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Measuring disability among children for forcibly displaced and stateless people: lessons learnt from Results Monitoring Surveys of UNHCR (The UN Refugee Agency)**Note by UNHCR***Abstract*

The Results Monitoring Surveys are household surveys conducted by UNHCR to monitor survey-based impact and outcome level indicators of the Results-Based Monitoring Framework of UNHCR. Currently, RMS has already been implemented in more than 60 countries. The survey includes the Washington Disability Group on Statistics module on disability to facilitate disaggregation by age, gender, and disability. Disaggregation, particularly regarding disability in children, poses methodological challenges related to survey modality, sampling, and questionnaire design.

I. Introduction

1. The number of forcibly displaced and stateless populations expected to reach 117.2 million in 2023 according to Global Appeal of UNHCR (United Nations High Commissioner for Refugees) (UNHCR, 2023). Due to the increasing numbers of forcibly displaced and stateless populations, it is more important than ever having access to high quality data to better inform policy makers, international organizations and governments institutions. However, forcibly displaced populations, which includes refugees, asylum seeker and internally displaced persons (IDPs) pose unique challenges to the selection of probability

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sample (Eckman & Kristen, 2022). In that regard, developing sound methodologies for survey data collection is crucial and requires different types of efforts to find solution for its unique challenges.

2. UNHCR aims to become a trusted leader on data related to forcibly displaced and stateless populations as part of UNHCR's Data Transformation Strategy of 2020 to 2025. Household surveys are crucial in that sense to have snapshot on the living conditions of these populations even in areas that are not reachable. UNHCR already implements several household surveys that serve for different purposes such as nutrition (SENS), socio-economic assessment, protection monitoring or RMS (Results Monitoring Surveys).

II. Results Monitoring Surveys

3. RMS is one of the household surveys implemented by UNHCR on forcibly displaced and stateless persons who are directly or indirectly assisted by UNHCR, including refugees and asylum seekers, internally displaced persons, returnees, stateless and others of concern. The objective of the survey is to monitor impact and outcome level indicators on education, healthcare, livelihoods, protection concerns, shelter, and water and sanitation. The results contribute to an evidence base for reporting against UNHCR's multi-year strategies to key stakeholders.

A. Context of RMS implementation

4. The RMS are household-level surveys that follow context-appropriate methodological approaches. They are tailored at country operation level. Operations can select relevant question sets from the RMS standard questionnaire based on their Results Frameworks and specific data and information needs. They can also be implemented in any operational context.
5. The data includes indicators collected at both the household and individual (household-member) level, and the survey aims to be statistically representative for the forcibly displaced population. A standard questionnaire has been developed for the RMS, which can be conducted as a stand-alone survey or flexibly integrated with other data collection exercises. The main standard questionnaire is structured for CAPI (Computer Assisted Personal Interviews) where there is another version for CATI (Computer Assisted Telephone Interviews) is made available due to high demand on phone surveys. As a results, the mode of survey is also up to the implementing operations which can be selected as CAPI or CATI.

B. Indicators

6. The RMS includes a total of 23 indicators that can be measured in the standard questionnaire. Most of the indicators are also corresponding indicators for Sustainable Development Goals (SGD) indicators. However, minor adjustments can be observed in the indicators as they have been adapted to forced displacement context. The below **Error!**

Reference source not found. shows the indicators that are part of the RMS. The aim of these indicators to be able to measure living conditions, access to services such as health, education, safety, security, shelter conditions.

Figure 1
UNHCR Results-Based Monitoring Indicators from the Results Monitoring Surveys

