherly, 2004, p.443). All the questions and statements were created based on the literature review and relevant to the research questions of this study. Merely 10 statements cannot contain the entire parts of knowledge and express the whole attitude of the students. All the questionnaires were sealed in envelopes before and after the process, and all the students were informed not to discuss the questions. All the questions are answered by the students’ real, own views. After collecting data, the SPSS program was used for analysis. Therefore, the results of this study are reliable. However, 6 questionnaires were not filled in completely and the respondents did not analyze those data.

Validity

Validity is the degree to which an instrument measures what it is supposed to be measuring (Polit and Cherly, 2004, p.443). All the questions and statements were created based on the literature review and relevant to the research questions of this
study. The respondents created closed-end questions and a scale to examine the attitude and knowledge towards elderly sexuality. The scale defined precise answers to questions and it shows the different attitudes and knowledge clearly and simply. When conducting this study, the respondents used SPSS to analyze the data by using numbers and demonstrated the result visibly and understandably. Before sending out the questionnaire, the pilot study was conducted. All of this was to make sure this research is valid.

Transfer to Practice
After analyzing the data, correlations proved to be difficult to find and this is a barrier to an advanced and continued study. The study still presents some correlations between attitude and knowledge. The results were significantly transferable to practice.

Base on Peplau’s interpersonal relation theory (1989, pp.3-16), caregivers’ attitude, knowledge and other factors will influence the quality of care and fulfillment of patients’ needs. Since the results showed that over 50% of students present negative attitude and limited knowledge toward elderly sexuality, the study can help the students explore attitudes and offer better care for elderly people; it can also guide nursing education towards paying more attention to this neglected area.
11. Discussion
This study attempts to raise students’ awareness of elderly sexuality. In an overview of the results, over 50% of nursing students reflect a negative attitude towards elderly sexuality, which is similar to other researchers’ studies (Golde and Kogan, 1959; Latorre and Kear, 1977). Nursing students in the study demonstrate lack of knowledge on elderly sexuality in that the majority have 1 out of 5 correct answers. This finding is coherent with Hatice, Emine, Sevinc and Halise’s (2010) observation that third-year and fourth-year students have difficulties in evaluating and counseling patients’ sexuality. Results also reveal a number of interesting findings.

Reviewing the hypothesis, the statements “Students with deeper religious beliefs do not have a better attitude than those with secular beliefs” and “Students who have living grandparents have a better attitude than those who do not have living grandparents” are established. Students who are further along in their studies were found to have a better attitude than first-year student or second-year students. Moreover, students who have more knowledge showed better attitude than those with less knowledge. Even so, the relationship between year of nursing study and students’ knowledge of elderly sexuality could not be discovered.

Year of Nursing Study and Attitude
The results find that nursing students who are further along in their studies present a more positive attitude towards the statement that elderly people need more privacy in elderly care facilities. Privacy is an import element for elderly sexuality, which is consistent with the literature (Hajjar and Kamel, 2003a; Touhy and Jett, 2010, pp.374-4). However, higher grade nursing students also present a more negative and restrictive attitude towards the sexuality of cognitively impaired elderly, which perhaps is not surprising, as Allen, Petro and Phillips (2008) have acknowledged that young adults express lower acceptance when elderly were described as cognitively
impaired. The results also show that the year of nursing study has no significant relation with students’ knowledge. As such, the original hypothesis was not supported by this sample.

**Working Experience and Attitude**

In this study, no relation between working experience and attitude was found; however, according to Bouman, Arceles and Benrow’s (2007) research, the people with more working experience present a more negative attitude.

**Knowledge and Attitude**

After analyzing the results, the respondents found that the students who thought elderly people have the same sexual needs and behavior present a more permissive attitude. Elderly people’s sexual needs and behavior have been mentioned in the research, and is not much different than that young people. Meanwhile, students who disagree with the statement that elderly with cardiovascular diseases should have less coital sex more easily tend to accept elderly sexuality between the the same gender. Ebrahim, et al. (2002) claimed that recurrence of CHD was more common in those with less frequency of sexual intercourse.

