Attitudes Towards Disability in an Undergraduate Nursing Curriculum: The Effects of a Curriculum Change

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Abstract

Through improved technology and treatment and ongoing deinstitutionalisation, nurses will encounter growing numbers of people with disabilities in the New Zealand (NZ) community and hospitals. Quality of nursing care is influenced by attitude and this study was to evaluate the effect of a curriculum change on the attitudes of two different streams of student nurses towards people with disabilities. During the year 2002 a focused disability unit was introduced to the revised undergraduate nursing curriculum of a major educational institution in New Zealand. The opportunity arose to consider student nurses' attitudes toward disabled people, comparing two streams of students undertaking two different curricula. A convenience sample of students completed Yuker, Block and Young's (1970) Attitudes Toward Disabled Persons scale (ATDP) form B prior to and on completion of their relevant disability unit. No statistically significant difference in scores was demonstrated. A number of possible reasons for this are suggested.

Key words: disability, curriculum, nursing students, attitudes, New Zealand.
Introduction

Historically, people with physical and intellectual disabilities have not been treated well by society. Over many centuries they have been the subject of varying degrees of pity, ridicule, rejection and seclusion as the result of being 'different'. 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; Oliver, 1990).

Various models of care have evolved for people with disabilities ranging from the charity and medical models (where others controlled and dictated the way people with disabilities should live), to the current social model where people are determined to have impairments and are disabled by barriers present in modern society (Oliver, 1990). These barriers may be physical (such as access to transport or buildings), financial, or attitudinal with discrimination and prejudice shown to people who are disabled (Ministry of Health, 2001). Factors such as war which increased the number of visibly disabled people, the actions of parents and health professionals, and latterly the actions of disabled people themselves have given a higher profile to the issues facing people with disabilities. While these factors have contributed to a slow but steady movement to more positive attitudes being evidenced in NZ society, the social model is only a starting point for continuing change (Beatson, 2001).

Equal acceptance of and treatment for disabled people is an ideal to strive for in our communities and particularly in the provision of health care. Fully embracing a social model of care and incorporating an empowerment focus into the education of student nurses is an essential step in this process in order for attitudinal change to be achieved.
For the purposes of this research and discussion, ‘disabled' is used as a generic term inclusive of all intellectual and physical impairments that may impact on an individual's life to a greater or lesser degree. Impairment is seen as a medically imposed condition while disability is the social disadvantage that results from the impairment (Barnes, Mercer & Shakespeare, 1999; Beatson, 2001).

The term 'disabled people' will be utilised throughout this discussion, and ‘contact’ refers to interaction with disabled people either socially, through family, in employment or during clinical experiences.

A brief overview of the care of disabled people and nursing education in New Zealand is provided to clarify the context of the study.

New Zealand Perspective

In New Zealand in 2001, one in five people identified themselves as disabled in some way. This equated to 743,800 people with a wide range of congenital and acquired impairments who require understanding, care and support. Ninety six percent of people with disabilities live in households in the community (Statistics N.Z., 2003.)

New Zealand society has reflected global changes in the care of people with disabilities. In colonial New Zealand in the 1800s, pioneering families faced many challenges including accidents and infectious diseases. Government provision for disabled people was inadequate and families were the expected caregivers (Tennant, 1996). The early 20th century saw the First World War, an influenza epidemic and poliomyelitis creating an influx of young disabled people. During the mid 20th century, significant social changes occurred, with increased financial support, supportive legislation, more community care and better integration of disabled people into
mainstream society. Consumer advocate groups were formed and spoke out against institutionalisation. (Tennant, 1996; Millen, 1999).

The Health and Disability Commissioner's Act in 1994 was established to promote and protect the rights of people using health or disability services. The Commissioner established the Code of Health and Disability Services Consumers' Rights in 1996 that provided the first legally enforceable protection for consumers of these services (Burgess, 1996).

More recently, and after a great deal of community consultation, the New Zealand Disability Strategy was developed with an empowerment focus and the vision of an inclusive society. This includes addressing those factors that create barriers for disabled people in our community (Ministry of Health, 2001). With de-institutionalisation and modern advances in technology, an increasing number of severely disabled persons are being integrated into the NZ community (Hunt, 2000).

