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The health of internally displaced people in Syria: are current systems fit for purpose?

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ABSTRACT

Introduction: Syria has the largest number of internally displaced people (IDPs) globally with 6.7 million forced from their homes since the uprising erupted in 2011. Most face multiple intersecting vulnerabilities with adverse health impacts. We explore the key health concerns among IDPs, how the various health systems in Syria have responded to the dynamic health needs of IDPs and what modalities have been used by humanitarian actors to address these needs. Methods: We undertook a scoping review of academic and grey literature for available evidence regarding the health of IDPs in Syria. We then organised an online workshop in November 2021 with around 30 participants who represent local, regional, and international organisations and who have relevant expertise. The discussion focused on how the health systems in Syria's various territories have responded to the health needs of IDPs, what this means to the structure and dynamics of these health systems and their intended outcomes and responsiveness. Findings: These emphasised the weak evidence base around IDP health in Syria, particularly in certain geographical areas. Workshop participants explored the applicability of the term IDP in the Syrian context given the fragmented health system and its impact on IDPs, the importance of considering co-determinants (beyond forced displacement) on the health of IDPs and taking a transectoral, community led approach to identify and respond to needs. Conclusion: This manuscript presents some of the current issues with regards to IDP health in Syria, however, there remain numerous unknowns, both for the health of IDP as well as non-IDP populations. We hope that it will be the foundation for further discussions on practical steps relating to research, analysis and interventions which can support health system responses for IDPs in Syria.

1. Introduction

By the end of 2020, there were 55 million internally displaced people (IDPs) globally (Internal Displacement Monitoring Centre 2021), the highest level ever seen, however, the health of IDPs remains underexplored globally (Cantor et al., 2021). This is particularly problematic in protracted conflicts, where there are numerous competing health and humanitarian issues. Syria has the largest number of IDPs of any country. At least half of Syria's pre-war population of 22 million people have been forcibly displaced of whom 6.7 million are IDPs; women and children make up at least two thirds of those displaced (Marzouk et al., 2020). Understanding IDP health issues, and the health system response,

Abbreviations: IDPs, Internally Displaced Persons; AANE, Autonomous Administration of North and East Syria; HIDN, Health and Displacement Network; ISIL, Islamic State of Iraq and the Levant; MHPSS, mental health and psychosocial services; MNCH, maternal, neonatal and child health; NGO, non-governmental organisation; R4HSSS, Research for Health System Strengthening in North West of Syria; SRH, sexual and reproductive health; SPHN, Syria Public Health Network; UNSC, United Nations Security Council; WASH, water, sanitation and hygiene.

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requires an understanding of their complex situation. IDPs are unequally distributed in the four main territories controlled by different conflict parties, each of which has evolved its own health system (Abbara, Marzouk, and Mkhallalati, 2021). These health system(s) have evolved differently with different leadership and governance structures, differences in financing and different prioritisation in healthcare provision (Abbara, Marzouk, and Mkhallalati, 2021). In part, this has been due to external factors, for example, funding but also due to the evolving needs of the populations they serve. Broadly, these subnational health systems are in north west Syria (including areas under Turkish control in northern Syria,) north east Syria which is under the AANE (Autonomous Administration of North and East Syria) and the remaining two thirds of the country which is under the control of the government of Syria (Syria Public Health Network 2020). As such, among IDPs in Syria, there is much heterogeneity with some displaced within their own geographical area and others displaced to different areas within Syria's borders, where the social norms and traditions are different either because of the inherited difference between urban and rural settings or due to the displacement from a different province (Syrian Center for Policy Research 2021). This has implications for medical services given the different health systems functioning within these areas as well as the social and political influences depending on the region of patient origin and destination (Syria Public Health Network 2020).

Given the vast humanitarian needs for most of Syria's population, (whether they are IDPs or host communities), some in the health and humanitarian sector challenge the utility of defining and exploring IDPs as a unified group, particularly given their heterogeneity. However, to counter this, it is noted that IDPs may face additional vulnerabilities over and above those experienced by other vulnerable populations in Syria related to the reasons for forced displacement, ongoing violence and insecurity, inadequate living conditions, poor WASH (water, sanitation and hygiene (Abbara et al., 2021)) as well as other risks including that of communicable diseases outbreaks and SGBV (Sexual and Gender Based Violence (Cantor et al., 2021).) This does not detract from the vulnerabilities faced by the majority of the Syrian population of whom more than 80% live below the poverty line and more than 12.4 million people are food insecure (an increase from 7.9 million in 2020 (CCCM Cluster 2022)). IDPs may face particular challenges accessing healthcare due to distances of travel, insecurity or, in the case of those relocated from areas outside of, to areas inside of government control and discrimination in the provision of services. Additionally, they may choose to stay in dangerous areas close to the frontlines where housing is affordable, given the extreme poverty they face; in such settings, they may lack health services or adequate health coverage (Physicians for Human Rights 2021).

There are, however, several difficulties when exploring the health requirements of IDPs in Syria. As with other countries, IDPs may not be differentiated from local populations when health or other humanitarian needs are reported, which can make identifying their specific needs or vulnerabilities challenging. As such, the health of IDPs and relevant health system responses to IDPs in Syria remains under-explored. Our aim in this manuscript is to explore key health concerns among IDPs in Syria, how the health systems in Syria have been responding to the changing and challenging health needs of IDPs and what modalities have been used by humanitarian actors to address the health needs of IDPs.

