ATTITUDES OF HEALTH PROFESSIONALS TOWARD PERSONS WITH DISABILITIES IN BHUTAN

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ABSTRACT

This study examined the attitudes and its impact, of physicians and nurses toward persons with disabilities in Bhutan, given their profession, gender, age and past experience. The Scale of Attitudes toward Disabled Persons (SADP) was sent to 269 physicians and nurses at 3 major hospitals in Bhutan. 170 (63%) health professionals completed the survey and it was found that physicians held significantly more positive attitudes than nurses on total SADP score and the optimism-human rights subscale ($p<.01$). The mean scores of both professions were lower than those of other studies. Bhutanese doctors and nurses appear to hold less positive attitudes toward persons with disabilities than their counterparts from western countries. Given that doctors and nurses play a vital role in providing information and support to persons with disabilities in Bhutan, a greater understanding of their attitudes toward this segment of the population will support efforts to implement appropriate interventions.

INTRODUCTION

According to the World Health Organisation (WHO), 7 to 10% of the population in developing countries live with some form of disability (1). According to the Population and Housing Census of Bhutan(2), the number of disabled persons is 21,894, representing 3.4% of the country's total population. This relatively low incidence of disabled people in Bhutan, compared to the WHO data, may be related to local definitions of disability, varying cultural perceptions of disability and the types of occupation practiced in the community. Regardless, a significant percentage of the population in Bhutan is living with a disability.

The provision of rehabilitation services for persons with disabilities is relatively new to Bhutan. As in many developing countries, Bhutan's health care professionals are the key persons

providing information and delivering medical and rehabilitation services to the disabled population. They play an influential role in determining the priorities and direction of rehabilitation services (3,4). The quality of medical and rehabilitation services is influenced by the attitudes of health care professionals toward persons with disabilities. If Bhutanese health professionals have misconceptions about disability or have limited experience and knowledge about managing disability, this could negatively impact on the quality of services provided to persons with disabilities. However, as there has been no study of health professionals' attitudes towards persons with disabilities in Bhutan, the extent to which their attitudes impact upon such persons is unknown.

There has been some study on the extent to which personal attributes influence attitudes towards persons with disabilities. While generalisations to the Bhutanese context are questionable, there are several noteworthy trends. Most studies observed that women hold more positive attitudes than men (5-10). Previous contact with persons with disabilities has also been shown to positively influence attitudes (5, 7-9,12-15). The influence of age upon attitudes toward persons with disabilities has shown variable results, as seen from studies of university and high school students demonstrating more positive attitudes than those at higher academic levels (10-16). In contrast, Bakheit and Shanmugalingam (17) reported that the majority of older individuals in rural communities in south India expressed less favorable attitudes toward persons with disabilities than the younger generation.

Several studies have compared the attitudes of health professional students across professions. Tervo et al. (15) and Garven and Stachura (13), whilst comparing nursing, physiotherapy and occupational therapy students, found that nursing students held the least positive attitudes, whereas occupational therapy students showed the most positive attitudes toward persons with disabilities. Garven and Stachura (13) suggested that the positive attitudes of the occupational therapy students may be influenced by the provision of accurate information concerning disability, frequent interaction with persons with disabilities during clinical placements, and through a humanistic and holistic philosophy embedded in the curriculum.

A better understanding of the multidimensional and intricate relationship between knowledge, attitudes, and behaviour would permit policy-makers and health professionals to design intervention strategies to change attitudes towards persons with disabilities and improve medical and rehabilitation services. An initial step toward this understanding is to gather

baseline measures of health professionals' attitudes toward persons with disabilities. This study addressed 3 questions: What are the attitudes of physicians and nurses in Bhutan toward persons with disabilities? Are there any differences in attitudes between men and women, between physicians and nurses, or between those who have a family member or friend with a disability and those who do not? Are age and number of years in practice of doctors and nurses, associated with attitudes toward persons with disabilities?

