

Social Economic Determinants of Health and Health Disparities in Uganda

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Abstract

Review Article

This review scrutinizes the intricate interplay between social-economic determinants of health (SDH) and the ensuing health disparities in Uganda, offering a nuanced understanding of the multifaceted factors shaping health outcomes across diverse demographic strata. By synthesizing a comprehensive array of empirical studies, theoretical frameworks, and policy analyses, this review illuminates the complex dynamics underpinning health disparities within the Ugandan context. Through a multidimensional lens, it explores the unequal distribution of resources, opportunities, and power structures that fuel disparities in health access and outcomes. Moreover, it delves into the implications of these disparities for public health policy and practice, advocating for targeted interventions aimed at addressing socio-economic determinants to foster health equity in Uganda.

Keywords: Disparity, Health, Inequality, Morbidity, Mortality.

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INTRODUCTION

Uganda, located in East Africa, grapples with a myriad of health challenges, including high rates of infectious diseases, maternal and child mortality, and non-communicable diseases (NCDs). Despite notable progress in healthcare delivery and disease control efforts, significant disparities persist, disproportionately affecting marginalized populations. These disparities manifest along various axes, including socio-economic status, gender, geographic location, and ethnicity, exacerbating health inequities across the country.

Social-economic determinants encompass a broad spectrum of factors that influence health outcomes, encompassing education, income, employment, housing, and access to healthcare. These determinants are deeply interconnected, shaping individuals' and communities' opportunities, resources, and capacities to attain optimal health. In Uganda, socio-economic disparities intersect with historical, cultural, and political contexts, creating complex webs of influence that impact health at multiple levels. Education serves as a cornerstone of socio-economic development and a powerful determinant of health. Higher levels of education are associated with improved health outcomes, healthier behaviors, and greater health literacy, thereby mitigating the risk of disease and promoting well-being (Cutler & Lleras-Muney, 2006). In Uganda, however, disparities in educational attainment persist, particularly among

marginalized populations, perpetuating health inequities and hindering efforts to achieve universal health coverage (Babalola *et al.*, 2016).

Income inequality, another pivotal social-economic determinant, profoundly influences health outcomes by shaping access to healthcare services, nutritious food, safe housing, and other essential resources. Studies indicate a strong correlation between poverty and poor health, with disadvantaged individuals facing heightened risks of morbidity and mortality (Wagstaff *et al.*, 2018). In Uganda, income disparities exacerbate health inequities, with impoverished communities bearing a disproportionate burden of preventable diseases (Kasozi *et al.*, 2019). Gender represents a significant axis of health inequality, with women often facing unique challenges in accessing healthcare, education, and economic opportunities. Gender-based disparities intersect with socio-economic factors, exacerbating health inequities and limiting women's agency and autonomy in health decision-making (Kwagala *et al.*, 2019). Addressing gender disparities is thus essential for achieving health equity and advancing women's rights in Uganda.

The Concept of Health Disparities

A health disparity is defined as a health difference that adversely affects disadvantaged populations, based on one or more of the health

outcomes. Health disparity populations include: Racial/ethnic minorities, less privileged socio-economic status, Underserved rural residents, and/or others subject to discrimination. The populations have poorer health outcomes often attributed in part to social disadvantage, and being underserved in the full spectrum of health care (Nicholas 2021). Usually, health disparities result into dimensions relating to higher incidence and /or higher prevalence, burden of disease measured by disability-adjusted life years, Premature and/or excessive mortality in areas where populations differ, poorer health-related quality of life, and/or daily functioning using standardized measures (Napier, 2014).

Mechanisms Leading to Health Disparities

Individual behaviors. These include but not limited to life style, beliefs, and, response to stress: racism, adverse conditions, food insecurity, witness to violence, immigrant, Biological processes such as Genetics and epigenetics: earlier age, of onset, gene variant, metabolic differences, susceptibility, faster progression or greater severity, Physical and cultural environment that include place, social interactions, network, community cohesion. Clinical events and health care: Differential treatments, poor communication, adverse events to medications, falls, progression of disease, access, use/abuse of appropriate services end of life care.