Nursing education in NZ

In the mid 1800s, nursing in New Zealand was mostly provided by untrained domestic women with convalescing patients expected to assist with care as able. The arrival in the 1880s of trained nurses was the beginning of professionalism in nursing practice in colonial New Zealand. Most of these nurses were believed to have been prepared in the Nightingale system in London (Burgess, 1984).

Formal training of nurses commenced in 1883 and in 1901 New Zealand became the first country in the world to establish registration of general nurses.

Preparation of student nurses specifically to care for disabled people is not a required unit in the current undergraduate nursing curriculum. New Zealand also does not
have disability nurse specialist postgraduate education as available in the United Kingdom.

**Attitudes to Disabled People**

The complexity of attitudes and attitude development has created a wide range of perspectives and theories varying from how people develop and change their attitudes to the impact of those attitudes on their behaviour and interactions with other people.

Attitudes are closely linked with values, ethics, moral reasoning, and choice when considering the affective skill development of an individual, 'represent a feeling for or against a person, object, belief or event' (Reilly & Oermann, 1992, p301), and can be general or specific (Gething, 1991). Attitudes toward disability may reflect the stigma and negative perceptions held by society (Gordon, Minnes & Holden, 1990), lack of social exposure to disabled people (Lee & Rodda, 1994), and the influence of stereotyping and frequency of contact (Gething, 1991; Wishart & Johnston, 1990). Changing attitudes in the long term is a difficult exercise and Livneh (1982) suggests that historical, experiential, social, visual, demographic and personality factors combine to contribute to attitude development.

Negative attitudes of nursing staff toward disabled people are well documented (Shaw, 1995; Bowes, 1998; Hershey, 1999). Some concerns must be raised about how this issue can be addressed.

**Literature Review**

Many of the studies reviewed for this research focus on physical disabilities or specific named disabilities (Kelly, 1988; Lester & Beard, 1988; McKonkey & Trusdale, 2000; Royal & Roberts, 1987), a number discuss rehabilitation (Biordi & Oermann,
1993; Chubon, 1982) while others debate the terminology (Hughes & Patterson, 1997; Scullion, 1999b), attitude measurement (Antonak & Livneh, 1988; French, 1994) or a variety of other perspectives including education for attitudinal change (Happell, 2000; Lindgren & Oermann, 1993; Snowden, 1997). A limited amount of research was located that involved student nurses, their education and their attitudes towards disabled people (Gething, 1992; Johnston & Dixon, 2003).

A number of themes were identified in the literature reviewed. A lack of provision for disability studies in nursing curricula is noted with concern (Conway, 1996; Holmes, 1999/2000; Nolan & Nolan, 1999; Northway, 1997; Shanley & Guest, 1995). Perspectives on the development of societal and nurses’ attitudes are examined (Brillhart, Jay & Wyers, 1990; Westbrook, Legge & Pennay, 1993). These may be influenced by the media (Barnes et al., 1999; Lester & Beard, 1988; Parsons, 1993; Millen, 1999; Wishart & Johnston, 1990), and prior experience with disabled people (Gething, 1991; Lindgren & Oermann, 1993; Slevin, 1995). The impact of negative attitudes on nursing care is described through individual experience (Bowes, 1998; Hershey, 1999; Shaw, 1995), and is often attributed to a continued medical model approach to care (George, 1992; Goodall, 1994; Scullion, 1999b; Slevin & Sines, 1996).

Interventions suggested for changing attitudes ranged from single interventions to combined approaches and specified the importance of contact (Beh-Pajooh, 1991; Gething, LaCour & Wheeler, 1994; McConkey & Truesdale, 2000; Seccombe & Blair, 2003; Slevin & Sines, 1996; White, Kouzekanani, Olson, & Amos, 2000; Yuker & Hurley, 1987). The pros and cons of the use of simulation are debated and the importance of information to complement these approaches is recommended. A combination of these
interventions is suggested as the best approach (Chan & Cheng, 2001; French, 1994; Murray & Chambers, 1991; Public attitudes, 2003).

