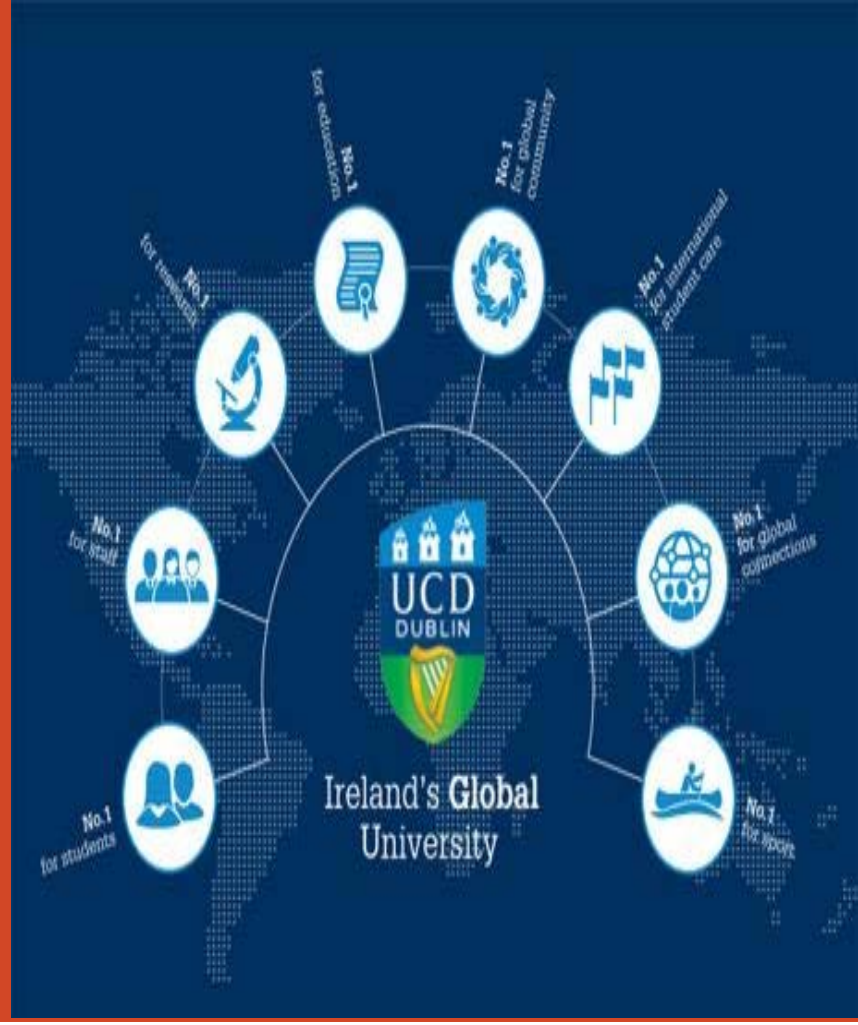
Use of W ashington Group Short Set of Questions: Summary from Uganda Demographic Health Survey 20 11 and Secondary Data Analysis Oppurtunity



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Uganda DHS 2011

Use of WG Short Set Questions

- In the 2011 UDHS, information was collected on each household member age 5 and older about whether he or she had difficulties with seeing, hearing, communicating, walking or climbing stairs, remembering or concentrating, or performing self-care.

Prevalence of Disability

- Difficulties in seeing and walking or climbing stairs are the most common types of disabilities reported during the survey.
- 19 percent of persons age 5 and over have some form of disability. The prevalence of disability increases with age.
- 31 percent at age 40-49, and to 49 percent at age 50-59.

Uganda Demographic Health Survey

Table 2.14 Disability by functional area and age

Percent distribution of de facto household population age five and over by the degree of difficulty according to the functional area, and percent distribution by the highest degree of difficulty in at least one functional area by age, Uganda 2011

