THE DISABILITY DATA REPORT

2022: Method Briefs

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METHOD BRIEF 1: DISABILITY DISAGGREGATION

1.1 DISAGGREGATION BASED ON DISABILITY

Disability is measured through the WGSS questions in MICS6 women's questionnaire.

Disaggregation can be done in several ways. First, disaggregation is done for women with no difficulty vs any difficulty (disaggregation A).

Disaggregation is done in two additional ways, which take into account the severity of functional difficulties. First, we use three categories: women with no difficulty vs some difficulty vs at least a lot of difficulty (disaggregation B).

Then, we compare women with no difficulty and some difficulty to women with at least a lot of difficulty in line with the Washington Group recommendation (disaggregation C).

For a given subgroup in a disaggregation (e.g. women with at least a lot of difficulty), we set

50 observations as the minimum required to produce estimates. For a given country and subgroup, disaggregation may be possible for some indicators but not others.

In Results Tables, the difference between groups and its statistical significance is typically noted in a separate column. A disability gap represents a statistically significant disadvantage for persons with functional difficulties compared to persons with no functional difficulty. Statistical significance is based on a t-test (*, **, and *** at the 10%, 5% and 1% levels respectively). As indicators reflect achievements (e.g. literacy) or deprivations (e.g. less than primary school completion), a disability gap may be reflected in a positive or a negative difference.

1.2 DISAGGREGATION BASED ON DISABILITY AND DEMOGRAPHIC CHARACTERISTICS

There may be patterns of intersectional disadvantage that affect subgroups of women with disabilities. For each data set under consideration, we tried to disaggregate results at the individual level based on disability as well as age group and rural/urban residence. Double disaggregation tables by disability and a demographic characteristic are available in Results Tables for women in rural areas, urban areas, age 18 to 29 and age 30 to 44.

METHOD BRIEF 2: INDICATORS

This method brief describes each of the indicators used in this study to capture human rights or development. They come under six main themes: education, personal activities, health, standard of living, insecurity and subjective wellbeing.

2.1 EDUCATION

WOMEN WHO HAVE EVER ATTENDED SCHOOL

This indicator reports the share of women who have ever been to school.

The highest level of educational attainment achieved is reflected in the following three indicators:

WOMEN WHO HAVE LESS THAN PRIMARY SCHOOL COMPLETION

This is the share of women who have not completed primary school. Some may have attended preschool. Some may have attended primary school but did not complete it. Women who never attended school also belong in this category.

WOMEN WHO HAVE COMPLETED PRIMARY SCHOOL

This is the share of women who have completed primary school. Adults who completed primary school, attended secondary school but did not complete secondary school belong in this category.

WOMEN WHO HAVE COMPLETED SECONDARY SCHOOL OR HIGHER

This is the share of women who have completed secondary school. Adults who completed secondary school belong in this category, whether or not they also attended tertiary school.

LITERACY RATE

The literacy rate is defined as the share of women with the ability to read a short simple statement about everyday life or who attended secondary or higher education

2.2 PERSONAL ACTIVITIES

EXPOSURE TO MASS MEDIA

This is the share of women who read a newspaper or magazine, listen to the radio, or watch television at least once a week.

COMPUTER USE

This is the share of women who used a computer in the past three months.

INTERNET USE

This is the share of women who used the internet in the past three months.

OWNERSHIP OF MOBILE PHONE

This is the share of women who own a mobile phone.

2.3 HEALTH

WOMEN IN HOUSEHOLDS USING SAFELY MANAGED DRINKING WATER

This indicator is based on the UN Statistics' (2017a) definition of and background to SDG indicator 6.1.1. It refers to the proportion of the population using safely managed drinking water services. Water sources considered as safely managed include: piped water into dwelling, yard or plot; public taps or standpipes; boreholes or tubewells; protected dug wells; protected springs; packaged water; delivered water and rainwater. Water sources that are not considered as safely managed include: unprotected well, unprotected spring, tanker truck, surface water (river/lake, etc), cart with small tank" UN Statistics (2017a).

WOMEN IN HOUSEHOLDS USING SAFELY MANAGED SANITATION SERVICES

This indicator is based on the UN Statistics' (2017b) definition of and background to SDG indicator 6.2.1. Members of the household are considered to have safely managed sanitation service if the household's sanitation facility is improved and is not shared with other households. 'Improved' sanitation facilities include: flush or pour flush toilets to sewer systems, septic tanks or pit latrines, ventilated improved pit latrines, pit latrines with a slab, and composting toilets" UN Statistics (2017b).

WOMEN WITH FAMILY PLANNING NEEDS MET

This is the share of women who self-report that they have their family planning needs met, i.e. who want and have access to modern contraceptive methods.

WOMEN WHO DID NOT PARTICIPATE IN ACTIVITIES DUE TO MENSTRUATION

Share of women menstruating in the last 12 months and who reported that they did not participate in social activities at school or work due to menstruation

WOMEN WHO THINK HUSBAND IS JUSTIFIED TO HIT WIFE

This is the share of women who think a husband is justified in hitting or beating his wife for at least one of the following circumstances: (1) she goes out without telling him, (2) she neglects the children, (3) she argues with him, (4) she refuses sex with him, and (5) she burns the food.