Assessment of Socioeconomic Status

In conducting assessment of social economic status, the following parameters can be used to measure the effect towards health and health disparities. Education-years of formal, usually translated into categories, income-defined in terms of annual household by number of dependents, occupation-laborer, technical, professional, business, information, life courses-increased attentio, Parental education as a measure in children Imputed value from average census data.

Therefore, it is suffice to assert that health inequalities are shaped by social and economic structures that are configured by conditions in which people are born, grow, work, live and age, and the wider set of forces and systems shaping the conditions of everyday life. These forces and systems include: political structures s economic policies & systems, development agenda, social reforms, social policies. These systems create circumstances that shape health, influence unfair differences at national level, district level, and local level (Margan *et al.*, 2017; Sarah & Ibrahim, 2013).

Paper Highlights

Social Structures and Their Influence on Health and Health Disparities

Political System

The cultural dynamics in Uganda largely influence health and health disparities. As culture is understood to be a set of practices and behaviors defined by customs, habits, language, and, geography that

individuals share (Napier *et al.*, 2014), there is growing difficulty with respecting local differences while promoting health universalism, an example is where culture is used to promote exclusiveness such as the habit of legislators who are offered the advantage of seeking health care in better hospitals outside the country, a cultural values that is considered as an intolerable form of multi-culturalism that is unfair.

Gendered Power

Research has shown that gender inequalities are uncovering negative effects on maternal health and maternal health care access and utilization in multiple ways. The women's inability to access maternal health care services include social patterns of gender discrimination, the lack of access and control over financial income at house hold level, perceptions that women cetered services being treated as women only spaces such as family planning services, hence the growing reason why progress towards engaging men in maternal and child health is very slow (Margan *et al.*, 2017). It is therefore suffice to conclude that the gender remains a power relation and driver of health inequality because households where power is constituted, negotiated in relation to access to resources, division of labor, social norms and decision-making reinforce health disparities in Uganda.

Amadi *et al.*, (2020), un cover a growing evidence that mothers often acknowledged a lack of control over how financial resources are used in their households including lack of male spouse support when purchasing items for delivery. Also is the gender dynamics in relation to labor where women's workload during and after pregnancy influence access to and use of health care services. The men's attitude towards fatherhood remains a key gender social norm as some men lack responsibility to care for their children. Therefore, gendered powered relations influence disparities about maternal health care access and utilization in Uganda. Division of labor both within and outside the home is often mediated by social norms designating which activities fall under the purview of men or women, as men are solely regarded as providers including working outside the home to bring income and women responsible for house work. It is the result of social norm that pregnancy and delivery is the role of women by some sections of Ugandans. Recognizing this unequal power within the decision –making process largely promotes health disparities in Uganda.

Culture

Culture is learned and passes from one generation to the next through the process of enculturation. Relying on symbols which have a particular meaning and values for people who share a culture, also is cultural traditions that take a natural phenomenon including biological urges and channels them in a particular direction. Everyone in Uganda is cultured, hence, making Uganda as a society patterned

through key symbols and forces towards seeking health. Some cultures constrain individuals to seeking health. This kind of cultural diffusion uncovers health disparities from one person to another, making some aspects of health seeking behavior universal, others merely wide spread or generalized, unique to particular societies or distinctive to particular societies.

Social Change

It is important to recognize that as groups come together into contiguous contact, a number of changes occur. One of the changes is diffusion as well as cultural borrowing. These arise as a result of cultural contact. As new identities emerge, others disappear, making the worst cases of which to collapse or be absorbed. Its people may die off or be exterminated. This can lead to cultural imperialism in which one's culture spreads at the expense of others. In Ugandan communities, this kind of cultural imperialism is responsible for health disparities. This is often brought about by a system of dominance where it lies within the sight of power holders. Their attributes to health must be accepted by the subjects not only at individual level but also collectively so much so that even outside forces enter the Uganda's new settings, they are typically indigenized. This explains why holders of power in Uganda prefer seeking health care in international hospitals to Uganda's health systems.

Families, Kinship and Descent

In many Ugandan communities, siblings play an important role in influencing health disparities. People who often live in the same village or neighborhood pray or celebrate together including caring for the sick. This continues to happen because they relate to one another. The extended family ties is one kind of kin groups that is wide spread in the Ugandan human societies who help each other in everyday tasks including decisions about health care, unlike nuclear families concentrated in urban areas where people tend to be independent including matters concerning health care. Therefore, extended families are complementing, overshadowing arrangements including health care.