I/O	Indicator	Question sources
Impact	Proportion of people residing in physically safe and secure settlements with access to basic facilities	UNHCR Core Indicator guidance
	Proportion of people with access to health services	UNHCR HAUS
	Proportion of children and young people enrolled in primary education	UNHCR Education Module
	Proportion of children and young people enrolled in secondary education	UNHCR Education Module
	Proportion of people that feel safe walking alone in their neighbourhood after dark	UNHCR Core Indicator guidance
Outcome	Proportion of children under 5 years of age whose births have been registered with a civil authority	UNICEF MICS6 + UNHCR Core Indicator guidance
	Proportion of people with legally recognized identity documents or credentials	UNHCR Core Indicator guidance
	Proportion of people who know where to access available GBV service	UNHCR Core Indicator guidance
	Proportion of people who do not accept violence against women	MICS6
	Proportion of children who participate in community-based child protection programmes	UNHCR Core Indicator guidance
	Proportion of people with primary reliance on clean (cooking) fuels and technology	WHO/WB Guidance
	Proportion of people living in habitable and affordable housing	UNICEF MICS6 + UNHCR Core Indicator guidance
	Proportion of people that have energy to ensure lighting	WHO/WB Guidance
	Proportion of children aged 9 months to five years who have received measles vaccination	MICS6
	Proportion of births attended by skilled health personnel	MICS6
	Proportion of people using at least basic drinking water services	MICS6
	Proportion of people with access to a safe household toilet	MICS6
	Proportion of people with an account at a bank or other financial institution or with a mobile-money-service provider	Global Findex Questionnaire
	Proportion of people who self-report positive changes in their income compared to previous year	UNHCR Core Indicator guidance
	Proportion of people (working age) who are unemployed	UNHCR SEA

Proportion of returnees with legally recognized identity documents or credentials	UNHCR Core Indicator guidance
Proportion of people with secure tenure rights to housing and/or land	UNHCR Core Indicator guidance
Proportion of people covered by national social protection systems	UNHCR Core Indicator guidance

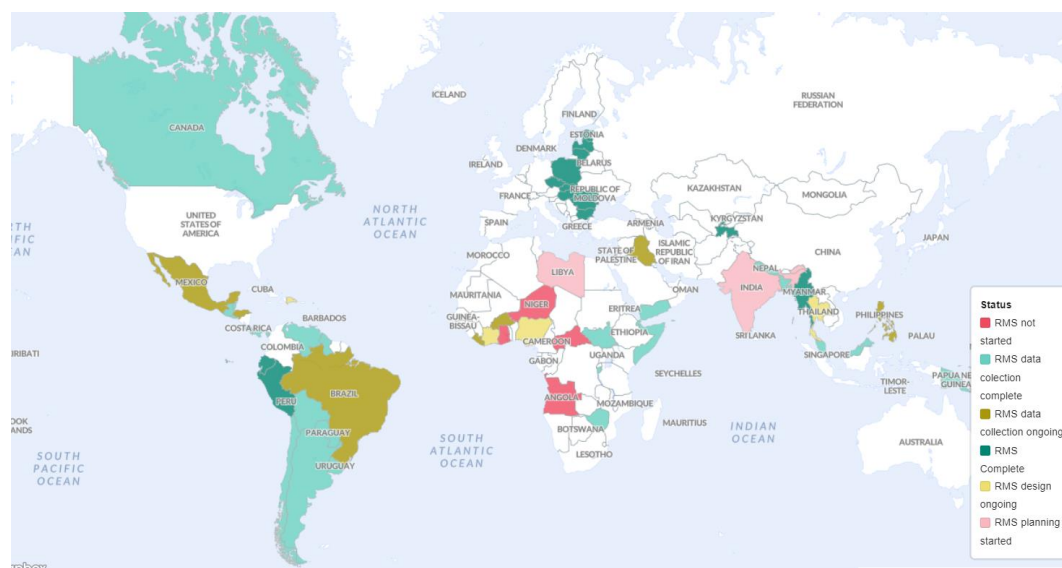
C. Countries where RMS data is available

- The results monitoring surveys were first piloted in 2021 in five countries: Brazil, Burkina Faso, Ethiopia, South Africa, and Georgia. The aim was to obtain impact and outcome indicators among forcibly displaced and stateless populations. The population groups surveyed were mainly refugees and asylum seekers, internally displaced persons, and other populations of concern.
- These pilot experiences demonstrated many challenges, the main one being the difficulty in obtaining a nationally representative sample of forcibly displaced populations due to the absence of a sampling frame or the lack of up-to-date lists, which is a common issue. The second main challenge was obtaining indicators disaggregated by sex, age, and disability with statistically representative results without the need for a very large sample size. This issue will be discussed, particularly in the case of indicators related to children, focusing on disability and other disaggregation indicators.
- The below Figure 1 and Figure 2 shows the countries where RMS planned or took place. In 2022, 33 countries from different continents completed data collection and reported on the indicators mentioned above. In 2023, 37 countries have already finalized data collection and will report on the indicators with some 11 countries currently either on design phase or data collection is ongoing.

