Leaving no One Behind: Displaced Persons and Sustainable Development Goal Indicators on Sexual and Reproductive Health

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Abstract

This paper critically reviews evidence on the sexual and reproductive health (SRH) of people displaced due to conflict and violence, addressing the question, "How visible are displaced persons in sustainable development goal (SDG) indicators on SRH?" Gaps in monitoring processes are not just statistical limitations; indicators are modes of power, and who and what gets measured counts. The data corpus comprises national surveys recommended as data sources for SDG indicators 3.7.1 (contraceptive demand satisfied by modern methods) and 5.6.1 (SRH decision making), conducted in Asia since 2015. The review identifies 31 national surveys collecting data on these indicators, of which six include some form of displacement screening. The quality of displacement questions is mixed, but overall, does not meet recommendations by the Expert Group on Refugee, IDP and Statelessness Statistics. Estimates of SDG indicators 3.7.1 and 5.6.1 are presented for displaced vs. national host populations, but comparability is limited by measurement and representation issues. Certain groups are made invisible, including younger adolescents, older and unmarried women and the heterogeneity of displaced people is blurred.

Keywords Sustainable Development Goals · Measurement · Displacement · Sexual and reproductive health · Household surveys

Introduction

In May 2022, the number of people displaced due to conflict, violence or fear of persecution exceeded 100 million for the first time (UNHCR, 2022b). Recognising the scale and largely protracted nature of displacement, the United Nations (UN) has called for development-oriented and longer-term solutions, with greater emphasis

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on the role of national governments (UN, 2021; World Bank, 2023). This marks a departure from traditional conceptions of displacement as a "humanitarian" issue (JDC, 2020), with short-term funding mechanisms aiming to provide life-saving assistance. This reframing of displacement means that specific references to displaced persons in the 2030 Agenda for Sustainable Development—the post-2015 development agenda that aims to promote rights and wellbeing of marginalised people—are even more relevant in efforts to *leave no one behind* (UN, 2022).

This paper uses sexual and reproductive health (SRH) to interrogate the visibility of displaced persons in the 2030 Agenda for Sustainable Development's accountability and monitoring framework—the Sustainable Development Goals (SDG). SRH is a basic right for everyone, including displaced persons, and is no less relevant in conflict-affected settings (Starrs et al., 2018). Evidence suggests heightened SRH risks during transit, at the place of destination, and return (Egli-Gany et al., 2021). Despite this, SRH is often deprioritised in the provision of health services in conflict settings, relative to other needs and rights (Singh et al., 2021). Conflicts can also hinder critical population and health data collection efforts—at times when it is important to understand the adverse effects on populations—due to security challenges, threats to staff and reprioritisation in emergencies (Levy & Sidel, 2008, 2016).

The paper critically reviews evidence recommended as data sources for SDG indicators 3.7.1 (contraceptive demand satisfied by modern methods) and 5.6.1 (SRH decision making), using the case of the UN Asia region. I unpack methodological issues of questionnaire and sample design in major population surveys, drawing on technical recommendations endorsed by the UN Statistical Commission for the inclusion of refugees and internally displaced persons (IDP) (EGRISS, 2018, 2020b). I bridge evidence across the humanitarian-development nexus and reflect on how politics and power are embedded in data. The paper raises issues of who or what is excluded or obfuscated in the data and why? And with what implications for SRH rights and justice?

Literature Review

Disaggregation and the Political Economy of SDG Metrics

The 2030 Agenda for Sustainable Development brings together 17 goals and associated targets under the SDG framework (UNGA, 2015). The 17 goals tackle global challenges such as ending poverty (goal 1) and hunger (goal 2), reducing inequalities (goal 10) and urgent climate action (goal 13). A full list of the SDGs is included as supplementary information. The UN resolutions related to the 2030 Agenda include explicit reference to those affected by conflict and forced displacement, including refugees and IDPs (UNGA, 2015, p. 7). The Inter-Agency and Expert Group (IAEG) on SDG indicators notes that disaggregation beyond national level estimates is critical to this vision, as referenced in UN decisions 47–51/101 (UNESC, 2015; UNSD, 2022a). Specific categories, such as migratory status, are identified as important for

disaggregation, increasing statistical visibility of inequalities and supporting efforts towards *leaving no one behind*.

Metrics such as the SDGs play an important role in the prioritisation of resources and accountability in population health (Adams, 2016). Over the last three decades, efforts to measure and track social phenomena and policy priorities using indicators have accelerated (Merry, 2016). This is partly reflected in the progression from the eight Millennium Development Goals covering 2000 to 2015, to the 17 SDGs of the 2030 Agenda for Sustainable Development. These metrics—composed of a set of concepts, categories, measures and standards (Glasman, 2020)—serve as a common numerical language among experts, advocates and bureaucrats (Wendland, 2016). This "infrastructure of commensurability" (Glasman, 2020, p. 12) facilitates cross-cultural and international comparisons, in efforts to identify and support the most vulnerable or those who are made vulnerable.