2. Methods

We undertook a scoping review of academic and grey literature to identify available evidence regarding the health of IDPs in Syria. This methodology was chosen so that a broad base of relevant information could be identified and key aspects regarding IDP health in Syria could be explored. Some of the concepts searched included, 'Syria,' 'IDPs,' 'internal displacement,' 'health.' To explore the effects of the fragmented health systems in Syria on the health of IDPs, we also identified literature around 'health systems' and 'health system governance' in Syria. Our aim was to draw on information across all geographical regions in Syria where literature is available.

We used the UNHCR definition of IDPs as those who have been forced from their homes but have not crossed an internationally recognised state border (UNHCR 2021) thereby excluding literature on refugees. We limited our searches to English language and included primary or secondary sources. For academic literature, two databases (PubMed and Embase) were searched and for grey literature, Reliefweb and OpenGrey were searched. We also manually searched the websites of certain organisations which we knew had published relevant reports including WHO, the Syria Centre for Policy Research, Human Rights Watch, Physicians for Human Rights, Syrian American Medical Society and the Union of Syrian Medical Associations. This review was used to prepare background material for a two and a half hour, on-line workshop which was conducted in November 2021. The workshop was held under Chatham House rules and was organised by SPHN (Syria Public Health Network (Syria Public Health Network 2022)), HIDN (Health and Displacement Network) and R4HSSS (Research for Health System Strengthening in North West of Syria 2022) (Research for Health System Strengthening in North West of Syria. (Health in Internal Displacement Network (HIDN) 2022))

The aim of the workshop was to bring together experts on IDP health in Syria, Syria's healthcare system and those with broad experience of IDP health to discuss how the health systems in Syria have been responding to the changing and challenging health needs of IDPs and what this means to the structure and dynamics of these health systems in relation to intended outcomes, system resilience, and responsiveness. We also aimed to explore the different modalities used by humanitarian actors to address the health needs of IDPs in northern Syria and discuss strengths, areas of improvement and lessons to be learnt from these modalities. Participants were selected for their expertise in the above with an emphasis placed on regional and local expertise in either the health or humanitarian response, in academia or policy. The workshop was attended by a variety of individuals and organisations with particular emphasis on having representatives from local health bodies such as Idlib Health Directorate, local practitioners, local NGOs, and other humanitarian health actors. Participants were provided with a background paper containing a framing of the discussion focused on the intersecting vulnerabilities which affect the health of IDPs in Syria; a policy brief produced by Marzouk *et al* for the Lancet Commission on Migration on the "Impact of COVID-19 on forcibly displaced persons inside Syria" (Marzouk et al., 2020) and Cantor *et al's* scoping review 'Understanding the health needs of internally displaced persons" (Cantor et al., 2021).

The workshop included three 15-minute interventions which gave an overview of key issues in the health of IDPs in Syria, health system responses for IDPs in northern Syria and case studies on the determinants of health inside Syria. This was followed by an hour-long moderated discussion and a conclusion which drew on key issues raised which were highlighted for further action. The session was not recorded to allow participants to speak freely and draw on examples which had not been described in the literature. A meeting summary was compiled and this, together with the scoping review forms our findings and conclusion. Around 30 participants who spanned academia, policy, health, and humanitarian practitioners participated.

3. Findings

3.1. Scale of internal displacement across Syria

During 2020, 1.82 million people in Syria were forcibly displaced from their homes (of which all but 25,000 were due to conflict and violence) and 467,000 were able to return to their homes (Norwegian Refugee Council 2021); this is among the highest number of annual displacements since the start of the conflict (see Fig. 1) 73% of movements occurred within governorates, with the highest forced