Figure 1
RMS 2022 countries where data collection planned/took place



Figure 2
RMS 2023 countries where data collection planned / took place



D. Is RMS data accessible?

10. The RMS surveys are highly decentralized, as mentioned, and many operations opt for different sampling methodologies within the available resources. The choice of methodology depends on the security situation in the country, available sampling frames, budget constraints, and data gaps concerning forcibly displaced and stateless populations in the country. All data is eventually anonymized and shared on the data library of UNHCR for external use upon requests¹.

III. Disaggregation by A(ge)G(ender)D(isability)

11. Disaggregation of survey data is crucial for producing high-quality estimates of indicators, particularly for Sustainable Development Goals (Khalil, Di Candia, Falorsi, & Gennari, 2022). With the objective of RMS being to monitor impact and outcome-level indicators on education, healthcare, livelihoods, protection concerns, shelter, and water and sanitation, having disaggregated results is as important as having the indicator itself. This allows for a more accurate understanding of research impacts and adoption patterns, leading to better policy implications (Davis, Bantilan, Nedumaran, & Charyulu, 2014).
12. However, the challenge of generalizing to out-of-distribution data remains, and further research is needed in this area (Zhou, Liu, Qiao, Xiang, & Loy, 2021). Samples used in most surveys are not large enough to guarantee reliable direct estimates for all relevant sub-

¹ UNHCR Micro Data Library: <https://microdata.unhcr.org/index.php/home>

populations (Falorsi, Donmez, Khalil, Di Candia, & Gennari, 2022). This issue has been recurring for RMS perhaps even more severe than the other household surveys as the challenges are already many just to be able to obtain a nationally representative sample for the forcibly displaced populations.

13. The standard survey methodology of RMS requires a national-level representative with a probabilistic sample. Disaggregation variables for Age, Gender, and Disability are available in the standard RMS questionnaire, and all indicators are disaggregated by AGD and also on a sub-national level, depending on availability. However, reporting on disability has been a major challenge compared to other disaggregation variables due to not having a large enough sample, which ultimately does not allow for statistically representative results. This hinders the generalization of the results for the population and is specifically problematic for indicators.

A. Measuring disability

1. Washington Group on Disability Statistics

14. The RMS uses the Washington Group on Disability Statistics module called WG Short Set on Functioning (WG-SS)². The survey asks all adults and children (only 5 years and above), who are members of the household, to determine their disability status based on the short set on functioning. Using the responses from the survey, a variable called 'disability' is created with standard syntax and coded as a binary variable. This new variable is then used as a disaggregation variable along with age and gender.

2. Measuring disability among children

15. The disaggregation of disability among children is particularly pertinent when examining indicators related to the proportion of children (aged from 6 to 24 inclusive for standard RMS questionnaire) enrolled in both primary and secondary education within the dataset. The module specifically focused on education incorporates additional inquiries, extending beyond mere enrolment statistics. It delves into the details of attendance levels, type of school and if a child is currently attending school in the current school year, the survey seeks to better understand the reasons for their non-attendance in the current school year. The options can be selected as follow '*School not equipped for children with special learning needs*' or '*Teachers and other school staff do not treat children with respect*' only examples of some of the response options. These can give an indication about the current needs of children with visible and/or invisible disabilities.
16. However, it's essential to note a potential limitation in the analysis of disability among children. The sample size for children with disabilities is notably small, which may impact the robustness and generalizability of the findings. While the results pertaining to adults can provide more meaningful insights for adult members within the dataset as there are more adults overall 18 and above compared to children above 5 particularly for the datasets that

² WG-SS : <https://www.washingtongroup-disability.com/>

were analyzed for RMS in the last years, the limited representation of disabled children in the sample underscores the need for cautious interpretation and consideration of the data's reliability in this specific subgroup.