The global SDG targets and indicators are not neutral; they are the product of political, as well as technical, negotiations. Their associated monitoring processes are modes of power (Barnes & Parkhurst, 2014; D'Ignazio & Klein, 2020; Merry, 2016). As Davis notes, "Quantitative data has become a contested terrain in a political debate over who counts, who does the counting, and who gets counted in global health" (Davis, 2017, p. 1146). For some issues, such as maternal mortality, the literature suggests that investments in measurement have been driven by efforts to position safe motherhood as a global political priority (Storeng & Béhague, 2017). Meanwhile, others suggest that SDG accountability mechanisms such as online public progress reports have incentivised action towards targets (Bevan et al., 2019). Statistical invisibility can reinforce invisibilities in policy priorities (Davis, 2017). If the populations that the SDGs aim to prioritise are not visible in the monitoring frameworks—that governments are held accountable to—they may be ignored, with constrained resources allocated elsewhere (Brolan et al., 2017; Denaro & Giuffré, 2022).

Bridging "Humanitarian" and "Development" Evidence on Displacement

Since the SDGs inception in 2015, there has been a lag between the ambition of the 2030 Agenda and the statistical visibility of displaced people. This is reflected in the omission of any indicators directly relating to refugees or IDPs in the initial SDG framework, only addressed in 2020 with the introduction of indicator 10.7.4 (proportion of the population who are refugees, by country of origin) (Mosler Vidal & Laczko, 2022).

Nevertheless, there have been concerted efforts within and beyond the UN to improve the quality, coverage and harmonisation of displacement data. An important first step was acknowledging and documenting the challenges of measuring displacement (Baal, 2021; Baal & Ronkainen, 2017; Baal et al., 2018; Beyani et al., 2016; Cardona-Fox, 2021; JDC, 2020; Macleod, 2021). Recognition of these technical, ethical, and operational challenges has been accompanied by investments to address them, notably with the Expert Group on Refugee, IDP and Statelessness Statistics (EGRISS); World Bank-UNHCR Joint Data Center on Forced Displacement (JDC);

Joint IDP Profiling Service (JIPS) and the IAEG-SDG working group on data disaggregation. This includes technical guidance and recommendations (EGRISS, 2018, 2020a, 2020b); for example, guidance on displacement screening questions in national household surveys to identify displaced persons. Thirdly, there have been calls to reduce the methodological divide between humanitarian surveys and so-called development equivalents, including alignment with international statistical standards (Schmieding, 2021). Recent examples of data collection that bridge humanitarian-development siloes include the integration of displaced populations into the World Bank's COVID-19 High Frequency Phone Surveys, and the inclusion of refugees in Uganda's latest and forthcoming Demographic and Health Survey (DHS). Finally, the feasibility of using publicly available, national household surveys to analyse outcomes of displaced people has started to be tested (Barahona-Zamora et al., 2020; Le Voir, 2022).

UNHCR and JIPS published a report (Barahona-Zamora et al., 2020) on 12 SDG indicators prioritised by EGRISS for disaggregation by displacement status, spanning three policy areas: (1) basic needs and living conditions; (2) livelihoods and economic self-reliance; and (3) civil, political, and legal rights. The 12 prioritised indicators were included in a background document for the 50th session of the UN Statistical Commission (IAEG-SDGs, 2019). The UNHCR and JIPS review of 57 datasets found weak availability of data to estimate SDG indicators for displaced persons. Data availability varied across thematic areas, from 18 estimates of SDG indictor 6.1.1 (proportion of population using safely managed drinking water services), to six estimates each of SDG indicators 3.1.2 (proportion of births attended by skilled health personnel) and 2.2.1 (prevalence of stunting among children under 5 years of age). The UNHCR and JIPS review did not include SDG indicators 3.7.1 (contraceptive demand satisfied by modern methods) and 5.6.1 (SRH decision making) on SRH (see Table 1) as they were not on the prioritised indicator list.

Introducing the Case of SRH

Universal access to SRH services and rights is a core component of the 2030 Agenda (Starrs et al., 2018). Table 1 outlines the SDG targets for SRH (UNGA, 2015). These metrics aim to capture concepts such as contraceptive demand satisfied by modern methods (SDG indicator 3.7.1), as well as SRH decision making (SDG indicator 5.6.1). In recent years, there has been increased critique and recognition of the limitations of these indicators, situated within the reproductive health and justice literature (Ross & Solinger, 2017). For example, they say nothing about the quality of SRH services and conflate demand-side and supply-side barriers to access (Senderowicz, 2020; Senderowicz & Maloney, 2022). While efforts are underway to revise and develop new metrics for SRH (Speizer et al., 2022), targets 3.7 and 5.6 remain the basis of accountability for SRH in the 2030 Agenda.

