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Olasoji Awoyera

ATTITUDE OF STUDENT NURSES' TOWARD PEOPLE WITH DISABILITIES



TURUN AMMATTIKORKEAKOULU
TURKU UNIVERSITY OF APPLIED SCIENCES

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Instructors Heikki Ellilä and Mari Lahti

Olasoji Awoyera

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The purpose of this study was to review the attitude of nursing students towards people with disabilities in the western world and compare this with the pilot study from Africa for possibility of cultural differences and demographical variables.

A systematic review of the previous studies were observed (n=6).The pilot study was conducted with 60 students in Ghana. A questionnaire (Interaction with Disabled Person Scale) was filled out by the students and statistical analysis; frequency, percentage, means and standard deviation were measured.

The findings revealed that the students still had negative attitude towards people with disabilities even in a different cultural background (74.76 ± 11.22). In the pilot study, no significant difference was found in age, gender. Slight different in educational level but significant differences in contact with people with disabilities, how often are they in contact and to whom do they have contact.

The study showed that there is existence of negative attitude among the nursing students regardless of cultural background. Further studies should be carried out on this and quick intervention should be put in place to improve the students' attitude to meet up with the continuous growing in the number disabled people.

KEYWORDS:

Disabilities,nursingstudents,attitudes

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LIST OF ABBREVIATIONS

ADTP	Attitudes Toward Disabled Persons Scale
MCRS	Medical Condition Regard Scale
IDP	Interaction with Disabled Persons Scale

1 INTRODUCTION

Today, intellectually, physically, or emotionally disabled individuals comprise a significant portion of the world population (Sen & Yurtsever 2007, 238). Of the world's population of nearly 6.5 billion in 2004, 18.6 million (2.9%) were severely disabled and another 79.7 million (12.4%) had moderate longterm disability. Disability prevalences rise strongly with age. (WHO 2004, 33.)

The average global prevalence of moderate and severe disability ranges from 5% in children aged 0–14 years, to 15% in adults aged 15–59 years, and 46% in adults aged 60 years and older. At all ages, both moderate and severe levels of disability are higher in low- and middle-income countries than in high-income countries; they are also higher in Africa than in other low- and middle-income countries. Older people make up a greater proportion of the population in high-income countries, but have lower levels of disability than their counterparts in low- and middle-income countries. Disability is also more common among children in the low- and middle-income countries. Moderate disability rates are similar for males and females in high-income countries, but females have somewhat higher rates of severe disability. In low- and middle income countries, male and female disability rates are similar, although females aged 15–59 years tend to have higher levels of moderate disability in Africa, the Eastern Mediterranean and the Western Pacific. (WHO 2004, 34-35.)

Surveys conducted in all EU member states have shown that about 16% of the population aged 16-64 has a long standing health problem or disability and that 3.4% has severe health problem. (United States Agency for International Development 2009.) Biritwum et al., (2001) also reported that prevalence of disabilities is increasing with age in Ghana.

As a result of this, health care professionals are greatly needed to provide services for this growing number of disabled people. A *Call to Action* was launched in US to improve the health and wellness status of men, women, and children with disabilities (Smeltzer 2007, 189).

Many have reported negative experiences in their interactions with health care providers from all health professions. Collectively, the nursing profession has been silent in its response to this call. (Smeltzer 2007, 189.)

Mantzios et al., (2002, 1) complained in Greece, of communication problems and poor relationships with health professionals, delays in detection and treatment, insufficient information, guidance and support, inadequate specialized holistic care and lack of home care services.

To save the situation, more knowledge is needed about the current status of attitude of future nurses and factors influencing these attitudes. It has been observed that this area is avoided by nursing professionals because of their negative attitude toward people with disabilities (Johnston & Dixon 2006, 1).

This bachelor thesis review the current behavior of the nursing students and what factors mostly influence their attitude towards disabled people. The review also involve societal attitudes' towards individuals with disabilities, attitudes of other health professional students and health care professionals towards individuals with disabilities. However, a pilot study was conducted to test for cultural influence on the attitude with the nursing students (N=60) in Ghana.

This study is very important in the sense that, the results will give information on the status of students' attitude towards people with disabilities. Result's will also enlighten the educators, health professionals, counselors and work practice employers to design programs that will improve the attitude of students toward people with disabilities.

2 BACKGROUND

2.1 Disability overview

The common view of disability is as tragedy, disgrace, the result of sin, and God's punishment. People with disabilities are seen as a burden to others, to their family, to themselves, and to society. In English they are described as being an invalid (not a valid person), as being handicapped (implying a beggar with a cap), or as being disabled (not able). Do these views carry over to the way people in the helping professions relate to people with disabilities? That is the interesting question. (Pfeiffer et al. 2004).

Health was defined in the WHO Constitution as "a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity". More recently, the concept has been extended to include health-related quality of life. Today, the International classification of impairments, disabilities and handicaps (ICIDH) provides indicators that allow a more structured approach to health disorders. (Barbotte et al., 2001, 1047.)

There are many definitions of disability and many types of disabling conditions. In 1980, the World Health Organization (WHO) defined disability as a limitation in a person's abilities (eg, mobility, personal care, communication, behavior); impairment as an alteration in body systems (e.g, neurological, respiratory, urologic); and handicap as the disadvantages experienced by people in their environment (e.g, in the workplace, economic sufficiency, and independence). (Lollar & Crews 2003, 201). In 2001, WHO revised its definitions to change the focus from a classification system based on consequences of disease to one that is focused on components of health.

Disability can be classified according to Americans with disabilities Act of 1990 :

Physical disability (e.g Mobility, visual, hearing impairment)

Mental disability (e.g Learning disability, schizophrenia, phobia, neurosis)

Developmental disability (e.g Dyslexia,down syndrome, ADHD,autism)

Other disabilities (e.g Substance abuse,senility)

Invisible disability (e.g Epilepsy, Asperger syndrome, fibromyalgia).

Models of disability provide a framework for understanding the way in which people with impairments experience disability. They also provide a reference for society as laws, regulations and structures are developed that impact on the lives of disabled people. There are two main models that have influenced modern thinking about disability: the medical model and the social model. Medical model or illness approach is based on the view that disability is caused by disease or trauma and its resolution or solution is intervention provided and controlled by professionals. The social model view as socially constructed and a consequence of society's lack of awareness and concern about those who may require some modifications to live full,productive lives. (Smeltzer 2007,193).

2.2 Attitude overview

"Attitude is a little thing that makes a big difference"- Winston Churchill (Died 1965).

Attitudes are likes and dislikes- affinities for or aversions to objects, persons, groups, situations, or any other identifiable aspects of the environment,including abstract ideas and social policies (Atkinson et al., 1990, 702.)

Attitude comprise of three components; affective, behavioural and cognitive (Mishra 2006, 8). Affective is shown by positive or negative emotional expression towards people,events or object. Behavioural is the tendency to behave in a particular way towards people,events,actions. And,cognitive refers to our beliefs formed about the object or person. (Mishra 2006, 9).

2.3 Attitude towards people with disabilities

Historically, people with disabilities have not been treated well by society. Over centuries they have been the subject of varying degrees of pity, ridicule, rejection and seclusion as the result of being 'different'. (Linton 1998,34).

Some societies perceived disability as punishment by the gods while in others children and adults with disabilities were ostracised, left to die or indeed killed through fear and ignorance. (Linton 1998,34).

2.3.1 Societal Attitude

Mishra (2006) elaborated the attitude of non-disabled treating the disabled as different. Mishra reported that they were not included in the competitive cliques that form among active adolescents. They are treated as an out cast whom people may like but exclude from their inner circle for sports and leisure activities. They live with their disabilities in the community but they never fully accepted by the teen age peers. (Mishra 2006, 2).