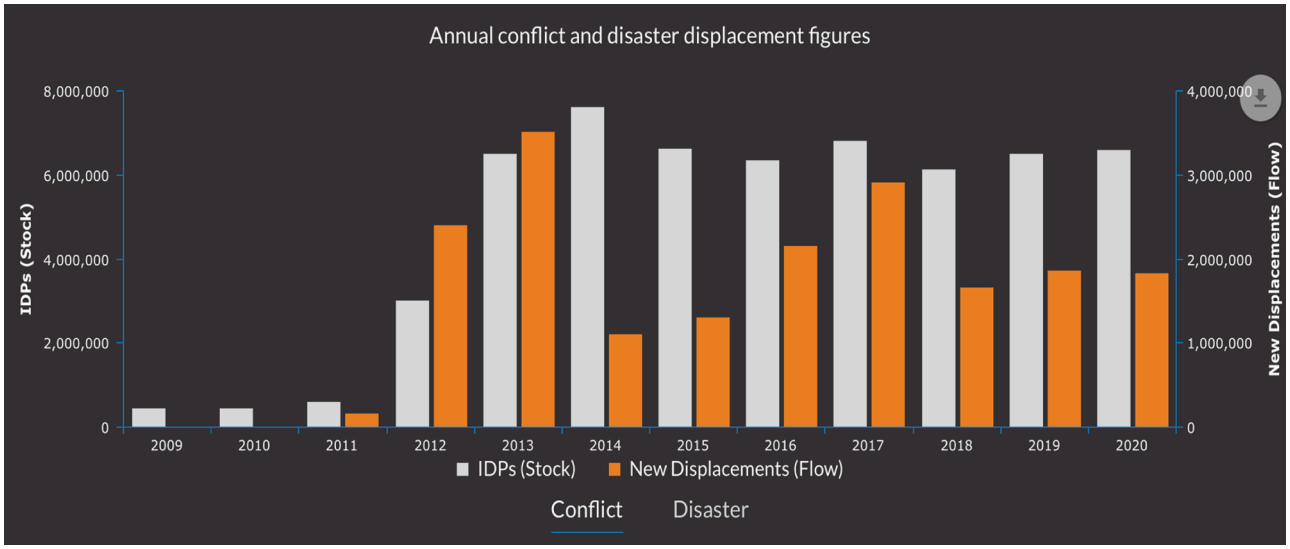


Fig. 1. The number of new annual displacements due to conflict and disaster in Syria until December 2020 (https://www.internal-displacement.org/countries/syria).

displacement occurring in Idleb and Aleppo governorates in northwest Syria. However, north east Syria is not spared. In January 2022, an attack by ISIL (Islamic State of Iraq and the Levant) on Hassakeh prison in north east Syria forced 45,000 from their homes; fortunately, by February 2022, more than 90% have been able to return (OCHA 2022). While we focused on the current picture of IDPs in Syria, relying on reports of UN OCHA and some other NGOs in the region, there have been some efforts to track population figures and movements since 2015. One of the main sources is the Needs and Population Monitoring (NPM), which is a frequent exercise which assesses population numbers, movements, and needs. This exercise is usually conducted by the International Organisation for Migration (IOM), the UN OCHA, and some local NGOs (Assessment, Analysis 2022) it is funded through the Syrian humanitarian pooled fund.

In north west Syria, an area where 4.17 million people reside, more than half are IDPs and 1.4 million still reside in tented settlements. In the winter of 2021-2022, freezing temperatures destroyed 10,000 tents while artillery shelling continued, which killed at least 11 civilians in January 2022 (OCHA 2022). IDPs in north west Syria arrived from various governorates fleeing atrocities and arbitrary detention by the Syrian government. Between 2013 and 2018, IDPs in this region were mainly arriving from opposition-controlled areas that had fallen to government control, and had then been subjected to forced displacement deals. This scenario was repeated in Homs in 2014, rural Damascus in 2015, eastern Aleppo in 2016, and in eastern Ghouta in 2018. Among the largest displacement in the Syrian conflict occurred between December 2019 and February 2020, when an offensive by the Government of Syria in Idlib governorate forced 960,000 people from their homes; 81% were women and children and more than half had already been displaced at least once previously during the conflict (OCHA 2020). Generally, there is more information and data on IDPs in north west Syria compared to the other areas of control. This could be related to the active cross border humanitarian response in this region which is coordinated by many international and local NGOs and which operates with relatively little restrictions from local authorities.

In north east Syria, around 780,950 IDPs are resident among an estimated population of 3.2 million. Al Hol is the largest camp in the area and hosts around 68,000 IDPs (mostly women and children) though it was initially established for around 10,000 people; as such, conditions are uninhabitable with poor access to healthcare and other services (Marzouk et al., 2020). Most of these IDPs fled ISIS atrocities in the region between 2014 and 2018. In addition, there are around 10,000 forcibly displaced people in the informal Rukban settlement which is in a demilitarised zone between Syria and the extreme north east of Jordan; people in this area also continue to have restricted access to health or humanitarian aid (Amnesty International 2021).

Areas under government control account for around two thirds of the population who remain in Syria and the number of IDPs in this area is unclear. In these areas, responding to the health needs of IDPs mainly falls under the leadership of the Damascus Ministry of Health and the Ministry of Foreign Affairs and Expatriates (previously called the Ministry of Social Affairs (And the Ministry of Foreign Affairs and Expatriates (MOFA), before it was the Ministry of Social affairs 2022)) with contributions from the limited number of non-governmental organisations (NGOs) permitted to register and operate in these areas (Haid, 2019). The functionality of the health system in areas under government control has been comparatively less affected by the conflict than other geographical areas; this is due to less conflict-related destruction of infrastructure in these areas and the maintenance of the health governance infrastructure through the Damascus based government. Additionally, the UN led humanitarian response recognises the Damascus government as a lead for humanitarian interventions and provides financial support despite evidence of corruption and differential aid provision to different populations in these areas in which was described in some reports as manipulation and politicisation of humanitarian aid (Oxfam, and Norwegian Refugee Council 2020; Syrian Association for Citizen's Dignity 2021; Human Rights Watch 2022). This particularly affects IDPs who have been forcibly displaced to areas under government control from territories that were retaken by the government or areas currently under opposition control. For example, those forcibly displaced from eastern Ghouta to areas under government control found that the equity and accessibility of services in these areas did not meet their needs (UNHCR 2018) or in Dara'a where those forcibly displaced by the government faced the withholding of humanitarian aid among other restrictions leading to a failure in their needs being met (Physicians for Human Rights 2020). Some participants emphasised that this inequity and lack of accessibility of health services for IDPs in areas under government control is part of a wider and more pressing concern over the human rights of these IDPs who are subject to reprisals, arbitrary detention, and deprivation of civil rights.

