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## Introduction

- More than 93 million of 1 billion of people with disabilities are children with disabilities from ages 0 to 14 years (WHO, 2011).
- 13 million of 93 million are estimated to be children with severe disabilities and 80% of this subset population is geographically located in developing countries (WHO, 2011).
- Inadequate prioritization the health wellbeing of children with disabilities and severe illness, evident in lack of accessibility, acceptability and availability of social welfare services and resources for this subset population.

## Objectives

- To describes the role of demographic and socioeconomic indicators as social determinants of health of the epidemics.
- To describes the accessibility to social welfare services such as health, education, and social services, in the comparison between children with severe illness or disability compared to children with no form of disability or severe illness.

## Research Design and Methods

### Strategy of enquiry

- Quantitative methods, post-positivism paradigm, stratified sampling with total sample size of 13047.
- Strata 1: Children with disability & severe illness with sample size of 560(n) and 2 unresponsive.
- Strata 2: Children with no form of disability or severe illness with sample size of 12485.

### Data Source

- National Income Dynamic Study Wave 4.
- 3 questionnaires were combined including, children's questionnaire, weighted Indderived questionnaire & Household Indderived questionnaire.
- [pweight=w4\_pweight] was used to give weight to the database.

### Data Analysis Plan

- Pearson Chi-Squared ( $\chi^2$ ) Statistic Test was used to test for significance,  $P < 0.05$ .
- Independent variables: socioeconomic Indicators, demographic Indicators, health and education Indicators.
- Dependent variables: Severely illnesses & disabilities, no form of disability or severe illness.

## Results

### Prevalence Rate of Epidemics

There was a high prevalence rate of disability and severe illnesses in children under 17 years of age which accounted for 5.2% [4.413, 6.138].

### Nature of Epidemics

Other respiratory diseases inclusive of pneumonia, bronchitis, asthma accounted for 34.2% [26.55, 42.49], Diabetes 0.4 [0. 0479, 2.45], heart disease 3.6% [1.348, 9.152], cancer 0.3% [0.0342, 1.762], epilepsy 6.5% [2.865, 13.92]. disabilities such as problems with sight, hearing or speech 18.1% [12.48, 25.55], physical handicapped accounted to 8.2% [4.875, 13.55] and mental problems 4.2% [ 2.02, 8.321]. Tuberculosis 3.9% [2.025, 7.356] and HIV/AIDS accounted for 8.8% [4.538, 16.33].

Table 1: Demographic Indicators

Demographic Variables	Non-disabled children	Disabled and severely ill children	P-value <0.05
<b>Gender</b>			
0=Male	94.2% [92.74,95.34]	5.9% [4.661,7.259]	0.1588
1=Female	95.4% [94.13,96.42]	4.6% [3.584,5.869]	
<b>Age Interval</b>			
0=1-4 years	95.8% [93.21,97.37]	4.3% [2.626,7.94]	0.0902
1=5-9 years	95.6% [94.21,96.63]	4.4% [3.373,5.789]	
2=10-14 years	93.7% [92.05,94.99]	6.3% [5.014,7.951]	
<b>Birth Certificate</b>			
0=No	91.9% [82.57,96.45]	8.1% [3.552,17.43]	0.2856
1=Yes	94.8% [93.89,95.63]	5.2% [4.368,6.11]	
<b>Population Group</b>			
0= All Other Races	92.7% [87.52,95.78]	7.4% [4.221,12.48]	0.1642
1= African	95.1% [94.24,95.83]	4.9% [4.166,5.756]	
<b>Geographical Area</b>			
0= Urban formal Urban Informal	93.9% [92.37,95.07]	6.2% [4.931,7.633]	0.0075
1= Traditional Authority Area Rural formal farms	96% [94.98,96.83]	4.0% [3.17,5.024]	
<b>Migration or Mobility of children</b>			
1=Yes	91.9% [88.62,94.32]	8.1% [5.681,11.38]	0.0055
0=No	95.4% [94.43,96.16]	4.7% [3.842,5.566]	
<b>Caregiver</b>			
1=Both parents	77.5% [44.61,93.66]	22.5% [6.337,55.39]	0.0116
0=Other	94.9% [93.98,95.68]	5.1% [4.324,6.024]	

Table 3: Socioeconomic Indicators

Socio-economic Indicators	Non-disabled children	Disabled and severely ill children	P-value <0.05
<b>Mother's Education</b>			
1=Matric/post school	94.2% [91.5,96.09]	5.8% [3.905,8.503]	0.4638
0=Less than matric	92.8% [88.89,95.39]	7.2% [4.609,11.111]	
<b>Father's Education</b>			
1= Matric/post school	95.3% [93.69,96.56]	4.7% [3.435,6.305]	0.8635
0= Less than matric	95.5% [94.08,96.59]	4.5% [3.41,5.917]	
<b>Access to social grant</b>			
1=Yes	93.9% [91.21,95.73]	6.2% [4.269,8.789]	0.2958
0=No	95.0% [94.06,95.87]	5.0% [4.128,5.939]	
<b>Financial Support from the Mother</b>			
1=Yes	94.5% [91.75,96.36]	5.5% [3.637,8.248]	0.9605
0=No	94.6% [90.08,97.12]	5.4% [2.876,9.919]	
<b>Financial Support from the Father</b>			
1=Yes	95.4% [93.66,96.6]	4.7% [3.295,6.336]	0.4751
0=No	94.58% [92.83,95.92]	5.4% [4.075,7.174]	