Mishra sited an example ``With regard to mentally ill, newspaper headlines in England in twenty first century have included 'Nuts to be caged for life by the doctors (The Sun, December 2000) and "psychos to be locked up for life' (The Sun, June 2002). The animalistic terms 'caged' and 'locked up' suggest those concerned are less than human.``

2.3.2 Attitude of Health care professionals

"Attitudes are more important than facts"- Karl a. Menninger(DIED 1990)

A study completed by Kim et al., (2010) comparing the attitudes toward and contact with people with disabilities among health care professional, lay persons, and disabled persons (N=270,141 health care professionals) revealed that health care professionals as well as lay persons and disabled persons have negative attitudes toward people with disabilities.

Torbjörn (2010) in his Ph.D thesis 'Not in my backyard' also reported the existence of negative attitude in sweden among the mental health professionals.

Mental health professionals with knowledge also display stigmatizing attitudes, which implies that they, as well as other citizens, must examine their own moral attitudes, improve their ability to interact with persons with mental illness and become more tolerant in order to prevent alienation. (Torbjörn 2010, 4)

Rao et al., (2009) also studied 108 health professionals' attitude toward people with mental disabilities. Participants had highly stigmatized attitudes towards patients from a forensic hospital and those with active substance use disorders. This suggested that health professionals have stigmatized attitudes towards an illness such as schizophrenia and this is worse towards patients from a secure hospital (Rao et al., 2009).

2.3.3 Attitude of health care students

"The only disability in life is a bad attitude"- Scott Hamilton.(Born 1958)

A study on the effect of curriculum change in an undergraduate nursing curriculum was carried out by Seccombe (2007). A convenience sample of students completed the attitude towards disabled people (ATDP) questionnaire. The study showed that there was no statistical significant difference in the scores prior to and on completion of their relevant disability unit. (Seccombe 2007, 459.)

Research at Michigan state university explored the effect of contact, context, and social power on undergraduate attitudes toward persons with disabilities. The authors were of the view that negative perceptions and attitudes toward persons with disabilities persist. These invisible barriers serve to limit social interactions with persons with disabilities and fuel the reciprocity of negative attitudes. Research suggests that social proximity to disability is a major factor affecting how these attitudes manifest themselves. (Schoen et al., 2009).

A sample of 218 undergraduate students completed the Attitudes Toward Disabled Persons Scale (ATDP), a direct measure of attitudes toward people with disabilities. Study findings suggest that representation of persons with disabilities in leadership roles in work, education, and other social settings may promote greater attitudinal shifts toward persons with disabilities than contact with persons with disabilities in non-authoritarian roles. (Schoen et al., 2009,11.)

Tervo et al., (2004) investigated the health professional student attitudes toward people with disability. A cross sectional survey of 338 students of university of South Dakota was carried out, using ATDP scale, SADP and RSI . All students' attitudes were less positive than SADP norms and nursing students held the least positive opinions. No attitudinal differences by gender, those with background in disability had more positive attitude. The author concluded that nursing undergraduate students were at greater risk of holding negative attitudes and recommend specific educational experiences to promote more positive attitudes. (Tervo et al., 2004, 913.)

3 PURPOSE AND AIM

The purpose of this bachelor thesis is to determine the attitudes of nursing students toward people with disabilities. And also, to evaluate what influence the attitude of the future nurses.

This research will be useful in identify factors to be addressed in the training of health care students. It will also help in identify the attitude of future health professionals which may hinder the integration and provision of services for people with disabilities. This will be published in the hoitonetti to enlighten the educators, health professionals, counselors and work practice employers on how to further improve the students' attitude.

4 RESEARCH QUESTIONS

- A. What is the attitude of student nurses toward disabled people?
- B. What demographic variables (age, gender, level of education, number of contact or cultural background) mostly influence this attitude?
- C. How can the student nurses' attitude be improved?

5 SYSTEMATIC LITERATURE REVIEW

5.1 The method of review

Systematic literature (S.R) review will be used for the previous articles. Systematic review uses existing primary research for secondary data analysis. In a situation where large volume of data is involved, S. R helps in controlling the data in a logical way and make use of all the relevant information that evolved. Most of the time, it is preferable to try S. R for a study before embarking on a fresh study. (Neale 2009, 63).

There may not be need to conduct a new study anymore. S.R is recommended before designing a new study because they can identify weaknesses in the methodology of existing studies and may prevent unnecessary replication. Systematic literature views systematic review from a very broad angle as a method with the following features: a clearly defined research question; transparent methods, defined a priori to include clear criteria for including and excluding studies; exhaustive searches for published and unpublished studies; explicit reporting of the methods used to appraise, abstract and synthesize information from individual studies, conducted in duplicate to minimize errors; and clear presentation of study findings. (Neale 2009, 65).

5.2 The process of review

The objective of the literature review was to find five to seven research articles discussing the attitude of nursing students' toward people with disabilities. The search for these articles was difficult as very few articles had direct links to free full text versions. The search took place between September 2010 and April 2011. In the search for the articles three databases were used; Pubmed, CINAHL (EBSCOhost), Elsevier and manual search. Most of the articles were in abstract form. The EBSCO was the best of all. The results were limited by the inclusion and exclusion criteria.

Inclusion criteria for the articles:

1. They were written in English.
2. They were published in scientific journals between 2000 and 2011.
3. They were based on research studies.
4. They were available in full text form.
5. They were peer reviewed.

Exclusion criteria for the articles:

1. The research which focused only on non-health sciences students.
2. The research which did not include any forms of disabilities.
3. Research which divert from measuring the attitude.

There were several different search terms that were used in hopes of finding relevant articles. The keywords used to do the search included the following: disabled, disabilities, student nurses, attitude (see appendix. 1).

The results were too wide and the search criteria had to be further narrowed. The searches were limited to include only those articles that either provided a full text version or a link to a full text version.

During the elimination process thousand abstracts were overviewed and then either eliminated or earmarked as a possibility and returned upon later. In the end of all the hundreds of articles overviewed only 43 proved to be adequately linked to the topic and 12 had a link to a full text version. Some of the other responses were also properly linked to the topic, but did not have a link to a full text article nor was it possible to find such a link through other search databases. Others had links to full text articles, but they were not free and they were purchased via the librarian.

Best 4 were picked from those with full text while others were eliminated based on meeting the exclusion criteria and 2 relevant articles were bought to meet up with the number for review. (See the appendix1/(2) for the flow chat.)

Table 1. Description of materials

Author(s)	Title and year	Aim(s) and purpose	Research method	Sample(N) who, where, when collected	Main results	Implication and or recommendations
Boyle.J Malcolm et al.	Attitudes of undergraduate health science students towards patients with intellectual disability, substance abuse, and acute mental illness: a cross-sectional study. 2010	Measure the attitudes of undergraduate students enrolled in six different health-related courses	Medical Condition Regard Scale (MCRS)	548 students. Monash University. Australia	Differences between the courses. students in undergraduate health-related courses, as a group, have a strong regard for patients with intellectual disability and some regard for patients with acute mental illness, but not for patients presenting with substance abuse problems.	Better education of students on patient presenting substance abuse.
Mantziou,V et al.	Attitudes of registered nurses and student nurses to disabled children.2002	To examine and compare the attitudes of nurses and student nurses.	Attitudes towards disabled persons' Scale (ATDP)	99 registered nurses,189 student nurses. Greece	Whole attitude appeared poor. Student nurses had more positive attitude than the nurses. Differences between age groups and students educational settings .No significant differences in gender.	Use of innovative educational strategies may have a positive effect on subjects' attitudes towards disabled children
Klooster Peter M.T et al.	Attitudes towards people with physical or intellectual disabilities: nursing students and non-nursing peers. 2009	To investigate the attitudes towards people with physical or intellectual disabilities.	ATDP-A,SADP &CLAS-MR	81 Dutch nursing students &48 non-nursing peers. Netherland	Nursing students were more positive than their peers. Positive attitude as a result of having a relative or friend with physical disability.	Educational interventions focus on forms of contact beyond the context of formal care relationships.

