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Attitudes of Rehabilitation Nursing Staff Toward Persons with Disabilities

by

Jean Elizabeth Burt 

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled Attitudes of Rehabilitation Nursing Staff Toward Persons with Disabilities submitted by Jean Elizabeth Burt in partial fulfillment of the requirements for the degree of Master of Nursing.

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Abstract

The attitudes of health professionals towards persons with disabilities have the potential to impact the approach to patient care, the self esteem of persons with disabilities, and ultimately outcomes for these individuals. This study measured attitudes of 43 registered nurses and 9 licensed practical nurses employed in a Western Canadian rehabilitation hospital towards persons with disabilities. The Interaction with Disabled Persons Scale, a relatively new attitude measurement tool, was used. Results indicated that the attitudes of the rehabilitation nursing staff were quite positive and there was no significant difference in scores between registered nurses and licensed practical nurses. Demographic variables of age, years of rehabilitation and other nursing experience, shift worked, employment status, whether or not respondents had a specific disability in mind when completing the questionnaire, and contact with persons with disabilities other than at work, did not have a significant effect upon the attitude scores.

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CHAPTER 1

Introduction

Due to advances in medical knowledge and technology, the number of surviving persons with disabilities continues to increase. A primary goal of rehabilitation is the successful integration of these individuals upon returning to mainstream society. Attitudes of health professionals working in a rehabilitation setting may have a significant impact upon outcomes for persons with disabilities, particularly if the attitudes are negative. It is thought that negative attitudes toward persons with disabilities may be more of an impediment than the disability itself (Lee- [illegible] 1992).

Gething (1994) describes a negative att[illegible]e as one "which sets people apart as being different, perceives them as being less capable, and stereotypes them according to their disabling condition rather than treating them as individuals" (p. 241). Persons with disabilities wish to be active participants and contributors to society, yet are not necessarily allowed to do so. All too frequently they are treated as minority groups, experiencing outcomes of discrimination such as poverty, decreased access to educational or work experiences, and social ostracism. Eisenberg, as cited in Vargo, (1989), states "Being disabled is not just having a body defect--it is a complex social-political reality that one lives with day by day, year by year" (p. 281). Attitudes of others, whether positive or negative, play an integral role in how persons with disabilities are regarded and treated.

Attitudes may be referred to as abstract constructs which are not directly observable or measurable. They are inferred from words and actions, finding expression in many ways including feelings, values, or beliefs (Gething, 1991). In the most comprehensive conceptual frameworks, attitudes are depicted as multidimensional, complex entities. It is generally agreed that attitudes are learned, acquired through a combination of operations which involve personal processes and social influences (Florian, 1982; Livneh, 1988; Miller, 1979; Sadlick & Penta, 1975; Vargo, 1989; Wright, 1988).

Some researchers have found that personal factors such as gender influence attitudes (Bell, 1986; Eichinger, Rizzo, & Sirotnik, 1992; Livneh, 1982; Paris, 1993), while other research has not supported this (Furnham & Pendred, 1983; Gething, 1993). An individual's past experiences, prior exposure to the attitude stimulus (Antonak & Livneh, 1988; Miller, 1979), level of creativity (Chubon, 1982), and openness to different situations (Antonak & Livneh; Miller; Wright, 1988) have all been associated with influencing attitudes. In addition, attitudes of some individuals can strongly influence those of others, which can ultimately affect outcomes for persons with disabilities.

Health professionals are central figures in the rehabilitation of persons with disabilities. Past research in the study of attitudes of health professionals has revealed mixed findings, due in part to problems with

instrumentation of attitude measurement. It has been difficult to compare results of the research due to the questionable reliability and validity of some measurement tools. With changing health care trends shifting toward more community based rehabilitation and integration of persons with disabilities, it is important to accurately assess attitudes of health care professionals toward persons with disabilities.

Health professionals, particularly those working in rehabilitation, are often referred to as the gatekeepers of rehabilitation services. Since nursing staff are often those most in direct contact with persons with disabilities in a rehabilitation setting, their attitudes may profoundly impact patient outcomes. According to Lyons (1991), their attitudes toward persons with disabilities are a "reflection of the social value with which such persons are regarded and are of grave concern for their perceived ramifications of professional behaviour and rehabilitation outcomes" (p. 316).

This thesis consists of two papers, each which is related to the examination of attitudes toward persons with disabilities. In the first paper, entitled Attitudes of Health Professionals Toward Persons with Disabilities the concept of attitudes of health professionals toward persons with disabilities is examined. Related research articles are reviewed as well as literature pertaining to measurement problems with existing attitude scales. Suggestions for future research and promotion of positive attitudes toward persons with disabilities are also discussed. This paper has been written with

the intent of publication in the Canadian Journal of Rehabilitation.

The second paper Attitudes of Rehabilitation Nursing Staff Toward Persons with Disabilities is a description of a research study conducted in a Western Canadian rehabilitation facility using a new attitude measurement tool, the Interaction with Disabled Persons Scale (IDP). It is hoped the results of this research will contribute to the general study of attitude measurement as well as increasing attitude knowledge of nurses and other health care professionals. As rehabilitation nursing staff are in a front-line position to affect outcomes of persons with disabilities, awareness of their attitudes is an important component of care delivery. This paper will be submitted for publication to the Rehabilitation Nursing journal.

References

Antonak, R., & Livneh, H. (1988). The measurement of attitudes toward people with disabilities: Methods, psychometrics, and scales. Springfield, IL: Charles C. Thomas.

Bell, T. (1986). Nurses' attitudes in caring for the comatose head-injured patient. Journal of Neuroscience Nursing, 18, 279-289.

Chubon, R. (1982). An analysis of research dealing with the attitudes of professionals toward disability. Journal of Rehabilitation, 48, 25-29.

Eichinger, J., Rizzo, T., & Sirotnik, B. (1992). Attributes related to attitudes toward people with disabilities. International Journal of Rehabilitation Research, 15, 53-56.

Florian, V. (1982). Cross-cultural differences in attitudes towards disabled persons: A study of Jewish and Arab youth in Israel. International Journal of Intercultural Relationships, 6, 291-299.

Furnham, A., & Pendred, J. (1983). Attitudes towards the mentally and physically disabled. British Journal of Medical Psychology, 56, 179-187.

Gething, L. (1991). Generality vs. specificity of attitudes towards people with disabilities. British Journal of Medical Psychology, 64, 55-64.

Gething, L. (1993). Attitudes toward people with disabilities of physiotherapists and members of the general population. Australian Physiotherapy, 39, 291-296.

Lee-Chan, T. (1992). Attitudes toward disabled people. Unpublished

master's thesis, University of Alberta, Edmonton, Alberta, Canada.

Livneh, H. (1982). On the origins of negative attitudes toward people with disabilities. Rehabilitation Literature, 43, 338-347.

Livneh, H. (1988). A dimensional perspective on the origin of negative attitudes toward persons with disabilities. In H. E. Yuker (Ed.), Attitudes toward persons with disabilities (pp. 35-46). New York: Springer.

Lyons, M. (1991). Enabling or disabling? Students' attitudes toward persons with disabilities. American Journal of Occupational Therapy, 45, 311-316.

Miller, A. (1979). Nurses' attitudes towards their patients. Nursing Times, 7, 1929-1933.

Paris, M. (1993). Attitudes of medical students and health-care professionals toward people with disabilities. Archives of Physical Medical Rehabilitation, 74, 818-825.

Sadlick, M., & Penta, F. (1975). Changing nurses attitudes toward quadriplegics through use of television. Rehabilitation Literature, 36, 274-278.

Vargo, J. (1989). "In the house of my friend": Dealing with disability. International Journal for the Advancement of Counseling, 12, 281-287.

Wright, B. (1988). Attitudes and the fundamental negative bias: Conditions and corrections. In H. E. Yuker (Ed.). Attitudes toward persons with disabilities (pp. 2-21). New York: Springer.

CHAPTER 2

Attitudes of Health Professionals Toward Persons with Disabilities

by

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CHAPTER 2

Attitudes of Health Professionals Toward Persons with Disabilities

Attitudes of those who work with persons with disabilities have a profound impact not only shaping in attitudes of persons with disabilities but also in shaping society's conception of disabilities. Health care professionals are in a position where their attitudes may positively or negatively affect their approach to and care of clients (Brillhart, Jay, & Wyers, 1990). Gething (1992a) states "health professionals are powerful models who consciously and unconsciously convey expectations about behaviors, goals, and aspirations" (p. 26). However, as Yuker and Block (as cited in Roush, 1986) note health care professionals tend to view those they help as having inferior status. There is also a tendency for self-fulfilling prophesy, where the patient actualizes the negative expectations of the health professional (Brillhart, et al.; Moss, 1988).

Attitudes

Description of Concept

A universally accepted definition of attitudes does not exist (Chubon, 1982). However according to Antonak & Livneh (1988), attitudes are abstract constructs which are not directly observable or measurable. In the most comprehensive conceptual frameworks, attitudes are depicted as multidimensional, complex entities. It is generally agreed that attitudes are

learned, acquired through a combination of operations which involve personal processes and social influences (Florian, 1982; Livneh, 1988; Miller, 1979; Sadlick & Penta, 1975; Vargo, 1989; Wright, 1988). Attitudes assist an individual to be comfortable with and make sense of the world. They act as intermediating influences on an individual's behavioral response to an environmental stimulus, finding expression in affects, feelings, values, or beliefs (Gething, 1991b).