Table 3: Education Indicators

Child's Education	Non-disabled children	Disabled and severely ill children	P-value <0.05
<b>Children that have been sent to school</b>			
1=Yes	94.8% [93.51,95.79]	5.2% [4.213,6.492]	0.0000
0=No	14.0% [4.979,33.52]	86.0% [66.48,95.02]	
<b>Children currently enrolled</b>			
1=Yes	93.2% [90.77,95.06]	6.8% [4.937,9.334]	0.0864
0=No	68.2% [16.11,96.01]	31.8% [3.993,8.89]	
<b>Type of school enrolled in</b>			
1= Formal school / educare	95.3% [93.59,96.54]	4.7% [3.459,6.408]	0.19895
2= Day Mother/Gogo	100%	0%	
3= None	97.4% [95.45,98.49]	2.6% [1.512,4.549]	
<b>Traveling time to School</b>			
1=Less than 30 minutes	93.7% [91.2,95.47]	6.3% [4.538,8.03]	0.9086
0=30 minutes or more	93.9% [90.07,96.29]	6.1% [3.713,9.931]	
<b>Mode of transport used</b>			
1= Walking / bicycling	94.9% [92.64,96.45]	5.1% [3.549,7.356]	0.1672
2= Public transport	90.8% [85.7,94.22]	9.2% [5.778,14.3]	
3= Private transport	91.3% [81.11,96.21]	8.7% [3.786,18.89]	
<b>Correct age for their grade in school</b>			
<b>Age Ratio</b>			
Grade 0= 5-6 years	96.2% [93.93,97.63]	3.8% [2.367,6.068]	0.0336
Grade 1= 7 years old	93.2% [89.18,95.87]	6.8% [4.2,10.82]	
Grade 2= 8 years old	97% [94.22,98.47]	3.0% [1.531,5.783]	
Grade3= 9 years old	95.4% [92.28,97.27]	4.6% [2.727,7.717]	
Grade4= 10 years old	92.4% [87.21,95.54]	7.6% [4.455,12.79]	
Grade5= 11 years old	91.8% [87.44,94.68]	8.3% [5.321,12.56]	
Grade6= 12 years old	91.1% [85.39,94.75]	8.9% [5.253,14.61]	
Grade7= 13 years old	95.1% [91.64,97.2]	4.9% [2.804,8.359]	
Grade8= 14 years old	96.4% [93.53,98.01]	3.6% [1.986,6.47]	
Grade9= 15 years old			

Table 4: Health Indicators

Child's Health Variable	Non-disabled Children	Severely ill and Disabled Children	P-value < 0.05
<b>Health Status Scale</b>			
1=Excellent	98.0% [97.04,98.69]	2.00% [1.311,2.959]	0.0000
2=Very Good	96.2% [94.52,97.34]	3.8% [2.662,5.477]	
3=Good	90.6% [87.71,92.86]	9.4% [7.141,12.29]	
4=Fair	52.1% [38.98,64.88]	47.9% [35.12,61.02]	
5=Poor	20.6% [7.862,43.98]	79.4% [56.02,92.14]	
<b>Delivered Births</b>			
1=Hospital/clinic	94.8% [93.8,95.61]	5.2% [4.394,6.199]	0.9195
0=Home/outside hospital or clinic	94.9% [91.59,96.98]	5.1% [3.023,8.414]	
<b>Clinic Card (Road to health card)</b>			
1=Yes/Yes but not available	94.6% [93.64,95.44]	5.4% [4.556,6.363]	0.0270
0=No	98.0% [95.07,99.21]	2.0% [788,4.933]	
<b>Skilled Health Care Worker Present at birth</b>			
1= Doctor or nurse	95.2% [94.1,96.14]	4.8% [3.865,5.901]	0.1628
0=TBA/Family/Friends/Other	93.9 % [92.04,95.35]	6.1% [4.652,7.955]	
<b>Consultations (routine check-up in the past 12-months)</b>			
1=Once/more than once	92.9% [91.43,94.06]	7.1% [5.939,8.569]	0.0000
0=Never	97.6% [96.53,98.33]	2.4% [1.669,3.468]	
<b>Health Facility Visits</b>			
1=Yes	83.7% [74.99,89.83]	16.3% [10.17,25.01]	0.1674
0=No	91.2% [81.54,96.04]	8.8% [3.956,18.46]	
<b>Eye Test</b>			
1=Yes	90.8% [87.35,93.36]	9.2% [6.642,12.65]	0.0000
0=No	95.8% [94.86,96.49]	4.3% [3.509,5.142]	
<b>Assistive Device</b>			
1=Yes	82.4% [66.42,91.75]	17.6% [8.249,33.58]	0.0007
0=No	95.1% [94.18,95.84]	4.9% [4.157,5.82]	