The quality and role of nurse educators is believed to be a significant factor influencing student nurses’ attitudinal change (Reilly & Oermann, 1992; Royal & Roberts, 1987; Scheller, 1993). It is suggested that the structure and content of nurse education programmes are examined to ensure effective teaching strategies creating an awareness of disability issues are incorporated (Goodall, 1995; Johnston & Dixon, 2003; Murray & Chambers, 1991; Oermann & Gignac, 1991; Scullion, 2000c).

Johnston and Dixon (2003) were concerned that traditional nursing curricula did not address the care of people with developmental disabilities and observed increasingly negative attitudes of their students towards their clinical placements in this field and an unwillingness to work in this area of nursing. Changing the unit and the clinical placements they used and introducing the empowerment model proved effective to the degree that clinical placements and working in this field of care are viewed more positively.

However, evidence of the effect of a nursing education curriculum change on the attitudes of student nurses was not located until this study was completed. Thompson, Emrich and Moore’s (2003) descriptive study suggested that a change in curriculum and clinical experience had a positive effect on senior nursing students’ attitudes towards people with disabilities.
The Study

Method

This research project undertook a comparative study of the attitudes of nursing students towards disabled people to evaluate the effects of a curriculum change on those attitudes. The research question was: “Will the inclusion of significant theory content into a training unit on disability improve the students’ attitudes and knowledge in this area?” A questionnaire frequently used in the measurement of attitudes to all disabled people was identified as the ATDP (Yuker, Block & Younng, 1970). This was a well-tested, generic, valid and reliable tool (Yuker & Block, 1986) and Version B seemed most suited to the requirements of this study.

This quantitative study used a two-group, pre-test post-test design. The pre-test was utilised to obtain the initial mean scores of each group. As each group was subject to an educational intervention plus a clinical placement, the post-test scores were obtained after completion of the specific units.

Subjects

A convenience sample of student nurses participating in an undergraduate nursing programme were the subjects of this study. As a revised curriculum was being introduced, the pool of nurses targeted involved both second and third (final) year students. The third year students were completing the previous curriculum while the second year students had commenced the newly revised curriculum.

The subjects included males and females of a wide age range with varying background experiences and contact with disabled people. Overall, 61% of the second year students were aged from 17 – 30 years and 53.6% of the third year students were in
this age group. The remainder of the students in each group were from 30 to the mid 50s in age. Gender breakdown of the groups showed a high proportion of females – 90.5% in the second year student group and 96.7% in the third year group. Participation in this study was by individual choice.

**Educational approach in each curriculum**

In the previous curriculum, 'caring for people with disabilities' was a compulsory unit for third year students focused on a three week clinical placement with prior preparation of 1 - 2 hours theoretical teaching that briefly covered practical skills, communication and empowering practice. A clinical workbook formed the basis of clinical tutorials and contained worksheets related to concepts and issues involving disabled people. A Book of Readings was also supplied. All assessment of knowledge and skills was clinically focused and occurred during the three week placement.

The revised (current) curriculum has an eight week theoretical unit focused on disability studies (24 hours teaching) plus a three week clinical placement during one semester. This unit was moved from the third to the second year of the nursing programme. This unit has an empowerment focus throughout and includes aspects of the historical care, the social impact of disability, relevant legislation, culture, communication, resources and contemporary issues. The social model of care is the perspective from which all teaching occurs. Disabled people are invited to share their experiences a number of times during the unit. Assessments include an assignment and an exam based on the theoretical content plus assessment of clinical competencies during the clinical placement. Students also have a workbook for completion during their clinical placement that documents their learning and is the focus for tutorial discussion.
Similar clinical placements were utilised for both groups and include a large local institution for intellectually disabled people (The Kimberley Centre), vocational day bases and residences for intellectually disabled people, residences for physically disabled people, special needs classes in primary and high schools, and acute rehabilitation units.

Ethics

Ethical approval was obtained from the UCOL Research Committee (Appendix 1) which deemed that no further ethical approval was required as the research only involved students of the institution, participation was voluntary and the students were not able to be identified. The research was also determined to be a useful evaluation of one unit of the current curriculum in the Nursing Programme.

An information sheet about the study was provided to supplement verbal information given prior to reading of the questionnaire and recording of responses. Completion of the questionnaire implied consent for the information to be used and there was no compulsion for any student to complete the questionnaire. Responses were not able to be individually identified and anonymity was assured. The nurse educators involved in the research project were not party to the completion or collection of the questionnaires.