	Degree of difficulty						Some difficulty, a lot of difficulty, or can't do at all	Number of individuals
Functional area and age	Can't do at all	A lot of difficulty	Some difficulty	No difficulty	Don't know/ missing	Total		
Functional area								
Difficulty seeing	0.1	1.6	7.7	90.5	0.1	100.0	9.4	35,226
Difficulty hearing	0.1	0.8	4.5	94.5	0.1	100.0	5.4	35,226
Difficulty walking or climbing stairs	0.1	1.7	5.4	92.6	0.1	100.0	7.2	35,226
Difficulty remembering or concentrating	0.1	1.3	4.8	93.6	0.1	100.0	6.2	35,226
Difficulty with self-care	0.3	0.4	1.6	97.6	0.1	100.0	2.3	35,226
Difficulty communicating	0.1	0.3	1.0	98.4	0.1	100.0	1.5	35,226
Difficulty in at least one functional area								
5-9	1.0	1.8	8.7	88.3	0.2	100.0	11.5	7,602
10-14	0.4	2.4	9.5	87.6	0.1	100.0	12.3	6,616
15-19	0.4	2.2	9.7	87.6	0.1	100.0	12.3	4,394
20-29	0.3	2.1	10.4	87.1	0.1	100.0	12.8	6,059
30-39	0.1	3.2	15.2	81.4	0.0	100.0	18.5	4,265
40-49	0.5	6.0	24.9	68.6	0.0	100.0	31.4	2,672
50-59	0.6	11.6	36.6	51.2	0.0	100.0	48.8	1,703
60+	3.4	24.8	38.6	33.0	0.2	100.0	66.8	1,914
Total age 10 and over	0.6	4.9	15.8	78.7	0.1	100.0	21.3	27,624
Total age 15 and over	0.6	5.7	17.8	75.9	0.1	100.0	24.1	21,007
Total	0.7	4.2	14.3	80.8	0.1	100.0	19.2	35,226

Secondary Analysis using DHS Uganda

RESEARCH ARTICLE

HIV/AIDS knowledge, attitudes and behaviour of persons with and without disabilities from the Uganda Demographic and Health Survey 2011: Differential access to HIV/AIDS information and services

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Use of W G Short Set of Questions

Secondary Analysis

- The Woman's and Man's Questionnaires explored a wide range of topics including marriage

and sexual activity; adult mortality; gender-based violence; and awareness and behaviour

with regards to AIDS and other STDs.

- Who is included:
  - males aged 15 to 54 years old and women aged 15-49 years old.

Secondary Analysis

- To explore HIV knowledge and disability, the household members data was merged with individual level data for males (N = 2,295) and individual level data for females (N = 8,674).
- The complete merged data for males and females resulted in a sample size of 10,969 individuals used in this study analyses.

Use of W G Short Set of Questions

DHS Analysis

- As per the recommendations of the WG: Some level of difficulty or above in any of the six functional areas.
- 19.2 % prevalence

Secondary Analysis

- any disability type for individuals with at least some difficulty or above in any of the six functional areas

Table 1 Descriptive characteristics by disability status.

Variable	All [mean, (SD)]	Persons with a disability	Persons without a disability	P Value
CONTROL VARIABLES				
Age (years):	28.14 (9.64)	32.54 (10.68)	27.26 (9.17)	0.000**
Education:				
No Education (N = 10,969)	13.24 (1,451)	16.25 (296)	12.65 (1,155)	0.000**
Primary	56.21 (6,158)	60.70 (1,106)	55.31 (5,052)	0.000**
Secondary	23.41 (2,565)	18.33 (334)	24.43 (2,231)	0.000**
Higher	7.14 (782)	4.72 (86)	7.62 (696)	0.000**
Education years	6.01 (4.16)	5.24 (3.96)	6.16 (4.18)	0.000**
Marital Status:				
Never married	28.93 (3,170)	19.65 (358)	30.78 (2,812)	0.000**
Currently married	60.58 (6,638)	63.23 (1,152)	60.05 (5,486)	0.011*
Formerly married	10.49 (1,149)	17.12 (312)	9.16 (837)	0.000**
Wealth Index:				
Poorest	19.67 (2,156)	19.86 (362)	19.63 (1,794)	0.825
Poorer	16.79 (1,840)	20.63 (376)	16.02 (1,464)	0.000**
Middle	16.27 (1,783)	19.03 (347)	15.71 (1,436)	0.000**
Richer	18.46 (2,023)	18.71 (341)	18.41 (1,682)	0.764
Richest	28.82 (3,159)	21.78 (397)	30.23 (2,762)	0.000**
Residence Type:				
Urban	23.13 (2,535)	17.55 (320)	24.24 (2,215)	0.000**
Semi-urban	5.98 (656)	5.76 (105)	6.03 (551)	0.657
Rural	70.89 (7,770)	76.69 (1,398)	69.73 (6,372)	0.000**
Male* (Note that males interviewed were 2,295/10,969)	20.91 (2,292)	21.45 (391)	20.80 (1,901)	0.536

* Significant at the 0.05 probability level.

** Significant at the 0.001 probability level.

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http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0174877

Use of W G Short Set of Questions

Secondary Analysis

- Hearing disability for individuals with difficulty in hearing even when using a hearing aid.

- We looked at the Deaf population as a distinct group to see if we might identify distinct disability-specific patterns due to the asserted difference between Deaf and hearing populations in relation to HIV in much of the literature

Secondary Analysis

- single disability for individuals with at least some difficulty or above in one functional area

- multiple disability for individuals with at least some difficulty or above in two or more functional areas

  - low severity of disability for individuals with only `some difficulty' in one of the functional areas;

  - high severity of disability for individuals with `a lot of difficulty' or `cannot do at all' in one of the functional areas;

Table 3. Disability categories by gender for 15–54 year olds.