IV. Different methodological aspects while measuring disability among children

A. Modality

17. The modality of a household survey might have an impact on the results and particularly on the data quality. This is also naturally applicable for disability variable calculated based on the WS-SS module. There are two main challenges that might occur while collecting data on disability. Firstly, it's about the differences between modalities. Research on the impact of survey modality on data quality has demonstrated mixed results. One research found that the presence of an interviewer, rather than the sensory channel, was the main cause of differences in response quality between phone and face-to-face surveys (Annette, Roberts, & Lynn, 2006). Revilla (2012) similarly found no significant impact of respondent characteristics on data quality in these two modes. On the other hand, another research showed that the telephone respondents were more suspicious about the interview process and more likely to present themselves in socially desirable ways than face-to-face respondents (Holbrook, Green, & Krosnick, 2003). These findings suggest that while the mode of survey administration can influence data quality, the specific impact may vary depending on the nature of the survey and the characteristics of the respondents.
18. In RMS standard questionnaire for in-person interviews, the experience with the previous surveys showed that the data is more reliable while collecting disability data in the form of CAPI (Computer-Assisted Personal Interviews). This is mainly due to having long questionnaire and it is easier to ask the module one by one for all household members in person than asking on the phone. This also can bring up sensitivities if there is a disabled member in the household and it's easier to manage if the enumerators are trained in-person. Lenzner (2012) on the other hand further emphasized the importance of question comprehensibility, as less comprehensible questions led to lower-quality responses. The disability module is well suited for in-person interviews, the further research is needed to measure data quality for phone-based interviews.

B. Questionnaire design

19. When designing questionnaires, many choices have to be made. Because the consequences of these choices for the quality of the questions are largely unknown, it has often been said that designing a questionnaire is an art. To make it a more scientific activity we need to know more about the consequences of these choices (Saris & Gallhofer, 2007). The design of a questionnaire significantly impacts the quality of the collected data. Sánchez (1992) found that questionnaire design can lead to errors and unprobed answers, affecting data quality. The RMS questionnaire asks the disability question in the coded KoBo form within the repeat group, posing questions for all household members in a horizontal manner. As the

questions are repetitive and asked for all household members, it is important to ensure that the respondent understands on behalf of whom he or she is responding for the module.

20. The Disability module is relatively long, and the questions are presented at the beginning of the survey for RMS during data collection for each member of the household. It should be noted that on average there are at least 5 members of the household that are eligible by age for this module. The questionnaire is structured to include individual-level questions at the beginning of the questionnaire, including those questions on disabilities. To enhance responses and improve data quality, an alternative approach could involve relocating disability-related questions within the health section of the questionnaire. This adjustment would allow respondents to better relate to the questions and be more prepared for the module, particularly if they have disabilities. This also requires a testing to measure differences between two different structures. As mentioned, the questionnaire design is an art and require a balance between survey length, data quality and asking the right question at the right time.

C. Sampling methodology

21. The effect of sampling methodology and sample size on disaggregation variables is a complex and multifaceted issue. Koppelman (1983) emphasizes the need for larger sample sizes than traditionally believed, particularly for estimation of relatively simple disaggregate choice models. The author adds that samples on the order of 1,000 to 2,000 observations may be needed for estimation of relatively simple disaggregate choice models. This is echoed another researcher who underscores the importance of precise sampling techniques and factors such as population size, confidence level, and standard deviation in determining sample size (Nanjundeswaraswamy & Divakar, 2021).
22. The RMS is a household survey designed for annual implementation in specific operations to measure and monitor impact and outcome-level indicators, tracking changes in the lives of forcibly displaced and stateless populations. Sampling presents a particular challenge, especially for urban refugees who are dispersed throughout the city, and registrations may not always be up to date. While achieving a nationally representative sample is inherently difficult, obtaining a larger sample size for meaningful disaggregation variables may be unrealistic without a budget specifically allocated for survey implementation targeting forcibly displaced populations in some countries such as South Sudan. Although the RMS can provide indications about disabilities, reporting on indicators disaggregated by disability remains a challenging aspect.

V. Conclusion

23. In conclusion, the success of household surveys, particularly in capturing reliable disability data, hinges on careful considerations in survey modality, questionnaire design, and sampling methodology. While in-person interviews, especially through Computer-Assisted Personal Interviews (CAPI), have shown promise in ensuring data quality, the impact of phone-based interviews requires further investigation. Questionnaire design, treated as an art, necessitates a delicate balance between survey length, data quality, and the strategic

placement of repetitive disability-related questions. Additionally, sampling methodology poses challenges, especially for achieving nationally representative samples and meaningful disaggregation variables, requiring larger sample sizes than conventionally assumed.

24. As household surveys like the RMS aim to monitor impact and outcome-level indicators, addressing these methodological considerations is essential for improving the accuracy and reliability of collected data, particularly when reporting on indicators disaggregated by disability.

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