Three components are directly associated with attitudinal responses: cognitive, affective, and behavioral (Antonak & Livneh, 1988; Geskie & Salasek, 1988). The cognitive component, which is typically demonstrated through verbal expression, refers to an individual's ideas, perceptions, beliefs, and opinions toward the stimulus. Affective responses, or the feelings or emotions which are elicited by the stimulus, are reflected through verbal statements or through physiological responses, such as those associated with arousal of the sympathetic nervous system. The behavioral component constitutes either an intention or predisposition to behave in a certain way which is observable through verbal statements, or the actual overt action. It is important to note that attitudes will influence, but may not necessarily result in a particular set of behaviors.

Antonak and Livneh (1988) envision attitudes toward people with disabilities as operating in three distinct yet concentric circles. The inner circle constitutes the attitudes of relatives, friends, and peers. The next

circle is composed of the attitudes of the rehabilitation professionals in contact with the persons with the disabilities while the outer circle represents the attitudes of the general public. Attitudes of those in the middle circle, the health professionals, can strongly influence attitudes of the adjacent circles (Antonak & Livneh).

Research Findings

Attitudes of health care professionals toward persons with disabilities have been studied extensively. Research articles on attitudes toward persons with disabilities began to emerge in the 1930s and toward particular impairments in the 1950s and 1960s. This emphasis on specific disabilities stemmed from the debate as to whether attitudes were similar across disabilities. After the mid-1980s, research conducted on attitudes shifted once more, with a more general focus emerging on attitudes toward persons with disabilities.

The results of more than three decades of research in attitudes of health professionals toward persons with disabilities are indeterminate (Chubon, 1982), with some studies revealing positive attitudes while others showing negative attitudes. According to Tranock (1991), attitudes of nursing students and nursing faculty members toward persons with physical disabilities were less favorable than attitudes of undergraduate psychology students. Although 251 nursing students and 34 nursing faculty were investigated, it is not clear how many psychology students were included in

the study, which may have had an impact upon the results. Interestingly, students enrolled in nursing programs that included rehabilitation theory and practice displayed more positive attitudes than other nursing students.

Examination of attitudes of medical and dental students toward persons with disabilities found fourth year students in both groups had more positive attitudes than those in first year (Paris, 1993). This may suggest that curricula designed to incorporate exposure and interaction with persons with disabilities may foster more positive attitudes.

Benham (1988) discovered that occupational therapists held very favorable attitudes toward persons with disabilities while a comparison of attitudes of occupational therapy (OT) students to attitudes of business students toward persons with disabilities revealed no significant difference (Lyons, 1991). However, those OT students who had contact with persons with disabilities displayed more positive attitudes. Another finding in this study was the lack of significant difference in attitudes between first, second, third, and fourth year OT students. Consistent with these results, another study by Lee-Chan (1992) in which attitudes of first, second, third, and fourth year OT students were examined, revealed a positive shift in attitudes following exposure to accurate information about persons with disabilities. Using a pre-test post-test design, attitudes of OT students in each academic year of their program were measured before and after receiving the information. No significant difference was found between

students and year of program.

Studies by Ryan (1992) and Smith (1993) both discovered that vocational rehabilitation counselors had relatively high positive attitudes toward persons with disabilities. Gething's (1992a) study of 636 training and practicing health professionals' attitudes toward persons with disabilities revealed devaluing judgements regarding social and psychological adjustment towards people in wheelchairs.

Type of Disability. Whether or not health care professionals hold varying attitudes depending on the disability being considered, or hold generalized attitudes about all disabling conditions, is unclear. Most measurement tools have in the past assumed generality (Gething, 1991a). A study by Jacicki (1970) examined attitudes of 54 health professionals (nurses, physicians, psychologists, social workers, and other health-related professions) toward specific disabilities. Findings revealed blindness and impairments of motor ability such as paraplegia and amputation were regarded as the most disturbing. Muhlenkamp (1971) found that 24 nursing students ranked blindness as the most difficult disability, followed by chronic heart disease, pulmonary disease, and hearing impairment.

Effect of Contact. The effect of contact with persons with disabilities in promoting positive attitudes of health professionals has been widely examined. Nursing students developed more positive attitudes toward persons with disabilities following a one week community placement with

persons with disabilities (Murray & Chambers, 1991). Children with disabilities were regarded more positively by pediatric residents who participated in an experimental curriculum program for pre-school children with disabilities (Richardson & Guralnick, 1978). Women enrolled in training for Child Health Care Workers were tested for attitudes towards persons with disabilities upon entering their program and again after one year of clinical placement with children having multiple disabilities (Felton, 1975). Results indicated a significant positive shift in attitudes, which strongly supports findings of other attitudinal research. Oermann and Lindgren (1995) measured attitudes of nursing students before and after one year participation in a educational program on caring for persons with disabilities. The findings indicate the participants' attitudes were significantly more positive following the educational program. A similar study of student nurses by the same authors, (Lindgren & Oermann, 1993), revealed a significant positive shift in attitudes toward persons with disabilities after attending a one day rehabilitation conference.

Haney and Rabin (1984) attempted to modify attitudes of physical therapy students toward persons with disabilities through a contact-plus-information experience. A significant improvement in attitudes of the students was measured following the intervention. Senior nursing students shown a 17-minute video of a successfully rehabilitated person with quadriplegia displayed significantly altered attitudes in a positive direction

after viewing and discussing the tape (Sadlick & Penta, 1975).

Measurement of Attitudes

Inconsistent research findings can be attributed to conceptual and methodological differences and difficulties. Univariate approaches, which fail to address the multifaceted nature of attitudes, have frequently been used. The Attitude Toward Disabled Persons (ATDP) scale, which was developed in the 1960s by Yuker, Block, and Campbell, has been the most extensively used measurement tool in attitude toward disability research (Antonak & Livneh, 1988; Furnham & Pendred, 1983; Gething, 1986).

Measurement Tools

Attitudes Toward Disabled Persons Scale. The ATDP has been criticized for its unidemensional structure (Furnham & Pendred, 1983), unequal balance between positively and negatively worded statements, poor discriminating ability in some items and limited differential capacity (Paris, 1993). Antonak (1980) investigated the reliability and validity of the ADTP scale focusing upon three psychometric properties associated with it. These include: item characteristic, scale reliability, and factorial structure. A sample of 326 undergraduate university students were administered the ATDP (Form O). Findings of this research did not support continued use of this version of the ATDP due to the need for modification of some items on the scale and weakness in the psychometric analysis.

Another shortcoming of the ATDP is the claim by some that the

responses can be faked due to the presence of "transparent" statements in which the socially desirable answer is obvious or appears obvious. Subjects may be tempted to fake their responses (Speakman, Tembo, & Hendry, 1994). A study by Vargo and Semple (1984) examined the extent to which ATDP could be faked with second year physical therapy students. Students were divided into two groups with Group 1 receiving the ADTP (Form A) and instructed to answer honestly. Group 2 were given the same form but were told to answer with the most favorable attitude possible. Results revealed responses were significantly more favorable under the "fake" condition, meaning the physical therapy students were able to "fake well" on the ATDP-A. Similar research was conducted on 33 rehabilitation counseling graduate students by Cannon and Szuhay (1986) using ATDP (Form B). Findings from this study showed significant differences between honest and faked ATDP scores, supporting the assumption that scores on the ATDP could be faked. Yuker (1986), the creator of the ADTP, acknowledges these findings but claims faking "may well depend more on the conditions under which the instrument is administered and the uses to which the results are put than to potential faking of the measure" (p. 203). He adds that the ATDP should be used primarily for research purposes where subjects have little motivation to fake their answers and not be used as a selection device for entrance to health care or rehabilitation professional education programs.

Significant social changes have also occurred since the original

publication of the ATDP scale which may have affected the reliability and validity of its' measurement. Attitudes toward persons with disabilities have most likely been influenced by legislation and programs intended to decrease discrimination against persons with disabilities, including mainstreaming of children and adults with disabilities in schools and society. Elimination of environmental barriers for persons with disabilities has allowed visible entry and integration to occur (Antonak, 1980).

Measurement of attitudes of health care professionals has overwhelmingly been conducted using the ATDP scale. Although questions concerning it's applicability for contemporary societal views of persons with disabilities have been widely recognized, it continues to be frequently used in recent research. However, based on the conceptualization of attitudes as complex, multidimensional, cognitive, affective, and behavioral phenomena, new scales are being developed, such as the Interaction with Disabled Persons (IDP) Scale (Gething, 1991b).

Interaction with Disabled Persons Scale. According to Gething (1992b), the IDP Scale is "designed to measure emotions, motivation, and reactions which underlie negative attitudes associated with discomfort that some people experience in actual or anticipated social interaction with a person with a disability" (p. 26) rather than focusing upon perceived differences as the ATDP does (Gething, 1993). The theory upon which the scale is based is that negative attitudes originate from the uncertainty or

anxiety created by perceptions of persons as being strange or unfamiliar.

The IDP Scale consists of 20 items and uses a response format that requires respondents to indicate their level of agreement/disagreement with each item using a six-point scale with no neutral point. The range of possible scores is 20 to 120: a higher score indicates a more negative attitude.