SRH is a basic right for everyone, recognised at the landmark 1994 Conference for Population and Development (McIntosh & Finkle, 1995; UN, 2014). Since then,

Table 1 SDG indicators 3.7.1 and 5.6.1

Target	Indicator	Operational definition	In-text label
3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	3.7.1 Proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods	Proportion of women who are currently using modern contraception over the total demand for modern contraception (unmet need for spacing/limiting births + current contraceptive use)	Contraceptive demand satisfied by modern methods
5.6 Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences	5.6.1 Proportion of women aged 15–49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care	Yes to all three questions: (a) A woman can say no to her husband/partner if she does not want to have sexual intercourse (b) Using or not using contraception is mainly the woman's decision or a joint decision with husband/partner (c) A woman can make own decision about health care for herself or it is a joint decision with husband/partner	SRH decision making

literature has reinforced the SRH rights of displaced persons across conflict-affected contexts and highlighted the risk of SRH rights violations (Austin et al., 2008; Busza & Lush, 1999; Hasan-ul-Bari & Ahmed, 2018; Heidari et al., 2019; Onyango & Heidari, 2017; Palmer et al., 1999; Starrs et al., 2018). Displacement can expose individuals to heightened SRH risks during transit, at the place of destination, and return (Abubakar et al., 2018; Egli-Gany et al., 2021; Orcutt, 2022). For example, missing or inadequate civil registration documents, a common issue for displaced persons, can limit administrative access to services (Saieh, 2019; WHO, 2022). Multiple displacements or moving to areas with an unfamiliar language may constrain knowledge of the available services in a new location. In addition, curfews or other movement restrictions, as well as living in particular settings such as camps or urban areas, may affect geographic accessibility to services (Whitmill et al., 2016). Weak service provision and systems access compound these vulnerabilities (Ager, 2014; Sitlhou & Hanghal, 2022). Case study evidence from 10 conflict-affected countries suggested deprioritisation of reproductive health services relative to other maternal and child health and nutrition services (Singh et al., 2021). A series of systematic reviews have further highlighted inadequacies in both the services for, and literature on, the SRH of populations affected by conflict (Amiri et al., 2020; Desrosiers et al., 2020; Ireland et al., 2021; Ivanova et al., 2018; Jennings et al., 2019; McGranahan et al., 2021; Munyuzangabo et al., 2020; Singh et al., 2018; Warren et al., 2015).

Access to SRH services is not uniform for displaced persons because "displaced" includes an extremely heterogeneous group. Legal, social and economic characteristics of individuals intersect with different components of access across multidimensional health system environments (Egli-Gany et al., 2021; Sochas, 2020). Health system interactions can be affected by context, and age- and gender-specific vulnerabilities exist too (Jones et al., 2019). For example, taking the case of Ukraine, displaced individuals may have been previously displaced from conflict-affected areas in eastern Ukraine, identify as LGBTQ+, and/or be a member of a minority group (Cox et al., 2022). People may be entitled to different services depending on whether they arrive as a refugee in Poland, Lithuania or Romania, or are internally displaced within Ukraine (Kismödi & Pitchforth, 2022).

There is a major evidence gap on quantitative SRH outcomes of conflict-affected and displaced populations (Singh et al., 2018), including SRH indicators in the SDG framework. National sample surveys that routinely collect data on population health and SRH, often exclude IDPs, refugees and conflict-affected areas inaccessible to the survey team (Barahona-Zamora et al., 2020; Guha-Sapir & D'Aoust, 2010). Alternatively, evidence focusses specifically on the *affected population*, particularly camp settings, with limited comparative analysis with the wider national population. For example, the Lebanon Multiple Indicator Cluster Survey (MICS) in 2001, 2005/6 and 2011 exclusively focused on Palestinian refugees and excluded the national host population. Disaggregation and contextualisation within countries is key to understanding potential inequalities in SRH outcomes that may otherwise be overlooked (Victora et al., 2019).

Methods

Objectives

This paper offers a state of the evidence review of SRH SDG targets for displaced persons in the UN Asia region, focusing on SDG indicators 3.7.1 and 5.6.1 (see Table 1). It addresses the overall question of "How visible are displaced persons in SDG indicators on SRH?" through four sub-questions:

(A) Which national sample surveys on population health (recommended as SDG data sources) include displacement screening questions (2015–2022)?
(B) How do the displacement screening questions identified in the survey question-naires align with technical recommendations by EGRISS?
(C) Which groups of displaced persons are (in)visible—gender, age, union, displace-ment status—due to survey design?
(D) Where data are available, what is the status of SDG indicators 3.7.1 and 5.6.1 for displaced persons?

Case Selection

The Asia region is defined in line with the UN Statistics Division's list of geo-graphic regions. This covers Central, Eastern, South-eastern, Southern and Western Asia, including countries such as Tajikistan, Mongolia, Myanmar, Afghanistan and Georgia, respectively (UNSD, 1998). See Table 2 for a full list of countries. Asia is an "extreme" case (Flyvbjerg, 2006) of displacement due to conflict and violence and has the largest population of reproductive age women globally (FP2030, 2021). Between 2005 and 2020, Asia accounted for three of the top five origin countries for refugees (Syria, Afghanistan and Myanmar) (McAuliffe & Triandafyllidou, 2021). As of 2020, two of the top five host countries for refugees were in Asia (Pakistan and Türkiye), as well as three of the top five countries with the largest populations of IDPs due to conflict and violence (Syria, Yemen and Afghanistan) (McAuliffe & Triandafyllidou, 2021). The case of the UN Asia region is illustrative. The paper addresses issues of questionnaire and sample design for international surveys that are highly transferable to other countries and regions affected by displacement, including the Sahel, Greater Horn of Africa and Venezuela, contributing to broader debates on the visibility of displaced persons beyond Asia.