Marriage

In Uganda, marriage remains a contentious issue as it increasingly becoming difficult to define, which is also influencing health disparities. Much as it involves a domestic partnership, romantic love, marriage to reproduction and family creation, issues of incest, exogamy and marriage to same sex continue to affect health disparities in Uganda. Incest in some Ugandan tribes is prohibited because it is dangerous. Believed to be linked to biological degeneration, it leads to yields harmful biological results of systematic in-breeding, decline in survival and fertility, threatens family roles and ties, disruption of family structure, is an instinctive horror, makes sex un appealing. Plural marriages in Uganda have increased risk of contracting sexually transmitted diseases, domestic violence, and associated stress/stigmatization.

Making a Living

The economic systems are largely influencing health and health disparities in Uganda. The modes of production in Ugandan societies are shaping availability, inaccessibility variations towards health. With Uganda's fee market economy, coupled with the privatization policy, health services provision in Uganda is partly enjoying individual and private ownership. In a comparative perspective, hospitals that are privately owned are performing better than government owned hospitals country wide, hence, influencing health and health disparities in Uganda. In the capitalist mode of production, the privately owned health facilities, user fees are much higher, yet with quality health care services. In order to maximize profits, the health workers personnel is under paid, often working longer hours than usual.

Religion

Religion is a manifest in a body of people with similar beliefs who gather together regularly for worship. Religion achieves social control through moral and ethical beliefs along with real and imagined rewards and punishments. Religious movements in Uganda aimed at revitalization of society are enabling people cope with conditions that influence health and health disparities. The Jehovah's witness religious sect does not believe that blood transfusion is morally acceptable as opposed to other religious sects such as Catholicism and Anglicanism. As religion reveals many expressions, meanings and functions, followers feel provided with comfort and security in times of disease threats and uncertainties. Believers in African traditional religion perform rituals, formal, invariant, earnest acts requiring them to act socially and collectively towards health and health security. This explains why some Ugandans still consult traditional herbalists, medicine men and women, shrines for health purposes as opposed to the religious devoted Christians who attend hospitals and health centers for care.

Social Stratifies and Their Influence on Health & Health Disparities

Health Disparities In Maternal and Child Populations

Uganda is one of the countries in sub-Saharan Africa with a very high maternal ratio estimated at 336 deaths per 100,000 live births. The main factors affecting maternal deaths wave around health disparities as this high number of maternal deaths in the country reflects inequities in access to health services. The causes are linked direct obstetric causes contributed to 73.8% of maternal deaths such as hemorrhage (42.7%), sepsis (24.0%), hypertensive disorders (18.7%) and complications of abortion (2.1%), whereas malaria (23.5%) and HIV/AIDS (20.6%) remain the leading indirect causes. Mortality is high among mothers referred late from other facilities who are HIV positive, aged more than 30 years, lack antenatal care attendance, and are delivered by caesarean section.

In Uganda, slow progress has been made in reducing maternal deaths, despite the relevant increase in skilled birth attendance from 59% to 73% and antenatal care attendance from 95% to 97% between 2011 and 2016. The maternal mortality ratio only declined from 438 deaths to 336 deaths per 100,000 live births. Most of the women who die are from rural and hard-to-reach areas, and they are usually uneducated and HIV positive; they generally delay seeking care and lack male partner support]. The leading causes of maternal death are direct obstetric causes and include hemorrhage, infection, hypertensive disorders, and abortion complications. HIV/AIDS also contributes significantly to indirect maternal deaths at some tertiary hospitals in Uganda.

Health Disparities in Children Populations

The infant mortality rate for Uganda in 2022 was 40.564 deaths per 1000 live births. A 3.32% decline from 2021. The infant mortality rate for Uganda in 2021 was 41.958 deaths per 1000 live births, a 3.21% decline from 2020. Infant mortality or death of an infant less than one year of age, represents the overall health of a country at one point in time and allows for comparisons of population health over time. Infant Mortality is an important factor in population health as factors that impact infant death, such as access to medicine, health care, and clean water, also affect the health of others in the population. Most (98%) of the 2017 infant deaths in the world occurred in low and middle-income countries. In 2017, estimates showed that Sub-Saharan Africa had the highest neonatal mortality rates (death under 28 days/1000 live births) in the world at 27.2 for every 1000 births overall. In Uganda 2018 estimates ranged from 27,889 to 46,361 total infant deaths. These disparities reflect Uganda's resource-limited settings in as far as health is concerned (Janis *et al.*, 2023).