Test- retest reliability measures of the IDP Scale range between +.51 for a one year period to +.82 over a two week period. Internal consistency, using Cronbach's coefficient alpha, ranges between +.74 and +.86 (Gething, 1992b). According to Nunnally (cited by Mishel, 1989), for a new scale, the criterion level for coefficient alpha should be approximately .70 or greater. Construct validity of the scale revealed that level of prior contact with persons having disabilities is closely associated with positive responding (Gething, 1992b).

The IDP Scale has been used to measure attitudes of various health care professionals, educators, employment groups, school children, and attitudes of the general public. Gething (1993) compared attitudes of the general public with those of physiotherapists toward persons with disabilities using the IDP Scale. Results revealed mean scores of 64.14 and 58.66 respectively indicating physiotherapists displayed more positive attitudes. Another study by Gething (1992b) compared the mean IDP scores of student nurses (64.34) and education students (72.82), as well as nurse practitioners (62.32) and those of a normative sample (64.14). These results

dispute findings from previous attitude research that claim attitudes of health professionals are negative toward persons with disabilities.

Limitations in Existing Research

Limitations of existing research on attitudes of health care professionals include: absence of a theoretical or conceptual framework, poor description of attitude change efforts utilized to promote positive shifts in attitudes, lack of standardized definitions and attitude stimuli, and problematic measurement approaches (Chubon, 1982). Other shortcomings identified by Furnham and Pendred (1983) are: unrepresentative samples, unidemensional measurement of multidimensional attitudes, response bias factors such as social desirability, and ambiguity of the attitude object (the person with a disability) which may result in a stereotypical response instead of measurement of the actual attitude.

Future Research Strategies

Use of a current, multidimensional, improved measurement method such as the IDP Scale may assist researchers to determine the attitude status of health professionals. Although the IDP Scale has been available for use since 1991, publications of it's use to date have primarily been those by Gething (1991a; 1992b; 1993), although research using the IDP Scale is presently being conducted in countries such as Canada. A review of current research of measurement of attitudes toward persons with disabilities reveals the ATDP continues to be widely used as a measurement tool (Kramer,

1994; Lee-Chan, 1992; Lindgren & Oermann, 1993; Lyons, 1991; Oermann & Lindgren, 1995; Saravanabhavan, 1994; Smith, 1993; Voyatzakis, 1995).

Continued research of attitudes of health care professionals toward persons with disabilities must include use of a reliable and valid measurement tool, such as the IDP Scale, which encompasses the multidimensional aspects of attitudes. Sound methods based on theoretical or conceptual frameworks will enhance internal validity of these studies. Longitudinal studies of health care professionals beginning at the onset of professional training and extending several years over the individuals' careers would clarify if changes in attitudes occur over time (Chubon, 1982).

Expanding the target sample beyond the institutional setting will decrease the impact of group norms, institutional norms, and authority figures on the attitudes of health professionals. This will also assist in enhancing the generaliziability of the findings. Changing health care trends have created a shift toward rehabilitation in a community setting resulting in clients spending less time in institutions. Community-based rehabilitation which serves some individuals across the life span, including persons with disabilities, is expanding to accommodate new approaches to health care and rehabilitation (Hoeman, 1992). It is hoped that an increased number of persons with disabilities participating in community rehabilitation programs, as opposed to within an institutional setting, may result in increased awareness and more positive community attitudes. Further research is

needed to determine the effect of community-based rehabilitation on attitudes toward persons with disabilities.

Education

Awareness of health professionals' attitudes and those of students in health professions toward persons with disabilities allows for examination and possible intervention through the use of educational and information strategies.

One such strategy is the Disability Awareness Package, developed by Gething, for training rehabilitation and service delivery professionals (Gething, 1994). The purpose of the Disability Awareness Package is to provide increased accuracy of information about, and promote positive attitude change towards persons with disabilities. It's underlying philosophy is to regard persons with disabilities as individuals first, and disabled second. The package consists of two manuals that contain information about life with a disability as well as a videotape depicting interactions between people with and without a disability. A range of contexts are presented including a job interview, the workplace, and service delivery situations. Each of these interactions leaves unresolved issues which the viewers must discuss (Gething).

The effectiveness of the Disability Awareness Package is supported by a study by Gething (1994) in which the Package was used in seven two-day workshops with rehabilitation and service delivery professionals. Attitudes of

participants were measured before and after the workshops, with results indicating that significant positive changes in attitudes and knowledge occurred.

Conclusion

Persons with disabilities are often regarded as "damaged goods", for disability is seen as a deviation from an absolute norm (Phillips, 1990). However, many persons with disabilities regard themselves as normal, healthy individuals who participate in life as others do. Until others, including health care professionals, adopt this attitude, persons with disabilities will be "suspended between the sick role and normality, between right bodies and wrong bodies" (Phillips, p.851).

Attitudes of health care professionals have a profound impact upon the self-perception of persons with disabilities. "The view people have of themselves is largely the reflection they see in others' eyes" (Oermann & Lindgren, 1995, p. 6). Health care professionals must be aware of and understand the influence their attitudes have upon clients' rehabilitation potential and goals. In order to provide optimal care in a positive, trusting environment, health care professionals must overcome their own attitudinal barriers. Accurate measurement of attitudes before entering health professions allows for identification of the need to implement educational programs such as the Disability Awareness Package in curricula. Greater understanding of attitudes benefits health care professionals, the general

public, and most importantly, persons with disabilities.

References

Antonak, R. (1980). Psychometric analysis of the Attitude Toward Disabled Persons Scale, form O. Rehabilitation Counseling Bulletin, 23, 169-177.

Antonak, R., & Livneh, H. (1988). The measurement of attitudes toward people with disabilities: Methods, psychometrics, and scales. Springfield, IL: Charles C. Thomas.

Benham, P. (1988). Attitudes of occupational therapy personnel toward persons with disabilities. The American Journal of Occupational Therapy, 42, 305-311.

Brillhart, B., Jay, H., & Wyers, M. (1990). Attitudes toward people with disabilities. Rehabilitation Nursing, 15, 80-82.

Cannon, B., & Szuhay, J. (1986). Faking can elevate scores on the Attitudes Toward Disabled Persons Scale. Rehabilitation Counseling Bulletin, 30, 120-123.

Chubon, R. (1982). An analysis of research dealing with the attitudes of professionals toward disability. Journal of Rehabilitation, 48, 25-29.

Felton, G. (1975). Changes in attitudes toward disabled persons among allied health paraprofessional trainees in an interdisciplinary setting. Perceptual and Motor Skills, 40, 118.

Florian, V. (1982). Cross-cultural differences in attitudes towards disabled persons: A study of Jewish and Arab youth in Israel. International

Journal of Intercultural Relationships, 6, 291-299.

Furnham, A., & Pendred, J. (1983). Attitudes towards the mentally and physically disabled. British Journal of Medical Psychology, 56, 179-187.

Geskie, M., & Salasek, F. (1988). Attitudes of health care personnel toward persons with disabilities. In H. E. Yuker (Ed.), Attitudes toward persons with disabilities (pp. 187-200). New York: Springer.

Gething, L. (1986). International year of disabled persons in Australia: Attitudes and integration. Rehabilitation Literature, 473, 67-70.

Gething, L. (1991a). Generality vs. specificity of attitudes towards people with disabilities. British Journal of Medical Psychology, 64, 55-64.

Gething, L. (1991b). Interaction with Disabled Persons Scale (IDP). Sydney: University of Sydney.

Gething, L. (1992a). Judgements by health professionals of personal characteristics of people with a visible disability. Social Science and Medicine, 34, 809-815.

Gething, L. (1992b). Nurse practitioners' and students' attitudes towards people with disabilities. The Australian Journal of Advanced Nursing, 9, 25-30.

Gething, L. (1993). Attitudes toward people with disabilities of physiotherapists and members of the general population. Australian Physiotherapy, 39, 291-296.

Gething, L. (1994). The Disability Awareness Package for training rehabilitation and service delivery professionals. Rehabilitation Education, 7, 241-251.

Haney, M., & Rabin, B. (1984). Modifying attitudes toward disabled persons while resocializing spinal cord injured patients. Archives of physical and Medical Rehabilitation, 65, 431-436.

Hoeman, S. (1992). Community-based rehabilitation. Holistic Nursing Practice, 6, 32-41.

Janicki, M. (1970). Attitudes of health professionals toward twelve disabilities. Perceptual and Motor Skills, 3, 77-78.

Kramer, S. (1994). An analysis of male and female occupational therapy students' scores on the Attitude Toward Disabled Persons Scale. Dissertation Abstracts International: 1356897.

Lee-Chan, T. (1992). Attitudes toward disabled people. Unpublished master's thesis, University of Alberta, Edmonton, Alberta, Canada.

Lindgren, C. L., & Oermann, M. H. (1993). Effects of an educational intervention on students' attitudes toward the disabled. Journal of Nursing Education,32, 121-126.

Livneh, H. (1988). A dimensional perspective on the origin of negative attitudes toward persons with disabilities. In H. E. Yuker (Ed.), Attitudes toward persons with disabilities (pp. 35-46). New York: Springer.

Lyons, M. (1991). Enabling or disabling? Students' attitudes toward persons with disabilities. American Journal of Occupational Therapy, 45, 311-6.

Miller, A. (1979). Nurses' attitudes towards their patients. Nursing Times, 7, 1929-1933.

Mishel, M. (1989). Methodological studies: Instrument development. In P. J. Brink & M. J. Wood (Eds.), Design in nursing research (pp. 238-284). London: Sage.