METHOD

The Scale of Attitudes toward Disabled Persons (SADP), was chosen as the measurement tool for this study. The SADP was developed by Antonak (18) as a measure of general attitudes toward persons with disabilities. The 24 item SADP can be administered to individuals or groups, directly or indirectly by mail. The SADP was subject to rigorous psychometric analysis and has been shown to be a psychometrically sound instrument (11). Spearman-Brown corrected reliability coefficients range from 0.81 to 0.85, and alpha coefficients of 0.88 to 0.91 (11). Principal factor analysis yielded three subscales containing optimism-human rights, behaviour-misconceptions, and pessimism-hopelessness with reliability coefficients ranging from 0.55 to 0.73, and alpha coefficient homogeneity indices ranging from 0.77 to 0.87. The SADP was translated into Chinese for a cross-cultural validation study by Chan, Hua, Ju, and Lam (19), and has been used for research in Hong Kong, Singapore and Taiwan. Its utility in Asian cultures suggests that it may also be applicable to the Bhutanese context. The scale was pilot tested with three Bhutanese health technicians who indicated that the questionnaire was relevant and easy to follow.

This study used a cross-sectional survey study design. Subjects consisted of 269 physicians and nurses working in the three major hospitals in Bhutan: Jigme Dorji Wangchhuk (JDW/NRH) (the National Referral Hospital), Geylephu (Central Regional Referral Hospital), and Mongar (Eastern Regional Referral Hospital). According to the Ministry of Health (20), most of the physicians and nurses in Bhutan work in these three centres. Although there are several categories of health professionals in Bhutan, physicians and nurses were chosen for this study since they have a more homogenous workload than other health professional groups in Bhutan.

In addition to the SADP, the questionnaire gathered data on age, gender, previous experience with a disabled friend or relative and number of years of practice.

Three clinicians working in each of the referral hospitals distributed the questionnaires into the individual mailboxes of all physicians and nurses currently working onsite at each of the institutions. Follow-up reminder e-mails were sent to participants after two weeks and again after the third week. Participants returned competed questionnaires into the respective clinician's sealed mailboxes.

Ethical approval was provided by the McMaster University Research Ethics Board.

RESULTS

All statistics were calculated with version 16.0 of the SPSS programme. A total of 170 (nurses and physicians) completed the questionnaire, providing an overall response rate of 63%. On an average, the respondents had been in practice for 9.5 years (S.D.=7.44). The mean age was 33.4 years (S.D.=8.03). Just over one-half of the respondents were female (52%) and the majority were from the nursing profession (74%). Twenty-nine percent (29%) reported having a disabled friend or relative.

Table 1, shows the comparison of the total SADP and subscale scores of doctors and nurses as calculated by independent t-tests. Missing items were replaced with 0 according to the instructions of the developers of the SADP scale (18). The level of significance was set at $p<0.05$ for all statistical tests. Four subjects in this survey omitted more than four items on the SADP. Therefore, only 166 surveys were used in the analyses. As shown, physicians held significantly more positive attitudes than nurses on SADP total score and optimism human-rights subscale.

Table 1. Comparison of the Total and Subscale Scores of the SADP of Doctors and Nurses

Attitude Scale	Physicians n=41 Mean (SD)	Nurses n=122 Mean (SD)
Total Score	97.98 (13.34)*	92.09 (12.04)*

Optimism	47.10 (7.14)**	42.69 (9.90)**
Misconception	25.24 (4.76)	25.07 (5.64)
Pessimism	25.63 (.89)	24.33 (5.00)

* t-value = 2.64, p<.01

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Table 2 shows the comparison between gender in the total and subscale scores of the SADP. Independent t-test shows that there were no significant differences between males and females.