3.2. *Subnational health system dynamics and impacts on IDPs*

Soon after the onset of the conflict, the withdrawal of the Ministry of

Health from areas under opposition control, particularly in north west Syria led to the formation of a variety of subnational health systems within Syria (Syria Public Health Network 2020). These have evolved differently with different leadership and governance structures, differences in financing and different prioritisation in healthcare provision. In part, they have evolved as a result of external factors e.g. funding priorities but also due to the evolving needs of the populations they serve. Broadly, these subnational health systems are in north west Syria (including areas under Turkish control in northern Syria,) north east Syria which are under the AANE (Autonomous Administration of North and East Syria) and the remaining two thirds of the country which is under the control of the Government of Syria (Syria Public Health Network 2020).

Years of underfunding, the weaponization of healthcare with relentless and ongoing attacks on health facilities as well as healthcare workers (Fouad et al., 2017), particularly in areas outside of government control as well as the changing and increasing health burden of those who remain in Syria, together with the COVID-19 pandemic have strained the subnational health systems across Syria. In addition, the failure to renew or the partial renewal of the UNSC resolution on cross-border aid has negatively affected the entry of health and humanitarian supplies to both north west and north east Syria (Syria Public Health Network 2020); this has been particularly devastating during the COVID-19 pandemic and for IDP (as well as host) populations in these areas. It has strained the already overburdened health system and exposed weaknesses across the subnational health systems; however, it has also provided an opportunity to reinforce the importance of community engagement and the role of bottom-up local governance structures (Ekzayez et al., 2020).

Differences between these health systems force IDPs to make difficult decisions. Some may be forced to make the choice of going to (or remaining in) areas under government control or going to areas under opposition control where their medical needs may still not be met or acknowledged (UNHCR 2018). For example, patients with haemophilia who may be evacuated to areas under government control, may not get the care they need due to health system capacity or discrimination (Rahima, 2021), on top of the security concerns for populations suspected to be affiliated with the opposition, which is more evident among male youths. For those with chronic diseases, due to the lack of a unified health system in Syria (and therefore a lack of a unified system of health records), the already limited resources may be wasted with duplication of services leading to redundancy.

Gender is an important factor that could affect heath access among IDPs in the various areas of control. For example, some women in north west Syria who suffer from cancer or other diseases that cannot readily be addressed in the health system in north west Syria, might be able to cross the contact line and receive treatment in government-controlled areas. The same applies for women in north east Syria, who could access some specialised services either in the national hospital of Qamishli (which is run by Damascus Ministry of Health), or travel to areas under government control to receive treatment. Men in north west or north east Syria are also adversely affected as they may not be able to enter areas under government control for fear of conscription or forced detention. On the other hand, some participants discussed cultural barriers that could affect the ability of IDPs women and girls to access to health services in the various health systems in the country. These issues include transportation (and the need for accompaniment,) risks of Sexual and Gender Based Violence (SGBV), and accessing services provided by men which may be culturally prohibitive for some. However, many participants confirmed that women constitute the majority of users of the different health systems across the different areas of control.

With regards to medical evacuations or the entry of humanitarian aid for IDPs (or host populations) in besieged areas or areas under government control often require complex international approvals for example, from Russia or the US and sometimes non-state organisations or the Syrian secret police (Mukhabarat) (Al-Sharq al-Awsat 2018). This is the case for those with injuries or advanced medical needs who may require evacuation. Even with appropriate approvals which are clearly documented, evacuations may still be refused. A widely publicised medical case is that of the conjoined twins in besieged eastern Ghouta who were born in 2016; after much advocacy and negotiations, they were transferred to Damascus where they received approvals for medical evacuation to the US, Europe or Saudi Arabia. However, this was declined by the Syrian government and they subsequently died (Sparrow, 2016). Between 2017 and 2018, only 36 of 1000 patients who needed evacuation for medical reasons from eastern Ghouta were evacuated despite appropriate approvals being in place as well as international advocacy (UNICEF 2017; Medicins Sans Frontiers 2018).

3.3. *Defining 'IDPs' in the Syria context*

Given the significant differences among the health systems across Syria (Abbara, Marzouk, and Mkhallalati, 2021) and the different governance structures which are in place across the geopolitical regions, some of the workshop participants challenged the utility and applicability of the term of IDPs in relation to Syria. It was stressed that even without crossing transnational borders, IDPs may arrive in areas where healthcare access is significantly better or worse than where they were resident and this may also be influenced by the degree of welcome, hostility or discrimination which they face on arrival (Human Rights Watch 2019). However, the term IDP is a legal definition which differentiates it from that of refugee. As such, a counter argument in the workshop was that the situation for IDPs in Syria may not differ substantially for IDPs in other countries and that some evidence (though sparse,) indicates that IDPs have worse health outcomes compared to host populations (Cantor et al., 2021). IDPs in Syria might differ from IDPs in other conflict affected countries (Renzaho, 2016) such as Ethiopia (Yigzaw and Abitew, 2020) and Myanmar in relation to having completely different governing systems across the contact lines of the conflict, which in turns affect accessibility to different health systems. However, there are still many similarities in relation to contributing factors to forced displacement – such as conflict hostilities and livelihood related factors, and in relation to the impact of forced displacement – such as disrupted social intimacy and livelihood hardships, which in turns affect health outcomes among IDPs and host communities.