Procedure

This study was undertaken over a period of two years in two stages, from late 2001 to 2003. For the year 2002 the overlap of the two curricula provided a pool of student nurses who were completing different disability units in two separate curricula. Each group included students who commenced their unit in the mid-year intake of the degree programme.
The ATDP questionnaire included some demographic questions. Participants completed the questionnaire at commencement and conclusion of their 'caring for people with disabilities' unit i.e. pre-testing and post-testing occurred. For third year students this was over a four week period and for second year students over an 18 week period.

Results

Of the 251 completed ATDP forms, 32 were invalid which left 219 correctly completed and valid responses. The total number of participating third year students was 107 (61 pre-test and 46 post-test) and second year students 112 (58 pre-test and 54 post-test). A small number of students chose not to provide some or all of the demographic data.

Pre-test mean scores for third year students were 117.33 and for second year students 116.91. No difference between the groups mean score at pre-test was found. It was expected that the post-test comparisons would determine if the intervention (curriculum change) had an effect. Post-test mean scores showed third year student nurses had a mean score of 120.87, while second year student nurses scored 123.04. There was no statistically significant difference in these scores. The scores also did not differ significantly within each group from pre-test to post-test (see Table 1).

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<td>117.23</td>
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<td>2nd year</td>
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<td>3rd year</td>
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Scores were then compared with the various demographic data and again no significant differences were demonstrated.

It is therefore not possible to reject a null hypothesis and as a result the research hypothesis that there would be a difference between the two groups cannot be accepted.

Discussion

It was concluded that the introduction of a curriculum change was not a significant factor in changing student nurses' attitudes towards people with disabilities. More movement in the scores of the second year students compared to the third year students may indicate a positive trend but is not statistically significant. However, the mean scores of these students (pre-test 117 & 116 and post-test 120 & 123) are similar to the mean scores of other Form B studies reviewed. One study showed a pre-test mean of 110 and post-test 123 (White et al., 2000), while the other two studies of a single questionnaire had means of 123 and 115 respectively (Paris, 1993; White & Olson, 1990). These authors comment that a mean of 113 or more on completion of the ATDP indicates the presence of positive attitudes. This would suggest that all student nurses in this study already held positive attitudes towards disabled people prior to their disability unit. No statistically significant results between ATDP scores and demographic data reflect reported inconsistent findings related to age, gender, educational level and amount of prior contact with disabled people (Yuker & Block, 1986). While the research results are disappointing, a number of reasons may account for the similarities in score.

While the new unit for second year students incorporated a theoretical empowerment approach, third year students had previously been introduced to the concept in other units of the previous curriculum. This meant that the theoretical
underpinning was there for clinical lecturers to reinforce during clinical placements. Maturation is also a factor which may have affected their attitude scores as the third year students had the benefit of an extra year of education and experience at the time the testing occurred.

Another factor that may have impacted on these results was the similarity of clinical preparation days for both groups which involved the same introduction to clinical practice with disabled people and the opportunity to interact with invited guests in a safe setting. Frequent positive verbal feedback from nursing students confirms the value of this exercise in preparation for their clinical placement.

In NZ nursing education, significant emphasis is placed on the preparation of nurses who are culturally safe in their practice and this perspective is reinforced throughout their three year programme. While bi-culturalism (Maori and Pakeha/European) is the focus, the concept includes awareness of all cultures that are different from an individual’s personal culture (Wepa 2005). It is suggested that this cultural focus may contribute to the positive attitudes towards disabled people held by the student nurses in this study.

Utilising disabled people in the preparation and delivery of nursing education programmes has been recommended in the literature and is supported by the nurse educators in this study. Disabled people and parents with disabled children are able to communicate the impact of disability on their own or their children's lives and are effective in communicating the emotional impact and difficulties faced in individual situations.
Nurse educators involved in student nurse education may have a considerable impact on student nurses’ attitudes to disabled people. Educators involved in this study have current skills and knowledge in their teaching field and a strong liaison with staff in all clinical placements. Educators exhibit positive attitudes in class as well as clinical environments when discussing or interacting with disabled people and nursing students.