Data Sources

The data corpus includes all publicly available national sample surveys recom-mended as data sources for SDG indicators 3.7.1 and 5.6.1, conducted in Asia from 2015 to August 2022, when the review was carried out. The recommended data sources for both indicators are nationally representative household survey data. Sur-veys include MICS, DHS, performance monitoring for action surveys (PMA) and

Table 2 Data availability on SDG indicators 3.7.1 and 5.6.1 for countries in the UN Asia region (2015–2022)

Country	Sub-region	3.7.1	5.6.1
Kazakhstan	Central Asia	✓	✕
Kyrgyzstan	Central Asia	✓	✕
Tajikistan	Central Asia	✓	✓
Turkmenistan	Central Asia	✓	✓
Uzbekistan	Central Asia	✕	✕
China	Eastern Asia	✕	✕
China, Hong Kong Special Administrative Region	Eastern Asia	✕	✕
China, Macao Special Administrative Region	Eastern Asia	✕	✕
Democratic People's Republic of Korea	Eastern Asia	✓	✕
Japan	Eastern Asia	✕	✕
Mongolia	Eastern Asia	✓	✓
Republic of Korea	Eastern Asia	✕	✕
Brunei Darussalam	South-eastern Asia	✕	✕
Cambodia	South-eastern Asia	✕	✕
Indonesia	South-eastern Asia	✓	✓
Lao People's Democratic Republic	South-eastern Asia	✓	✕
Malaysia	South-eastern Asia	✕	✕
Myanmar	South-eastern Asia	✓	✓
Philippines	South-eastern Asia	✓	✓
Singapore	South-eastern Asia	✕	✕
Thailand	South-eastern Asia	✓	✕
Timor-Leste	South-eastern Asia	✓	✓
Viet Nam	South-eastern Asia	✓	✓
Afghanistan	Southern Asia	✓	✓
Bangladesh	Southern Asia	✓	✓
Bhutan	Southern Asia	✕	✕
India	Southern Asia	✓	✓
Iran (Islamic Republic of)	Southern Asia	✕	✕
Maldives	Southern Asia	✓	✓
Nepal	Southern Asia	✓	✓
Pakistan	Southern Asia	✓	✓
Sri Lanka	Southern Asia	✕	✕
Armenia	Western Asia	✓	✓
Azerbaijan	Western Asia	✕	✕
Bahrain	Western Asia	✕	✕
Cyprus	Western Asia	✕	✕
Georgia	Western Asia	✓	✓

Table 2 (continued)

Country	Sub-region	3.7.1	5.6.1
Iraq	Western Asia	✓	✕
Israel	Western Asia	✕	✕
Jordan	Western Asia	✓	✓
Kuwait	Western Asia	✕	✕
Lebanon	Western Asia	✕	✕
Oman	Western Asia	✕	✕
Qatar	Western Asia	✕	✕
Saudi Arabia	Western Asia	✕	✕
State of Palestine	Western Asia	✓	✕
Syrian Arab Republic	Western Asia	✕	✕
Türkiye	Western Asia	✓	✓
United Arab Emirates	Western Asia	✕	✕
Yemen	Western Asia	✕	✕

other national surveys on reproductive health. The review excludes incomplete surveys and other sources of demographic data, such as civil registration and census.

Methodology

State of the evidence reviews are broader than traditional systematic reviews and often draw on the grey literature (Benzies et al., 2006). This is an appropriate approach for policy-oriented topics such as the SDGs, as key evidence is not necessarily published in peer-reviewed academic outlets. Similar approaches have been used elsewhere to assess the available evidence on progress against specific SDG areas (Barahona-Zamora et al., 2020; Guglielmi et al., 2021).

The methodology is sequential, beginning with an analysis and screening of the data corpus. First, I screened the survey questionnaires for questions that allow data collection on SDG indicators 3.7.1 and 5.6.1. I then reviewed this subset of questionnaires for inclusion of displacement screening questions. I also contacted the MICS, DHS, and EGRISS teams to ask about surveys that had included displacement questions, to triangulate the findings of the screening. No further examples were identified.

I compared the questions and response options against the EGRISS technical recommendations and analysed over time. For all survey datasets that meet both screening criteria, estimates for indicators 3.7.1 and 5.6.1 are presented, comparing SDG indicators 3.7.1 and 5.6.1 for the displaced and national host populations.

Results

The paper's findings are organised in response to the four sub-questions.