These two findings tend to present the same idea that students who have more knowledge present a more positive and permissive attitude, which was consistent with Hillman and Stricker’s (1996) study which showed that greater and wider knowledge was related to a more permissive attitude. However, these two findings are contrary to Glass’s (1986) study which showed that more knowledge reflects a more negative and restrictive attitude.
Religion and Attitude
A negative relationship between degree of religious activity and attitude towards homosexuality in old age was found, which means that students with deeper religious beliefs have a more negative attitude. According to McKelvey, et al. (1999), students who attended church more frequently have shown less knowledge and a more negative attitude towards elderly sexuality. In one word, religion plays one implacable role in affecting the registered nursing students’ attitude towards elderly sexuality.

Grandparents and Attitude
Students who have living grandparents support the sexuality of cognitively impaired elderly while those do not have living grandparents are opposed to elderly sexuality. In this thesis, the respondents did not find out the correlation between students who have living grandparents or not and their knowledge of elderly sexuality. Hillman and Stricker (1996) found that students without living grandparental contact presented a non-significant knowledge of elderly sexuality.

Dilemma and Challenge
Nursing is not about what it does but what it can and should do. According to Peplau (1988), the initial step to build up the nurse-patient relationship is the patient’s orientation where the patient expresses needs and feelings. Discussion of sexuality with the elderly regarding lifestyle, illness or disability, and exploring the elderly’s situation brings an advantage in establishing the nurse-patient relationship. Given that human sexuality is expressed in individual ways, how to facilitate conversation and encourage the patient to share?

However, over 50% of the nursing students in the study believe older people have totally different sexual needs, 60.4% disagree with the statement that cognitively
impaired elderly can have sexual activity with other residents in the elderly care facility, and 66.7% disapprove of sexual activities between the same gender. Hajjar and Kamel (2003b) found that a quarter of nursing home residents were labeled as having behavior problems. In the second phase of an interpersonal relationship, patients respond selectively to nurses on a different basis. Older people may encounter the challenge to compromise their lifestyle so that they can be respected by the nurse.

In Turkey, nursing students are not allowed to discuss elderly sexuality although they believe it is useful (Hatice, Emine, Sveinc and Halise, 2010). The present study found that nursing students with deeper religious beliefs disapprove more of sexuality between the same gender. Considering who we are and what we should do, should we overcome our beliefs and anxieties in order to care about the sexual life of the older people?

A nurse is educated to recognize and to respond to the need for help (Peplau, 1988). There seems to be a urge for elderly sexuality education in geriatric courses for nursing students, not only myths regarding sexuality and the aging process, but also involving discussion associating elderly sexuality and illness, particularly in connection with the individual’s value and attitude.

**Application of Results**

The result shows that students are not satisfied with their own knowledge of elderly sexuality and they are not comfortable when discussing the elderly sexuality. The complication of the result could raise the students’ awareness and even suggest that school could better develop nursing education regarding elderly care. It is important for nursing students to explore their own attitude towards elderly sexuality and this may affect their future roles as caregivers. Patients’ needs will be met only when the
caregivers understand and respect the needs.

**Limitation**

The number of participants is limited and narrow. During analysis of the data, the respondents had difficulties finding the relative correlation between each statement and question in the questionnaires. The respondents assumed that more correlation will be found if the portion of sample is extended. In the questionnaires, there were only 5 statements to evaluate nursing students’ knowledge towards elderly sexuality, which cannot be comprehensively presented.

The nationalities variable impacts the students’ attitude and knowledge about elderly sexuality. Different countries have different educational system regarding sex or even elderly sexuality. European countries like Denmark begin to educate students regarding sex when the students are 12-13 years old; other parts of world like Africa and Asia have insufficient sexual education policies. However, the respondents did not find the relationship between nationalities, knowledge and attitude, which may be due to the insufficient number of participants from outside Europe, that is, 1 from Middle Eastern, 5 from Africa and 8 from Asia.

The respondents suggested further study could observe deeper on the relationship between the culture components and students’ knowledge and attitude towards elderly sexuality by a larger sample. In addition, researchers could set the questions about attitude and knowledge more relationally.
References:


Appendix 1

List of Figures:

Figure 1. A continuum showing changing aspects of nurse-patient relations (Peplau, 1998, p.10)

Figure 2. Overlapping phases in nurse-patient relationship (Peplau, 1998, p.21)
Appendix 2

Questionnaires (English and Swedish):

Appendix 2 a

COVER LETTER

Dear students,

We are third year students from the international nursing program at Novia University of Applied Sciences, Vaasa. We are now working on our thesis about registered nursing students from different cultures and their view on attitude and knowledge towards elderly sexuality. The aim of this thesis is to investigate knowledge and attitude of nursing students regarding elderly sexuality, in order to raise awareness of sexual needs of the aging. This thesis is a part of the project “Leading for a Change – Placing Elderly in the Centre”.