Table 1. Description of materials (continued).

Tervo R.C et al.	Health professional student attitudes towards people with disability.2004	To investigate health professional student attitudes toward people with disability	ATDP,SA DP&RSI	338 graduate &undergraduate students. University of South Dakota USA	All students' attitudes were less positive. Nursing student held least positive. No attitudinal difference in gender. Those with disability background are more positive.	Specific educational experiences are needed to promote more positive attitudes
Au KW & Man D W K	Attitudes toward people with disabilities: a comparison between health care professionals and students.2006	To explore the attitudes of health care professionals and their students towards people in Hong Kong with disabilities	ATDP	511 students and 489 professionals Hong Kong	Professionals had a significantly higher attitudinal score than the students. Their attitudes were less positive than those of the student nurses. Age, year of study, educational level, knowledge and contact with people with disabilities were significant factors in the attitudes held by the students and professional respondents	Made to modify the current training curriculum and enhance the quality of services to develop more favorable attitudes towards people with disabilities.
Matziou V. et al	Attitudes of nurse professionals and nursing students towards children with disabilities. Do nurses really overcome children's physical and mental handicaps?in_735 45 2009	To investigate the attitudes of nurse professionals (pediatric nurses) and nursing students towards disabled children.	Attitude Towards Disabled Person Scale (ATDP).	228 nursing students, 90 post-diploma nurses 123 nurse Greece	Nurses' attitudes appeared to be poor	Carefully designed curricula can influence the attitudes of nursing students towards children with disabilities.

The articles reviewed above (see table 1) were published within 2002 to 2010. All the articles made use of reasonable sample size. Three of the articles (Mantziou et al., 2002, 2009 & Au & Man, 2006) compared the attitude of nursing students and the registered nurses, one (Klooster et al., 2009) compared the student nurses with the non-nursing peers and one article (Tervo et al., 2004) involved only nursing students. All the research assess the attitude of health care students. The two studies (Mantziou et al., 2002, 2009) focused on disabled children, one (Boyle et al., 2010) investigate attitude towards intellectual disability, substance abuse and acute mental illness.

One article (Klooster et al.) measured attitude toward physical or intellectual disabilities and two (Mantziou et al. & Tervo et al.) measured general disability. Five articles (Mantziou et al., Klooster et al., Tervo et al., Au & Man) used ADTP scale, two (Klooster et al. & Tervo et al.) used other scales plus ADTP (SADP, CLAS-MR & RSI). One article (Boyle et al., 2010) used medical condition regard scale (MCRS) but all measured the attitude. Demographical variables in all include age and gender (3), educational level (2) and contact with friends or relatives (3).

6 MATERIAL AND METHODS

6.1 Pilot Study

Pilot study was used in this Bachelor thesis. Pilot study is a small experimental designed to test logistics and gather information prior to a larger study, in order to improve the latter's quality and efficiency. A pilot study reveal deficiencies in the design of a proposed experiment or procedure. (Altman et al. 2006, 2.)

In this pilot study nursing students were asked questions related to various aspects of interactions focusing on discomfort in social interactions, coping when meeting people with disabilities, information about disability and a person's vulnerability.

6.2 Data collection instrument

A self – report question about attitudes to individuals with disabilities developed in Australia, Interactions with Disabled person’s scale (IDP) was used to obtain data (See appendix 4) and a designed demographic information sheet was used to obtain variables. (See appendix 6).

This is 20-item Likert scale designed to measure attitudes toward people with disabilities by assessing levels of discomfort in social interactions as a central factor underlying negative attitudes. (Gething 1992, 10.)

The respondent indicates his or her level of agreement with each of the 20 items on the scale. The response for each item range from *I agree very much* (6) to *I disagree very much* (1). There is no mid- or neutral- point on the scale. Question No. 19 was discarded as evidence emerged from factor analyses suggest it does not cluster consistently with other variables on a factor. All remaining items were add up except (Question 10, 14 and 15). Questions 10, 14 and 15 were scored in reverse, and added to total. This gives a Total scale score (see the appendix 5 for summary of the scoring system). Higher scores will indicate greater discomfort in social interactions with people with disabilities. (Gething 1992, 10.)

6.3 Data collection

The study took place during the three months clinical practice in Ghana (Sept.- Dec. 2010). Simple random sampling was used by the researcher to efficiently recruit nursing students for this study and to gain insight into the attitude. First, second and third year students were asked to complete a paper version of the Interaction with disabled person scale (IDP) in a classroom setting. After giving verbal consent, 59 successful completed the demographic information and IDP scale. One student was unable to complete the question. The demographic information included questions regarding student status, age, gender, contact, how often are they in contact and to whom do they have contact.

6.4 Data analysis

Data analysis was performed using IBM SPSS window (version 19). The methods of statistical analysis that were used included frequencies, percentage, means and standard deviations to show the distribution of demographic characteristics and the questionnaire scores.

7 RESULT OF PILOT STUDY

This pilot study aim to identify the attitudes of nursing students in Ghana in relation to the existing findings. The total number of sample was sixty with one missing due to incomplete answer of the scale (N=59). Results are presented in the following categories: demographic description, IDP scores with the variables and comparison of the means score with standard deviation classified by age, gender, college year ,ontact, how often and with whom do you have contact.

7.1 Demographic description

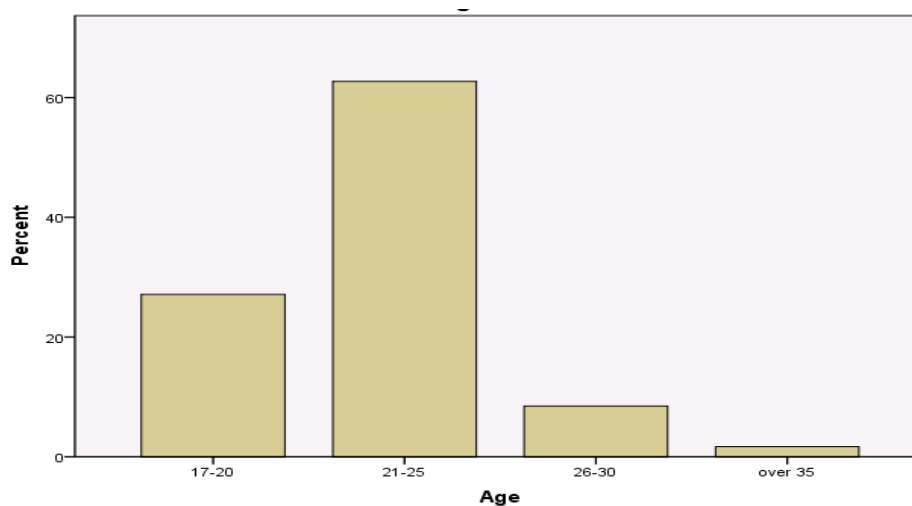


Figure 1. Percentage of age.

Most of the students' ages were between 21-25 (61.7%); second by the ages group 17-20(26.7%). Only one subject was over 35 year of age.