Explanatory Variable	All % (n)	Males	Females	*P* Value
Any disability type	16.6 (1,823)	17.1 (391)	16.5 (1,432)	0.536
Single disability	11.5 (1,259)	11.8 (269)	11.4 (990)	0.674
Multiple disability	5.1 (558)	5.3 (121)	5.1 (437)	0.646
Low severity	15.4 (1,682)	15.8 (363)	15.2 (1,319)	0.462
High severity	2.5 (268)	2.4 (55)	2.5 (213)	0.874
Hearing disability	3.6 (390)	3.5 (80)	3.6 (310)	0.874

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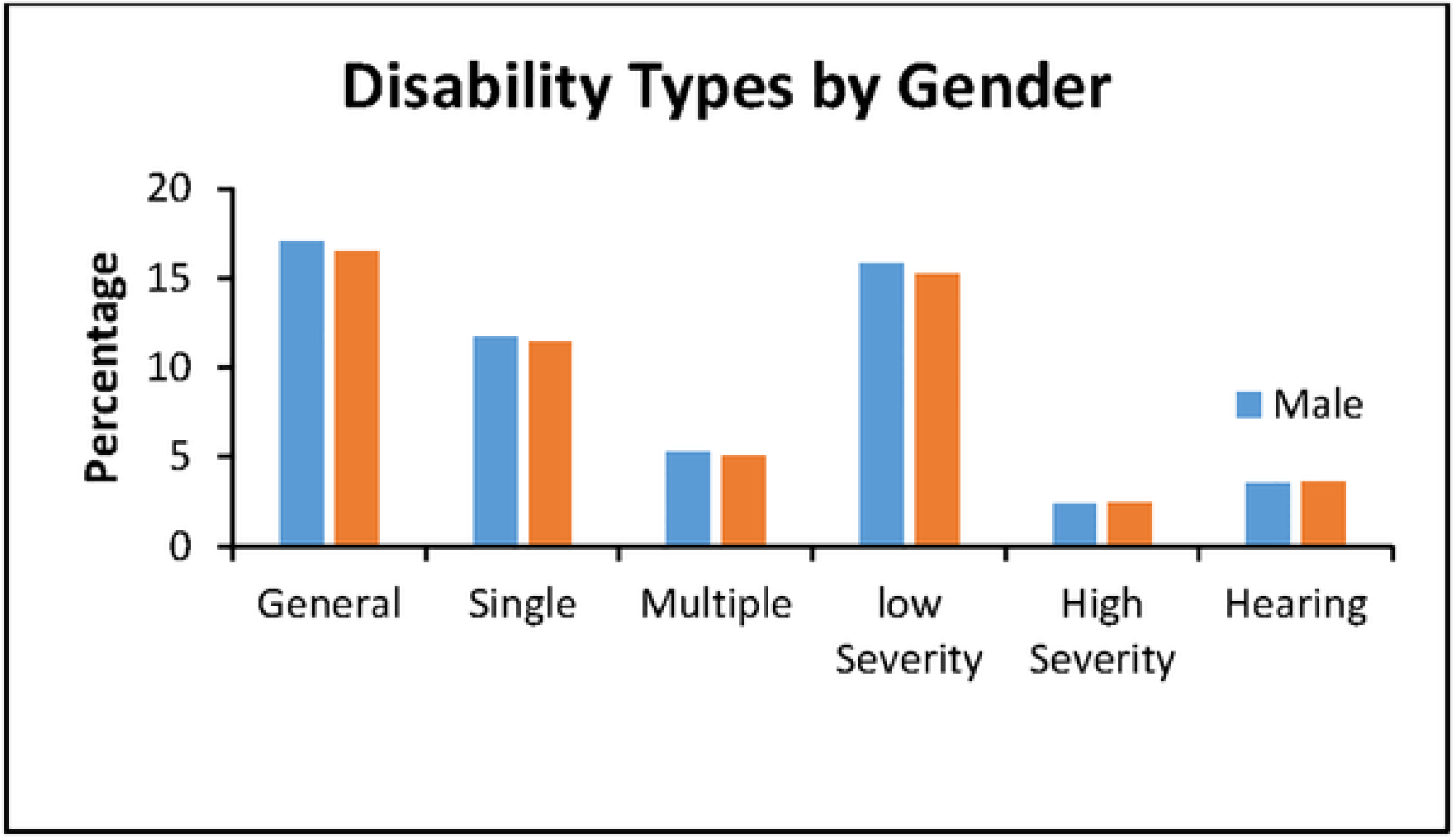
Fig 1 Disability types by age groups.