With regards to Syria, an additional point raised was that we do not currently have clear evidence to suggest that being an IDP in Syria in itself is a vulnerability given the massive, forced displacement within Syria and multiple other factors which could affect this heterogenous group. As such, it was emphasised that we consider IDPs in Syria as a group who have 'agency and resilience,' with many of the IDPs having made the difficult choice to move with their families, often multiple times (Syrian Center for Policy Research 2021). If exploring health in Syria from a justice or equity dimension, it may be that considering vulnerabilities among groups, whether IDPs or not is more appropriate. Vulnerabilities may include children, those with chronic illnesses or disabilities or female headed households (Syrian Center for Policy Research 2021). Therefore, considering the health of IDPs through a purely health lens may do a disservice to this population without considering the various other vulnerabilities and determinants which can also affect their health. In their study of the Determinants of Internal Displacement in Syria by the Syrian Centre for Policy Research, the authors note that health conditions have worsened among IDPs as a result of the conflict including physical and mental health though this is under-explored with little rigorous evidence (Syrian Center for Policy Research 2021).

3.4. *A weak evidence base on IDP health in Syria*

From the literature and workshop, it is noted that, despite potential differences between the health of IDPs in Syria compared to host

populations or refugees including morbidity, mortality and interactions with the health system(s) where they reside, there remains inadequate information which explores this. In particular, there is very limited research evidence on health intervention effectiveness among IDPs compared to refugees (Blanchet et al., 2017). Participants had a wealth of experience to share while also noting that more emphasis needed to be placed on researching and documenting this field.

Almost all aspects of IDP health in Syria remain under-studied. Areas of particular importance include SRH (sexual and reproductive health,) MHPSS (mental health and psychosocial services,) and MNCH (maternal, neonatal and child health) and relevant interventions or health system strengthening to meet their needs (Akik et al., 2020; Hendrickx et al., 2020). One challenge includes mixed populations of IDPs and host populations which can make it difficult to distinguish between their health needs and that of local communities or to identify what services are reaching them. For example, COVID-19 rates are likely lower among IDPs however this may represent less access to testing or less trust in local services while they may not be differentiated in reporting. However, this also presents an opportunity to explore and compare services in similar micro-contexts (Abbara et al., 2020).

Weak evidence also extends to a lack of accurate information about the number or status of the population as well as problems with coordination due to the collapse of the local health systems. When information is available, it is often not timely and may lack granularity. Various models of healthcare delivery to IDPs have been tried e.g. mobile health clinics however there is no model to support implementation or evaluate the effectiveness of this intervention with limited published evidence on this (Abujaber et al., 2021). Of note, during the workshop, we drew mainly on examples from north west Syria because, even though there is little published on the health of IDPs in this area, there is even less in other parts of the country.

During the workshop discussion, participants emphasised an urgent need to focus on both the current and future health needs of IDPs particularly with regards to the potential impacts of future political changes and changes to funding mechanisms which could affect their access to healthcare services. This requires timely, disaggregated data and tools to understand the health needs of IDPs and challenges related to their access to healthcare. However, it was noted that there remain significant issues with regards to data and funding politics, competition among organisations (both Syrian and international), and other challenges to mechanisms of collaboration which need to be addressed.

In terms of interventions, there is sparse literature on this both for IDP and non-IDP populations. Participants at the workshop emphasised the importance of community-led initiatives to identify solutions appropriate to them in the areas in which they live; this has been done in a limited way in non-health initiatives in Syria (UNHCR 2021, October). This is something increasingly discussed in relation to Syria however, it has yet to be fully explored in terms of the health of IDPs. This may support discussions around intersecting vulnerabilities where communities which face particular challenges e.g. gender-related, socioeconomic or discrimination could explore measures which could support their needs. In some instances, more than 80% of IDPs are women and children and many have been forcibly displaced more than once or have faced prolonged displacement; strengthening evidence around differential health outcomes depending on the type and frequency of displacement could improve health system responsiveness for this group.

3.5. Social determinants of health and the importance of a trans-sectoral approach

IDPs share some similar challenges around healthcare access compared to non-IDPs however they also face additional challenges with increased likelihood of poor shelter, food insecurity, poor access to employment, higher rates of poverty and potentially greater impacts on mental health related to displacement and loss (Syrian Center for Policy Research 2021). However, this is a broad generalisation given multiple factors, including social determinants of health which can have varied impacts on the health of both IDPs and non-IDPs. For IDPs who share some similar but some additional healthcare needs compared to non-IDP populations, this has meant that healthcare has been inadequate to respond to their needs (Middle East Consulting Solutions (MECS) 2018). The social determinants of health for both IDPs and non-IDPs in Syria have been adversely affected by the protracted conflict with subsequent impacts on major health burdens (Fig. 2).

To explore this further, the authors adapted the WHO Social Determinants of Health (SDH) Framework (2010) and presented this to workshop participants in the context of IDPs in Syria (see Figs. 3a and (3b) (WHO 2010). These figures highlight the key social determinants of health in the Syrian context alongside their impacts as well as the key health burdens. The use of this framework acknowledges that among the 6.5 million IDPs in Syria, there is significant heterogeneity among IDPs on an individual, community, and population-level. This includes not only the macro-factors, such as the socioeconomic and political context of each area, but the micro-factors as well, including biological, psychological/social, and economic factors which can exacerbate or mitigate health outcomes.