WOMEN WHO HAVE EVER HEARD OF HIV

This is the share of women who have ever heard of HIV (awareness).; (ii) correctly identify all three means of mother-to-child transmission of HIV; and, (iii) have ever been tested for HIV.

WOMEN WHO IDENTIFIED MEANS OF MOTHER-TO-CHILD TRANSMISSION FOR HIV

This is the share of women who identified three means of mother-to-child transmission for HIV: transmission during pregnancy, delivery, and by breastfeeding.

WOMEN WHO HAVE EVER BEEN TESTED FOR HIV

This is the share of women who have ever been tested for HIV.

2.4 STANDARD OF LIVING

WOMEN IN HOUSEHOLDS WITH ELECTRICITY

This indicator is based on the UN Statistics' (2017c) definition of and background to SDG indicator 7.1.1. Specifically, Indicator 7.1.1 refers to the proportion of population with access to electricity. Access is "only considered if the primary source of lighting is the local electricity provider, solar systems, mini-grids and stand-alone systems. Sources such as generators, candles, batteries, etc., are not considered due to their limited working capacities and since they are usually kept as backup sources for lighting (UN Statistics, 2017c)."

WOMEN IN HOUSEHOLDS WITH CLEAN COOKING FUEL

This indicator is based on the UN Statistics' (2017d) definition of and background to SDG indicator 7.1.2. It refers to the share of the population with primary reliance on clean fuels and technology for cooking. Clean fuel includes electricity, gaseous fuels (e.g. natural gas, biogas). Unclean fuels include kerosene and solid fuels (biomass (wood, crop waste, dung), charcoal, coal).

WOMEN IN HOUSEHOLDS WITH ADEQUATE HOUSING

Adequate housing refers to a household living in a place with quality floor, roof and wall materials. Quality floor conditions include laminates, cement, tiles, bricks, parquet. Poor floor conditions include earth, dung, stone, wood planks. Quality roof conditions include burnt bricks concrete, cement. Poor roof conditions refer to no roof or roofs made of natural or rudimentary materials (e.g. asbestos, thatch, palm leaf, mud, earth, sod, grass, plastic, polythene sheeting, rustic mat, cardboard, canvas, tent, wood planks, reused wood, unburnt bricks). Quality wall conditions include burnt bricks, concrete, cement. Poor wall conditions refer to no walls or walls made of natural or rudimentary materials (e.g. cane, palms, trunk, mud, dirt, grass, reeds, thatch, stone with mud, plywood, cardboard, carton/plastic, canvas, tent, unburnt bricks, reused wood.

WOMEN IN HOUSEHOLDS OWNING ASSETS

Adult who own assets is the share of adults who live in households owning at least a radio, TV, telephone, bike, motorcycle, refrigerator, car (or truck) and computer.

WOMEN IN HOUSEHOLDS WITH A MOBILE PHONE

Adult who own assets is the share of adults who live in households with a mobile phone.

2.5 INSECURITY

WOMEN COVERED BY HEALTH INSURANCE

This is the proportion of women with health insurance.

WOMEN FEELING SAFE WALKING ALONE

This is the share of women feeling safe walking alone in their neighborhood after dark.

WOMEN WHO FELT DISCRIMINATED AGAINST BASED ON DISABILITY

This is the share of women who felt discriminated against or harassed within the past 12 months on the basis of disability.

WOMEN WHO FELT DISCRIMINATED AGAINST BASED ON GENDER

This is the share of women who felt discriminated against or harassed within the past 12 months on the basis of gender.

WOMEN LIVING IN HOUSEHOLDS RECEIVING SOCIAL PROTECTION

The share of women living in households receiving social protection is the share of women in households who have received social transfers and benefits within the last year.

WOMEN WHO FELT DISCRIMINATED AGAINST BASED ON ANY GROUND

This is the share of women who felt discriminated against or harassed within the past 12 months on a ground of discrimination prohibited by international human rights law. There is a list of over 20 grounds protected under international human rights law as follows: race, color, sex, language, religion, political or other opinion, national origin, social origin, property, birth status, disability, age, nationality, marital and family status, sexual orientation, gender identity, health status, place of residence, economic and social situation, pregnancy, indigenous status, and other status. For MICS6, the grounds asked across the countries were ethnic or immigration origin, gender, sexual orientation, age, disability and any other reason.

2.6 SUBJECTIVE WELLBEING

HAPPINESS

This is the share of women who report being very happy or somewhat happy. The set of responses include: 'very happy', 'somewhat happy', 'neither happy nor unhappy', 'somewhat unhappy' and 'very unhappy'.

PERCEPTION OF A BETTER LIFE

This is the share of women who report their life has improved during the last one year and that they expect that their life will be better after one year.

MEAN LIFE SATISFACTION FOR WOMEN

MICS6 uses a visual ladder-of-life scale, with explicit reference points (10, for the best possible life, and 0 for the worst possible life) and respondents are asked on which step of the ladder they feel they stand at this time.