Moss, A. (1988). Determinants of patient care: Nursing process or nursing attitudes? Journal of Advanced Nursing, 13, 615-620.

Muhlenkamp, A. (1971). Attitudes of nursing students toward eight major disabilities. Psychological Reports, 29, 973-974.

Murray, M., & Chambers, M. (1991). Effect of contact on nursing students' attitudes to patients. Nurse Education Today, 11, 363-7.

Oermann, M., & Lindgren, C. (1995). An educational program's effects on students' attitudes toward people with disabilities: A 1-year follow-up. Rehabilitation Nursing, 20, 6-10.

Paris, M. (1993). Attitudes of medical students and health-care professionals toward people with disabilities. Archives of Physical Medical Rehabilitation, 74, 818-825.

Phillips, M. (1990). Damaged goods: Oral narratives of the experience of disability in American Culture. Social Science and Medicine, 30, 849-857.

Richardson, H., & Guralnik, M. (1978). Pediatric residents and young handicapped children: Curriculum Evaluation. Journal of Medical Education, 53, 487-492.

Roush, S. (1986). Health professionals as contributors to attitudes toward persons with disabilities. Physical Therapy, 66, 1551-1554.

Ryan, J. (1992). The relationship of selected variables on attitudes of vocational rehabilitation counselors as measured by the Attitudes Toward Disabled Persons Scale. Dissertation Abstracts International: 9205157.

Sadlick, M., & Penta, F. (1975). Changing nurse attitudes toward quadriplegics through use of television. Rehabilitation Literature, 36, 274-78.

Saravanabhavan, S. (1994). A model for assessing attitudes toward individuals with disabilities in India. Dissertation Abstracts International: 9424734.

Smith, N. (1993). Attitudes of rehabilitation counselors toward persons with hidden and visible disabilities. Dissertation Abstracts International: 9304275.

Speakman, H., Tembo, A., & Hendry, S. (1994). Honest and faked responses on the Attitudes Toward Disabled Persons Scale--Form A. Central African Journal of Medicine, 40, 66-70. Abstract from CINAHL Item: 95007746.

Tranock, S. (1991). Attitudes of baccalaureate nursing students and faculty toward persons with physical disabilities. Dissertation Abstracts International: 9112121.

Vargo, J., & Semple, J. (1984). Honest versus fake scores on the Attitudes Toward Disabled Persons Scale--Form A. Rehabilitation Counseling Bulletin, 27, 182-185.

Vargo, J. (1989). "In the house of my friend": Dealing with disability. International Journal for the Advancement of Counseling, 12, 281-287.

Vovatzakis, M. (1995). Attitudes of undergraduate university students toward people with disabilities. Dissertation Abstracts International: MM94400.

Wright, B. (1988). Attitudes and the fundamental negative bias: Conditions and corrections. In H. E. Yuker (Ed.). Attitudes toward persons with disabilities (pp. 3-21). New York: Springer.

Yuker, H. (1986). The Attitudes Toward Disabled Persons Scale: Susceptibility to faking. Rehabilitation Counseling Bulletin, 29, 200-204.

CHAPTER 3

Attitudes of Rehabilitation Nursing Staff Toward Persons with Disabilities

by

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CHAPTER 3

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Attitudes of others are recognized as being a major influence on the behavior of persons with disabilities and their ability to live successfully with their disabilities. It is thought that attitudes of health professionals who work with individuals with disabilities may affect optimal rehabilitation and response to treatment (Biordi & Oermann, 1993; Chubon, 1982; Gething, 1992a). Since health professionals, particularly nursing staff, often become significant others to persons with disabilities, their attitudes may influence how clients feel about themselves, ultimately affecting progress and adjustment (Biordi & Oermann; Brillhart, Jay, & Wyers, 1990; Schneider & Anderson, 1990). Suboptimal attitudes of health care professionals may impair rehabilitation by limiting available life options and undermining an individual's personal identity, self-confidence, and independence (Sadlick & Penta, 1975; Wright, 1988). Chubon (1982) refers to such attitudes as invisible barriers to rehabilitation.

Given this, it is important to be aware of the attitudes of nursing staff employed in rehabilitation settings. The purpose of this paper is to present the findings of a study in which the attitudes of rehabilitation nursing staff working with persons with disabilities were examined.

Literature Review

Attitudes

Attitudes have been referred to as abstract constructs that are not directly observable or measurable (Antonak & Livneh, 1988). They are multidimensional, complex, and assist us in being comfortable with and in making sense of the world. Attitudes are learned through personal and social processes, acting as mediating influences on an individual's behavioral response to an environmental stimulus (Gething, 1991).

Attitudes Toward Persons with Disabilities

Attitudes toward persons with disabilities are complex and mixed (Gething, 1993; Livneh, 1988; Vargo, 1989). Highly industrialized countries have been found to view persons with disabilities more positively than less industrialized ones (Vargo). Earlier research has supported the influence of demographic variables associated with attitudes including age, where attitudes are more favorable at late childhood and adulthood; socioeconomic status, in which higher income groups held more positive attitudes than those in lower income groups; and educational level, where there is a positive correlation between level of education and more favorable attitudes (Livneh, 1982). However, more recent studies have not supported the influence of the demographic variables of age and level of education (Gething, 1993).

Sources of negative attitudes include social and cultural norms, which

emphasize the "body beautiful" (Mitchell, Zhou, Lu, & Watts, 1993; Livneh, 1982); childhood influences; the Bible, where disabilities are regarded as a punishment for sins (Livneh; Roush, 1986; Vargo, 1989); and media and literature portrayal of persons with disabilities characterized as either evil or virtuous (Livneh; Mitchell, et al.; Vargo). Mistaken or incorrect information also contributes to the actualization of negative attitudes.

Psychodynamic mechanisms such as the "spread phenomenon", that is the human tendency to draw inferences about an individual based upon a single, prominent characteristic is one of the most harmful attitudes toward persons with disabilities. A negative evaluation of a disabled individual is then spread to other aspects of the person such as health and emotional maturity (Gething, 1991; Livneh, 1982; Wright, 1974). This creates devaluing stereotypes of persons with disabilities, leading to isolation, differential expectations, and differential treatment.

Negative attitudes toward persons with disabilities have been linked to a variety of feelings. These include fear of the unknown, threat to security, fear of becoming disabled, guilt, and aversion, (Gething, 1984; Livneh, 1982). As well, feelings and beliefs may be expressed in ways that indirectly belie the owner's true emotions. Revulsion, for example, may be expressed as concern or pity towards the disabled person (Monbeck, 1973).

Gething (1991) notes that a negative or nonaccepting attitude toward a person with a disability is associated with a view of that individual as

being separate or different, implying deficiency or inferiority. Perceived differences between the abled and disabled may arouse feelings of uncomfortable anxiety in nondisabled persons. This concept of discomfort in social interaction as an underlying factor of negative attitudes is supported by other researchers (Evans, 1976; Livneh, 1982). Gething (1991) states "nondisabled people with nonaccepting attitudes are not sure of what to expect or how to behave" (p. 5) when in social interaction with an individual who is disabled. Unease is then sensed by the person with a disability who in turn becomes tense, inhibiting interaction between the two individuals (Bell, 1986; Horton, 1992; Nelson, 1990).

Attitudes of Health Professionals

Nurses and other health professionals are held accountable by several authors as contributors of disabling myths about particular groups to the public (Moss, 1988; Roush, 1986; Sadlick & Penta, 1975; Wright, 1988). Furthermore, nurses act as role models and coaches in perpetuating attitudes of new staff members and students (Bell, 1986; DeTornyay, 1984; Miller, 1979; Moss). Studies show that nursing students enter the profession with person-oriented attitudes but in time adopt the task-oriented attitudes of the clinical setting in which they are employed (Brillhart et al., 1990; Gething, 1992a; Miller).

Research pertaining to attitudes of nurses and other health care professionals toward persons with disabilities has been extensive. Results of

the research indicate that attitudes have been found to be both positive and negative. A 1990 study of nurses (students, faculty, graduating, and registered) and persons with disabilities revealed that nursing faculty displayed the most negative attitudes toward those with disabilities while registered nurses had the most positive attitudes (Brillhart, Jay, & Wyers). The individuals who were disabled had the most positive attitudes of the entire sample. Gething, LaCour, & Wheeler (1994) investigated attitudes of nurses and nursing home administrators and found the administrators had more positive attitudes toward persons with disabilities than did the nurses. Gething's studies that measured attitudes of student nurses, nurse practitioners (1992b), and physiotherapists (1993), toward persons with disabilities revealed these professionals displayed more positive attitudes when compared to those of the general public.

A study of nurses' attitudes working with patients with head injuries revealed only slightly positive attitudes (Bell, 1986) while Nievaard (1987) found that if the relationship between the physicians' and nurses was problematic, the patients were viewed more negatively by the nurses. Biordi and Oermann (1993) found that student nurses who had prior work experience with persons with disabilities displayed more positive attitudes. Gething's (1992a) study of 636 training and practicing health professionals' responses toward persons with disabilities revealed devaluing judgements regarding social and psychological adjustment toward people in wheelchairs.

Attitude Measurement

Inconsistent research findings can be attributed to conceptual and methodological differences and difficulties. Univariate approaches, which fail to address the multifaceted nature of attitudes, have frequently been used. Yuker's Attitude Toward Disabled Persons (ATDP) scale which was developed in the 1960s has been the most extensively used measurement tool in attitude toward disability research (Furnham & Pendred, 1983; Gething, 1986). The ADTP scale has been criticized, however, for its unidimensional structure (Furnham & Pendred), unequal balance between positively and negatively worded statements, poor discriminating ability in some items (Paris, 1993), and limited differential capacity (Florian, 1982; Paris).