Significant changes are needed in the preparation of nurses to practice in the 21st century. As previously determined, disabled people form an increasingly significant section of our community. With the Kimberley Centre scheduled for closure in 2006, de-institutionalisation is nearing completion in this country. This integration of people with intellectual and physical disabilities into schools, workplaces and communities will require NZ nurses of the future to be adequately prepared. 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'. While there is a strong emphasis on 'cultural safety' in New Zealand nursing curricula, the same emphasis is not apparent in caring for people who are different in other ways than ethnicity. The revised curriculum discussed in this study seeks to redress the balance and guide nurses to adopt empowering practices that will allow disabled people to feel accepted and supported to reach their potential.

Nursing education has a significant role to play in creating a climate of information and experience that is conducive to and supportive of a move away from a 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. The literature review findings in this study acknowledge the importance of a balanced approach to educating student nurses.
about caring for disabled people, i.e. an empowerment approach which incorporates the elements of information, supported contact and the input of disabled people. Preparing student nurses for contact in the clinical placement must be complemented by positive support during the experience as student nurses are constantly interacting with disabled people throughout their clinical placement.

While NZ has progressed in implementing changes to lessen discrimination against disabled people, further education is required to increase disability awareness in our communities. Challenging the misconceptions and stereotypical images of disabled people held by individuals is important in the drive for attitudinal change in society. While nurses’ attitudes may reflect those of society, nurses have a role and indeed a responsibility to influence attitudinal change towards disabled people through example, education and caring action. To do this, nursing education is needed which facilitates positive attitude development and empowering practice.

A number of limitations of this study have been identified. The actual study comparing two groups of students at different levels was an unusual situation unlikely to reoccur. The participant numbers were small and more specific demographic information needs to be collected before this information can be accurately linked to the attitude scores. The low number of males participating in the study does not give a clear indication of any relationships between gender and attitudinal score. This study used a convenience sample rather than a random selection of students so there may have been an element of 'expected' answers that may skew the results and is referred to as the Hawthorne Effect (Polit & Hungler, 1999). No control group was utilised which does not allow for comparison with general attitudes towards disabled people.
Few studies were identified that used the ATDP Form B as used in this study so it was difficult to compare actual scores. Having a coded form for each student for each questionnaire would have permitted individual comparisons of scores and identification of individual as well as group movement in scores. The ability to link these scores to demographics would also have been facilitated.

Comparison of the results of this study with others is difficult given the variety of research designs utilised, the variety of education programmes considered and the varying instrumentation employed. No other study evaluated the effect of a curriculum change comparing nursing students at two different levels. While no significant difference in attitude was able to be demonstrated between students undertaking the previous and the revised curricula, the results do indicate that positive attitudes towards disabled people are held by these students and some positive movement in mean scores did occur. However, the disability studies unit in current use in this study would seem to include all recommended approaches for educating student nurses in this area.

If aspects of this study were to be repeated, a control group of local citizens of similar demographics would strengthen the study. A future research study of interest would be to question student nurses on their attitudes towards disabled people on enrolment in a nursing programme and then annually to possibly determine where most attitudinal change occurs. Questions could be supplemented with some open questions allowing a concurrent qualitative study and identification of those aspects of the degree programme which result in most attitudinal change. Research about the persistence of attitudes over time would also guide the development of nursing education programmes.
Conclusion

Further study is needed on many aspects of student nurses' attitudes towards disabled people. Identifying best practice for nurse educators involved in this area of nursing training would be simplified with more data available about the effectiveness of a variety of education methods. More research is needed in New Zealand about the disability studies content in nursing curricula and an international comparison of this content. The provision of disability specialist registered nurses to oversee the care and support of disabled people in the community, particularly those people integrated from institutional settings, is recommended as essential for maintaining high quality of care.

Incorporating an empowerment focus and the social model of care into the theoretical training of student nurses is important to stimulate movement away from the restrictive medical model of care still reported in the provision of nursing care today. The importance of providing adequate information and opportunities for supported contact in a positive environment in student nurses’ education has been noted as conducive to positive attitudinal change towards disabled people. The participation of disabled people in the preparation and teaching of disability studies along with the quality of involved nurse educators are significant elements in the educational preparation of ‘enabling’ nurses for the future.
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