Questions driving the WHO SDH framework are as follows:

1 Where do health differences among social groups originate, if we trace them back to their deepest roots?
2 What pathways lead from root causes to the stark differences in health status observed at the population level?
3 In light of the answers to the first two questions, where and how should we intervene to reduce health inequities?

These questions were modified slightly to reflect the Syrian context:

1 Where do health differences among IDPs originate, if we trace them back to the pre-conflict context?
2 What pathways lead from root causes to the stark differences in health status observed among all IDPs?
3 In light of the answers to the first two questions, where and how should we intervene to reduce health inequities for all IDPs?

We used the COVID-19 situation in northwest Syria as a case study to illustrate the adaptation of the WHO SDH Framework. We started by considering the structural determinants, which are defined by the 'Socioeconomic and political context' in the original framework. For IDPs in northwest Syria, this context can be defined as an 'Active Armed Conflict & Economic Crisis.' Building on the outline of the WHO SDH framework, this is defined by limited governance resulting from poor leadership and coordination, a fractured economy, absence of formal social and public policy infrastructure, and limited exchange of culture and societal values. The next consideration under the structural determinants defined by the original WHO framework is the 'Socioeconomic position.' In the modified framework, this is defined as 'IDP status', which leads to a lack of employment, discrimination, unstable occupation and income. This leads to an inability to establish or maintain social cohesion within the population or social capital, which is a key component of the WHO framework which leads into the intermediary determinants.

The intermediary determinants described by the WHO include material circumstances, behaviours and biological factors, as well as psychosocial factors which interact with the health system and contribute to equity in health and well-being. Material circumstances include unstable working and living conditions, limited food and safe drinking water, fuel. Behaviours and biological factors are affected by extreme stress and desensitisation. Lastly, psychosocial factors are exacerbated by a lack of social support, reliance on humanitarian aid, and chronic stress

As discussed, differences among the groups are poorly differentiated in the academic and grey literature. Other gaps include those related to

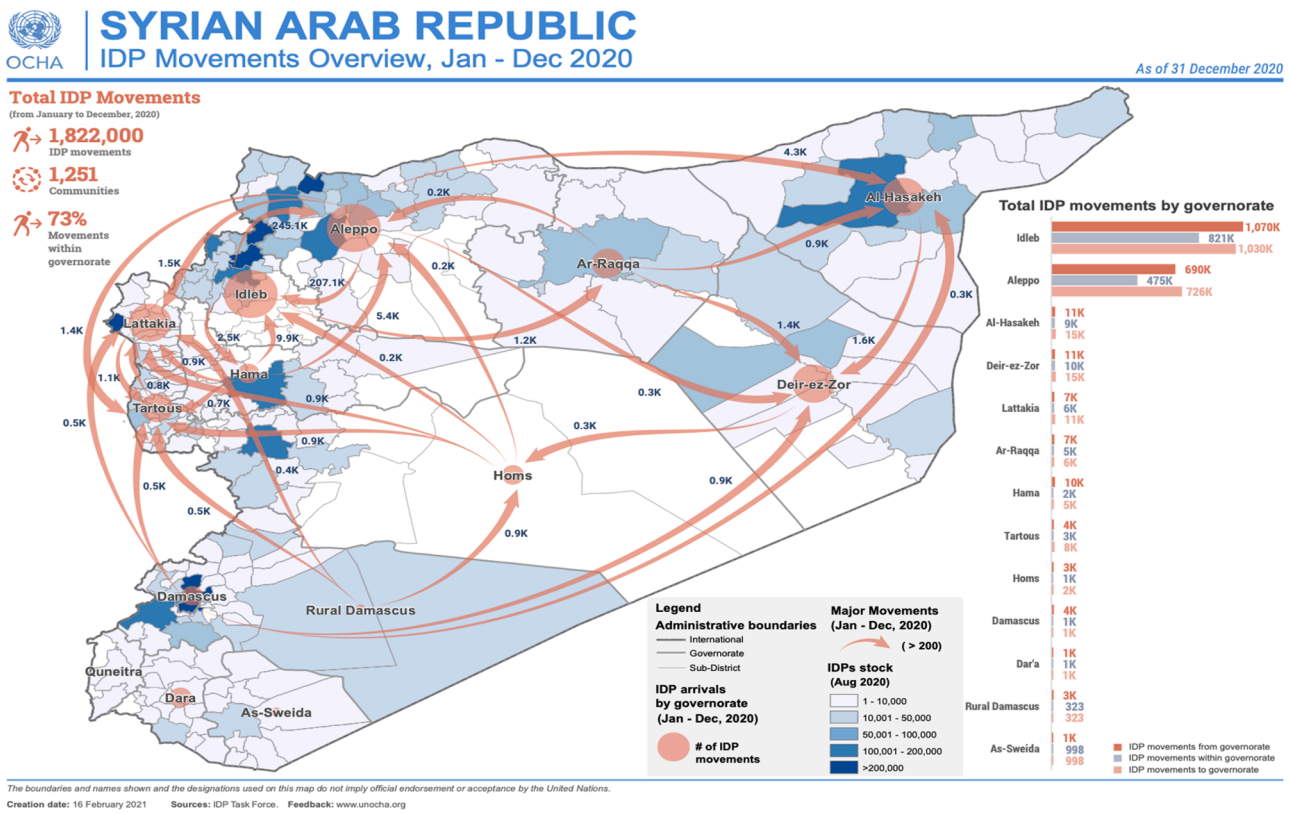


Fig. 2. This Fig. gives an overview of IDP (internally displaced people) movements during 2020 and shows the distribution of IDPs as of August 2020 (Assessment, Analysis 2022).