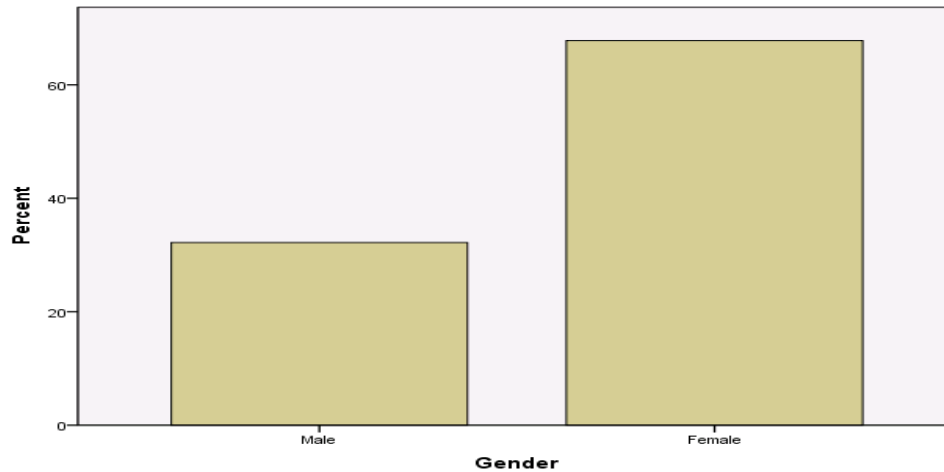


Figure 2. Percentage of gender.

Large group of the studying were female (66.7%) while male were (31.7%).

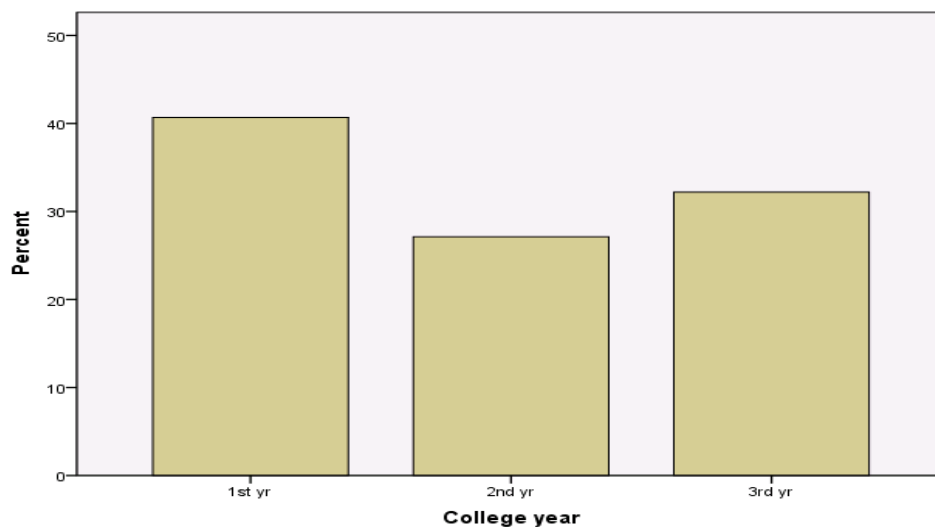


Figure 3. Percentage of college year.

First year students had the highest percentage(40.0%); this was followed by the third year (31.7%) and 2nd year (26.7%).



Figure 4. Percentage of people that had contact with disabled people.

This report showed that 81.7% of the students had contact with people with disabilities and just 16.7% did not have contact.

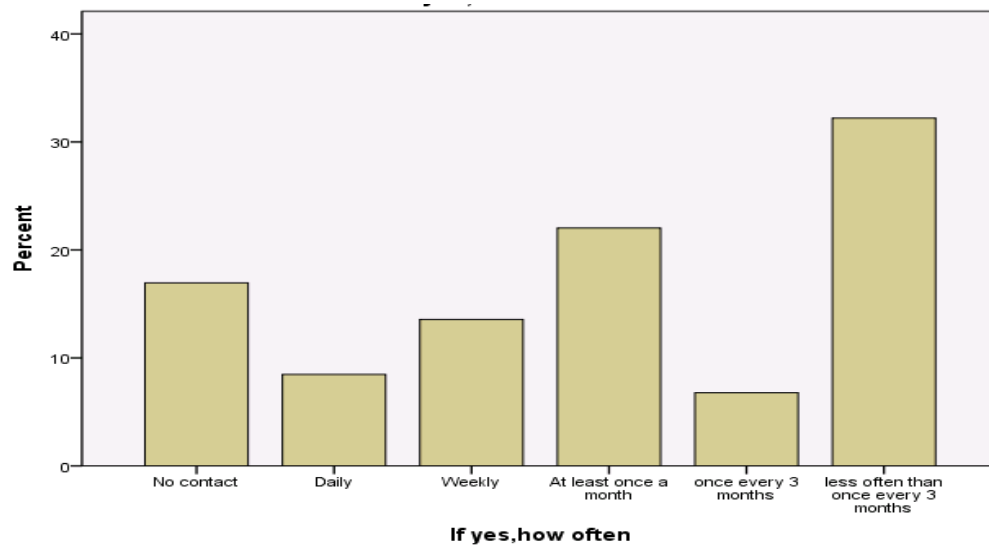


Figure 5. Percentage of how often the subjects had contact with the disabled people.

31.7% of the students had contact with disabled people less often than once every 3 months; followed by students that had at least once a month (21.7%). The least was in students that had contact once in every 3 months.

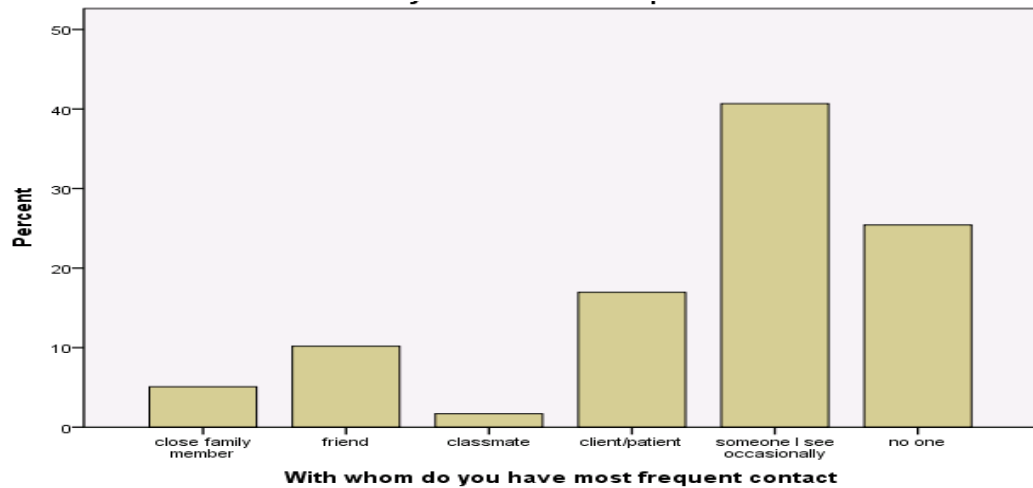


Figure 6 . Percentage of whom do they had contact.

40.0% of students had contact with someone they see occasionally; 25.0% contact others. 1.7% of the subjects had contact with classmate that were disabled and 16.7% had contact with patient that were disabled.

7.2 Interaction with disabled persons scale scores and the variables

Score ; < 55 represent positive attitude, 55-65 represent indifference and >65 represent negative attitude.