Over the years attitude measurement has changed, becoming more multidimensional in nature in order to capture the multidimensional aspects of attitudes (Antonak & Livneh, 1988). In addition, some items on the older scales are no longer pertinent or meaningful for contemporary societal views of persons with disabilities.

Summary

The findings of several studies suggest that attitudes of nurses and other health care professionals toward persons with disabilities have been both positive and negative. Since rehabilitation is complex process through which a person with an injury or disability adapts to his/her limitations and

achieves self-sufficiency or independence, those caring for these individuals must view each person as a unique individual with strengths and capabilities (Nelson, 1990). Attitudes of nurses and other health professionals in the rehabilitation environment may profoundly affect outcomes and integration of persons with disabilities.

In light of modern societal trends in Western culture toward tolerance of differences and diversity (Florian, 1982), it is conceivable that attitudes of nurses and other health professionals are changing. On the other hand, economic restraints which have led to financial cutbacks, increased workloads, and stress among staff, may present new conditions which foster negative attitudes. In order to determine the attitude status of health professionals, improved measurement methods must be utilized which are multidimensional, current, and open to a balance of positive and negative responses.

Purpose of the Study

The purpose of this study was to measure attitudes of rehabilitation nursing staff toward persons with disabilities, using the IDP Scale. A secondary purpose was to add to the international data bank being collected by Gething for the IDP measurement tool. The research questions for this study were:

i) What are the attitudes of rehabilitation nursing staff toward persons with disabilities?

ii) Are there any associations between the demographic variables of age, years of education, years of rehabilitation and other nursing experience, shift worked most frequently, type of work (full-time, part-time, casual), whether a specific disability was considered when completing the IDP questionnaire, and amount of personal contact with persons with disabilities other than at work, and attitude scores as measured by the IDP Scale?

Method

Measurement Tools

Interaction with Disabled Persons Scale (IDP). The IDP Scale was used in this research to measure attitudes of rehabilitation nursing staff toward persons with disabilities. The IDP Scale was chosen due to the limitations of existing attitude measurement tools. This scale was designed to measure discomfort of individuals when in actual or anticipated social interaction with persons with disabilities. It is intended to target emotions, reactions, and motivations that underlie negative attitudes (see Appendix A).

The IDP Scale consists of 20 items and uses a response format that requires respondents to indicate their level of agreement/disagreement with each item using a six-point scale with no neutral point. Test-retest reliability measures of the IDP range between +.51 for a one year period to +.82 over a two week period. Internal consistency, using Cronbach's coefficient alpha, ranges between +.74 and +.86. According to Nunnally (cited by Mishel, 1989), for a new scale, the criterion level for coefficient alpha should

be approximately .70 or greater. Construct validity of the scale revealed that level of prior contact with persons having disabilities is closely associated with positive responding (Gething, 1992b).

Demographic Questionnaire. Demographic information was obtained through a brief questionnaire created by the researcher (see Appendix B). Characteristics of the nursing staff that were considered in relation to their attitudes include the following: age, years of education, years of rehabilitation nursing experience, years of other nursing experience, shift most frequently worked, type of work (full-time, part-time, or casual), whether or not they completed the questionnaire with a specific disability in mind, and amount of personal contact with persons with disabilities other than at the work.

The decision to include these variables resulted from inconsistent findings in the literature. Some research has shown that a higher level of education yields more positive attitudes toward persons with disabilities (Livneh, 1982). As well, attitudes have been found to be more positive during young and middle adulthood and less positive as one becomes older (Geskie & Salasek, 1988). In terms of length of nursing experience with persons with disabilities, it was found that as nurses became acculturated to the nursing unit over time, their attitudes became more negative in deference to the norms of the work environment (Miller, 1979). Nursing staff working varying shifts and hours would range from having frequent to minimal

interaction with patients with disabilities resulting in possible differences in attitudes. Research concerning generality or specificity of attitudes toward persons with disabilities has yielded inconsistent results, therefore the question of whether the nursing staff had a specific disability in mind when completing the IDP was included. Since persons who have experienced regular close personal contact with persons with disabilities have been found to hold more positive attitudes (Gething, 1991), this variable was also examined.

Sample

The convenience sample surveyed consisted of nursing staff employed in a 208 bed Western Canadian rehabilitation facility that serves patients from a large geographical area in central and northern Alberta. The center cares for patients recovering from a variety of conditions, some of which are cerebral vascular accidents (CVA), spinal cord injuries (SCI), musculoskeletal problems, burns, amputations, and brain injury. Geriatric programs offered include cognitive impairment, psychiatry, and assessment and rehabilitation. In addition, there are some in-patient pediatric patients. Members of the community participate in one of several adult and pediatric day programs such as the cardiac rehabilitation program, Tourette Syndrome clinic, and a school hospital.

Registered nurses (RN) and licensed practical nurses (LPN) employed on four adult nursing units were invited to participate in the study. These

nursing units provide care for adult patients recovering from CVA's, SCI, neurological disorders, musculoskeletal problems, rheumatoid arthritis, burns, amputation, and brain injury. Nursing unit managers and clinical nurse specialists were also included due to their frequent contact with patients and families. Criteria for inclusion were: (a) employed as an RN or LPN within the chosen facility; (b) delivering nursing care to adults within this facility.

Procedure

Approval for access to the facility was obtained through the required channels and ethical procedures. Information about the study was placed in the weekly staff newsletter with the intent of enhancing response rates. A brief letter explaining the study, the IDP questionnaire, the demographic questionnaire, and an addressed return envelope was sent through hospital mail to 88 RN's and 71 LPN's. The questionnaires were not individually marked or coded in any way in order to protect the identity of individuals. Participants were encouraged to contact the researcher by telephone with any questions or concerns.

Data Analysis

Data analysis began with scoring of the IDP questionnaires using the guide provided in the IDP manual (Gething, 1991) with the range of possible scores being 20 to 120: a higher score indicating a more negative attitude. Five questionnaires (4 RN and 1 LPN) which were missing no more than two answers were addressed to enable their inclusion in the study. Completed

questionnaires with similar IDP scores were grouped with the five incomplete questionnaires. Average scores of the missing questions were taken from the group of similar subjects and applied to the missing questions of the incomplete group. Measures of central tendency were then applied to the RN and LPN IDP scores.

The SPSS computer program was used to complete the analysis of this data. To compare the IDP scores of the RN and LPN groups, a t-test for independent groups was conducted. Analysis of demographic data began with a cluster analysis to determine categories for the variables of age, years of rehabilitation nursing experience, and years of other nursing experience. The categories included: age (24-39) (39-54) (55-72), years of rehabilitation nursing experience (0-15) (16-32), and years of other nursing experience (0-15) (16-32).

One-way analysis of variance (ANOVA) was applied to both RN and LPN groups to examine whether the independent variables of age, years of rehabilitation nursing experience, other nursing experience, shift worked most frequently, employment status, whether a specific disability was considered when completing the IDP, and amount of contact with persons with disabilities other than at work had an effect upon the dependent variable, IDP scores.

Due to the extremely small sample size of the LPN group, analysis of interactions between variables was not possible. However, the RN sample

size was sufficient to allow examination of variable interactions upon IDP scores using two-way ANOVA. A total of eighteen interaction combinations were conducted using the demographic variables (ie. age X disability).

Findings

Description of the Sample

In total, 52 completed questionnaires were returned with a response rate from RN's being 43 (48.9%) and from LPN's, 9 (12.7%). Due to the small representation of males within the sample and the possibility of revealing identity, a gender variable was not included in the demographic questionnaire. The age range of the RN group was from 24 to 63 years while the LPN age group range was 34 to 66 years. The largest number of total respondents were between the ages 39 to 54 (see Table 1).

Table 1

Age in Years of Respondents

Age in Years	RN	LPN
24-38	30.2%	11.1%
39-54	51.1%	77.7%
55-72	18.6%	11.1%

Demographic Variables

Nearly two-thirds (74.4%) of the RN's had from 0 to 15 years of rehabilitation nursing experience while just over half (55.5%) of the LPN's were in this category (see Table 2). Of the RN group, 21% (9) had no nursing experience other than rehabilitation with the range being 0 to 32 years. One respondent from the LPN group had no other nursing experience (range 0 to 23 years). The number of respondents working day shift (RN=44.4%, LPN=44.4%) and evening (RN=41.8%, LPN=44.4%) shift were quite even for both groups, but considerably fewer responses came from those working night shift (RN=13.9%, LPN=11.1%). Employment status of RN's was quite evenly distributed with 17 (39.5%) full-time, 14 (32.5%) part-time, and 12 (27.9%) casual. Three (33.3%) LPN's worked

full-time, 5 (55.5%) part-time, and 1 (11.1%) casual.

Thirty percent (13) of RN respondents considered a specific disability when completing the IDP questionnaire. The type of disability in mind varied with persons with spinal cord injuries the most frequently stated. Other disabilities mentioned were persons with cerebral vascular accidents, cerebral palsy, severe burns, brain injury, rheumatoid arthritis, and wheelchair dependent. Four of the LPN respondents (44%) considered specific disabilities including brain injury, cerebral vascular accident, and rheumatoid arthritis. It is interesting to note that all the disabilities mentioned by the participants are those most commonly seen in this study site. Conditions such as visual impairment which is often regarded as a severe disability (Augusto & McGraw, 1990) was not considered when completing the questionnaire.