We will appreciate your participation in this study by answering the questionnaire. The questionnaire is divided into two parts: part one includes questions about general information; part two includes statements checking attitude and knowledge. All the obtained information from questionnaires will be processed in a confidential way. We will present the result of the study in September 2011.

Thank you for your cooperation.

Lihong Chen

Shan Lin

Ruwang Han
Part I

In this part, please choose one alternative for each question.

1. Age
   - □ a. 18-23
   - □ b. 24-26
   - □ c. 27-29
   - □ d. 30+

2. Gender
   - □ a. Male
   - □ b. Female

3. Nationality
   - □ a. European
   - □ b. African
   - □ c. Asian
   - □ d. American
   - □ e. Middle Eastern
   - □ f. other

4. Religion
   - □ a. Christian
   - □ b. Buddhist
   - □ c. Muslim
   - □ d. Taoist
   - □ e. other

5. Degree of religion
   - □ a. Secular
   - □ b. Semi-religious
   - □ c. Religious
   - □ d. Very religious

6. Marital status
   - □ a. Single
   - □ b. Married
   - □ c. Cohabitate
d. Divorced

e. Widow

7. Year of nursing study
   a. First year
   b. Second year
   c. Third year
   d. Fourth year

8. Did you take a geriatric course already?
   a. Yes
   b. No
   c. I am not sure.

9. How long you have been practicing or working in elderly care facilities
   a. I have never practiced or worked in elderly care.
   b. 1-5 weeks
   c. 6-10 weeks
   d. 11-15 weeks
   e. 15+ weeks

10. Are your grandparents still alive?
   a. Yes
   b. No

If you answered Yes in question no. 10, please continue to question no. 11.

11. How do you consider your relationship with your grandparents?
    a. No relationship
    b. Good relationship
    c. Very good relationship
    d. I do not know
Part II

This part of the questionnaire is checking attitude and knowledge by some statements. Please chose from 1-4 by circling the alternative corresponding with your point of view. (1 is correspondent to not accepting this view, while 4 is correspondent to the same view).

<table>
<thead>
<tr>
<th>Statement</th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Viagra can enhance libido and sexual desire.</td>
<td>----------</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>2. Most testosterone hormone prescriptions are given to men over 65.</td>
<td>----------</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>3. Natural cessation of postmenopausal estrogen may result in painful intercourse.</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>4. Elderly people with cardiovascular diseases should have less frequent sexual intercourse than healthy elderly people.</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>5. Elderly people have totally different sexual needs and sexual behavior than young people.</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>6. Cognitively impaired elderly people can have sexual activity with other residents at the same elderly care facility.</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>7. Sexual activities between the the same gender are much acceptable in old age.</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>8. I feel very comfortable discussing sexuality with my patient.</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>9. I need more knowledge about sexuality in relation to elderly people.</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>10. All elderly care facilities have appropriate privacy for elderly.</td>
<td>1 2 3 4</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 2b

FÖLJEBREV

Bästa studerande

Vi är tredje årets studerande från det internationella sjuksköterskeprogrammet vid Yrkeshögskolan Novia i Vasa. Vi arbetar nu på vår uppsats om sjuksköterskestuderande från olika kulturella synvinklar gällande attityd och kunskap om äldre människors sexualitet. Syftet med denna avhandling är att undersöka sjuksköterskestudierandes kunskaper och attityder om äldre människors sexualitet, i syfte att öka medvetenheten om äldrandes sexuella behov. Detta examensarbete är en del av ett projekt: "ledande för en förändring - att sätta äldre i centrum".

Vi uppskattar ditt deltagande i denna studie när ni har besvarat frågeformuläret. Enkäten är uppdelad i två delar: Del ett innehåller frågor om allmän information, del två innehåller uttalanden som kontrollerar attityd och kunskap. Alla erhållna information från frågeformuläret kommer att behandlas konfidentiellt. Vi kommer att presentera resultatet av studien i september 2011.