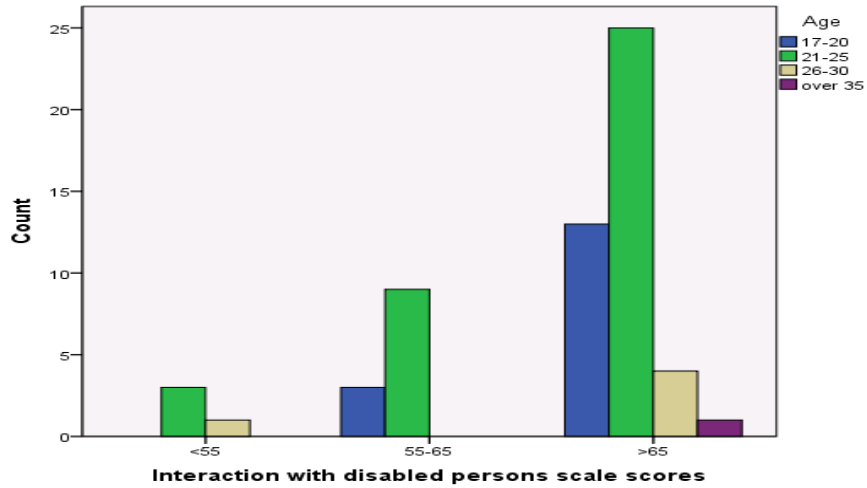


Figure 7. Age and the scores.

Most students had scores above 65 (43%) age (21-25); 12% scores mark between 55-65 and 4% scores less than 55.

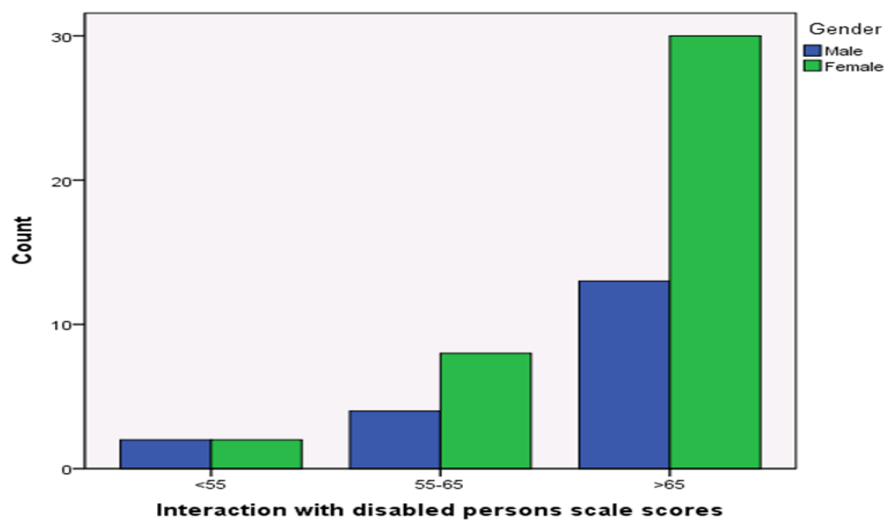


Figure 8. Gender and the scores.

30 female students had scores greater than 65 and 13 male had score above 65. The same number of students male and female scores less than 55.

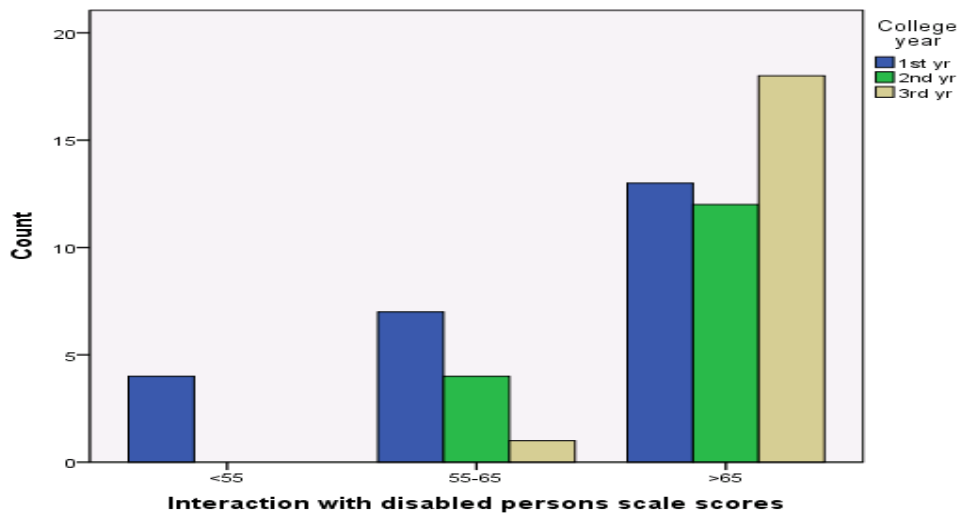


Figure 9. College year and scores.

Among the college years that score above 65, 3rd year had the highest (N=18) and the second year had the lowest (N=12). Only 1st year had the lowest score (N=4).

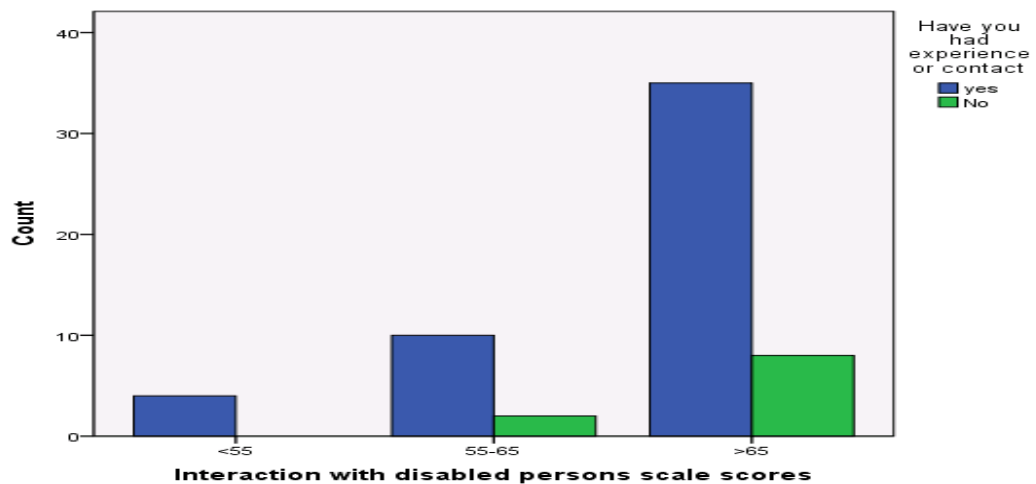


Figure 10. Have you had experiences or contact and the scores.

Among the respondents, 35 students had contact with the disabled people and score above 65. Only 4 respondents scores less than 55.

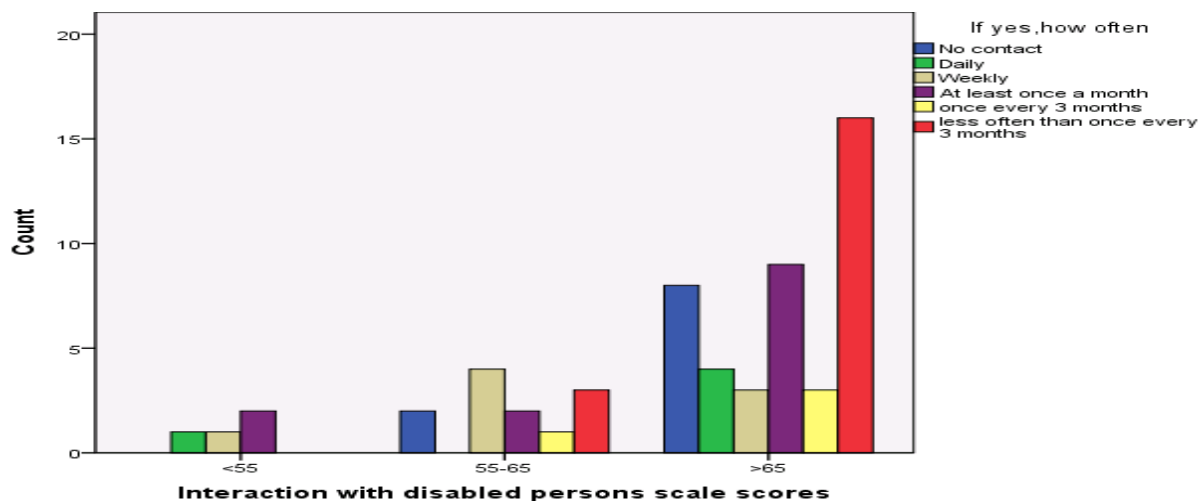


Figure 11. How often do you have contact and the scores.

