Disability Orientation Outcomes in Three Districts of Nepal: An Interventional Study

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Introduction: Disability orientation in the community can have positive effects in timely identification and treatment seeking behavior, as well as help mitigate the stigma that often burdens persons with disabilities (PWDs).

Objective: To assess the outcome of disability orientation in the community in three purposively selected districts of Nepal.

Materials and Methods: The study was conducted in three purposively selected project districts of Nepal (Rupendehi, Arghakhanchi and Gulmi). Fifty percent of the municipals were randomly selected from each district. Twenty-five persons from each municipal were randomly enrolled in the study as study participants. Hence, the study was conducted among 425 participants in total. A community level course about disability awareness followed a structure focusing on awareness, interaction with PWD, and education, in order to make a positive impact on their knowledge. Pre-and post-test interviews were conducted before and after disability orientation at a 2-week interval.

Results: There were 52% female participants, and 44% were between 38 to 47 years. 44% had completed at least ten years of schooling, and 3% could not read or write. The average increase in the level of knowledge regarding causes of disability, rights and entitlements of the persons with disability and the preventive measures of disability were by 24%, 52% & 40% respectively. The overall average increase in the knowledge of the participants after disability

orientation was 39%, and this was maximum for those who could not read or write, or had no access to the formal education.

Keywords: causes of disabilities, disability orientation, outcome, preventive measures, rights and entitlements.

t is estimated that around one billion (15%) of the global population experience some form of disability, and the prevalence is higher for developing countries like Nepal.¹ Persons with disabilities are more likely to experience adverse socioeconomic outcomes such as less education, poorer health outcomes, lower levels of employment, and higher poverty rates. It is estimated that 7 to 10 percent of Nepalese population live with some form of disability, out of which physical disability (32%) predominates.² Social stigma associated with disability, and lack of knowledge on rights of PWD's, leads to this group being marginalized in society. Attitudes towards PWD's are based on levels of knowledge, and experiences and interactions with PWD's.3 Awareness plays a central role in creating positive attitudes towards PWD's, and in facilitating early identification and promoting treatment seeking behavior. Hence, the present study was designed with an objective to assess the outcome of disability orientation sessions conducted by the district supervisors of Hospital Rehabilitation Centre for Disabled Children (HRDC).

Materials and Methods

The study was conducted in three purposively selected project districts of Nepal (Rupendehi, Arghakhanchi and Gulmi). Fifty percent of the municipals were randomly selected from each district. Twenty-five persons from each municipal were randomly enrolled in the study as a study participant (425 participants) (**Figure** 1). The survey was given twice at 2-weeks interval to 425 community people. A community level course about disability awareness followed a structure focusing on awareness, interaction with PWDs, and education, in order to make a positive impact on their knowledge. Pre-test interviews were conducted by HRDC's and district supervisors post-course interviews were conducted by independent enumerators to reduce the enumerator's bias. Awareness sessions were broken down into three key components: 1) Causes of disability, 2) Rights & entitlements of PWD's, and 3) Prevention & control measures of disability. The purpose of this research was to examine if such a disability orientation program can bring about a positive change in the level of knowledge of the participants. Only permanent citizens

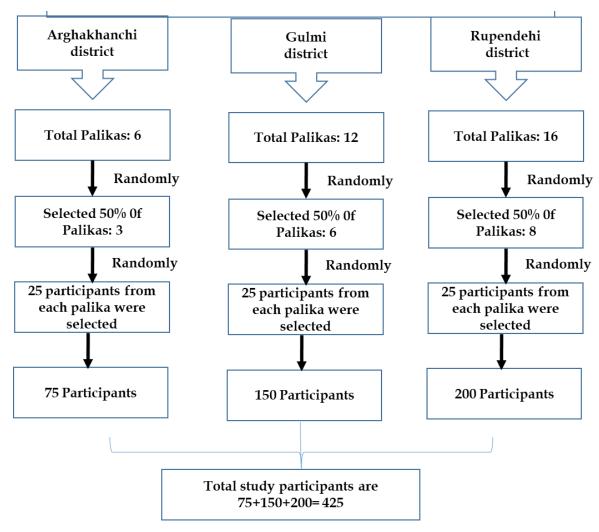


Figure 1: Participant selection

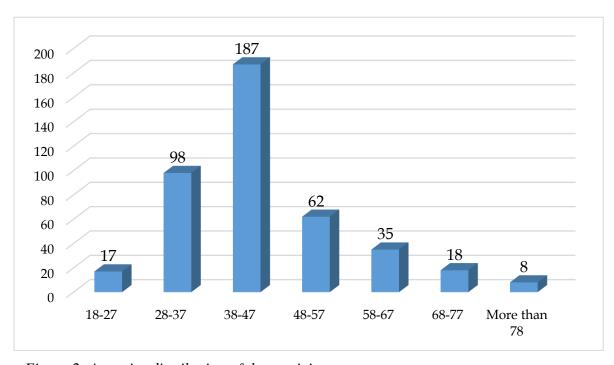


Figure 2: Age wise distribution of the participants

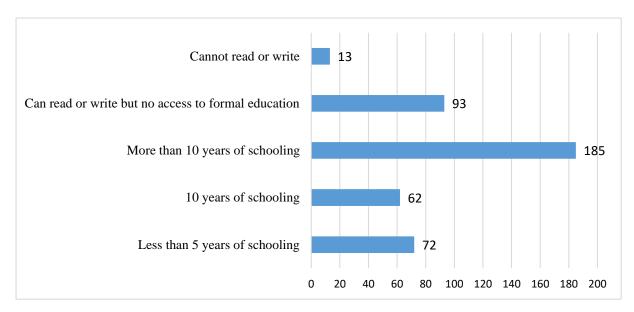


Figure 3: Educational state of the participants

of the respective municipals who gave an informed consent and were above the age of 18 years were included. Any participant who did not complete the post-test survey was excluded. Ethical clearance was taken from the hospital IRC. The pre-test was administered immediately before the orientation session and the post-test was taken at 2 weeks' interval.