Table 2

Demographics of Sample

Years Rehab. Experience	RN	LPN
0-15	74.4%	55.5%
16-30	25.6%	44.4%
Years Other Nursing Experience		
0-15	72%	88.9%
16-32	27.9%	11.1%
Shift		
Days	44.1%	44.4%
Evenings	41.8%	44.4%
Nights	13.9%	11.1%
Status		
Full-time	39.5%	33.3%
Part-time	32.6%	55.6%
Casual	27.9%	11.1%
Specific Disability Considered?		
Yes	30%	44%
No	70%	56%

IDP Scores.

The mean IDP score of the RN group was 58.7 (range 38 to 83) and mean LPN IDP score was 56.8 (range 43 to 76) as indicated in Table 3. A t-test to compare mean IDP scores of the RN and LPN groups did not reveal a significant difference ($df = 11.4$, $p = .66$). The distribution of scores are presented in Figures 1 and 2. One outlier of the RN group had an IDP score of 83. Examination of this respondent's questionnaires revealed an individual with a combination of twenty-five years of nursing experience (10 rehabilitation and 15 other) who was presently working evening shift on a casual basis. A specific disability was not considered when completing the IDP questionnaire and weekly contact was made with persons with disabilities other than at work.

Table 3

Measures of Central Tendency for IDP Scores of RN's and LPN's

Measure	RN	LPN
Mean	58.7	56.8
Mode	64	43
Median	59	55
Standard Deviation	10.68	10.97
Range of scores	38-83	43-76

Figure 1

RN IDP Scores

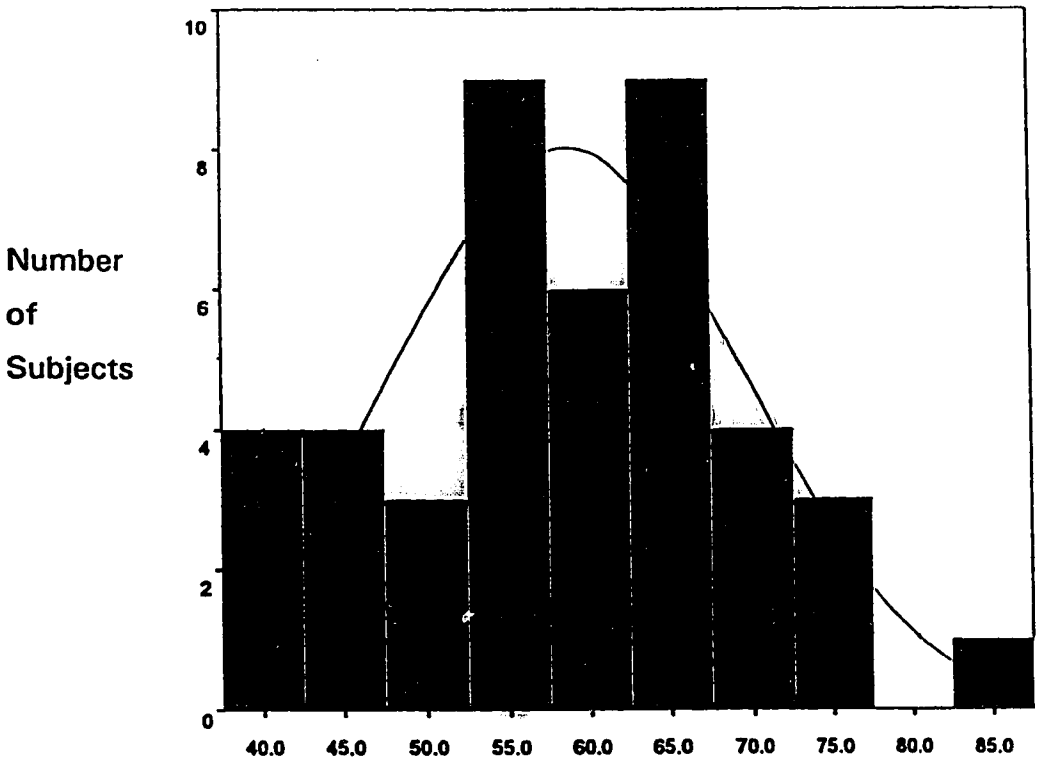
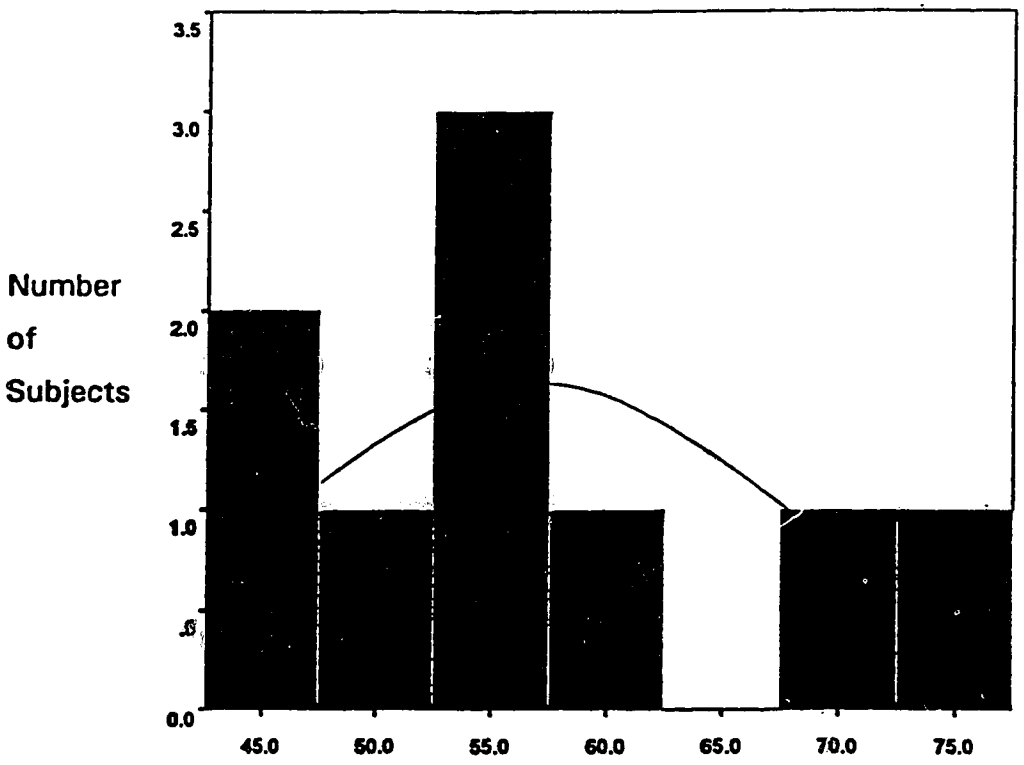


Figure 2

LPN IDP Scores



The lowest mean IDP score (54.9) of the RN group was from the 25.58% who had weekly contact with persons with disabilities other than at work. The highest mean IDP score (62.1) was from the 20.9% who had contact less than every three months outside of work. Interestingly, those who had daily contact with persons with disabilities (20.9%) had a somewhat higher mean IDP score of 57.6. RN's with contact once a month (18.6%) displayed a mean score of 54.9 and those with contact once every three months (13.9%) had a mean score of 61.3 (see Table 4).

Table 4

Contact and Mean IDP Scores

	RN	M IDP	LPN	M IDP
Daily	20.9%	57.6	22.2%	61.5
Weekly	25.6%	54.9	44.4%	52.2
Once a month	18.6%	59.3	11.1%	54
Once every three months	13.9%	61.3	0.0%	N/A
Less than every three months	20.9	62.1	22.2%	63

Consistent with these findings was the lowest mean IDP score (52.25) from the LPN group (44.4%) who had contact with persons with disabilities on a weekly basis. The highest mean LPN score (IDP = 63) was from those who had contact less than every three months (22.2%) and the mean IDP score of LPN's who had daily contact (22.2%) was 61.5.

The ANOVA test that was applied to each demographic variable (age, years of rehabilitation and other nursing experience, shift most frequently worked, type of work, whether or not a specific disability was considered when completing the IDP questionnaire, and amount of personal contact with persons with disabilities other than at work) showed that none of these variables had an effect upon RN IDP scores. Marginally significant results were shown for the LPN variables of shift ($p = .082$) and employment status ($p = .069$) but further analysis was considered inappropriate due to the small sample size of this group and the possibility of this finding being spurious (see Table 5).

The two-way ANOVA test to determine interaction effects for RN IDP scores showed a significant finding with the variables of RN's who considered a specific disability when completing the questionnaire and who had 16 to 32 years of other nursing experience ($df = 1$, $p = .042$). This group also had the highest mean IDP score (64.75) of the entire RN sample group. However, these findings must be treated cautiously in that only 4 (9.3%) of the respondents met these criteria.