Respondents that had often less than once every 3 months had the highest number (N=16) that scores above 65; respondents that also had contact once every 3 months (N=9) scores well above 65. Only 4 respondents had daily contact and scores less than 55.

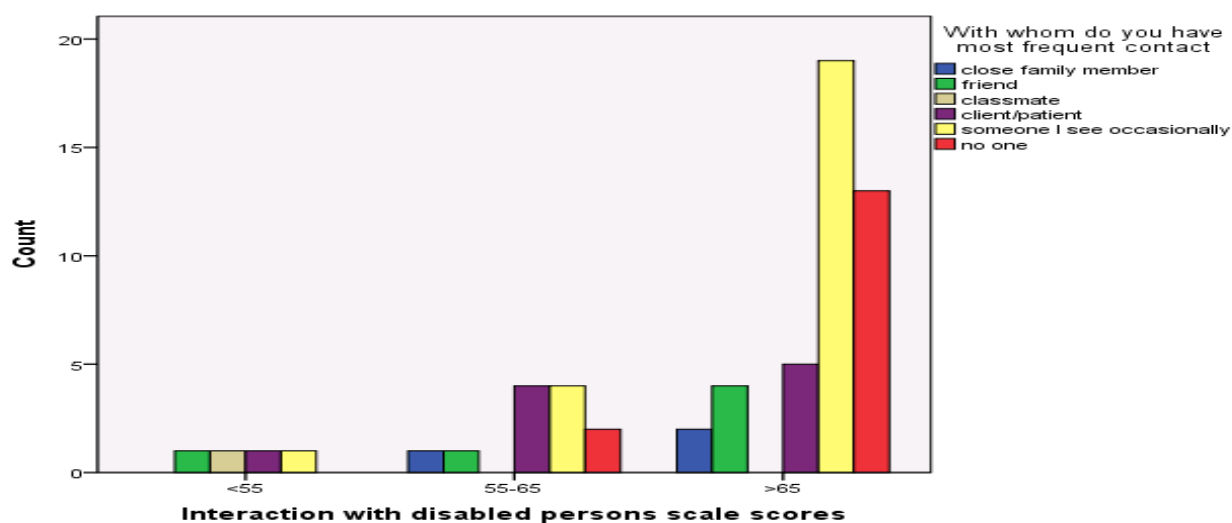


Figure 12. With whom do they have contact and the scores.

Respondents (N=19) that had contact with someone they see occasionally were the most among subjects that scores above 65. The same number of respondents (N=1) scores less than 55 had contact with friend, classmate, client/patient and someone they see occasionally.

7.3 Comparison of the means score ,standard deviation and variables

The mean score and the standard deviation of all the respondents on this questionnaire were 74.76 and 11.22 (N=59), suggesting that the respondents tended to have negative attitudes toward people with disabilities.

Table 2. Mean and standard deviation of the gender.

	Gender		
	Male	Female	Total
Mean	72,05	76,05	74,76
N	19	40	59
Std. Deviation	11,86	10,81	11,22

Female respondents had mean score of 76.05 (SD=10.81) and the male had 72.05 (SD=11.86). This shows negativity in the gender.

Table 3. Mean and standard deviation of the age.

	Age			
	17-20	21-25	26-30	over 35
Mean	77,06	74,16	72,00	74,00
N	16	37	5	1
Std. Deviation	9,11	11,91	14,26	.

The mean score of the age group 17-20 had the highest (77.06); and lowest was found in the age group 26-30 (72.00). This revealed no significant difference in age group and shows social discomfort.

Table 4. Mean and standard deviation of the college year

	College year		
	1st yr	2nd yr	3rd yr
Mean	71,12	75,25	78,94
N	24	16	19
Std. Deviation	12,45	9,60	9,70

The third year students had the highest mean score (78.94) and the lowest was found in the first year (71.12). This college year revealed negativity in social interaction with disabled people, but there is more difference between the 1st year and 3rd year students.

Table 5. Mean and standard deviation of the Contact with disabled people.

	Contact with disabled people	
	Yes	No
Mean	73,51	80,90
N	49	10
Std. Deviation	11,06	10,40

The mean score for respondents that had contact was lower (73.51) than the respondents without contact (80.00). Though this shows negativity but students that had contact are better.

Table 6. Mean and standard deviation of how often.

How often						
	No contact	Daily	Weekly	At least once a month	Once every 3 months	Less often than once every 3 months
Mean	80,90	67,00	67,87	71,15	75,75	78,73
N	10	5	8	13	4	19
Std. Deviation	10,40	10,34	5,93	10,83	5,50	12,07

Respondents that had daily contact had the lowest mean score (67.00); The mean score of students with no contact was the highest (80.00).

The mean score of respondents that contact disabled classmates was 51.00, seconded by those that had them as friends (68.00).The highest was found in students that do not contact any (79.80).

Table 7. Mean and standard deviation of whom do you have most frequent contact

With whom do you have most frequent contact						
	Close family member	Friend	Classmate	Client/patient	Someone I see occasionally	No one
Mean	70,66	68,00	51,00	72,70	75,66	79,80
N	3	6	1	10	24	15
Std. Deviation	10,01	11,54	.	10,40	10,76	10,22

All statistics were calculated with version 19.0 of the SPSS programme. In this study, there were more female (N=40, 66.7%) more than male (N=19, 31.7%).

Among the students (N=60), forty percent were first year students. Most of the students (N=37, 61.7%) were between 21-25 years old.

Most of the students in this study (N=49, 81.7%) had previous contact with disabled people (fig.4). According to how often the students had contact, 31.7% had contact less often than once every three months, 21.7% had contact at least once a month and 16.7% had no contact (fig.5). With whom do they had contact, forty percent of the students (N=24) had frequent contact with someone they see occasionally and 1.7% had contact with their classmate (fig.6). The scores of IDP scale ranged from 50 to 94 with the overall mean score of 74.76 ± 11.22 , which is considered to be negative.

There were no significant differences between the age and gender with the mean scores of the students (see table 3 and 4). Slight difference was observed in the college year between the first year and third year students but the range still indicate negative attitude (71.13-78.95) (Tab.5).

There was differences in the IDP mean scores of students that had previous contact (73.5) and students without experiences (80.9). Students that contact disabled people daily shows significant different in the mean score (67.0) compare to other students (Tab.7). Furthermore, the type of people they had contact with also show significant differences, classmate (51.0), friend (68.0), close family (70.7), patient (72.7), someone I see occasionally (75.7) and no one (79.8). This results supported most of the previous studies that will be discussed.

8 ETHICAL CONSIDERATIONS

Written permission was obtained from Sydney, Australia to use the IDP scale. (See appendix 4). In Ghana, the researcher consulted the school administrator for advice and it was determined that there was no need for an application to be made but verbal consent from the clinical instructor was obtained.

Written and verbal information about the study were given to the students and they were told that their participation in the study was voluntary. (See appendix 3). Further, the answers were anonymous, the students could not be identified and the results were reported with no possibility for identification of any students' data. (Etene 2002.)