Data was analyzed using the SPSS 20. Descriptive data was presented in tables and graphs. This shows pre and post test scores and any changes thereof.

Results

There were 52% female participants, and 44% were between 38 to 47 years (**Figure 2**). 83% were married, 44% had completed at least ten years of schooling, and 3% could not read or write (**Figure 3**). Our results indicate a significant increase in the

knowledge level of participants regarding causes of disability, rights & entitlements of persons with disability, and prevention of disability. The average increase in the level of knowledge regarding causes of disability, rights & entitlements of the persons with disability and the preventive measures of disability were by 24%, 52% & 40% respectively (**Figure 4**). The overall average increase in the knowledge of the participants after disability orientation was 39 percent. While improvement in knowledge after disability orientation was observed across all levels of education, this was maximum for participants who could read or write but had no access to the formal education, and those who could not read or write. The details of orientation subjects versus level of knowledge is shown in **Tables 1, 2 & 3**.

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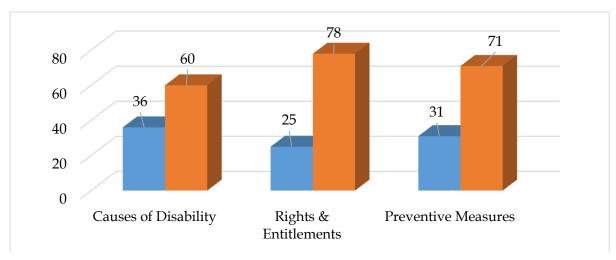


Figure 4: Correct response in %

Education Level	Pre- test score	Post-test score	% increase in participants with correct responses	P- Value
Less than 5 years of schooling	30	50	16	>0.5
10 years of schooling	56	70	11	>0.5
More than 10 years of schooling	62	73	9	>0.5
Can read & write but no access to formal education (literate)	20	72	43	< 0.5
Cannot read and write (illiterate)	10	35	21	>0.5

Table 1: Percentage change in the level of knowledge regarding 'causes of disability'

		ntitlements		
Education Level	Pre-test score	Post-test score	% increase in participants with correct responses	P- Value
Less than 5 years of schooling	27	78	19	>0.5
10 years of schooling	37	72	13	>0.5
More than 10 years of schooling	47	78	12	>0.5
Can read & write but no access to formal education (literate)	10	98	34	< 0.5
Cannot read and write (illiterate)	5	62	22	< 0.5

Table 2: Percentage change in the level of knowledge regarding 'right and entitlement of the persons with disabilities'

Education Level	Pre-test score	Post-test score	% increase in participants with correct responses	P- Value
Less than 5 years of schooling	25	61	18	>0.5
10 years of schooling	51	81	15	>0.5
More than 10 years of schooling	57	84	13	>0.5
Can read & write but no access to formal education (literate)	15	83	34	< 0.5
Cannot read and write (illiterate)	5	46	20	< 0.5

Table 3: Percentage change regarding 'preventive measure of disabilities

Discussion

Disability of any kind in the setting of poor socioeconomic environment poses significant barrier to the right to education, employment, and livelihood, compounded by gender bias that is prevalent in such communities.⁴ Addressing such barriers, thus improves the likelihood of the aforementioned rights. One such study from our center showed that disabled children who had received treatment were functioning well in physical skills and in their educational settings, and that parental attitudes were generally positive, including that for the female child.⁵ Nepal's ratification of the United **Nations** Convention on the Rights of Persons with Disability (UNCRPD) in 2010 and the passage of the Disability Rights Act in 2017 highlights Nepal's commitment addressing disability-related issues using the rights-based model rather than welfare or charity-based approaches.⁶ The most basic tenet of a rights-based model is access

to information regarding available rights. Our study shows that even a simple orientation program has significant impact on the understanding of disability and rights related issues. This improvement was seen to be much more for persons who had no formal education, so programs catered to persons without formal education can be very impactful in raising awareness regarding the issues discussed in this paper.

Limitation of the study

The present study was limited to three purposively selected districts of Nepal where HRDC was already working, so results may not be generalized to other districts with different demographic characteristics. However, as the results of this study indicate that that orientation improves knowledge in the domains studied, and that level of education of the participants influences the degree of such improvement, these conclusions are likely to be valid to a greater or lesser degree in

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different areas of Nepal. This can be a subject of future research. Another limitation is that the questionnaires used in this study were self-generated from our experience, and not validated.

Conclusion

The results of the present study show that disability orientation brought a positive change in the knowledge of participants, especially those who had no access to formal education. Disability orientation is important and cost effective (considering the number of preventive disabilities) tool/ medium for social inclusion of the persons with disability. Our study can be used as a pilot to design better studies suited to larger audiences, both with or without formal education, and administer such orientation to improve the overall understanding of disability related issues in the wider community.

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