Neonatal Mortality and Health Disparities

In 2015, approximately 1,700,000 babies were born in Uganda, or around 4,600 every day. Among young women (aged 20-24), 33 percent gave birth by age 18.2. Approximately 81 babies will die each day before reaching their first month; 96 stillbirths occur every day.6 Neonatal mortality rate: Uganda's neonatal mortality rate (NMR) is 19 deaths per 1,000 live births.3 NMR \neq in rural areas is 30 deaths per 1,000 live births and 31 deaths per 1,000 live births in urban areas.2 NMR \neq among the poorest households is 26 neonatal deaths per 1,000 live births, compared to 34 deaths per 1,000 live births among the richest households. In Uganda, the causes of Neonatal Mortality, 2015 In Uganda were birth asphyxia (28.6 percent), prematurity (27.9 percent) and sepsis (18.2 percent).

Maternal and Newborn Health Coverage Indicators by Residence

In rural areas, 46 percent of women made at least 4 antenatal care (ANC) visits compared to 57 percent in urban areas. Coverage of skilled attendance at birth is 53 percent in rural areas, compared to 89 percent

in urban areas. 9 percent of newborns in rural areas receive postnatal care (PNC) within 2 days after birth, compared to 21 percent in urban areas. By household wealth, only 44 percent of mothers in the poorest households had a skilled attendant at birth, compared to 88 percent of mothers in the richest households. 20 percent of newborns in the richest households receive PNC within 2 days after birth, compared to 11 percent among the poorest households. 80 of newborns among the richest households are weighed at birth, compared to 40 percent of newborns in the poorest households.

Health Disparities in the Care for New Born By Mothers Age

Mothers aged 20-34 and younger mothers (aged less than 20) have similar levels of skilled attendance at birth (57 percent and 67 percent, respectively). Their newborns receive low levels of postnatal care: 11 percent and 11 percent, respectively. 58 percent of newborns born to younger mothers (aged less than 20) were weighed at birth, compared to 50 percent of newborns to mothers aged 20-34.

Health Disparities in the Care Of New Borns by Mother's Education

Only 38 percent of mothers with no education had a skilled attendant at birth, compared to 55 percent with primary education and 93 percent for mothers with higher education. 8 percent of newborns are checked within two days after birth if their mothers have no education, compared to 9 percent of mothers with a primary education and 23 percent of mothers who received higher education. 89 percent of newborns born to mothers with higher education were weighed at birth, compared to 29 percent of newborns born to mothers with no education (UNICEF 2015).

Health Disparities in the Care of New Born By Geographic Region

The region with the highest coverage of skilled birth attendance is Central with 72 percent; the lowest coverage is Western with 49 percent – a difference of 1.5 times. Central has the highest coverage of PNC for newborns (within 2 days after birth) with 14 percent while Western has the lowest coverage at 5 percent – a difference of 2.6 times. 62 percent of newborns were weighed at birth in Central region, compared to the lowest coverage of 41 percent in Western region (UN, 2015).

Health Disparities in Adolescent Populations

Adolescents in Uganda have a heavy burden of disease mainly from STD's, HIV and effects of unwanted pregnancy. Currently there are limited initiatives to address this problem. Adolescent health in Kabarole district, Uganda, is seriously jeopardized by both high teenage pregnancy rates and high rates of sexually transmitted diseases, including HIV infection.

Health Disparities in Older Populations

Andrea and Susan (2022) in their study about Multidimensional disparities, resisting inequities: A political ecology of aging in Uganda observed marginalized aging groups as a social determinant of health disparities. Particularities in the health and aging subfields generate uneven health realities in old age. Conditions of health inequities in old age shape uneven health outcomes among older populations. Much as older adults comprise a small, but growing proportion of the Ugandan population, they experience health concerns where they are commonly sidelined in development agendas as programs to support them are less and less.