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UN Statistics (2017a). Metadata 06-01-01. Accessed April 10th 2021 at:
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In addition to an indicator-by-indicator dashboard analysis, this study also estimates a multidimensional measure of poverty to investigate the experience of simultaneous deprivations following Alkire and Foster (2011). In brief, this method counts deprivations for a set of dimensions and indicators.

An individual is considered to experience multidimensional poverty if the number of deprivations of the individual exceeds a set threshold. Details on the calculation of this measure are included below. H is the multidimensional poverty headcount and gives the percentage of the population who experiences multidimensional poverty or multiple deprivations. Dimensions are weighted and wj is the weight of dimension j. There are different possible methods for setting up weights, for instance, asking people's opinions or using the observed distribution of successes or deprivations (Decancq and Lugo 2013).

In this report, as is often done in multi-dimensional poverty research, all dimensions were considered equally important and were given equal weights (each has a weight of 1) and when more than one indicator was used within a dimension, indicators were equally weighted within the dimension. For instance, for the health dimension with two indicators, each indicator weighs ½.

According to the method laid out in Alkire and Foster (2011), each individual i has a weighted count of dimensions where that person achieves deprivations (c_i) across all measured

The cutoffs for the dimensions are as follows: if a person (1) has less than primary education; (2) lives in a household without safely managed drinking water; (3) lives in a household without

dimensions: $0 \le c_i \le d$ where d is the number of dimensions; with c_{ij} equal to one if individual i has a deprivation in dimension j, and zero otherwise. Let q_i be a binary variable equal to one if the person is identified as deprived, and to zero otherwise. A person is identified as experiencing multidimensional poverty if the person's count of deprivations is greater than some specified cutoff (k):

if $c_i > k$, then $q_i = 1$; if $c_i \le k$, then $q_i = 0$

In this study, k=1.

The *share of adults experiencing multidimensional poverty H* is then the number of persons in multidimensional poverty ($q = \sum q_i$) divided by the total population (n): *H=q/n*

Dimensions and indicators are laid out in Table 1. Based on the information available in the datasets under study, three dimensions and seven indicators were selected for the calculation of the multidimensional poverty measure. The three dimensions are: education, health, and standard of living. Each has a weight of 1 and when more than one indicator was used within a dimension, indicators were equally weighted within the dimension.

Education is measured through an indicator of educational attainment for adults. Health is measured with two indicators and each has a weight of ½: access to safely managed drinking and sanitation services. Standard of living is measured through four indicators with each a weight of ¼: clean fuel, electricity, adequate housing and asset ownership.

safely managed sanitation services; (4) lives in a household without clean cooking fuel; (5) lives in a household without adequate housing, i.e.

without adequate walls, floor and roof; (6) lives in a household without assets.

More details on how each indicator is defined is in Method brief 2

Table 1. Dimensions, Indicators and Weights in the Multidimensional Poverty Measure

Dimension	Indicator(s)	Threshold: Deprived if…	Dimension Weight	Indicator Weight
Education				
	Education	Individual has less than primary schooling	1	1
Health			1	
	Water	Household without safely managed drinking water		1/2
	Sanitation	Household without safely managed sanitation services		1/2
Standard of living			1	
	Electricity	Household without electricity		1/4
	Cooking fuel	Household without clean fuel		1/4
	Housing	Households without quality floor, roof and wall materials		1/4
	Assets	Household does not own more than one asset (among radio, TV, telephone, bike, or motorbike or fridge); and the household does not own a car (or truck).		1/4

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```
/****
May  27, 2022
*This  STATA code was prepared by Jaclyn yap, for any question, please email rcd@fordham.edu"

This STATA code is for generating the main analysis of the 2022 Disability Data Report using Multiple
Indicator Cluster Survey 6 MICS6 data

This code is divided into two parts:

**I. Data Preparation Section
Clean and generate variables needed for analysis: use _HL, _HH, and _WM from folder:

_HL = household list - includes age, sex, relationship to HH, ever attended, and highest level of
education
_HH = household level vars i.e. standard of living vars
_WM = women's dataset - includes functional difficulty,marital status, and the rest of individual-level
indicators
Then merge all three and save as MICS_raw.dta

** II. Analysis Section : Generate Disability and Indicator Vars  (line #460+)



*****/


/**
**# Bookmark #1
I. Data Preparation Section
*/

clear all

/*
HOUSEHOLD LIST MODULE
*/
use "{}MICS6\Malawi\Malawi_hl.dta" , clear
lookfor age HL3
```

```
*Age
fre HL6
clonevar age_new=HL6

*sex_new      =1 male        =2 female
fre HL4
clonevar sex_new=HL4


**EDUCATION
*Ever attended school
*  ED9 Attended  school    during   current  school year   (2076)
gen everattend_new=cond(mi(ED4)|ED4==9,.,cond(ED4==1,1,0))


*Educational Attainment
fre ED5A ED5B

clonevar edattain_new=ED5A
tab ED5B ED5A if age_new>=15,m
recode edattain_new (8 9=.) (0 1 =1) (2 3=2) (4 5=4)
replace edattain_new =2 if ED5A==1 & ED5B==8
replace edattain_new =3 if ED5A==3 & ED5B==4