(A) Inclusion of displacement screening questions in national sample surveys

This review identifies 31 national sample surveys that collect data on SRH indicators since 2015, covering 25 countries. All 31 surveys collect data on indicator 3.7.1 (contraceptive demand satisfied by modern methods), while only 20 collect data on indicator 5.6.1 (SRH decision making) (see Table 2). Of these 31, six surveys include some form of displacement screening questions: three DHS (Nepal 2016, Pakistan 2017–18, Türkiye 2018) and three MICS (Georgia 2018, Iraq 2018, State of Palestine 2019–20). Table 3 provides a summary of the displacement screening questions identified, for surveys that collect data on SDG indicators 3.7.1 and 5.6.1. These surveys include major host countries for refugees, such as Türkiye and Pakistan, as well as contexts with high levels of internal displacement, such as Iraq. Some of the countries in the region most affected by displacement, including Yemen, Lebanon and Syria, do not have nationally representative survey data on SRH available for the SDG period (although MICS6 is planned for Yemen in 2022–23 and Lebanon in 2023).

(B) Alignment of displacement screening questions with EGRISS recommendations

The quality of displacement questions is mixed, and overall, falls short of the EGRISS technical recommendations. The Türkiye 2018 DHS is one of the more detailed examples, asking questions about place of birth, citizenship, number of migrations, reason for moving, Syrian migrant status, and residence type. The State of Palestine 2019–20 MICS asks questions about refugee status and residence type. Some surveys (Iraq 2018 MICS, Nepal 2016 DHS, Pakistan 2017–18 DHS) include questions from which displacement history could be inferred, for example, previously moving due to conflict or violence. However, these questions are not specifically designed to identify displaced people. Others include questions on migration history or nationality, but not the reason for moving, for example due to forced displacement. The Jordan 2017–18 DHS captures refugee camps in the survey sample, but the available documentation and data file does not include a variable identifying these.

(C) (In)visibility of sub-population groups

Visibility of displaced people is not only dependent on questionnaire design. Surveys also require appropriate sampling approaches to infer representative statistics about a population of units based on the information in a sample (Groves & Lyberg, 2010). If surveys are not designed to collect information about displaced people, they are unlikely to stratify by geographic areas with high cases of displacement (for example, camps or specific urban districts) (Barahona-Zamora et al., 2020). In this review, all six surveys with some form of displacement screening questions provide information on their sample design. Only three of these (State of Palestine 2019–20 MICS, Türkiye 2018 DHS, Georgia 2018 MICS) explicitly include a feature of displacement in the main sampling strata. The Georgia 2018 MICS is designed to provide representative estimates of *IDPs* at the national level, while the State of Palestine 2019–20 MICS and Türkiye 2018 DHS Syrian sample stratify by *camp and out-of-camp populations*. For conflict- and displacement-affected populations, gaps in key sources of demographic data—such as the census—can also limit the quality of sampling frames. The Iraq 2018 MICS uses a 2009 update of the 1998 census sampling frame,

thereby missing significant population displacements between 2014 and 2017 during the ISIS conflict. The Iraq MICS also excludes people currently living in camps, as well as six conflict-affected districts with high levels of displacement that were inaccessible to the survey team due to security issues. In this way, statistical invisibility can also be rendered by sample design.

It is important to consider *who* the displacement screening questions are administered to, as this has implications for whose displacement status is measured. For example, in the Iraq 2018 MICS, displacement screening questions are administered in the household questionnaire, but not the individual women's questionnaire. This means that household head's (primarily male) displacement experiences are used as a proxy for women's experiences. Similarly, in the Georgia 2018 MICS, IDP status is measured for all household members but is only disaggregated in the report by the status of the household head. Other surveys ask the household head about individual household members (current or previous). The Türkiye 2018 DHS is unusual because it includes detailed screening questions in the individual woman questionnaire.

The SRH status of some groups are completely invisibilised by the SDG metrics and survey design. SDG indicators 3.7.1 and 5.6.1 measure SRH outcomes among *all* women aged 15–49 years. However, all surveys here only report the indicators for married or in-union women aged 15–49 years, with the exception of the Türkiye 2018 DHS which provides separate estimates for *all* women and *currently married* women. This means that most surveys exclude unmarried women, younger adolescents, and older women, consistent with DHS and MICS survey designs elsewhere (Guglielmi et al., 2021). Unusually, the Pakistan 2017–18 DHS includes questions on contraceptive knowledge and use in the ever-married man's questionnaire. Other surveys only administer these questions to women, as the SDG framework does not monitor SRH outcomes for those who do not identify as women, including men. Furthermore, the SDG framework focuses on modern methods of contraception, such as condoms, oral contraceptive pills, sterilisation, and long-acting reversible methods (UNSD, 2022b). This excludes users of so-called "traditional" methods, such as fertility awareness-based methods and periodic abstinence, which remain the primary, initial, or interim method of contraception for many women and their partners (Bertrand et al., 2022).

Finally, the availability of displacement questions means that specific groups cannot be identified. For example, the Iraq 2018 MICS does not include a question about country of birth or citizenship, limiting identification of refugees. It is also not possible to differentiate between multiple versus single displacements in most survey datasets, unless questions are asked about every movement.