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W hat did the secondary analysis do?

- From the 20 11 UDHS, a series of questions relating to HIV/AIDS was analysed comparing persons with and without disabilities in relation to HIV/AIDS knowledge, attitudes and practices.
- The main outcomes of interest were HIV/AIDS knowledge, transmission and prevention methods, and sexual behaviour.

Table 2. HIV/ AIDS awareness, knowledge and prevention by disability status.

Variable	All (%, n)	Persons with a disability	Persons without a disability	P Value
OUTCOME VARIABLES				
Model 1: Awareness; Knowledge of Prevention; and Rejection of Misconceptions about HIV/AIDS:				
Model 1a:				
RR = Reduced risk of HIV infection:				
RR using condom	85.34 (8,542)	87.21 (1,479)	84.96 (7,063)	0.017**
RR having one sexual partner	92.60 (9,803)	93.62 (1,657)	92.40 (8,146)	0.075*
Healthy person can be HIV infected	89.80 (9,487)	91.29 (1,624)	89.50 (7,863)	0.023**
R = Risk of HIV infection:				
R mosquito bites	30.60 (2,924)	34.39 (540)	29.86 (2,384)	0.000****
R share food	15.53 (1,580)	17.03 (282)	15.23 (1,298)	0.065*
OK for a person with HIV to teach	74.95 (7,910)	71.23 (1,258)	75.69 (6,652)	0.000****
OK to care for a relative with HIV in household	89.42 (9,633)	91.53 (1,643)	89.00 (7,990)	0.001***
OK to buy vegetables from a vendor with HIV	73.13 (7,930)	71.75 (1,293)	73.41 (6,637)	0.147
Model 1b: Knowledge of Prevention of Mother-to-Child Transmission:				
HT = HIV transmission possible during:				
HT pregnancy	71.17 (7,261)	74.24 (1,271)	70.55 (5,990)	0.002***
HT delivery	93.37 (9,654)	93.89 (1,628)	93.26 (8,026)	0.339
HT breastfeeding	90.51 (9,169)	89.91 (1,497)	90.63 (7,672)	0.358
Model 2: HIV Knowledge and Sexual Behaviour:				
Months since last HIV test	24.722 (35.91)	25.35 (36.44)	24.59 (35.80)	0.492
Received test results most recent HIV test	94.54 (7,347)	93.54 (1,231)	94.75 (6.116)	0.079*
Age at first sex	16.69 (3.06)	16.43 (3.00)	16.74 (3.07)	0.0003****
Condom last sex	14.01 (1,099)	13.69 (183)	14.07 (916)	0.710
Had genital sore in last 12 months	11.35 (1,241)	15.71 (286)	10.47 (955)	0.000****
Had genital discharge in last 12 months	9.98 (1,092)	13.41 (244)	9.30 (848)	0.000****
Had STD in last 12 months	11.16 (1,133)	14.48 (1,671)	10.51 (891)	0.000****
Can get condom	69.73 (5,862)	70.04 (961)	69.67 (4,901)	0.781
Number of sexual partners in last 12 months	1.31 (4.69)	1.40 (5.35)	1.30 (4.54)	0.521
Lifetime sexual partners	3.00 (6.17)	3.61 (7.56)	2.87 (5.83)	0.0003****

* Significant at the 0.1 probability level.
** Significant at the 0.05 probability level.
*** Significant at the 0.01 probability level.
**** Significant at the 0.001 probability level.

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Findings

Comparable levels of knowledge on HIV/AIDS for those with and those without disabilities in relation to HIV transmission during delivery (93.89%, 93.26%) and through breastfeeding (89.91%, 90.63%).

- may reflect increased attention to reaching the community of persons with disabilities.

Several gaps in the knowledge base of persons with disabilities stood out, including misconceptions of risk of HIV infection through mosquito bites and caring for a relative with HIV in own household (34.39%, 29.86%; $p<0.001$; 91.53%, 89.00%; $p = 0.001$, respectively).

- The issue is not just access to appropriate information but also equitable access to HIV/AIDS services and support.

Implications for future research

Persons with disabilities are becoming sexually active earlier, are more likely to have an STD and are less likely to receive HIV test results, it is important to understand why.

Age of onset of disability, whether from birth or later in life, and cause of disability were not assessed and this may make a difference in knowledge, attitudes and practices in relation to HIV and AIDS

Findings from this Ugandan national DHS raise as many questions as answers both about successes and gaps in disability statistics.

The use of WG questions in DHS has made this analysis possible and use of the same in other national DHS allows for comparative analysis and benchmarking.