Health Disparities in the Disability Population

Krahn, Walker and Araujo (2015) in their paper about Persons with Disabilities as an Unrecognized Health Disparity Population, observed that People with disabilities have largely been unrecognized as a population for public health attention. Adults with disabilities are 4 times more likely to report their health to be fair or poor than people with no disabilities.

Health Disparity in the Sexual Oriented Population

Jackson *et al.*, (2016) have found that sexual minorities had a higher prevalence of some poor health behaviors and outcomes. Research shows that sexual minorities (e.g., lesbian, gay, and bisexual individuals) experience higher levels of discrimination, stigma, and stress and are at higher risk of some poor health outcomes and health behaviors compared to their heterosexual counterparts. However, the majority of studies have examined sexual orientation disparities in a narrow range of health outcomes and behaviors using convenience samples comprised of either men or women living in restricted geographic areas. Therefore, it has been hypothesized that sexual minorities have a higher prevalence of health behaviors and poor health outcomes and a lower prevalence of health services use compared to heterosexual persons across gender and age groups.

Health Disparities in Ethnic Populations

The Chimps Report news indicates that health disparities continue existing among the Batwa communities in Western Uganda. Due to low political representation at village, district and national level, the chances of forwarding their health concerns to the line authorities remain minimal. Also are the low education levels and a high dropout rate of pupils precisely due to marginalization issues of such indigenous and ethnic minority communities in the country.

Racism and Health Disparities

Racism entails practices and norms that allocate lower value and determine prospects according to the external looks or skin color of individuals. In the context of Uganda, inequalities emerge particularly regarding marginalized and racialized populations. Strong differences exist concerning mortality and infection rates by ethnicity. Racism involves a disadvantaged position

in society where consistent disparities arise along with institutional exclusion in aspects like employment, education, healthcare and everyday interaction. It is articulated that the albinos experience discriminatory practices due to social identification of racial and ethnic origin with precarious living conditions. They are subject to aggression and false characterizations, negative behaviors, rejections for work advancement and access to education and healthcare. All these lead to poor life opportunities and unfavorable exclusion regarding healthcare, thus, increasing health disparities. In Uganda, the conditions now recognized as disabilities are hearing, visual, intellectual, speech, and mobility impairment as well as albinism. People with albinism in Uganda have similar experiences to other disabled that they all face discrimination, prejudice and harassment. It is an invisible disability as it is considered a life-time discrimination and disadvantage experience. Different health challenges cannot let persons with albinism work for long hours under the sun as it causes skin cancer, their sight cannot permit them to read clearly. Situations in Uganda uncover how people with Albinism shun healthy facilities in Mbale City. This is why one woman living with Albinism was isolated and failed to access proper medication. As she approached the medical personnel, she was tough asking why the woman had visited the healthy facility. As she was asked to undress, the medical personnel tipped other nurses to come and see her body, making the nurses laugh at the woman with Albinism (under the same sun, 2016).

Political Systems and Their Influence on Health & Health Disparities

Political Power Dominance

Karl Marx viewed access to health care in terms of political power and dominance in a capitalist society, further believing that health care workers were satisfied according to the dictates of the capitalist system as governments spend less on ill health, hence viewing ill health as a class problem related to social inequality (Amadi *et al.*, 2020). This is not news to Ugandans.

Colonial Legacies

Moses *et al.*, (2021) consider in their study that Uganda struggles with a recent colonial past and its legacy. Its effects have remained brutal as forced colonization continues to influence health disparities in the country. Colonization disrupts people's connection to the land and forces a new country identity on existing cultures, communities, and families, and does so through policies that seek to control, stigmatize, and intervene in their lives. The political, economic, social, and cultural control that was leveraged on an occupied nation breaks down local social fabrics and creates inequality and public mistrust in the governance system. As a result, some populations in Uganda become more and more excluded, and these historical cycles of disempowerment lead to further exclusion. Colonialism also shapes the health system and all governance processes within, with a history of colonization acting as a key determinant of

health for many vulnerable population groups (UNICEF & UNPF, 2015, Kwagala *et al.*, 2019; Alex, 2022).