health determinants and how to maximise the health service response. When looking at the underlying social determinants of health, this is where differences among IDPs lie so when examining IDP health, it is important to understand these factors as this is where the solution lies. In Syria, it is important to understand the fluidity of the health system in this context. There remains little exploration of the routes which IDPs take and their interactions with the health system. There is a need to examine IDP health using the social determinants model at the micro, meso and macro level (Syrian Center for Policy Research 2021).

Borrowing from other contexts e.g. Palestine, it is important for us to be clear that IDPs do not exist within one sector only; as such, health should not be viewed in silo. We need to consider where health fits into the life and suffering of this non-homogenous group and ensure it is integrated into wider discussion. Participants stressed the importance of timely and rapid assessments which do not only focus on health but also other sectors. There has been much discussion on localisation but for IDPs, who may move more frequently, there are additional challenges relating to protection, livelihoods, WASH and access to services (Munezero and Manoukian, 2021). Other challenges include cultural issues, health system preparedness, national and subnational planning of IDP movements and needs.

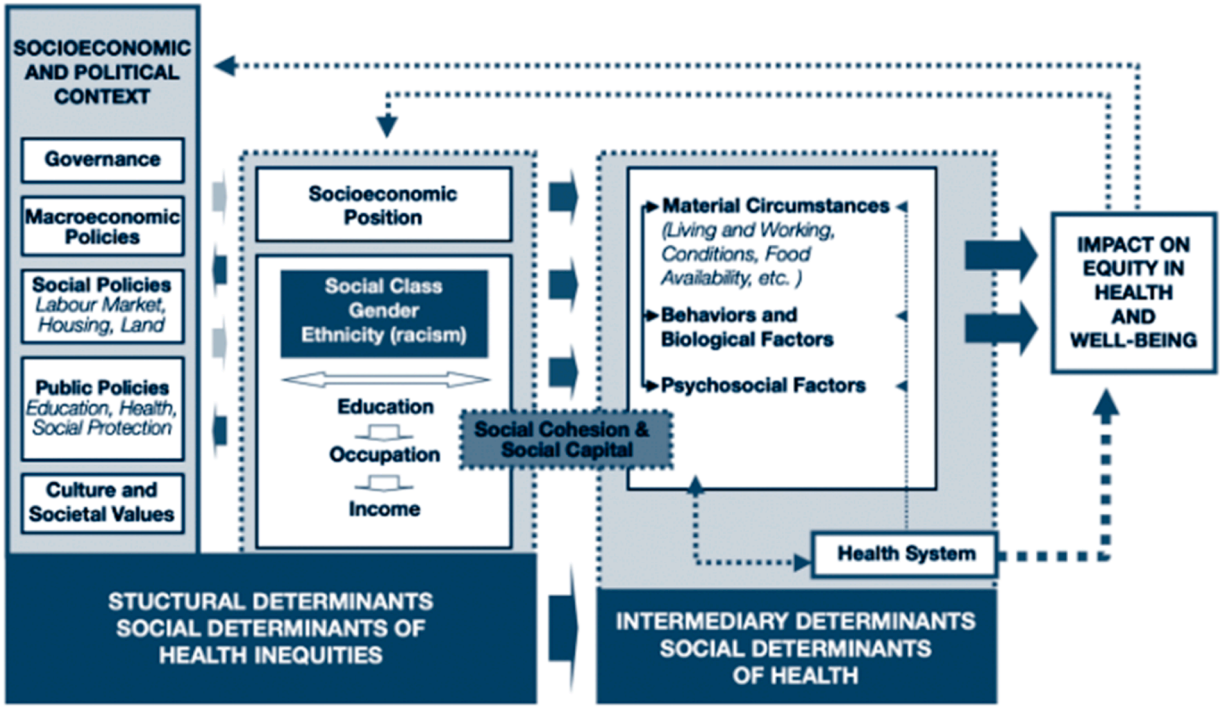
Understanding social determinants could result in more appropriate public health interventions through coordination or collaboration with the protection sector or livelihood sector to support health among IDPs in innovative ways. For example, through a livelihood project, face masks were produced during the pandemic with benefits to the population and potential health impacts.