Table 5

Analysis of Variance for Demographic Variables on IDP Scores

RN	df	F	Sig of F
Age	2	1.45	.247
Years Rehabilitation Experience	1	.054	.818
Years Other Nursing Experience	1	.398	.593
Contact	4	.645	.634
Specific Disability Considered?	1	.547	.464
Shift	2	.001	.999
Status	2	.466	.631
LPN			
Age	2	2.06	.208
Years Rehabilitation Experience	1	2.451	.161
Years Other Nursing Experience	1	.141	.718
Contact	3	.470	.717
Specific Disability Considered?	1	.065	.806
Shift	2	3.916	.082
Status	2	4.309	.069

Discussion

Interaction with Disabled Persons Scores

The results of this research revealed no significant difference between the IDP attitude scores of registered nurses and licensed practical nurses within this rehabilitation facility. However, the mean LPN score (56.8) is slightly lower than the mean RN score (58.7). Although the RN's in this facility are actively involved in patient care, the role of the LPN is primarily "hands-on" patient care. It is encouraging that given this amount of close interaction with patients with disabilities, LPN's maintained a low IDP score, reflecting more positive attitudes. However, the low response rate from the LPN group must also be considered when interpreting this finding.

The one outlier from the RN group with an IDP score of 83 warrants some concern for this would indicate a rather negative attitude in comparison with the other IDP scores. However, it is difficult to interpret this finding for there did not appear to be any visible explanation for the high score upon examination of this individual's questionnaires.

In comparing the RN IDP scores with the mean IDP scores of registered nurses enrolled in a Post-RN baccalaureate program, the rehabilitation nurses' scores were noticeably lower (post-basic RN IDP score = 65.8; rehabilitation RN IDP score = 58.7) (Gething, Vargo, & Day, 1995). The mean RN IDP score from this research is also lower than that of staff nurses employed in a nursing home setting (IDP score = 64.21) in a

study by Gething, LaCour, & Wheeler (1994). In other attitude research by Gething (1992b) the IDP scores of student nurses (64.34) and nurse practitioners (62.32) are both considerably higher than the scores of the rehabilitation nurses in this study. Comparison of the IDP scores of the LPN group were not possible due to lack of available literature regarding measurement of LPN attitudes using the IDP scale.

Rehabilitation Process

In patient care areas such as spinal cord injury where the nurse/patient interaction involves attention to bodily functions such as bowel and bladder, one may wonder if this would produce more negative attitudes. However this does not appear to be evident with these study participants. It is quite likely that the lower RN and LPN IDP scores indicated in this study are associated with the promotion of a holistic rehabilitation philosophy within this facility. Encouraging client independence, emphasizing client capabilities instead of incapabilities, and encompassing the entire rehabilitation team during the rehabilitation process may impact the attitudes of nursing staff. In addition, many of the nursing staff have had the opportunity to complete a Rehabilitation Nursing Course offered through this facility. This course is designed for university credit for RN's and a modified non-credit version is available for LPN's. Availability of such an educational program for nursing staff may contribute to positive attitude acquisition.

Rehabilitation nursing staff are witnesses and participants in the

immense challenges and successes of many of their patients. Discharge outcomes are not taken for granted upon entering a rehabilitation facility for each client has different potentials and capabilities. More often than not, rehabilitation nursing staff see patients progress from nearly total dependency to a state of independence. These achievements are strengthened through assisting patients with goal planning, encouraging participation in self-care, and preparing for discharge with "trial runs" of weekend passes.

Nurses in acute care facilities do not have the opportunity to observe and celebrate the final outcome of patients with disabilities once a transfer to a rehabilitation facility has occurred. Positive attitudes of nursing staff play an integral role in how clients view themselves, their disabilities, potentials, and ultimately their outcomes.

Assumptions can then be made in relation to the finding of the interaction variables of RN's having 16 to 30 years of other nursing experience who considered a specific disability when completing the IDP questionnaire having an effect upon their attitude scores. It could be postulated that these RN's had significant nursing experience in areas other than rehabilitation that did not allow them the opportunity to observe the maximization of potential of patients with disabilities. When entering employment in the rehabilitation field, they may have already had a conceptualization of individuals with disabilities that could have contributed

to higher IDP scores.

Additional Variables

Age. The finding that age had no effect upon IDP scores supports findings from other research (Gething, 1993; Gething, Vargo, & Day, 1995). The fact that years of rehabilitation and other nursing experience had no effect upon scores is also consistent with the findings of Gething, Vargo, & Day. It does not appear that the particular shift worked had an influence upon attitudes of RN's or LPN's. The majority of both groups worked the day or evening shift which would put them in more frequent and direct contact with patients. In addition, whether nursing staff were employed on a full-time, part-time, or casual basis did not have an effect upon the IDP scores. It must be noted that in today's health care area, many part-time and casual nursing staff are working additional shifts, thereby bringing their hours to full-time quota. This reality was not accounted for in the demographic questionnaire.

Specific Disability. Although 30% of RN's and 44% of LPN's had a specific disability in mind when completing the questionnaire, this did not have a significant effect upon their IDP scores. This is consistent with previous research by Gething (1991). As mentioned previously, many of these respondents considered disabilities which appeared to be related to their area of specialization such as spinal cord injury, brian injury, rheumatoid arthritis, or burns.

Contact. Both RN's and LPN's who had weekly contact with persons with disabilities other than at work revealed the lowest IDP scores when compared with other levels of contact associated with this variable. Although some authors believe that the relationship between health care professionals and persons with disabilities is not one of equal status in which both individuals are involved in personal contact on an equal level (Gething, 1993), the finding of lower IDP scores in this research may indicate that the weekly contact outside of the employment setting was not one of a professional nature. Contact in an equal status relationship is voluntary and mutually rewarding by allowing the persons with disabilities the opportunity to express their capabilities (Gething, as cited in French, 1994). Therefore, type, as well as amount of contact with persons with disabilities are important indicators when assessing attitude measurement.

Knowledge of the type of contact would have assisted in interpreting the higher IDP scores of both groups who were in daily contact with a person with a disability other than at work. These findings may be indicative of respondents who had an immediate family member with a disability or were involved in some form of care giver role in the home in conjunction with being employed in a rehabilitation facility. Interestingly, the highest mean IDP scores of RN's and LPN's for the contact variable were those who had contact less than every three months. This may indicate that although rehabilitation nursing staff appear to have quite positive attitudes towards

persons with disabilities, those involved in personal or equal status relationships with these individuals other that at work appear to have more positive attitudes.

Limitations of the Study

Limitations of this study must be acknowledged such as the small sample size of the LPN group. In addition, this research did not allow for examination of the variable of education due to inaccurate wording on the demographic information sheet. The question did not allow the researcher to determine any education level other than whether the respondent was an RN or LPN.

Future Research

Further research is necessary using the IDP Scale with a larger, more diverse sample of RN's and LPN's to allow for comparison of results using this measurement tool. However, the overall lower RN and LPN scores of this sample of rehabilitation nursing staff warrants further investigation of attitudes of nursing staff in other rehabilitation facilities.

Attitude measurement could also be expanded to include other personnel within rehabilitation settings; patients participating in a rehabilitation program are in contact with many different and diverse groups. These may include other health disciplines involved in the multidisciplinary team such as physicians, occupational therapists, physical therapists, social workers, recreational therapists, speech and language therapists,

psychologists, or students. As well, support staff such as housekeeping, maintenance, and dietary, also have some interaction with patients. It is critical that all those in contact and interaction with persons with disabilities foster positive attitudes to promote positive outcomes of rehabilitation.

Since previous research has shown that level of education may influence attitudes, more investigation in this area is warranted in the nursing field. Contact with persons with disabilities other than in the employment setting provided interesting results. Expansion in this area should include type of contact, whether it be personal, volunteer work, care giver, or other interactions that may explain higher or lower IDP scores.

Interestingly, of the five incomplete questionnaires returned by respondents that required adjustments for missing data prior to analysis, four had chosen not to answer the same question, #16. This statement reads "I feel overwhelmed with discomfort about my lack of disability" (see Appendix A). Perhaps further investigation is necessary to determine if the wording of this statement requires modification.

Conclusion

Assumptions from past research on the study of attitudes of health professionals toward persons with disabilities has indicated negativity. However, it is possible that problematic instrumentation of attitude measurement contributed to these conclusions and that attitudes of health professionals are not as negative was once thought. Clearly more recent

studies, particularly those which have utilized the IDP scale, have indicated that attitudes of health professionals toward persons with disabilities are quite positive. The findings of this study provide support for current attitude research outcomes.

With the concern in today's health system for quality of care it is encouraging that the results of this research revealed that this group of rehabilitation nursing staff held quite positive attitudes toward persons with disabilities. It is hoped that this study will benefit the discipline of nursing by providing information that will contribute to the understanding of attitudes influencing the rehabilitation of persons with disabilities. As well, using and testing a new tool such as the IDP scale to measure attitudes of nursing staff will contribute to attitude measurement research. Examination of current attitudes of nursing staff using an updated, improved scale, is a step forward in the optimization of attitudes of nurses and society toward persons with disabilities and enhanced rehabilitative nursing care outcomes for these individuals.

References

Antonak, R., & Livneh, H. (1988). The measurement of attitudes toward people with disabilities: Methods, psychometrics, and scales. Springfield, IL: Charles C. Thomas.

Augusto, C., & McGraw, J. (1990). Humanizing blindness through public education. Journal of Visual Impairment and Blindness, 84, 397-400.

Bell, T. (1986). Nurses' attitudes in caring for the comatose head-injured patient. Journal of Neuroscience Nursing, 18, 279-289.

Biordi, B., & Oermann, M. (1993). The effect of prior experience in a rehabilitation setting on students' attitudes toward the disabled. Rehabilitation Nursing, 18, 95-98.