*recode those who never attended school as less than primary education
replace edattain_new=1 if everattend_new==0

cap label def edattain 1 "Less than primary" 2 "Primary" 3 "Secondary" 4 "Higher than Secondary"
label val edattain_new edattain


save "{}MICS6\Malawi\Malawi_hl.dta" , replace

/*
 WOMEN 15-49
*/
use "{}MICS6\Malawi\Malawi_wm.dta" , clear

*WGSS/functional difficulty vars for Women 18 to 49
clonevar seeing_diff_new=AF6
clonevar hearing_diff_new=AF8
clonevar mobility_diff_new=AF9
clonevar cognitive_diff_new=AF10
clonevar selfcare_diff_new=AF11
```

```
clonevar comm_diff_new=AF12

su seeing_diff_new hearing_diff_new mobility_diff_new cognitive_diff_new selfcare_diff_new
comm_diff_new

*replace missing value 9 = NO RESPONSE
mvdecode seeing_diff_new hearing_diff_new mobility_diff_new cognitive_diff_new selfcare_diff_new
comm_diff_new, mv(9=.a)
su seeing_diff_new hearing_diff_new mobility_diff_new cognitive_diff_new selfcare_diff_new
comm_diff_new

*SEEING/HEARING AIDS
*Seeing Aid
gen seeing_aid=cond(mi(AF2)|AF2==8|AF2==9,.,cond(AF2==1,1,0))
*Hearing Aid
gen hearing_aid=cond(mi(AF3)|AF3==8|AF3==9,.,cond(AF3==1,1,0))

*Literacy Rate
* if woman ages 15-49 =1 if obtained secondary education or if not, can read whole parts of sentence

gen lit_new=cond(mi(WB6A)|WB6A==8,.,cond(WB6A<=1,0,1))
*able to read whole sentence:
replace lit_new=1 if lit_new==0 & WB14==3
*can't read, only parts of sentence:
replace lit_new=0 if WB14==1|WB14==2
tab WB6A lit_new,m


**HEALTH

*Access to modern family planning methods
fre CP2
codebook CP4*,c
fre CP2
gen current_fp_modern=cond(mi(CP2)|CP2==9,.,cond(CP4A=="" & CP4B=="" & CP4C=="" & CP4D==""
& CP4E=="" & CP4F=="" & CP4G=="" & CP4H=="" & CP4I=="" & CP4J=="",0,1)) \tab CP2
current_fp_modern ,m
label var current_fp_modern "family planning using modern method"


*Missed activities due to menstruation
gen mh_activitymissed=cond(mi(UN16)|UN16==8|UN16==9,., cond(UN16==1,1,0))
tab UN16 mh_activitymissed,m
```

```
*HIV
lookfor HA*

*HIV awareness
fre HA1
gen hiv_aware=cond(mi(HA1)|HA1==9,.,cond(HA1==1,1,0))
tab hiv_aware

*generate variable
cap program drop know_gen
program define know_gen
                args var_name q
        gen `var_name'=cond(`q'==9|`q'==8|mi(`q'),.,cond(`q'==1,1,0))

end
fre HA8*

*Awareness of Mother to Child transmission
*among those who  know...Percentage of women and men age 15-49 years who correctly identify all
three means  of mother-to-child transmission of HIV HA8~

tab HA1 HA8A,m
know_gen "hiv_pregnancy" "HA8A"
know_gen "hiv_delivery" "HA8B"
know_gen "hiv_breastfeed" "HA8C"
gen hiv_trans_momchild=cond(hiv_aware==0|mi(hiv_aware),.,cond(hiv_pregnancy==1 &
hiv_delivery==1 & hiv_breastfeed==1,1,0))
label var hiv_trans_momchild "correctly identify all three means  of mother-to-child transmission of
HIV"

fre HA24
local q HA24
gen hiv_evertested=cond(`q'==9|`q'==8|mi(`q'),.,cond(`q'==1,1,0))