(D) Status of SDG indicators 3.7.1 and 5.6.1 for displaced people

Disaggregation of indicator 3.7.1 by displacement is possible for Georgia, Iraq, State of Palestine, and Türkiye. The Nepal 2016 DHS and Pakistan 2017–18 DHS are excluded due to the small number of respondents reporting "security" and "escape from violence/natural disaster" as the main reason for moving. The Türkiye 2018 DHS dataset was not publicly available at the time of the review, but it is possible to report disaggregated estimates on SDG

Table 3 Displacement screening questions in survey questionnaires

Country	Sub-region	Displacement context [a]	Survey	Data on SDG indicator		Displacement screening questions	Displacement in sample design
				3.7.1 (contraceptive demand satisfied by modern methods)	5.6.1 (SRH decision making)		
Georgia	Western Asia	308,000 IDPs due to conflict in 1990s and 2008	MICS 2018	✓	✓	Individual household members: IDP status and region of origin	✓
Iraq	Western Asia	1.2 million IDPs due to conflict; hosts 262,000 Syrian refugees due to conflict	MICS 2018	✓	✗	Household head: reason for last move and previous residence (camp)	✗
Nepal	Southern Asia	58,000 IDPs due to disasters; hosts 20,000 refugees from Tibet, Bhutan and other states	DHS 2016	✓	✓	Previous household members: main reason for last move (security), month and year of last move, destination (Nepal/India/Other country) Individual women and men: previous residence (outside of Nepal)	✗

Table 3 (continued)

Country	Sub-region	Displacement context [a]	Survey	Data on SDG indicator		Displacement screening questions	Displacement in sample design
				3.7.1 (contraceptive demand satisfied by modern methods)	5.6.1 (SRH decision making)		
Pakistan	Southern Asia	21,000 IDPs due to conflict; hosts 1.3 million Afghan refugees due to conflict	DHS 2017–18	✓	✓	Individual household members: main reason for last move (escape from violence/natural disaster), year of last move, place of birth (outside Pakistan), previous residence (outside Pakistan)	✗
State of Palestine	Western Asia	12,000 IDPs due to conflict; 2.46 million registered Palestinian refugees in Gaza and West Bank due to conflict	MICS 2019–20	✓	✗	Household: residence area (camp) Individual household members: refugee status Individual women: previous residence (camp, outside of Palestine)	✓

Table 3 (continued)

Country	Sub-region	Displacement context [a]	Survey	Data on SDG indicator		Displacement screening questions	Displacement in sample design
				3.7.1 (contraceptive demand satisfied by modern methods)	5.6.1 (SRH decision making)		
Türkiye	Western Asia	1.1 million IDPs due to conflict; 4 million refugees and asylum seekers due to conflict	DHS 2018	✓	✓	Individual household members: place of birth, citizenship, Syrian migrant status. Individual women: number of migrations, reason for moves (war in Syria), Syrian migrant status, residence (camp/non-camp), husband's migration history	✓

[a]Data on current displacement context from UNHCR (refugees excluding Palestine), UNWRA (Palestinian refugees), and Internal Displacement Monitoring Centre (IDMC)

indicators 3.7.1 and 5.6.1 as these are provided in a separate narrative report for the Syrian migrant sample (Hacettepe University Institute of Population Studies, 2019b). No data are available for indicator 5.6.1 for Iraq and the State of Palestine.

Figures 1 and 2 present estimates of indicators 3.7.1 and 5.6.1 for the displaced population, compared to estimates for the national host population. The "displaced" category is constructed differently for each of the surveys and refers to "Syrian migrants" in Türkiye, "refugees" in State of Palestine, "IDPs" in Georgia, and "displaced" in Iraq, highlighting the heterogeneity of displacement. Estimates for Türkiye, State of Palestine, and Georgia are provided in the survey reports (Hacettepe University Institute of Population Studies, 2019a; National Statistics Office of Georgia, 2019; Palestinian Central Bureau of Statistics, 2021). For Iraq, estimates of "displaced" are author's own calculations based on head of household reporting "conflict or violence" as the main reason for last move[1] (Iraq Central Statistical Organisation & Kurdistan Regional Statistics Office, 2019). All estimates apply to women aged 15–49 years who are *currently married or in-union*.

The status of SDG indicators 3.7.1 (contraceptive demand satisfied by modern methods) and 5.6.1 (SRH decision making) varies for displaced populations. In three out of four countries, estimates of contraceptive demand satisfied by modern methods are slightly higher for displaced persons relative to the national host population. A notable exception is Türkiye, where outcomes for Syrian migrants (38%) are far below national estimates (60%). For 5.6.1, the two countries where data are available show opposite results. In Georgia, a higher proportion of IDP women aged 15–49 years who are currently married or in union make their own informed decisions regarding sexual relations, contraceptive use, and reproductive health care (85%), relative to all women in this group (79%). By contrast in Türkiye, informed decision making on SRH decision making is lower among Syrian migrant women (35%) compared to the national host population (50%). These two cases of Syrians in Türkiye and IDPs in Georgia reflect the heterogeneity of displacement-affected populations, where variation in modern method use, reproductive intentions, and SRH decision making may intersect with displacement experiences in different ways. However, these results should be interpreted with caution. Survey findings depend on survey design and may be affected by the issues of measurement and representation discussed here, such as construct validity and sampling error, rather than limited substantive differences between the displaced and wider population.