4. Conclusion and recommendations

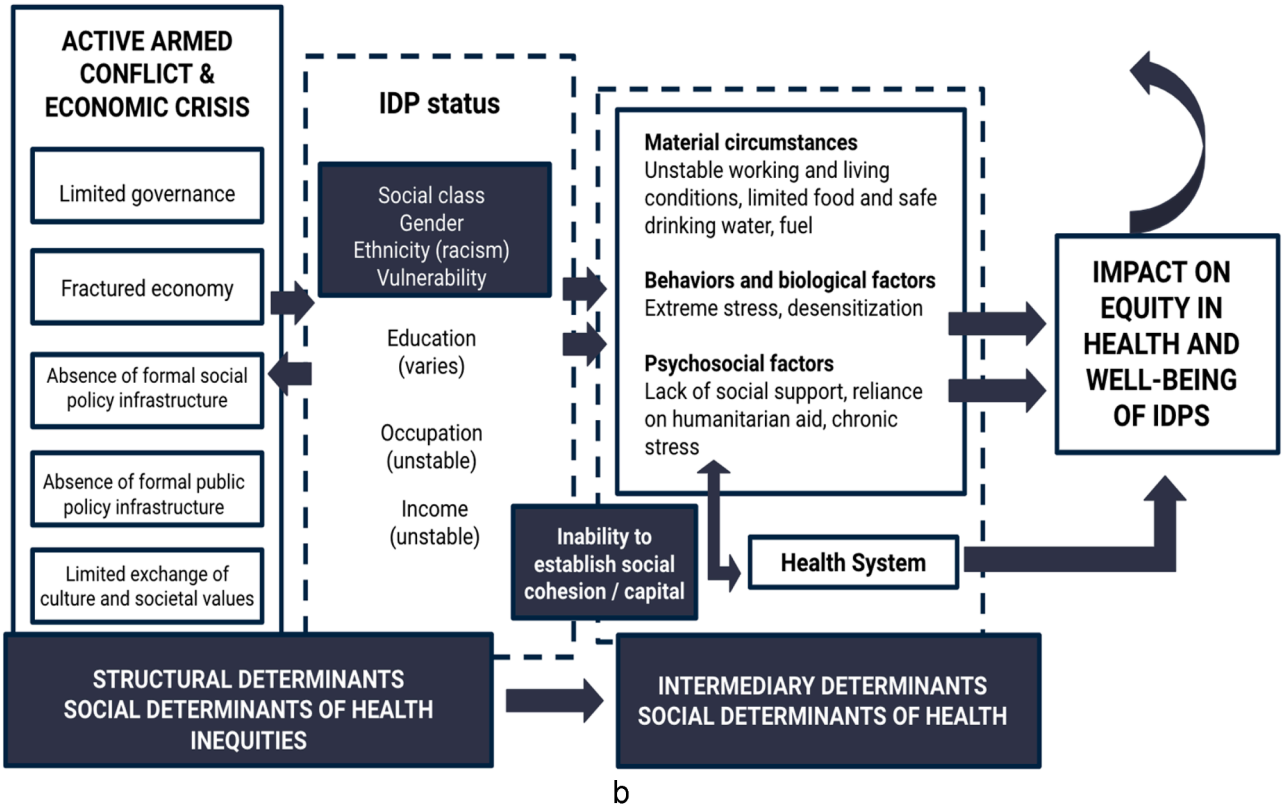
This manuscript presents some of the current issues with regards to the health of IDPs in Syria however there remain numerous unknowns both for the health of IDP as well as non-IDP populations in Syria. We hope that it will be the foundation for further discussions on practical steps relating to research, analysis and interventions which can support health system responses for IDPs in Syria. Though evidence gaps exist across the country, there are more gaps in some geographical regions (north east Syria and areas under government control) than others, as well as in data and granular exploration of health within this heterogenous group. As in other IDP settings, there is a gap in information relating to localised interventions which can be effective and responsive to the health needs of the population in a timely manner. The importance of community led initiatives was stressed by a number of participants however the 'how' of this requires urgent, further exploration.

Based on the study findings, we conclude the following recommendations:

- A ddressing the health of IDPs requires a transdisciplinary and transectoral approach with an emphasis on social determinants for health e.g. WASH was little mentioned in relation to IDP health;
- understanding the health needs of IDPs requires more exploration of the drivers of past and ongoing displacement e.g. attacks on healthcare, conflict events, and climate factors;
- in conflict areas, more attention should be paid to issues of discrimination regarding healthcare access on the basis of political affiliation – this was evident in certain areas in the Syrian conflict e. g. areas in government control in areas retaken by the government;
- careful considerations for balanced healthcare access and availability of services for both IDPs and host communities taking into account intersecting vulnerabilities among IDPs e.g. disability, multiple displacements and poverty;
- outreach health services seem to be key in responding to the health needs of IDPs and making the link between IDPs and host communities and health facilities;
- strategies for community engagement, such as local health committees and various communication channels, should be employed to



a



b

Fig. 3. Fig. (3a) Social determinants of health framework (WHO 2010) Fig. (3b) Social determinants of health framework for Syrian IDPs (adapted from WHO 2010) (WHO 2010).

ensure better understanding of the health needs of IDPs and host communities as well as more acceptance of health services among these communities;
- new tech solutions should be further utilised in understanding and responding to health needs of IDPs, this includes satellite imaging, positioning systems, social media, and other communication methods;
- health systems in areas where internal displacement is prevalent should adopt participatory approaches to ensure IDPs are involved in decisions related to their health.
- using and adapting existing frameworks, such as the WHO Social Determinants of Health Framework, are useful exercises in order to consider the broader structural factors impacting health at the individual and population level

There is no one size fits all but keeping IDPs, as well as local humanitarian actors and first responders, at the centre of these discussions is essential.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.jmh.2022.100126.

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