Table 2. Comparison of the Total and Subscales Scores of the SADP between Males and Females

Attitude Scale	Females n=85 Mean (SD)	Males n=76 Mean (SD)
Total Score	92.69 (11.65)	94.78 (13.61)
Optimism	43.67 (9.13)	45.24 (9.79)
Misconception	24.80 (4.92)	25.08 (4.90)
Pessimism	24.53 (4.69)	24.96 (5.79)

Table 3 compares the total and subscale scores of the SADP of those with and without a disabled friend/relative. Independent t-tests show there were no significant differences found between the respondents who have a friend/relative with a disability and those who do not.

Table 3. Comparison of the Total and Subscale Scores of the SADP of those With and Without a Friend/ Relative with a Disability

Attitude Scale	Friend/Relative with Disabilityn=115 Mean (SD)	No Friend/Relative with Disabilityn=49 Mean (SD)
Total Score	94.34 (13.10)	92.00 (11.26)
Optimism	44.36 (8.58)	42.63 (11.26)

Misconception	25.20 (5.53)	24.94 (5.25)
Pessimism	24.78 (5.57)	24.43 (4.38)

Spearman's correlations (rho) were done to determine the relationship of total SADP scores and subscales with age and number of years practised. As shown in Table 4, there is a significant negative correlation of the misconception subscale with age and number of years practised. The misconception subscale scores were lower for older persons who had practised for more years. The total SADP score and the other subscale scores were not correlated with age or number of years practised.

Table 4. Spearman's Rho of Total and Subscale Scores of the SADP with Age and Number of Years Practised

Attitude Scale		Age	Number of Years Practised
Total Score	Rho	-.038	.009
	P value	.632	.913
Optimism	Rho	.088	.113
	P value	.725	.162
Misconception	Rho	-.267*	-.222*
	P value	.001	.006
Pessimism	Rho	-.028	-.036
	P value	.225	.657

* $p < 0.01$ level (2-tailed)

DISCUSSION

Physicians had significantly more positive attitudes than nurses toward persons with disabilities on total SADP and optimism-human rights subscales. This could be attributed to the fact that Bhutanese physicians are educated in other countries and therefore likely to have more knowledge and experience with human rights legislation and rehabilitation services for persons

with disabilities. Nurses, on the other hand, may place greater importance on basic needs such as food, clothing and shelter, rather than on human rights, employment and external facilities. It is possible that for many who have no experience with persons with disabilities, the statements under the optimism-human rights subscale which are mostly concerned with employment and rights for persons with disabilities, are difficult concepts to understand.

Both physicians and nurses had similar mean scores on the behavioural-misconception and pessimism-hopelessness subscales. However, the mean attitudes of Bhutanese health professionals were lower than the mean scores of other populations, such as first-year medical students from Canada and the United States (9). This suggests that Bhutanese physicians and nurses have more misconceptions and pessimistic views about persons with disabilities than those in other countries. This may in part be due to frustration with the lack of adequate rehabilitation facilities for persons with disabilities to be referred to when discharged from the hospital. Clearly, many of these assertions are conjecture which must be verified by further study.

Age and number of years practising were significantly negatively correlated with behavioural-misconception scores. This could be a result of a comparative lack of education of older health professionals in Bhutan on rehabilitation and integration of persons with disabilities. Young physicians and nurses may have greater opportunities to interact with persons with disabilities during their education. The younger physicians and nurses who were trained outside Bhutan are more likely to have come across rehabilitation facilities and assistive devices to help persons with disabilities live independent lives. Such exposure could have influenced their attitudes in a positive direction.

Although most studies conducted in Europe and North America observed that older people showed more positive attitudes than younger ones; according to Bakheit Am Shanmugalingam (17), older people in south India expressed less positive attitudes than younger people toward persons with disabilities. It may be that a factor related to Asian culture has some negative influence on the attitudes of older people. Further investigation is needed to determine the cause of negative attitudes of older physicians and nurses on behavioural-misconception scores. Typically, one would assume that with greater experience and wisdom, older doctors and nurses would have more positive attitudes than younger colleagues.