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[1] See Le Voir (2022) for detailed information on the construction of this indicator, as well as its strengths and weaknesses.

Discussion

Is Displacement a Useful Analytical Lens?

This analysis of SDG indicators on SRH illustrates the complexities of increasing visibility of displaced people, particularly in a global framework whose users draw international comparisons. While there have been significant efforts by EGRISS and partners to standardise definitions and harmonise methodological approaches, the heterogeneity of displacement (defined by national legal and policy frameworks) means that the concepts (and people) being measured are not the same. For example, in Türkiye, displaced Syrians are given "temporary protection status" rather than recognition as refugees (Ekmekci, 2017), so the 2018 DHS questionnaires refer to "Syrian migrant". Furthermore, the sample does not capture representative data on refugees from other countries nor IDPs. It would, therefore, be inappropriate to suggest this disaggregation includes all displaced persons in Türkiye, nor draw comparisons with SRH indicators for "refugees" in the State of Palestine 2019–20 MICS. This heterogeneity is not limited to the Asia region; for example, in South America, UNHCR provides estimates separately for "Venezuelans displaced abroad" and refugees from other countries (UNHCR, 2022a). This results in "a patchwork of non-harmonized estimates" (Barahona-Zamora et al., 2020, p. 16).

This does not mean that displacement is not a useful analytical lens. The global scale of displacement and UN calls for development-oriented policy solutions means that the SDGs cannot be displacement-blind. The inclusion of indicator 10.7.4 (proportion of the population who are refugees, by country of origin) in 2020 was an important step to increasing the visibility of displacement on policy agendas. But it is necessary to go further, disaggregating indicators across the wider SDG framework to understand inequalities within populations.

Cognisant of the complexities in operationalising the concept of displacement, I argue here that a displacement lens is vital, and efforts to strengthen the statistical visibility of displaced persons could be advanced in three ways. Firstly, the validity of country estimates and official national statistics—in line with international technical guidance by EGRISS and others—should be prioritised over an "infrastructure of commensurability" (Glasman, 2020, p. 12). This is a common tension and trade-off for multinational, multiregional, and multicultural surveys such as DHS and MICS that facilitate cross-cultural and international comparisons (Pennell et al., 2017). Reflecting on questions of "who and what is the data for?" reinforces the importance of national level ownership, with data that reflects local realities and diverse information needs in heterogeneous displacement contexts (UN, 2021). The forthcoming Uganda DHS is a promising example of integrating refugees in existing data collection initiatives, with intentions inside government to use the data to inform national development plans. Secondly, there must be improved transparency in the communication of displacement data, with clear statements about who is and who is not being measured, in what ways and why (Polzer & Hammond, 2008). This would reduce the risk of inappropriate
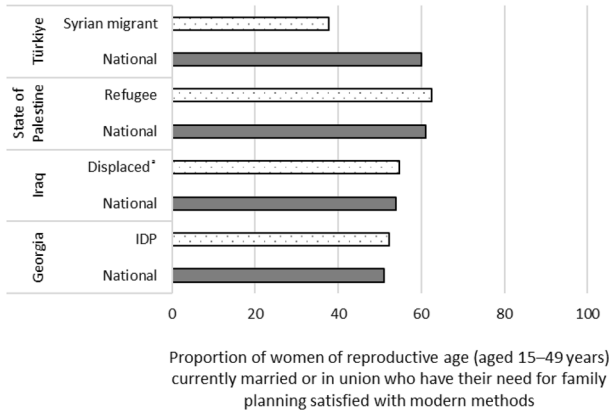
Fig. 1 SDG indicator 3.7.1 for national host and displaced populations—proportion of women of reproductive age (aged 15–49 years) currently married or in union who have their need for family planning satisfied with modern methods. [a]Author's own calculations
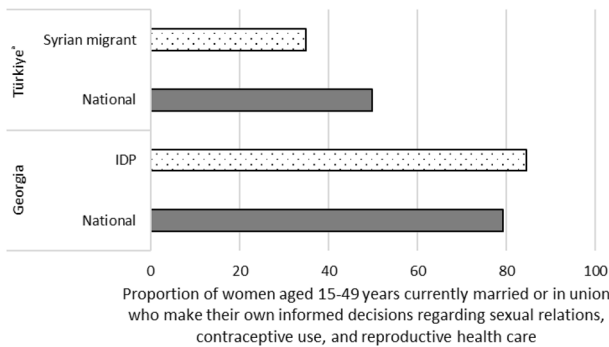
Fig. 2 SDG indicator 5.6.1 for national host and displaced populations—proportion of women aged 15–49 years currently married or in union who make their own informed decisions regarding sexual relations, contraceptive use, and reproductive health care. [a]For Türkiye, estimates of 5.6.1 are available only for currently married women who are not pregnant

cross-national comparisons and give greater visibility to those who are not captured in the data. Thirdly, future global indicator frameworks should prioritise disaggregation by displacement (and other groups affected by inequality) from the beginning, alongside the development of indicators. Disaggregation by displacement must also be central to the survey design stage, addressing issues of representation and measurement inference, while minimising additional burden on participants. This may help to avoid the lag between the 2030 vision of *leaving no one behind* and statistical visibility of displacement in the SDG framework.