*Attitudes towards Domestic Violence
codebook DV*, c

*gen variable
cap program drop var_gen
program define var_gen
                args var_name q
```

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```
         gen `var_name'=cond(`q'==8|`q'==9|mi(`q'),.,cond(`q'==1,1,0))

end

*Attitude components:

*DV1A     If she goes out with out telling husband: wife beating justified
var_gen "dv_out" "DV1A"
tab DV1A dv_out,m

*DV1B     If she neglects the children: wife beating justified
var_gen "dv_neglect" "DV1B"
tab DV1B dv_neglect,m

*DV1C     If she argues with husband: wife beating justified
var_gen "dv_argue" "DV1C"
tab DV1C dv_argue,m

*DV1D     If she refuses sex with husband: wife beating justified
var_gen "dv_refuse" "DV1D"
tab DV1D dv_refuse ,m

*DV1E     If she burns the food: wife beating justified
var_gen "dv_burnfood" "DV1E"
tab DV1E dv_burnfood,m

*If any of the responses is yes
egen dv_beatingjust=rowmax(dv_out      dv_neglect   dv_argue     dv_refuse    dv_burnfood)
label var dv_beatingjust "Any reason =1 wife beating justified"
tab dv_beatingjust , m


**SUBJECTIVE WELLBEING
*Life Satisfaction
 codebook LS1 LS2 LS3 LS4, c

*Generate happiness =1 if orig var == 1 very happy 2 somewhat happy
*LS1      Estimation of overall happiness (1 to 5 with 5 very UNHAPPY)
fre LS1
gen ls_happy=cond(LS1==9|mi(LS1),.,cond(LS1==1|LS1==2,1,0))

*LS2      Satisfaction with ladder step (range is 0 to 10 )
clonevar ls_satisfaction=LS2
recode ls_satisfaction (99=.)
```

```
*Optimism or Perception of a better life
*Percentage of women and men whose life improved during the last one year AND who expect that
their life will be better after one year
fre LS3 LS4
gen ls_optimism=cond((LS3==9|mi(LS3)|LS4==9|mi(LS4)),.,cond(LS3==1 & LS4==1,1,0))

**PERSONAL ACTIVITIES
*Computer usage
su MT4 MT5 MT6*
fre MT4
var_gen "computer_everused" "MT4"
tab MT4 computer_everused, m

*Internet usage
fre MT9
var_gen "internet_everused" "MT9"
tab MT9 internet_everused, m

*mobile ownership women
var_gen "mobile_own" "MT11"
tab mobile_own MT11
*frequency usage in last 3 months
gen mobile_frequent= cond(MT12==9|mi(MT12),.,cond(MT12==0|MT12==1,0,1))


*Media Exposure Variables
codebook MT1 MT2 MT3

*variable generator
cap program drop freq_gen
program define freq_gen
            args var_name q
     gen `var_name'=cond(`q'==9|mi(`q'),.,cond(`q'==2|`q'==3,1,0))

end

* freq at least once a week or almost everyday
freq_gen "media_newsp_mag" "MT1"
freq_gen "media_radio" "MT2"
freq_gen "media_tv" "MT3"

tab1 media_*
```

*Percentage of women and men age 15-49 years who, at least once a week, read a newspaper or magazine, listen to the radio, and watch television
egen media_exp=rowmax(media_newsp_mag media_radio media_tv)
tab media_exp

*INSECURITY

*Safety
codebook VT20 VT21

*Among those who do walk alone, they felt "Very Safe" or "Safe"
gen safe_feel_walkalone=cond(mi(VT20)|VT20==9|VT20==7,.,cond(inlist(VT20, 1,2),1,0))

*Discrimination Variables:
codebook VT22*,c
*EQ7 Percentage of women and men age 15-49 years having personally felt discriminated against or harassed within the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law

*disability discrimination
gen disc_disa=cond(mi(VT22F)|VT22F==8|VT22F==9,.,cond(VT22F==1,1,0))
tab disc_disa VT22F,m

* gender discrimination
fre VT22B
gen disc_gender=cond(mi(VT22B)|VT22B==8|VT22B==9,.,cond(VT22B==1,1,0))
tab disc_gender VT22B,m

*any discrimination
egen disc_any=rowmin(VT22A VT22B VT22C VT22D VT22F VT22X)
mvdecode disc_any, mv(8 9=.)
recode disc_any (2=0)
tab disc_any

*Health insurance
fre WB18
local q WB18
gen health_insurance=cond(`q'==9|`q'==8|mi(`q'),.,cond(`q'==1,1,0))

```
save "{}MICS6\Malawi\Malawi_wm.dta", replace
```

```
*HOUSEHOLD MODULE
use "{}MICS6\Malawi\Malawi_hh.dta" , clear

fre HH6
*urban_new:  =1  rural    =2 urban
gen urban_new=cond(HH6==1,2,1)
label var urban_new "=1 rural =2 urban"
tab urban_new HH6,m

*Asset components
*phone_new   =1 with phone (telephone) =0
lookfor telephone
fre HC7A
gen phone_new= cond(HC7A==9|mi(HC7A),.,cond(HC7A==1,1,0))
tab phone_new HC7A,m


*cell_new/mobile phone at hh level  =1 =0
lookfor mobile
fre HC12
local var HC12
gen cell_new= cond(`var'==9|mi(`var'),.,cond(`var'==1,1,0))
tab HC12 cell_new,m


*flooring where variable floor_new =1 if floor is rudimentary / unimproved
*floor_new (see def below)    =1 if bad=0 if good
fre HC4
gen floor_new=cond(mi(HC4)|HC4==99,.,cond(inlist(HC4,11,12,21,22,96),1,0))
tab HC4 floor_new,m

*roof where variable roof_new =1 if roof is rudimentary / unimproved
*roof_new       =1 if bad =0 if good
fre HC5
gen roof_new= cond(mi(HC5)|HC5==99,.,cond(inlist(HC5,11,12,21,22,23,24,96),1,0))
tab HC5 roof_new,m

*wall where variable wall_new =1 if wall is rudimentary / unimproved
```

*wall_new   =1 if bad=0 if good
fre HC6

gen wall_new=cond(mi(HC6)|HC6 ==99,.,cond(inlist(HC6,11,12,13,21,22,23,24,25,26,36,96),1,0))
tab HC6 wall_new,m