Tack för ditt samarbete

Lihong Chen

Shan Lin

Ruwang Han
Del I

I denna del, vänligen välj ett alternativ för varje fråga.

1. Ålder
   - a. 18-23
   - b. 24-26
   - c. 27-29
   - d. 30+

2. Kön
   - a. Man
   - b. Kvinna

3. Medborgarskap
   - a. Europeisk
   - b. Afrikansk
   - c. Asiat
   - d. Amerikan
   - e. Mellan-Östern
   - f. Annan________

4. Religion (tro)
   - a. Kristen
   - b. Buddhist
   - c. Muslim
   - d. Taoist
   - e. Annan

5. Graden av tron
   - a. Icke religiös
   - b. Måttligt religiös
   - c. Religiös
   - d. Mycket religiös

6. Civilstånd
   - a. Ogift
   - b. Gift
   - c. Samboende
d. Skild
□ e. Änka / änking

7. Antal år av studier vid sjuksköterskeprogrammet
□ a. Första året
□ b. Andra året
□ c. Tredje året
□ d. Fjärde året

8. Har du avlagt äldre omsorg redan?
□ a. Ja
□ b. Nej
□ c. Jag studerar nu
□ c. Jag är inte säker

9. Hur länge har du praktiserat eller arbetat inom äldre omsorg?
□ a. Jag har aldrig praktiserat eller arbetat inom äldre omsorg
□ b. 1-5 veckor
□ c. 6-10 veckor
□ d. 11-15 veckor
□ e. 15+ veckor

10. Lever dina far- eller morföräldrar ännu?
□ a. Ja
□ b. Nej

Om ditt svar är Ja i fråga 10, fortsätt till fråga 11.

11. Hur ser du på din relation med dina mor- och farföräldrar?
□ a. Ingen relation
□ b. Bra relation
□ c. Mycket bra relation
□ d. Jag vet inte
Del II
Denna del av enkäten tar reda på dina attityder och din kunskap gällande ämnet. Vänligen välj 1-4 genom att ringa in det alternativ som motsvarar din åsikt. (1 är korrespondent för den motsatta åsikten, medan 4 är korrespondent för samma uppfattning.)

<table>
<thead>
<tr>
<th>Nummer</th>
<th>Fråga</th>
<th>Av annan åsikt</th>
<th>Samma åsikt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Viagra kan förbättra libido och sexuell lust.</td>
<td>1  2  3  4</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>De flesta testosteron hormon recept ges till män över 65 år.</td>
<td>1  2  3  4</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Naturliga upphörande av postmenopausala estrogen kan leda till smärtsamma samlag.</td>
<td>1  2  3  4</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Äldre personer med hjärt och kärloskdomar skall ha mindre frekvenser av samlag än friska äldre människor.</td>
<td>1  2  3  4</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Äldre människor har helt olika sexuella behov och sexuella beteende än ungdomar.</td>
<td>1  2  3  4</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Gamla människor med nedsatt kognitiv förmåga kan ha sexuella aktiviteter med andra som bor på samma vårdplats.</td>
<td>1  2  3  4</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Sexuella aktiviteter mellan samma kön är mycket godtagbara i vid ålderdom.</td>
<td>1  2  3  4</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Jag känner mig väldigt bekväm att diskutera sexualitet med min patient.</td>
<td>1  2  3  4</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Jag behöver mer kunskap om sexualitet i samband med gamla människor.</td>
<td>1  2  3  4</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Alla äldreomsorgs anstalter ger de äldre möjlighet till personlig integritet.</td>
<td>1  2  3  4</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 3

A letter of motivation

Dear students,

We are students from the international nursing program at Novia University of Applied Sciences. So far we have participated in 3 practice periods in elderly ward, home care, psychiatric ward, medical ward and surgical ward; however, we realize nurses almost ignore elderly sexual needs which are a vital part of human life that may result in lack of privacy and possible support.

The study of “attitude towards elderly” was motivated by Medibothnia in the autumn of 2010. In the thesis, the respondents will do the research on “The Views of Registered Nursing Students from Different Cultures on Attitude and Knowledge Regarding Elderly Sexuality”. The aim of this study is to investigate the knowledge and attitude of registered nursing students regarding elderly sexuality, in order to raise the awareness of sexual life of the aging. This study also aims to identify attitude towards elderly sexuality among registered nursing students from different cultural backgrounds.