The English Law and Health Disparities in Uganda

Such foreign systems of rule of law limited local peoples' self-determination and sovereignty, for subjected communities were beholden to laws that they had not participated in making. The repressive systems that crushed Indigenous legal and health systems also disregarded local traditional values, which were then replaced by those of the colonial rules. These systems include the health system, which was organized by the colonizers based on their own ideas and beliefs around the type and number of services that should be provided to the local population. This explains why disparities in health still exist as much of the health-related legislation that remains on the books today was imposed through the doctrine of legal reception, in which the British legal culture was transferred to Uganda. Laws such as the Public Health Act (1935), the Mental Treatment Act (1938), the Venereal Diseases Act (1977), the Penal Code Act (1950), and many others still affect health governance in Uganda. Starting in the 1930s, the colonial government shifted its medical focus to public health policy. During this time, many laws relating to public health were adopted and have not been comprehensively reviewed since. Changing socioeconomic conditions call for legal frameworks to be updated, and often strengthened. Some of these laws have been criticized for being restrictive in the area of reproductive rights, such as with regard to sexual orientation and access to safe and legal abortion. In such cases, as part of decolonization, it is important to open a participatory dialogue around legal review to address gaps between policy, law, and practice.

Armed Conflict

Armed conflict is an important contributor to the social determinants of health and a driver of health inequality. The northern Uganda region is still recovering from over 20 years of the armed conflict between the Lord resistance Army and the Ugandan government that has resulted into disruption of health services and health disparities, but, the northern region ranks the highest in the country with a median age at first birth at 17.8 years and Uganda has a maternal mortality ratio of 310 per 100.000 live births (Primus *et al.*, 2015).

Iversen *et al.*, (2021) in their study about child and adolescent mental health services in Uganda uncover that one in five children and adolescents suffer from mental health disorders, while facing limited opportunities for treatment and recovery. Growing up, they face multiple challenges that might contribute to the development of mental disorders. Uganda is a developing country with a history of prolonged civil and regional wars associated with child soldiers, large numbers of refugees and internally displaced people due to natural disasters and unrests, and a large infectious

disease burden mainly due to acute respiratory tract infections, malaria and HIV/AIDS.

Ugandan children and adolescents are exposed to stressful conditions. These include pressure from peers and at school or difficulties in accepting their identity and sexuality, as well as pressure from social media on issues such as body image, success and popularity]. The stress they go through contributes to one in five children and adolescents suffering from mental illnesses. The unfortunate bit of it is that access to treatment is insufficient and unevenly distributed. As a large proportion of the Ugandan population are children and adolescents (57% are under 15 years) and given its history of prolonged armed conflicts, such as north region and the Ruwenzori sub regions that has lasted for 20 years or so has resulted in 1.7 million children to live without their parents, greater emotional needs, living with poor elderly widowed female caregivers (Margan *et al.*, 2017; Sarah & Ibrahim, 2013)

Decentralization

As Uganda operates on a district health system model with the decentralization of health service delivery at health district and health sub district levels, also at public and private actors, their utilization is still low in public section due to lack of medicines, shortage of health workers, un official fees in public health facilities and poor infrastructures, and long waiting times (ibid, 2015), hence, the notion that Uganda is a very poor country with people only living to 57 years old on average as disease continue putting a big burden on the countrys's health system with yet curable and manageable diseases like malaria, where there are over 15 million malaria cases in Uganda each year, making it a leading cause of death.

Law Enforcement That Is Not Legitimate

Elizabeth *et al.*, (2021) uncover in their paper on Violence and discrimination among Ugandan residents during the COVID-19 lockdown. They portray an account of how law enforcement during the pandemic influence health disparities in the county. In March 2020, the World Health Organization (WHO) declared COVID-19 a pandemic. Many countries in Sub-Saharan Africa, Uganda inclusive, implemented lockdowns, curfew, banning of both private and public transport systems, and mass gatherings to minimize spread. Social control measures for COVID-19 are reported to increase violence and discrimination globally, including in Uganda as some may be difficult to implement resulting in the heavy deployment of law enforcement. Media reports indicated that cases of violence and discrimination had increased in Uganda's communities following the lockdown. Therefore, a substantial proportion of Ugandan residents experienced violence and/or discrimination during the COVID-19 lockdown, mostly perpetrated by law enforcement officers.