In the meantime, UN statisticians could look to alternative data sources to increase the visibility of displaced people in the SDG framework (d'Harcourt et al., 2017). This could involve identifying data through networks such as the

Inter-Agency Working Group on Reproductive Health in Crises or the newly established SRH Task Team under the Global Health Cluster, as well as publicly available datasets hosted on platforms such as The Humanitarian Data Exchange (OCHA, 2022). There are promising developments beyond SRH for inclusion of displaced people in national surveys that could offer transferable lessons, such as the World Bank-supported High Frequency Phone Surveys (Tanner, 2021). Similarly, researchers are optimising data from other sources, such as hospital databases, to enable comparative analysis of maternal health outcomes pre- and post-displacement (AlArab et al., 2023), as well as among refugees from different countries, relative to the host population (McCall et al., 2023).

Political Economy of Displacement Data

Considering the scale of the issue, what might explain the slow progress towards statistical visibility of displaced persons in the SDG framework? Undoubtedly, technical complexities in measuring displacement are part of the answer. Most surveys in this review were likely designed before the EGRISS recommendations on refugees and IDPs were published in 2018 and 2020, respectively, so it is positive that there are some efforts to improve statistical visibility. That said, there is still a chasm between the aspirations of the post-2015 Agenda for Sustainable Development—with its specific references to displaced persons in efforts to *leave no one behind*—and the findings of the review.

The political economy of displacement data cannot be ignored. Firstly, siloes between humanitarian and development evidence production mean that data on displaced and conflict-affected populations has typically been the remit of specific agencies or government departments. For example, UNHCR generally focuses on displaced persons and host communities, rather than a holistic view of the national population. These vertical approaches have now been called out in favour of integrated "whole of society" and nexus solutions (UN, 2021, p. 21), accompanied by longer-term strategies, stronger engagement between international organisations and national governments, and inclusion of displaced persons in official statistics (World Bank, 2023). Secondly, variations in displacement concepts are not arbitrary, but may be traced back to organisational mandates and policy priorities; if certain groups are not visible, there is less accountability to meet their needs. Maternal health advocates recognised and countered this, investing in the statistical visibility of maternal deaths to elevate the issue on political agendas (Storeng & Béhague, 2017). These issues highlight avenues for future research. For example, it could be useful to study cases of different international surveys to understand how study design priorities are set, and to unpack the decision-making processes that underlie sampling and measurement decisions. Similarly, it would be interesting to explore how the global position of participating agencies and groups influences the development of monitoring frameworks such as the SDGs.

It is important to recognise that some displaced individuals may seek to remain statistically invisible for fear of state discrimination (Kibreab, 1999). Davis (2017) refers to this invisibility as a "data paradox", further reinforcing inadequate resources

and services (Davis, 2017, p. 1157). But for some, statistical invisibility can be an important survival mechanism, for example, among those who are refused asylum in Europe or urban self-settled refugees (Polzer & Hammond, 2008). It is, therefore, essential to get the right balance between displacement data privacy and accessibility.

Conclusion

Data disaggregation in SDG metrics is key to the UN agenda of *leaving no one behind*. Displaced people are one of the marginalised groups that the SDGs aim to support, including for SRH. National sample surveys are a key potential data source to understand health outcomes and inequalities among displaced populations, bridging siloes between humanitarian and development evidence. However, this review finds that displaced people are largely hidden in nationally representative surveys on population health in Asia—one of the main data sources for SDG targets on SRH. While there are promising examples of displacement screening questions in survey questionnaires, others fall short of the EGRISS technical recommendations. There are also issues of representation inference, and limited stratification by displacement, all of which increase the risk of analytic error (West et al., 2017), and constrain the potential to produce representative, unbiased estimates for displaced populations at the national level. Certain groups such as unmarried, adolescent and older people, are often completely omitted, suggesting that their SRH rights are not prioritised in policy decisions. The political economy of displacement data requires strategies to encourage participation in official statistics—while prioritising safeguarding and data privacy—as well as devising sampling strategies that would allow credible inference for individuals who seek to remain invisible. Gaps in these monitoring processes are more than just statistical limitations because evidence links to issues of power and accountability, through increased policy attention and funding. At the mid-point of the 2030 Agenda, the SRH of displaced people may be deprioritised without greater visibility in SDG data. This paper offers a foundation to stimulate discussion on improved visibility of displaced people and their SRH in global frameworks.

Declarations

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