Brillhart, B., Jay, H., & Wyers, M. (1990). Attitudes toward people with disabilities. Rehabilitation Nursing, 15, 80-82.

Chubon, R. (1982). An analysis of research dealing with the attitudes of professionals toward disability. Journal of Rehabilitation, 48, 25-29.

DeTornyay, R. (1984). Research on the teaching-learning process in nursing education. In H. Werley & J. Fitzpatrick (Eds.). Annual review of nursing research (Vol. 2, pp. 197-200).

Evans, J. (1976). Changing attitudes toward disabled persons: An experimental study. Rehabilitation Counseling Bulletin, 19, 572-579.

Florian, V. (1982). Cross-cultural differences in attitudes towards disabled persons: A study of Jewish and Arab youth in Israel. International Journal of Intercultural Relationships, 6, 291-299.

French, S. (1994). Attitudes of health professionals towards disabled people. Physiotherapy, 80, 687-693.

Furnham, A., & Pendred, J. (1983). Attitudes towards the mentally and physically disabled. British Journal of Medical Psychology, 56, 179-187.

Geskie, M., & Salasek, F. (1988). Attitudes of health care personnel toward persons with disabilities. In H. E. Yuker (Ed.), Attitudes toward persons with disabilities (pp. 187-200). New York: Springer.

Gething, L. (1984). Cumberland's strategy for changing attitudes toward disabled people. Australian Disability Review, 6, 44-52.

Gething, L. (1986). International year of disabled persons in Australia: Attitudes and integration. Rehabilitation Literature, 473, 67-70.

Gething, L (1991). Interaction with Disabled Persons Scale. Sydney: University of Sydney.

Gething, L. (1992a). Judgements by health professionals of personal characteristics of people with a visible disability. Social Science and Medicine, 34, 809-815.

Gething, L. (1992b). Nurse practitioners' and students' attitudes towards people with disabilities. The Australian Journal of Advanced Nursing, 9, 25-30.

Gething, L. (1993). Attitudes toward people with disabilities of physiotherapists and members of the general population. Australian Physiotherapy, 39, 291-296.

Gething, L., LaCour, J., & Wheeler, B. (1994). Attitudes of nursing home administrators and nurses towards people with disabilities. Journal of Rehabilitation, 60, 66-70.

Gething, L., Vargo, J., & Day, R. (1995). [Attitudes of nursing, occupational therapy, and physical therapy students toward persons with disabilities]. Unpublished raw data.

Horton, B. (1992). Back-breaking attitudes. Radiologic Technology, 63, 331-333.

Livneh, H. (1982). On the origins of negative attitudes toward people with disabilities. Rehabilitation Literature, 43, 338-347.

Livneh, H. (1988). A dimensional perspective on the origin of negative attitudes toward persons with disabilities. In H. E. Yuker (Ed.), Attitudes toward persons with disabilities (pp. 35-46). New York: Springer.

Miller, A. (1979). Nurses' attitudes towards their patients. Nursing Times, 75, 1929-1933.

Mishel, M. (1989). Methodological studies: Instrument development. In P. J. Brink & M. J. Wood (Eds.), Design in nursing research (pp. 238-284). London: Sage.

Mitchell, R., Zhou, D., Lu, Y., & Watts, G. (1993). Community-based rehabilitation: Does it change community attitudes towards people with disability? Disability and Rehabilitation, 15, 179-183.

Monbeck, M. (1973). The meaning of blindness. Attitudes toward blindness and blind people. Bloomington, IN: Indiana University Press.

Moss, A. (1988). Determinants of patient care: Nursing process or nursing attitudes? Journal of Advanced Nursing, 13, 615-620.

Nelson, A. (1990). Patients' perspectives of a spinal cord injury unit. Science of Nursing, 7, 44-63.

Nievaard, A. (1987). Communication climate and patient care: Causes and effects of nurses' attitudes to patients. Social Sciences and Medicine, 24, 777-784.

Paris, M. (1993). Attitudes of medical students and health-care professionals toward people with disabilities. Archives of Physical Medical Rehabilitation, 74, 818-825.

Roush, S. (1986). Health professionals as contributors to attitudes toward persons with disabilities. Physical Therapy, 66, 1551-1554.

Sadlick, M., & Penta, F. (1975). Changing nurse attitudes toward quadriplegics through use of television. Rehabilitation Literature, 36, 274-78.

Schneider, C., & Anderson, W. (1990). Attitudes toward the stigmatized: Some insights from recent research. Rehabilitation Counseling Bulletin, 23, 299-313.

Vargo, J. (1989). "In the house of my friend": Dealing with disability. International Journal for the Advancement of Counseling, 12, 281-287.

Wright, B. (1974). Analysis of attitudes--dynamics and effects. The New Outlook for the Blind, 68, 108-118.

Wright, B. (1988). Attitudes and the fundamental negative bias: Conditions and corrections. In H. E. Yuker (Ed.), Attitudes toward persons with disabilities (pp. 3-21). New York: Springer.

Appendix A

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 usually feel.

I disagree very much	I disagree somewhat	I disagree a little				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 disabled person 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 disabled people	6			
			7	I am grateful that I do not have such a burden	7			
			8	I try to act normally and to ignore the disability	8			
			9	I feel uncomfortable and find it hard to relax	9			
			10	I am aware of the problems that disabled people 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 disabled people after I have discussed their disability with them	19			
			20	I dread the thought that I could eventually end up like them	20			

Appendix B

Demographic Information

Instructions: Please complete the following information.

1. Year of birth _____

2. Number of years of Education: _____

   (ie. 12 years school plus 3 years RN training = 15 years)

3. Years of rehabilitation nursing experience: _____

4. Years of other nursing experience: _____

5. Shift worked most frequently? Days ____ Evenings ____ Nights _____

6. Type of work: Full-time _____ Part-time _____ Casual _____

7. Did you have a specific disability in mind when completing this questionnaire?

   Yes _____ No _____

   If yes, please describe the disability _____

8. How often do you have contact with persons with disabilities other that at work?

   daily ( ) weekly ( ) at least once a month ( ) once every three months ( ) less often than once every three months ( )

Appendix C

Information Letter

Research Title: Attitudes of Nursing Staff Toward
Persons with Disabilities

Dear Colleague:

I am a graduate student in nursing at the University of Alberta. I am doing a research project that looks at the attitudes of nursing staff toward persons with disabilities.

If you agree to participate in my study, you will complete the two enclosed questionnaires that will take about 10 minutes to answer. One is a questionnaire on how you feel about persons with disabilities and the other is an information sheet. The questionnaires should be filled out while you are alone. Please try not to talk about the questions with others for I am interested in how you feel. You can leave a question unanswered if you wish.

All of the information will be strictly confidential. Only my supervisor and I will have access to the questionnaires. Please do not write your name on them. I will have no way to match responses with individuals.

The results of the research will be provided to you in the form of an education session inservice. Written reports will also be available on each nursing unit.

Please complete the questionnaires within the next two weeks and return in the enclosed envelope to the Office of Research Services. I appreciate you taking the time to complete the questionnaires. If you have any questions or wish to discuss the questionnaires, please contact me through the Faculty of Nursing at 492-6251. Thank you.

Jean Bellstedt RN

Faculty of Nursing
University of Alberta 492-6251

Supervisor: Dr. Rene Day, Faculty of Nursing, University of Alberta
492-6481

APPENDIX D

University of Alberta
Edmonton
Canada T6G 2G3

Faculty of Nursing
3rd Floor Clinical Sciences Building

Certification of Ethical Acceptability for Research Involving Human Subjects

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NAME OF APPLICANT(S): Jean Bellstedt, MN Candidate

TITLE OF PROJECT: "Attitudes of Nursing Staff Toward Persons with Disabilities"

The members of the review committee, having examined the application for the above named project, consider the procedures, as outlined by the applicants, to be acceptable on ethical grounds for research involving human subjects.

Feb 22/96
Date

Janice Lander, PhD
Chair, Ethics Review Committee

ERC 96-072
5005-02-072

APPENDIX E

Capital
Health
Authority

8 April 1996

Jean Bellstedt
Faculty of Nursing
3rd Floor Clinical Sciences Bldg
University of Alberta
Edmonton, Alberta T6G 2G3

RE: *Attitudes of Nursing Staff Toward Persons with Disabilities*

Dear Jean:

The Research Ethics Committee has advised that the above-noted proposal has been reviewed and found to be ethically acceptable. On their recommendation, I am pleased to advise you that your project is approved.

Approval is given for a three year period, with an automatic yearly review. Any substantial changes made subsequent to this review must be submitted to the committee for approval.

I wish you success with your project!

Sincerely,

Linda Youell

Linda Youell
Acting Senior Operating Officer,
Glenrose Site

APPENDIX F

Glenrose
Rehabilitation
Hospital

Memo

From: Kerrie Pain

Date: April 8, 1996

To: Jean Bellstedt

Re: Application for Discretionary Funds

This confirms your access to discretionary funds. It is my understanding that your costs will be quite low, and will consist primarily of photocopying, etc. This confirms an allocation of up to $200.00.

It is likely easiest for you to purchase what is needed, and then submit the receipts for reimbursement. If you have any questions about procedures, call Maria at ext. 2500. If you have questions about the amount provided, call me at ext. 8212.

K. P.

Kerrie Pain, PhD
Director, Research Services