Economic Structures and Their Influence on Health and Health Disparities

Cost and Distance

From 2002/3-2005/6 the influence of distance as a barrier to health care among rural residents (OR 0.61, 95% CI 0.50-0.75) fell significantly. But, high costs were a increasing reason for not seeking care. Self-medicating dropped significantly among the most poor (OR 0.11, 95% CI 0.08-0.15) and rural residents (OR 0.17, 95% CI 0.14-0.19). Use of private for-profit providers also dropped in 2005/6. For severe illness rural residents were more likely to use private not-for-profit or public facilities than private facilities in 2002/3 and 2003/4. Cost and distance are still key barriers to accessing health care for the poor and rural residents. Public private partnerships should be broadened to increase access to quality care among the vulnerable. Rather than simply continuing general subsidies, policy makers should consider targeted poor and rural poor (Silje *et al.*, 2021).

The Poor Experience Greater Burden of Disease

Of 678 identified documents, 48 met the study criteria. The poor and vulnerable experience a greater burden of disease, but have poorer access to health care than the non-poor. Barriers to use of health services include drug and staff shortages, late referrals, health worker attitude, cost of care, lack of knowledge, distance and poor quality services. The poor/vulnerable are more affected by user charges; their abolition in Uganda has largely been perceived as pro-poor. Conclusions: The poor still experience a greater burden of disease, and have poorer access to health care than the non-poor. Distance to service points, perceived quality of care and availability of drugs are key determinants of use.

ART Delivery and Accessibility

In Uganda, more than half the people who need anti-retroviral therapy do not get it and it is feared that by 2012, people in need of ART will have doubled. Government capacity to respond to needs of PLAs is outstripped by the demand. Treatment increased due to the free ARV program, yet demand continues to outstrip supply, and the gap is widening. PMTCT does not adequately address pregnant women's treatment needs. HIV-TB co-infection is rife; while TB treatment has risen, programme reach is limited by travel distances, inadequate training and poor community awareness. A severe financing shortfall and corruption undermine ART delivery, aggravated by shortages of health care facilities, laboratories, equipment and doctors, nurses and counsellors (Amadi, *et al.*, 2020; Moses, 2021)

Patients and Access to Medicines

Surveyed medicines were most available in Mission facilities and least available in public facilities. In public services, there was no difference in availability of medicines between rural and urban facilities, but in the private and mission sectors, medicines were more available in urban facilities. Prices of medicines in the

private sector facilities were higher than in mission facilities, and medicines in private sector and mission facilities were unaffordable for the lowest paid Government worker. Conclusions: An analysis of the medicine procurement system in public sector facilities is needed and government should live up to its commitment to ensure essential medicines are available in these facilities. Low availability of first line anti-malarial medicine in the private sector can undermine proper malaria case management and should be investigated, as well as Mission sector pricing mechanisms to ensure medicines are affordable to the people they serve.

Policy and Legal Frame Work for Human Resources for Health

Despite growing recognition of the crucial role of Human Resources for Health and related functions in health service delivery, little attention has been given to the role of policy and legal frameworks in Uganda. In this paper we review the implications of existing policy and legal frameworks on the human resources for health. The workforce is the single most valuable asset in the health system, which can ultimately influence the success or failure of the health system. In Uganda the National Health Policy addresses a number of factors affecting the national human resources for health such as inadequate numbers and inappropriate distribution of trained health personnel. The policy proposes several government measures to strengthen Human Resources management at all levels. Several other scattered national policies and laws have provisions that influence the challenge of addressing human resources for health in Uganda. This paper focuses on provisions in the policies and laws that address: education and training of human resources for health; procedures for recruiting health workers; terms and conditions of work for health workers; health worker safety; migration of health workers within districts and from Uganda to other countries; and provisions on the optimum incentive structure for health workers in Uganda. There is a need for a holistic approach to address the issues of human resources for health in Uganda. A review of the existing policy and legal frameworks is needed and the implications must be assessed so as to influence future policy processes regarding human resources for health (Kasozi, 2019; Gloria *et al.*, 2015).