9 RELIABILITY AND VALIDITY

Statistical feature of systematic review (S.R) makes the results of S. R to be more reliable and valid. It allows possibility of using mathematical approaches which helps in drawing a significant relationship among the data under study. A particular advantage of systematic review including a meta-analysis is their statistical power. (Neale 2009, 67.) In this bachelor thesis, meta-analysis will not be used but systematic review.

Clearly defined research questions in the beginning of a study give a direction to the systematic review method. S. R has a logical way of providing answers to an already set research question; it follows the analysis in a chronological order till the end and arrives at the answer. It also creates a room for future modification. Having a clearly defined research question is fundamental to the success of a systematic review. (Neale 2009, 69.) In this bachelor thesis, the research questions are clearly stated.

The scale used in the pilot study had been tested and re-tested, found reliable and valid (Gething 1992, 19).

10 DISCUSSION

10.1 Discussion of methodology

Systematic literature review was used in this study, details about the method is given in the previous chapter. After gathering the valuable articles, the next line of action was to analyze the data and make use of them properly.

The pilot study aims to study the attitudes of the nursing students toward people with disabilities classified by age, gender, educational level, contact, how often, to whom do they have contact and to test possibility of cultural influences. The samples were 60 nursing students who are currently studying nursing science. Data was collected in November 2010. There were two instruments used in this research (1) interaction with disabled persons scale (2) Demographic questionnaire. Data was analysed by using IBM SPSS version 19.0 for window to examine the frequency, percentage, mean and standard deviation.

10.2 Discussion of result

This pilot study demonstrates that nursing students are not showing positive attitude towards people with disabilities despite the cultural difference from the previous study. Watanabe (2003, 37) studied cross cultural comparison of attitudes towards person with disabilities using college students in Japan and United States, reported no significant difference in the attitude scores. On the contradiction, Grames & Leverentz (2010,1) observed significant differences among the three disability types. However, the Chinese reported significantly higher scores on the ATDP scale, which corresponded with more favorable attitudes toward persons with disabilities.

Providing answers to the research questions :

1. What is the attitude of the student nurses toward disabled people ?
2. What demographic variables (age,gender,levels of education,number of contact or cultural background) mostly influence this attitude ?
3. How can the student nurses' attitude be improved ?

To answer the first question, this pilot study showed the attitude of the student nurses towards people with disabilities is not positive (Mean score = 74.76 ± 11.22). This is in line with the findings of Mantziou et al. (2002 & 2009) which highlight the overall the overall negative attitude towards disabled among the Greek student nurses. Tervo et al. (2004, 908) also reported that nursing students held the least positive opinion about the disabled among all the health professional students. Au & Man (2006, 155) found the nursing students to be in third place among group of four students which showed negative impression. Klooster et al. (2009, 2562) reported positive attitude, this was compared to the non-nursing peers. Boyle et al. (2010, 2) also showed that student's attitude was positive because of the perceptive of viewing disability as a medical condition. This form of inconsistency was early reported in many articles and that is why it called for further research.

To address the second research question, the mean scores of the attitude and the variables in this pilot study (Tables 2-7) showed differences in the students that had contact, how often they had contact and with whom they had contact. There were no significant differences in age and gender but slight different was noted between the 1st and 3rd college year (Table 4). This is similar to previous studies. Ouellette et al. (2010, 132) reported that participants who had contact with family member with intellectual disability showed positive attitude. Stachura & Garven (2003, 653) and Schafer et al (2010,1) also found that personal contact with someone with mental illness was a significant factor, the more the contact students had with disabled people, the more positive their attitude. Most of the research works do not test for the time of contact and with whom do they have contact but they suggested it.

This pilot study revealed that students that had contact daily and weekly had more positive attitude than students that do not have contact and had contact less often than once every 3 months (Table 6). This implies that regular proximity to the disabled people can actually break the barrier of students' negative behavior.

From the six articles reviewed, there was still different factors considered but mostly implicated factors were:

1. Gender
2. Educational level
3. Contact with disabled people

The third question investigates the possible ways to improve the student nurses' attitude. Different articles gave various ways to improve the students' attitude; Shakespeare et al. (2009, 1816) suggested that visiting patients in their own homes enables students to understand disabled people in context and appreciate what their capabilities are. Shakespeare cited a positive results have been reported from programmes where pediatrics residents spend time with families of children with disabilities in their homes. Student nurses need the skills and knowledge to equip them to provide safe and enabling care for everyone they encounter, including patients who are in any way 'different', Seccombe (2007, 450) suggested. The six reviewed articles unanimously agreed on the following ways to improve the attitude:

1. Use of specific and innovative educational strategies.
2. Educational interventions focus on forms of contact beyond the context of formal care relationships.
3. Long hours work experience with disabled people.

The limitations of this study include different scales used in the reviewed articles for measurement. In the pilot study, only one school and the number of students used makes it difficult to generalize the attitude of nursing students in Africa.

11 CONCLUSION

There is a need for significant changes in the preparation of nursing students to practice in the 21st century. Seccombe (2007, 450) implicated nursing education to have a significant role to play in creating a climate of information and experience that is conducive to and in support of a move from medical model of practice to embrace the social model if the attitudes of student nurses are to become more open and accepting of people with disabilities. In the researcher's view and experience, having a long hours contact, having disabled persons as a relative or friends will go a long way to improve the attitude.

The researcher recommend further studies should be carried out to test for the effect of types and duration of contact. Constant research studies should be carried out on the nursing students to know their attitude status before complete degradation.

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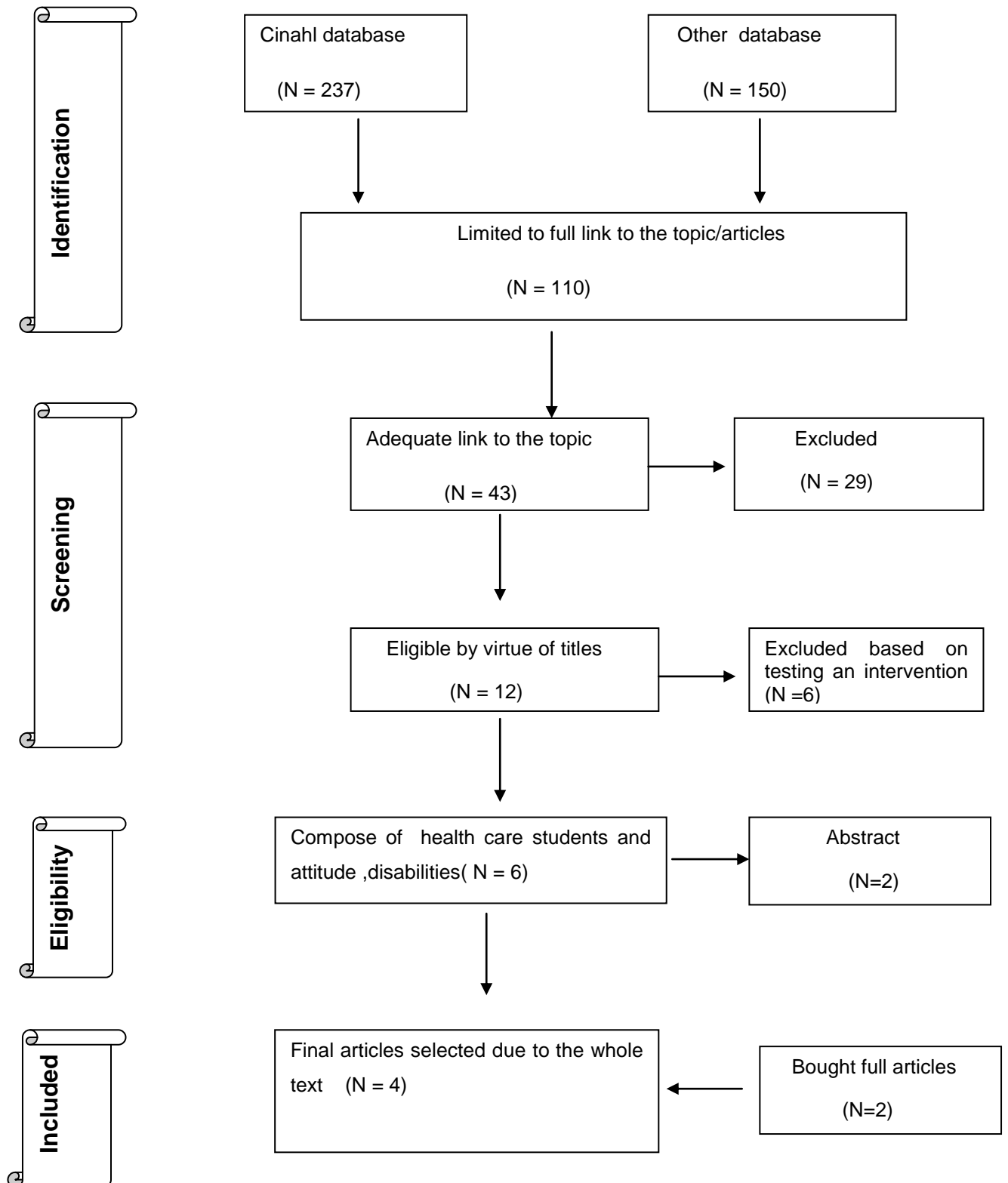
Searching words (CINAHL)

