Summary of Key Evidence Related to the Role of Gender in Addressing Zero-Dose and Immunization Equity

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As part of Gavi 5.0's ambitious agenda to "leave no one behind" on the path to achieving the 2030 SDGs, Gavi has commissioned the International Vaccine Access Center (IVAC) to produce evidence-based and policy-relevant knowledge products relevant to Gavi's equity approach in wider political and policy spaces. **This knowledge summary is the third in a series of six (6) documents which aim to provide a snapshot of recent key evidence related to a specific topic or area of interest. This document focuses on zero-dose in the context of gender considerations.** Key findings are briefly described below in the form of an annotated bibliography but the related advocacy brief presents additional information about the topic and contextual details.

Introduction

"Immunization interventions will only succeed in expanding coverage and widening reach when gender roles, norms and relations are understood, analysed and systematically accounted for as part of immunization service planning and delivery." - Why Gender Matters: Immunization Agenda 2030

Gender affects both supply (provision of services) and demand (health seeking behaviour) dimensions of immunization and other primary health care services. "To increase immunization coverage, and in particular to sustainably reach "zero-dose" children and missed communities, it is necessary to understand and address the many ways in which gender interacts with additional socioeconomic, geographic and cultural factors to influence access, uptake and delivery of vaccines[1]."

"Gender inequality at the national level is predictive of childhood immunization coverage, highlighting that addressing gender barriers is imperative to achieve universal coverage in immunization and to ensure that no child is left behind in routine vaccination[2]."

A wide range of factors are known to be associated with non- or under-vaccination, including poverty[3,4], remote rural residence[5], conflict[6], migration[7], homelessness, cultural marginalization, and, importantly, gender-related barriers[8]. Centering gender equity and considering gender-related factors in childhood immunization activities is, thus, crucial to ensure that no children are left behind[2].

Key Definitions

Caregiver is a person who regularly or intermittently cares for an infant or child, and may include, for example, mothers, fathers, grandparents, or siblings.

Gender refers to the socially constructed roles, norms, and behaviours that a given society considers appropriate for individuals based on the sex they were assigned at birth. Gender also shapes the relationships between and within groups of women and men.

Sex refers to the biological characteristics that define humans as female, male or intersex and is typically assigned at birth[9].

Gender equity is the process of being fair to women and men. It recognizes that men and women have different needs, power, and access to resources, which should be identified and addressed in a manner that rectifies the imbalance. Addressing gender equity leads to equality.

Gender-transformative approaches are those that attempt to redefine and change existing gender roles, norms, attitudes, and practices. These interventions tackle the root causes of gender inequality and reshape unequal power relations.

Gender responsive approaches adopt a gender lens to consider individual needs of different gender identities without necessarily changing the larger contextual issues that lie at the root of the gender inequities and inequalities. For example, employing female health workers will facilitate enhanced immunisation service acceptance and uptake, but would not address the underlying cultural barrier that prevents female caregivers from seeking immunisation services from male health workers[9].

Missed communities are home to clusters of zero-dose and under-immunized children. These communities often face multiple deprivations and vulnerabilities, including lack of services, socio-economic inequities, and often gender-related barriers.

Zero-dose children are those who have not received any routine vaccines. For operational purposes, Gavi measures zero-dose children as those who have not received their first dose of diphtheria-tetanus-pertussis containing vaccine (DTP1)[10].

Gender-Related Barriers to Immunisation

Gender-related barriers to immunization for children may be particularly prevalent in settings with high rates of zero-dose children and these intersectional dimensions may extend from the level of health systems down to individual-level knowledge and beliefs about immunization. Key gender-related barriers to immunization cluster around 5 key themes: negative interactions with health providers and poor-quality services, reduced access to education, limited autonomy in household healthcare decision-making, restricted mobility and control over resources, and high prevalence of gender-based violence (GBV).

1. **Negative interactions with health providers and poor-quality services**
   Negative experiences with health services, including poor treatment by providers, deters many women from returning to health centres, resulting in missed opportunities for vaccination[1].

2. **Low education level and health**
   There is a strong link between maternal education, child health, and immunization uptake for children. Maternal education has been identified across multiple studies and countries as a particularly important indicator for predicting vaccine uptake[1,2,6–9]. Across countries, children of more educated mothers are significantly more likely to be immunized[2].

3. **Limited autonomy in decision-making and household**
   Women's decision-making and agency have been strongly associated with children's immunization status[1]. Due to unequal power relations, men often are empowered as decision-makers for

Gender Equity in the Global Health Workforce

A commitment to equity must also include prioritizing gender equity within the global health workforce. An estimated 70% of the world's health workers are women, yet across local, national, and global levels men hold the majority of senior and decision-making roles[1,12]. According to a 2019 WHO report, in general, "women deliver global health and men lead it[8]; 70% of global health organizations are headed by men while just 5% of global health organization leaders were women from low- and middle-income countries (LMICs)[13,14].

Unpaid and informal work make up nearly half of women's contributions to the global health sector[13]. A 2022 report, estimates that "six million women work unpaid and underpaid in core health systems roles, effectively subsidizing global health with their unpaid and underpaid labor[15]".

- Gender-based discrimination in healthcare settings is widespread and includes occupational segregation, lack of formal employment, wage gaps, sexual harassment, limited promotion opportunities, and the inability to participate in leadership and decision-making[1,13,16]. This impacts on the rights of a health worker to decent work and to work in an environment free from violence and also impacts on the quality of care.
- Women health workers may be limited in safely undertaking immunization outreach due to security threats and gender-based violence[1,17].

the household, including when children have access to health services. Women who require spousal permission for their child's immunization are less likely to fully immunize their children[1].

4. **Lack of access and control over resources and mobility**
   Particularly in lower-income and emergency settings that may be associated with increased rates of zero-dose children, women tend to have worse access to the resources necessary to access health services, such as time, money, information and transportation1. Across LMICs, a higher level of women's social independence is associated with improved levels of childhood immunization[11].

5. **High prevalence of gender-based violence (GBV) and harmful practices**
   GBV can have a harmful effect on decreasing immunization outcomes by making women less likely to utilize health services due to fear of disclosing violence outside of the household. GBV has been shown to contribute to overall lower use of reproductive and maternal health services and adverse child health outcomes[1].

What is the latest research related to gender barriers telling us?

A 2022 study analysed the intersection of women's empowerment and levels of vaccination across 50 LMICs using data from Demographic and Health Surveys (DHS). The analysis found that at the country-level, "*the higher the proportion of women with high empowerment, the lower the zero-dose prevalence*." Specifically, children born to less empowered women were found to be "over three times more

likely to belong to the zero-dose category" when compared to children born to women with high levels of empowerment as defined by the SWPER Global indicator[8].

While acknowledging that factors besides maternal empowerment may influence use of and access to vaccination services, the study concluded that promoting maternal empowerment may reduce several key barriers that limit women's ability to access health services for themselves and their children. The authors estimated that "*there would be 4.7 million fewer no-DPT children in the world if all of them had empowered mothers*[8]."

Conclusion and Recommendations

In order to close equity gaps and ensure that no child is left behind, we must prioritize approaches to focus on gender equity as centre and essential to the global immunization equity agenda. This must include a multi-dimensional approach addressing barriers to equity at both the demand- and supply-sides of immunization.

- Address gender-related inequalities in the health and social workforce weaken health systems and health delivery[13]
- Adapt data collection and analysis methodologies to determine and monitor critical gender-related inequalities and barriers[18]
- Ensure a gender lens is applied to immunization programs and policies across global, national, and sub-national levels[1,2]

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