*Clean Fuel
*fuelcook_new (see description below of clean fuel)   =1 if good - NOT organic material =0 if bad -
organic (dung, coal, etc)
*BLEN fuels (biogas, liquefied petroleum gas, electricity, and natural gas) are the cleanest solutions,
able to reduce household air pollution emissions to the level of WHO guidelines safe for health.
fre EU1
tab EU1 EU4
gen fuelcook_new=cond(mi(EU1)|EU1==97|EU1==99,.,cond(inlist(EU1,1,2,3,4,5),1,0))
tab EU4 fuelcook_new,m
tab EU4 EU1

tab EU4 fuelcook_new,m
tab EU1 fuelcook_new,m

*electric_new =1 if yes =0 otherwise
fre HC8
gen electric_new=cond(mi(HC8)|HC8==9,.,cond(inlist(HC8,1),1,0))

**HEALTH

*sanitation
*toilet_new   =1 with toilet (pit latrine, etc) =0 no toilet
fre WS11
local var WS11
gen toilet_new= cond(`var'==99|mi(`var'),.,cond(inlist(`var',11,12,13,21,22,31),1,0))

*WS15 -- Toilet facility shared
fre WS15

*reclassify if toilet is shared (yes) to unimproved sanitation
replace toilet_new=0 if WS15==1
tab WS11 toilet_new

```
*water indicator watsup_new where =1 if household has access to improved water source
*watsup_new
fre WS1
gen watsup_new= cond(mi(WS1),.,cond(inlist(WS1,11,12,13,14,21,31,41,51,91),1,0))
tab WS1 watsup_new,m


*Assets
*variable generator
cap program drop assets_gen
program define assets_gen
            args var_name q
        gen `var_name'=cond(`q'==9|mi(`q'),.,cond(`q'==1,1,0))

end
fre HC10E

*autos_new    = with auto  q= HC10E
* HC10E -- Any member of household own: Car, truck or van
assets_gen "autos_new" "HC10E"
tab HC10E autos_new,m

*computer_new       =1 if computer =0  q=HC11
fre HC11
assets_gen "computer_new" "HC11"
tab  HC11 computer_new,m

*refrig_new    =1 =0  q=HC9B
fre HC9B
assets_gen "refrig_new" "HC9B"
tab HC9B refrig_new,m

*tv_new        =1 =0  q=HC9A
fre HC9A
assets_gen "tv_new" "HC9A"
tab HC9A tv_new,m

*radio_new     =1 =0 q=HC7B
lookfor radio
assets_gen "radio_new" "HC7B"
tab HC7B radio_new,m

*bike_new      =1 =0 q=HC10B
lookfor bike bicycle
```

```
assets_gen "bike_new" "HC10B"
tab HC10B bike_new,m


*motorcycle_new      =1 =0 q=HC10C
lookfor motorcycle //
assets_gen "motorcycle_new" "HC10C"


*INSECURITY
*Any social assistance received
codebook _v106 _v107 _v108 _v109 _v110,c
codebook _v111 _v112 _v113 _v114 _v115,c

egen soc_assist=rowmin(_v106 _v107 _v108 _v109 _v110)
recode soc_assist (2=0)
egen soc_rec=rowmin(_v111 _v112 _v113 _v114 _v115)
recode soc_rec (2=0)

replace soc_assist=0 if soc_rec==0 & !mi(soc_assist)
tab soc_assist
recode soc_assist (8=.)

save "{}MICS6\Malawi\Malawi_hh.dta", replace



/*
MERGE Modules _hl _hh _wm
*/


use "{}MICS6\Malawi\Malawi_hl.dta" , clear
gen LN=HL1
label var LN "line number to merge w Women module"

*merge household
merge m:1 HH1 HH2 using "{}MICS6\Malawi\Malawi_hh.dta", keep(master matched) gen(hh_merge)
*merge women's module
merge 1:1 HH1 HH2 LN using "{}MICS6\Malawi\Malawi_wm.dta", keep(master matched)
gen(women_merge)

label val seeing_diff_new hearing_diff_new mobility_diff_new cognitive_diff_new selfcare_diff_new
comm_diff_new  .
```

```
codebook seeing_diff_new hearing_diff_new mobility_diff_new cognitive_diff_new selfcare_diff_new
comm_diff_new, c

save "{}MICS6\Malawi\Malawi_MICS6_raw.dta" , replace


/****
**# Bookmark #2
** II. Analysis Section : Generate Disability and Indicator Vars
****/

use "{}MICS6\Malawi\Malawi_MICS6_raw.dta" , clear



egen missing_funcq=rmiss2(seeing_diff_new hearing_diff_new mobility_diff_new cognitive_diff_new
selfcare_diff_new comm_diff_new)

keep if age_new >= 18 & age_new <. & sex_new==2
keep if missing_funcq == 0

*Generate Functional difficulty indicators
egen func_difficulty=rowmax(seeing_diff_new hearing_diff_new mobility_diff_new cognitive_diff_new
selfcare_diff_new comm_diff_new)

*Disaggregation A: None vs. Any Functional Difficulty
*Any functional difficulty =1 if response for 1 of 6 functional difficulty is 2, 3, or 4 , 0 otherwise
gen disability_any=0 if !mi(func_difficulty)
replace disability_any=1 if inrange(func_difficulty, 2, 4)

*Disaggregation B: None, Some, At least a lot  of Functional Difficulty
*To compare None vs. Some difficulty
gen diff_none_some=cond(mi(func_difficulty)|inrange(func_difficulty, 3,
4),.,cond(func_difficulty==2,1,0))
*To compare None vs. At Least a lot of difficulty
gen
diff_none_atleast=cond(mi(func_difficulty)|func_difficulty==2,.,cond(func_difficulty==3|func_difficulty
==4,1,0))

*Disaggregation C: None vs. At least a lot of Functional Difficulty
*At least a lot functional difficulty if response for 1 of 6 functional difficulty is 3, or 4 , 0 otherwise
gen disability_atleast=0
replace disability_atleast=1 if  inrange(func_difficulty, 3, 4)
```