In contrast to previous findings in other countries, there were no significant differences between males and females toward persons with disabilities in Bhutan. The mean scores for both genders were low, indicating more negative attitudes compared to normative data. There are several possible explanations for these findings. Given that the majority of the doctors were males, and that physicians had more positive attitudes, the attitudes of males in this study may simply be a reflection of the attitudes of physicians. A similar interaction between profession and gender may exist for the females, who are mostly nurses.

Also, in contrast to previous studies, prior experience with disability did not significantly influence the attitudes of physicians and nurses in Bhutan. On the contrary, the mean scores of physicians and nurses who responded as having a friend or relative with a disability were marginally lower than those who did not have a friend or relative with a disability. This may be due to the lack of formal social support for persons with disabilities in Bhutan, therefore necessitating that family and friends provide all the required care. The majority of Bhutanese work in manual agricultural jobs and subsistence farming. It is often difficult for people who have disabled friends or relatives, to provide adequate care and support due to the commitments required of their work. This may lead to feelings of frustration and excess burden in relation to persons with disabilities. In this study, physicians and nurses may be expressing the views of Bhutan's majority rural population, rather than their individual or professional opinion.

A possible explanation for the less positive attitudes of physicians and nurses in Bhutan toward persons with disabilities is cultural variation and lack of experience with rehabilitation. Bhutanese physicians and nurses may not have interpreted the statements of the SADP scale in the same context as respondents in Europe, Australia and North America, where most of the previous studies were conducted. For example, the statement "disabled people should live with others of similar disability", could be interpreted positively, because Bhutanese physicians and nurses might support the idea of similarly disabled people being together in a school for the blind or a school for speech and hearing impaired persons, as this is common in Bhutan. Similarly, "simple repetitive work is appropriate for persons with disabilities", may have been interpreted as being caring and comprehensive, rather than persons with disabilities being less capable than persons with no disabilities. Clearly, further investigation needs to be carried out to confirm these hypotheses.

This study is limited, in that it used a convenience rather than a random sample. The problem with such samples is that they may not represent the general population of health professionals in Bhutan. Another limitation relates to the measurement tool. Although the SADP appeared to be the most relevant measure and psychometrically sound scale available, it was developed in the United States. Even though the questionnaire was reviewed by local health care workers for suitability in a Bhutanese context, the possibility exists that due to its complicated terms and phrases, some of the respondents may have found the SADP difficult to understand.

This is the first study on attitudes of health professionals toward disability in Bhutan. Due to the essential role that physicians and nurses play in providing information and rehabilitation services to persons with disabilities and their families, it is essential that they possess positive attitudes, sound knowledge and skill with regard to managing disability. As with many areas of new study, this research raises more questions than answers.

CONCLUSION

The findings from the present study indicate that Bhutanese physicians and nurses are not very comfortable with disability and rehabilitation issues, based on normative data and comparison to professionals in other countries. Further research should focus on establishing a standard definition of impairment and disability based on the Bhutanese context. Due to limitations in the specificity of the SADP to a Bhutanese population, these negative attitudes cannot be separated from a misinterpretation based on cultural context. It is also necessary to explore whether similar views are shared by other categories of health professionals. In addition, the attitudes of teachers, who interact directly with students with disabilities, and engineers, who are responsible for designing adapted environments, are of interest.

Although Bhutan has done well with preventive and curative components of the health system (20), there is a need to improve the integration of persons with disabilities into mainstream society. Placing greater emphasis on rehabilitation, education and employment for persons with disabilities, will aid in achieving Bhutan's Ministry of Health and Education sector strategy: realising vision 2020 (21). Through a greater integration of persons with disabilities into the Bhutanese workforce, rates of unemployment and poverty will also decrease (22). Bhutan has created Gross National Happiness (GNH) as a quality of life indicator (22). Given that one of its four pillars is socio-economic development, it is timely and very relevant

within a Bhutanese context to further research and improve attitudes toward disabled persons, thereby enhancing the quality of life for this marginalised portion of the population.

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