Since the first practice in elderly care, the respondents realize that there exist some issues regarding elderly sexuality. Have you ever noticed the needs of elderly sexuality during your practice? Have you ever talked about this issue with your classmates or caring team? Have you ever treated it as a disease? Have you ever learnt something referring to elderly sexuality from courses in our school? However, you will be warmly welcome to share your opinions and experiences. Please contact us!
Ruwang. Han@novia.fi

Lihong Chen, Shan Lin & Ruwang Han
Appendix 4

Anonymity of respondents in the questionnaires

Dear students,

In this thesis, the respondents will use questionnaires to investigate the attitude and knowledge of nursing students towards elderly sexuality. The questionnaire is anonymous and will be divided into two parts: one part will be the general information excluding your name, birthday and social security number in order to not reveal your identity; another part will be multiple-choice questions, which means you choose one adequate option from the choices which means it is difficult to recognize your ID as well. As a result, no one will know what your answers are and these questions will be for all the nursing students at Novia.

Anonymity is protection of the participant in a study in such a way that even the researcher cannot link him or her with the information provided (Polit and Cherly, 2008, p.635). These data collected via questionnaire will be interpreted with SPSS which will calculate the scores of choice questions. A questionnaire approach has the advantage of guarantee of anonymity to participants when answering sensitive questions. The data will be protected under the Medibothnia program.

Lihong Chen, Shan Lin & Ruwang Han
BESTÄLLNING AV LÄRDOMSPROV

1. Enhet/avdelning, organisation, adressuppgifter
   Medibythia project

2. E-mail adress

3. Projektets syfte och innehåll
   Registered nursing students from different cultures' view on attitude and knowledge towards elderly sexuality
   The aim of this study is to investigate the knowledge and attitude of registered nursing students regarding elderly sexuality in order to raise the awareness of aging sexual life
   This study also aims to identify attitudes towards elderly sexuality among registered nursing students from different cultural background

4. Projektet skall utföras i...
   To raise awareness about elderly sexuality among nursing students

5. Lämplig tidpunkt för projektets utförande
   1/09/2010 - 29/09/2011

6. Projektansvarig på enheten/avdelningen
   Novia University of Applied Sciences

7. Deltar avdelningspersonalen i projektet
   ☒ Nej

8. Önskemål om antal studerande som deltar i projektet

9. Projektet finansieras av beställaren
   ☐ Helt ☐ Delvis ☐ Inte alls

10. Övrigt

Ort/Datum
   Vasa 26.8.2011

Namnunderskrift
   [Signatur]

Tjänsteställning
   [Signatur]

Beställningen skickas till
   Yrkeshögskolan Novia
   Hälsovård och det sociala området
   Seresgatan 2,
   65 320 Vasa

* separat avtal uppgörs vid behov.
Uppdragssgravare
Namn: Per Thelander
Kontaktperson: Ylva Hill
Kontaktpussifler: ylva.hill@uef.ac.jp

Studerande
Namn: Cheng Chen, Runwei Han, Shen Lin
Kontaktpussifler: cheng.chen@novia.fi
Utbildningsprogram: Nursing

Handledare
Uppdragssgravaren: Namn
Kontaktpussifler

Yrkeshögskolan Novia: Namn: Liisa Leppä-Malmborg
Kontaktpussifler: liisa.leppa-malmborg@novia.fi

Examensarbetet
Syfte: The aim of this study is to investigate the knowledge and attitude of registered nursing student regarding elderly sexuality, in order to raise the awareness of aging sexuality life. Also aim to identify attitudes towards elderly sexuality among registered nursing student from different cultural background.

Upplägg och tidsdisposition

Upphovsrätt
Uphovs- och äganderättten till examensarbetets resultat tillhör alltid den/de studerande. Uppdragssgravaren ges med detta avtal omskränkt rätt att använda examensarbetetets resultat
Ja X Nej

Övriga villkor
Uppdragssgravaren betalar antingen Yrkeshögskolan Novia eller den studerande för examensarbetet
Ja Nej X

Uppdragssgravaren har för avsikt att utnyttja resultaten i sin verksamhet
Ja Nej X

För övriga villkor som exempelvis tystnadsplikt, publicering eller ekonomisk ersättning avsätts separat.

Datum och underskrift
26-6-2011
Cheng Chen

Uppdragssgravare Studerande
PA/representant YH Novia