*For analysis by type of functional difficulty : Indicator var =1 if respondent reports any difficulty (2,3,4) for each type
foreach var of varlist seeing_diff_new hearing_diff_new mobility_diff_new cognitive_diff_new selfcare_diff_new comm_diff_new {
        `var'_ind=cond(mi(`var'),., cond(`var'!=1,1,0))
}

****
*Generate Indicator variables
****

**Education:

 *Proportion of individuals who have ever attended school
gen ind_everattended=cond(mi(everattend_new),.,cond(everattend_new==0,0,1))

*Average highest educational level reached

*Less than Primary
gen ind_less_primary=cond(mi(edattain_new),.,cond(edattain_new==1,1,0))

*Primary
gen ind_primary=cond(mi(edattain_new),.,cond(edattain_new==2,1,0))

*Secondary or Higher
gen ind_atleastsecondary=cond(mi(edattain_new),.,cond(edattain_new==3|edattain_new==4,1,0))

*Literacy Rate
gen ind_literacy=cond(lit_new==1,1,0)

**Personal Activities:

*Computer use
gen ind_comp_used=cond(mi(computer_everused),.,computer_everused)
*Internet use
gen ind_int_used=cond(mi(internet_everused),.,internet_everused)

*Own Mobile Phone
gen ind_mobile_own=cond(mi(mobile_own),.,mobile_own)

*Media Exposure

```
gen ind_media_exp = cond(mi(media_exp),.,media_exp)
```

**Health:

*access to safe drinking water
```
gen ind_water=cond(mi(watsup_new),.,cond(watsup_new==1,1,0))
```

*proportion of population using safely managed sanitation services
```
gen ind_toilet=cond(mi(toilet_new),.,cond(toilet_new==1,1,0))
```

*proportion of population with access to electricity
```
gen ind_electric=cond(mi(electric_new),.,cond(electric_new==1,1,0))
```

*proportion of population using clean fuel
```
 gen ind_cleanfuel=cond(mi(fuelcook_new),.,cond(fuelcook_new==1,1,0))
```

*Access to Modern contraceptive
```
gen ind_fp_modern=cond(mi(current_fp_modern),.,current_fp_modern)
```

*Attitude towards Domestic Violence
```
gen ind_dv_attitude=cond(mi(dv_beatingjust),.,dv_beatingjust)
```
*HIV awareness
```
gen ind_hiv_aware =cond(mi(hiv_aware),.,hiv_aware )
```
*HIV knowledge of mother-to-child transmission
```
gen ind_hiv_momchild_know=cond(mi(hiv_trans_momchild),.,hiv_trans_momchild)
```
*HIV Ever tested
```
gen ind_hiv_evertested=cond(mi(hiv_evertested),.,hiv_evertested)
```
*Missed Activities due to Menstruation
```
gen ind_mh_activitymiss= cond(mi(mh_activitymissed),.,mh_activitymissed)
```

**Standard of Living

*Mobile phone in household
```
gen ind_cell=cond(mi(cell_new),.,cond(cell_new==1,1,0))
```

*Asset Ownership

```
        *First check if these vars exist and check is stored in global var:
        local variable_tocheck "radio_new tv_new autos_new computer_new refrig_new
phone_new cell_new motorcycle_new bike_new "
```

```
foreach var in `variable_tocheck' {
capture confirm variable `var', exact
if !_rc {
        *display "`var' exists"
        global `var' = 1
}
else {
        *display "`var' does not exist"
        global `var' = 0
}
}
```

*Create an index that sums all existing assets in dataset (at least 1).
*Create dummy for each type of assets. Sum of dummies, max number of assets owned

```
if($phone_new == 1){
 gen ind_phone=cond(mi(phone_new),.,cond(phone_new==1,1,0))
        }
else{
gen ind_phone = 0
}




if($autos_new == 1){
 gen ind_autos=cond(mi(autos_new),.,cond(autos_new==1,1,0))
 }
else{
gen ind_autos = 0
}

if($computer_new == 1){
 gen ind_computer=cond(mi(computer_new),.,cond(computer_new==1,1,0))
}
else{
gen ind_computer = 0
}

if($refrig_new == 1){
 gen ind_refrig=cond(mi(refrig_new),.,cond(refrig_new==1,1,0))
}
else{
gen ind_refrig = 0
}
```

```
if($tv_new == 1){
 gen ind_tv=cond(mi(tv_new),.,cond(tv_new==1,1,0))
}
else{
gen ind_tv = 0
}

if($radio_new == 1){
 gen ind_radio=cond(mi(radio_new),.,cond(radio_new==1,1,0))
}
else{
gen ind_radio = 0
}

if($bike_new == 1){
 gen ind_bike=cond(mi(bike_new),.,cond(bike_new==1,1,0))
}
else{
gen ind_bike = 0
}


if ($motorcycle_new == 1){
 gen ind_motorcycle=cond(mi(motorcycle_new),.,cond(motorcycle_new==1,1,0))
 }
else{
 gen ind_motorcycle = 0
 }

egen ind_asset_ownership = rowtotal(ind_phone ind_cell ind_autos ind_computer
ind_refrig ind_tv ind_radio  ind_bike ind_motorcycle)
 replace ind_asset_ownership = ind_assets/($phone_new + $autos_new + $cell_new +
$computer_new + $refrig_new + $tv_new + $radio_new +$motorcycle_new + $bike_new )
```

