

A STUDY OF EPIDEMIOLOGICAL CORRELATES OF PHYSICAL DISABILITY AMONG STUDENTS OF AN EDUCATIONAL INSTITUTE OF KANPUR

Sandeep Singh*, **R.P.Sharma****, **Suresh Chandra*****, **Seema Nigam******,
Punit Varma*****, **Pooja Goel*******, **S. K. Barman*******
Resident*, Professor & Head**, Professor***, Associate Professor****,
Assistant Professor*****, Lecturer*****

Department of Community Medicine, G.S.V.M. Medical College, Kanpur (U.P.)

ABSTRACT:

Objective: To study the epidemiological correlates of physical disability among students in an educational institute of Kanpur.

Study Design: Cross-sectional study.

Study Setting: Dr. Ambedkar Institute of Technology for Handicapped, U.P., Kanpur.

Study Subjects: Physically disabled diploma students in the age group 15 years and above of Dr. Ambedkar Institute of Technology for Handicapped U.P., Kanpur were taken as study subjects. Data was collected on pre-designed and pre-tested questionnaire.

Statistical Analysis: Analysis was done using percentages.

Results: Physically disabled students predominantly belonged to age-group of 18-20 years (47.62%), birth order third (28.10%), Hindu religion (95.24%), OBC Caste (47.14%) and social class V (51.90%). Poliomyelitis was the most common probable cause of disability in majority of students (77.14%) and right lower limb was the most common site (36.67%) affected.

Key words: Physical disability, Epidemiological correlates, Adolescents.

Introduction:

Disability is a physical or mental impairment that limits an individual's activities of life. Globally, some 180 million young people between the ages of 10-24 live with a physical, sensory, intellectual or mental health disability significant enough to make a difference in their daily lives. The vast majority of these young people, some 150 million (80%) live in the developing world. Some studies have been carried out abroad, as far as developing countries are concerned such studies particularly in age group 15 years and above are very negligible. Realizing dearth of studies on physically disabled adolescents in India, the present was planned.

Material and Methods:

The study was conducted in Dr. Ambedkar Institute of Technology for Handicapped, U.P., Kanpur. All the physically disabled diploma students, who were present at the time of study, in the age group 15 years and above were taken as study subjects. The present study was carried out in the year 2009-2010. The social classification was done according to modified B. G. Prasad (AICPI, April 2010). The data was collected in the pre-designed and pre-tested questionnaire by interview method. Analysis was done using Percentages.

Results:

Table-1 reveals that maximum (47.62%) students belonged to

age group 18-20 years followed by 32.38% students in the age group 21-23 years & least 10% each in age group 15-17 years & 24 years and above.

It was observed that birth order of maximum (28.10%) students was third, followed by 18.11% students with birth order first and the least (8.57%) students with birth order more than fifth.

It was also seen that most of the students (95.24%) were Hindus while Muslims were only 4.76%. None of the students belonged to Christian & other religions.

It was noted that maximum (47.14%) students were OBCs followed by 31.91% General & least (20.95%) belonged to SC/ST.

It was observed that majority of students (51.90%) belonged to social class V, followed by 31.43% social class IV, 8.57% social class II, 6.67% social class III and least (1.43%) belonged to social class I.

Table-2 shows that Poliomyelitis was the most common probable cause of disability in majority of the students (77.14%), followed by congenital causes (11.43%).

Table-3 reveals that in the majority (36.6%) of physically disabled students the site of disability was Rt. Lower limb followed by 27.14% in Lt. lower limb.

Table 1
DISTRIBUTION OF PHYSICALLY DISABLED STUDENTS
ACCORDING TO THEIR BIO- SOCIAL CHARACTERISTICS

Bio-Social Characteristics	Number	Percentage
AGE GROUP		
15-17	21	10.00
18-20	100	47.62
21-23	68	32.38
24 and above	21	10.00
Total	210	100.00
BIRTH ORDER		
1	38	18.11
2	37	17.62
3	59	28.10
4	29	13.81
5	29	13.81
>5	18	08.57
Total	210	100.00
RELIGION		
Hindu	200	95.24
Muslim	10	4.76
Christian	0	0.00
Others	0	0.00
Total	210	100.00
CASTE		
General	67	31.91
OBC	99	47.14
SC/ST	44	20.95
Total	210	100.00
SOCIAL CLASS (according to modified B.G. Prasad Classification)		
I	03	01.43
II	18	08.57
III	14	06.67
IV	66	31.43
V	109	51.90
Total	210	100.00

Table 2
DISTRIBUTION OF PHYSICALLY DISABLED STUDENTS
ACCORDING TO THE PROBABLE CAUSE OF DISABILITY

Probable Cause	Physically Disabled	
	No.	%
Poliomyelitis	162	77.14
Congenital	24	11.43
Injuries other than burn & medical/surgical interventions	14	6.67
Others*	10	4.76
Total	210	100.00

*Includes injuries due to burns, medical and surgical interventions

Table 3
DISTRIBUTION OF PHYSICALLY DISABLED STUDENTS ACCORDING TO SITE OF DISABILITY

Site of Disability	No.	%
B/L lower limb	34	16.19
Rt. Lower limb	77	36.67
Lt. lower limb	57	27.14
B/L upper limb	05	2.38
Rt. upper limb	08	3.81
Lt. upper limb	18	8.57
Rt. upper limb & Rt. lower limb	01	0.48
Rt. upper limb & B/L lower limb	01	0.48
Lt. upper limb & B/L lower limb	02	0.95
B/L lower limb & spinal deformity	03	1.43
Rt. lower limb & spinal deformity	01	0.48
Lt. lower limb & spinal deformity	03	1.43
Total	210	100.00

Discussion :

Maximum 47.62% of physically disabled students belonged to age group 18-20 years followed by 32.38% students in the age group 21-23 years.

It was observed that birth order of maximum (28.10 %) students was third.

Among physically disabled students maximum 95.24% belonged to Hindu religion while minimum 4.76% belonged to Muslim religion. The same pattern was observed in NFHS-3(2005-2006)¹, where corresponding figures were 82% & 13% respectively.

Among physically disabled students majority belonged to OBC caste followed by General (31.91%), while the same trend was observed in the findings of NFHS-3 (2005-2006)¹.

It was found that the majority of students (51.90%) belonged to social class-V while minimum 1.43% belonged to social class-I.

In the present study, in majority of students 77.14% the cause of disability was poliomyelitis and the same trend was observed by Singhi P.D. et al (1990)² and NSSO (1991)³.

In the present study, monoparesis was most common (63.81%) site of disability and this is higher than observation made by Singhi P.D. et al (1990)².

Conclusion :

Maximum 47.62% of physically disabled students belonged to age group 18-20 years. It was observed that birth order of maximum (28.10 %) students was third. Among physically disabled students maximum 95.24% belonged to Hindu religion. majority of students belonged to OBC caste. It was observed that majority of students (51.90%) belonged to social class V. In the present study, in majority of students 77.14% the cause of disability was poliomyelitis. monoparesis was most common (63.81%) site of disability.

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