Appendix 1

Search terms	Hits
Attitude,health professional,disabilities	237
attitude	60892
health care professional,student nurses	184819
health care professionals	6070
student nurses	2691
nurses	180150
paraplegia	42520
down's syndrome	1606
epilepsy	564
exceptional	1
handicaps	548
impairment	328
sensory disability	16709
physical disability	27
multiple disability	1084
severe disability	79
intellectual disability	701
intellectual disability	25169
mental disability	0
learning disability	270
emotional disability	1504
behavioral disability	62
disability	20
disabled	25169
disable	39

FLOW CHART of Review

Appendix 1/(2)



PERMISSION FROM SYDNEY,AUSTRALIA

APPENDIX 2

13.09.2010

Dear Olasoji

Please find attached a copy of the IDP scale and scoring manual. Also included are a sample consent form and a sample background demographics page – you will need to adapt these as required to suit your requirements. Lindsay Gething, who developed the scale, has retired. The IDP is now free, so there is no charge for its use. Please get back to me if you have any questions.

Good luck with your research

Cheers

Judith Fethney

Participation permission

APPENDIX 3

Dear Student,

I am a nursing student from Turku University of Applied Sciences, Salo in Finland. I am working on my bachelor thesis: ``**Attitude of student nurses' toward people with disabilities**``. I am asking you to take part in a research I am conducting .The aim of my research is to find out what the attitude of student nurses is and what influence the student attitude when in contact with disabled people. I hope that the results of this research will be useful to all the students and help the health professionals/educators on how to improve the attitude.

This research is conducted as a quantitative and qualitative study. The questionnaire address questions related to background information and attitude toward people with disability. The target groups are the future nurses.

I ask you kindly to answer the questions below; it will take about ten minutes. The information obtained from the questioners will be handled completely in confidence and anonymously. The finished thesis will be placed for viewing at the library of Turku University of Applied Sciences Salo Unit. At the request I will also send the finished thesis to your school.

Lecturers Heikki Ellilä(heikki.ellila@turkuamk.fi) and Mari Lahti(mari.lahti@turkuamk.fi) will be instructing me on conducting this research.

Thanks you for your participation. If you want further information please contact me.

Olasoji Awoyera

Student in Degree Program in Nursing

Turku University of Applied Sciences

Salo, Finland. SNUS08

E-mail:olasoji.awoyera@students.turkuamk.fi

Phone:+358466699069

APPENDIX 4

INTERACTION WITH DISABLED PERSONS SCALE

Here is a list of statements that some people have said describe how they feel when they have contact with a person with a disability. Of course, how we respond to people depends on how well we know them as individuals. However we would like to know how you feel in general when you meet a person with a disability. Please read each statement carefully and decide how much it describes how you feel.
Please place one tick next to the question under the column that describes how you feel.

I disagree very much	I disagree somewhat		I disagree		I agree a little	I agree somewhat	I agree very much	
		1	It is rewarding when I am able to help	1				
		2	It hurts me when they want to do something and can't	2				
		3	I feel frustrated because I don't know how to help	3				
		4	Contact with a person with a disability reminds me of my own vulnerability	4				
		5	I wonder how I would feel if I had this disability	5				
		6	I feel ignorant about people with disabilities	6				
		7	I am grateful that I do not have such a burden	7				
		8	I try to act normally and ignore the disability	8				
		9	I feel uncomfortable and find it hard to relax	9				
		10	I am aware of the problems that people with disabilities face	10				
		11	I can't help staring at them	11				
		12	I feel unsure because I don't know how to behave	12				
		13	I admire their ability to cope	13				
		14	I don't pity them	14				
		15	After frequent contact, I find I just notice the person not the disability	15				
		16	I feel overwhelmed with discomfort about my lack of disability	16				
		17	I am afraid to look at the person straight in the face	17				
		18	I tend to make contacts only brief and finish them as quickly as possible	18				
		19	I feel better with people with disabilities after I have discussed their disability with them	19				
		20	I dread the thought that I could eventually end up like them	20				

The scoring system of IDP Scale

Table 5.1: Scoring system for the IDP Scale		
<ol style="list-style-type: none"> 1. Discard item No. 19 as evidence emerging from factor analyses suggest it does not cluster consistently with other variables on a factor. 2. Add up scores for all remaining items (except 10, 14 and 15). 3. Reverse scores for 10, 14 and 15 and add reversed scores to total. This gives a Total Scale Score. <p>Thus,</p>		
Rating	Score for most of Scale	Score for items 10,14 and 15
I agree very much	6	1
I agree somewhat	5	2
I agree a little	4	3
I disagree a little	3	4
I disagree somewhat	2	5
I disagree very much	1	6
<p>Interpretation A higher Total Scale score indicates more discomfort in social interaction.</p>		

DEMOGRAPHIC INFORMATION

The following information is required to assist in describing the sample of people who have taken part in this project. For each question, mark only one option.

1. Age
 - 17-20 ---
 - 21-25 ---
 - 26-30 ---
 - 31-35 ---
 - Over 35 ---
2. Gender
 - Male---
 - Female---
3. Nationality
 - Finnish---
 - Ghanaian---
 - Others---
 - Specify-----
4. Religion
 - Christian---
 - Islam -----
 - Buddhism---
 - Atheist ----
 - Other-----
5. Marital Status
 - Single---
 - Married---
 - Widow----
 - Widower---
6. College Year
 - 1st year----
 - 2nd year----
 - 3rd year----
 - 4th year----
7. College Major
 - Diploma---
 - B.Sc General Nursing---
 - Public health nursing----
8. Do you have disability?
 - I have a disability-----
 - I do not have a disability----
9. Have you had experiences or contact with people with disabilities?
 - Yes----
 - No----

If yes, how often?

 - Daily -----
 - Weekly----
 - At least once a month-----
 - Once every 3 months-----
 - Less often than once every 3 months---
10. In terms of your contact with people with disability, with whom do you have the most frequent contact?
 - Close family member---
 - Friend-----
 - Classmate-----
 - Client/Patient-----
 - Someone I see occasionally-----
 - No one-----