*Living Conditions Indicator
*note: floor_new roof_new wall_new were coded as deprivations
*if any one of three components is poor then living condition =0
```
 gen ind_livingcond = cond(floor_new == 1|roof_new==1| wall_new ==1,0,1)
```

*Multidimensional Poverty headcount

```
    *recode dimensions as deprivations
    gen deprive_health_water=cond(mi(watsup_new),.,cond(watsup_new==0,1,0))
    gen deprive_health_sanitation=cond(mi(toilet_new),.,cond(toilet_new==0,1,0))
```

```
gen deprive_sl_electricity=cond(mi(electric_new),.,cond(electric_new==0,1,0))
gen deprive_sl_fuel=cond(mi(fuelcook_new),.,cond(fuelcook_new==0,1,0))
gen deprive_sl_housing = cond(floor_new == 1|roof_new==1| wall_new ==1,1,0)
gen deprive_sl_asset=cond(mi(ind_assets),.,cond(ind_assets==0,1,0))

*education: deprived if less than primary
*weight of dimension is 1/3 or 0.33
gen deprive_educ=cond(mi(edattain_new),.,cond(edattain_new==1,0.33,0))

*generate temp var
egen health_temp=rowtotal(deprive_health_water deprive_health_sanitation)
egen sl_temp=rowtotal(deprive_sl_electricity deprive_sl_fuel deprive_sl_housing
deprive_sl_asset)

*we assume that dimensions can not be missing but indicators inside can be missing. The
dimension weights remain the same but the indicators weights should change
egen missing_health=rmiss2(deprive_health_water deprive_health_sanitation)
replace missing_health=2-missing_health

egen missing_sl=rmiss2(deprive_sl_electricity deprive_sl_fuel deprive_sl_housing
deprive_sl_asset)
replace missing_sl=4-missing_sl

*health : weight is 0.33
gen deprive_health=(1/missing_health)*0.33*health_temp
*standard of living : weight is 0.33
gen deprive_sl=(1/missing_sl)*0.33*sl_temp

*check if any dimension missing, then missing
gen
mdp_score=cond(mi(deprive_educ)|mi(deprive_health)|mi(deprive_sl),.,deprive_educ+deprive_healt
h+deprive_sl)
gen ind_mdp=cond(mi(mdp_score),.,cond(mdp_score>0.33,1,0))
replace ind_mdp=0 if mi(ind_mdp)


**Insecurity:

*Feelings of safety
gen ind_safe_feelwalkalone = cond(mi(safe_feel_walkalone),.,safe_feel_walkalone)

*Discrimination: disability
 gen ind_discr_disa = cond(mi(disc_disa),.,disc_disa)
```

*Discrimination: gender
gen ind_discr_gender = cond(mi(disc_gender),., disc_gender)

*Discrimination: any
gen ind_discr_any = cond(mi(disc_any),.,disc_any)

*Social Assistance
gen ind_soc_assist = cond(mi(soc_assist),.,soc_assist)

**Subjective Wellbeing:

*Happiness
gen ind_ls_happy=cond(mi(ls_happy),.,ls_happy)

*Mean Life Satisfaction
gen ind_ls_satis_mean=cond(mi(ls_satisfaction),.,ls_satisfaction)

*Optimism
gen ind_ls_optimism=cond(mi(ls_optimism),.,ls_optimism)

save "{}MICS6\Malawi\Malawi_MICS6.dta" , replace

use "{}MICS6\Malawi\Malawi_MICS6.dta" , clear

*Template for analysis:
svyset   [pweight=wmweight]

*Share of those who use assistive device for seeing (seeing_aid) among those with seeing difficulties
svy: mean seeing_aid if seeing_diff_new >1 & !mi(seeing_diff_new)

*Share of those who use assistive device for hearing (hearing_aid) among those with hearing difficulties
svy: mean hearing_aid if hearing_diff_new >1 & !mi(hearing_diff_new)

*replace indicator here
local indicator_variable ""
local disability_variable ""
*Calculate the means
 svy: mean `indicator_variable', over(`disability_variable')
 *Calculate the difference and the p-value of the difference

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```
lincom _b[c.`indicator_variable'@0bn.`disability_variable'] -
_b[c.`indicator_variable'@1.`disability_variable']
```

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disability   data initiative