Health Funding

Public health spending is below the level needed to realize the targeted 2.5 health treatments per person per year. More state funds are essential to the longevity of scale-up programs, particularly treatment. Although health expenditure is about 6% of GDP, drug supply remains inadequate compared to demand, therefore priority must be given to per capita funding for essential drugs. The immediate shortfall in HIV funding is about 200 billion shillings. Continued political commitment is needed to improve equitable distribution with budget reform for districts; a better tracker system

and greater transparency on budget allocations to make clear where money is actually being spent on HIV; and better management of HIV funds to increase accountability (UN, 2015; Janis *et al.*, 2023)

Local Government Budgeting and Its Response to Gender Health Needs

Local government budgeting does not respond to gender health needs in Mpigi district. While the Local Governments Act (1997) provides for inclusion of gender concerns in budgeting and service delivery, it has failed to translate this gender equality commitment into meaningful action at local government levels.

House Hold Willingness to Join Community Health Insurance

Community Health Insurance is increasingly seen as a way to address inequity in access to healthcare arising from direct payments for healthcare. It is seen as particularly relevant in countries that depend a lot on out-of-pocket payments for healthcare and where a large part of the population is not engaged in formal employment. Uganda is one such country. Most households were willing to join CHI schemes but were willing to pay only small contributions per person. The district health team and Ministry of Health should introduce CHI in Jinja District and identify extra funding sources to supplement the meager contributions that households are willing to make. Most (81%) households were willing to enroll in CHI schemes; they were willing to contribute on average Ushs 5,977 (US\$3.4) per person per year. Willingness was associated with employment of the household head in the formal sector, location of household in rural areas and absence of children in the household. In up to 26% of households, someone had been admitted in the year preceding the study; up to 77% had made direct payments for healthcare whenever someone fell ill (Kwagala *et al.*, 2019).

Allocation of Primary Health Care Resources

There are large disparities in health outcomes and health service delivery across different regions in Uganda, but health sector resource allocation does not adequately address the varying health needs of different regions. Therefore, there is a need for an equity-oriented resource allocation process for the health sector (wagstaff *et al.*, 2018).

Economic Status

The poor are often the disadvantaged, whatever the dimension assessed because they continue to suffer more-ill health (eg death), utilize health services less and pay more of their income (proportionally) on health care than the better off. Such disparities are infiltrating the entire country despite of Uganda's level of economic growth. This picture is worse because the Uganda Demographic and Health survey (UDHS) of 2016, the infant mortality and child mortality rates are as twice as much in the lower population quintile. They (the poorest groups) were four times more likely than the wealthiest

quintiles to deliver un attended to or attended by a traditional birth attendant; and about three times more likely than the richest groups to be attended to by the relatives or friends.

Rural-Urban Disparities

Substantial health care disparities exist between much of rural and urban. The majority of health care resources are located within urban centers as rural communities have lower health care and clinical laboratory access, higher levels of poverty and unemployment, and longer travel times to social service providers.

Nicholas (2021) in his study about exploring country-wide equitable government health care facility access in Uganda, observes that rural access to health care due to urban bias barriers is responsible for the concerns of health disparities in Uganda. This often lead to lack of equity, thus, leaving disproportionately less health centers with poor quality health service remain accessible for the villagers who are the poorest residents in their rural communities. Yet with their health care needs as compared to those living in urban areas, make Ugandans continue experiencing a high infectious and non-communicable disease burdens.

Further, it shows un acceptable disparities in the same indicators between different regions of the country- with the northern part being worse-off, and more favorable in urban areas than rural areas. Most of the people in the rural areas spend about 5% of their monthly consumption on health compared with 3% for their urban counter parts, hence making ill health as the most top cause of poverty in Uganda (ibid, 2016)

User Fees

Much as the user fees was abolished in all government health facilities to help reduce the gap between the rich and the poor, the private wings are still collecting money from Ugandans. Still, public subsidies targeting services expected to be used by poor Ugandans living in the periphery such as PNFP health units, are also charging higher user fees.

Location of Facility

Despite the free government health services, distance is often cited as a challenge, which implies that the opportunity cost is too high for many Ugandans to afford, hence, forcing the rich and the poor to seek care form the private sector, the majority of which, in Uganda, raises questions about quality The percentage of Ugandans with in a one hour walking distance to the nearest health center 11 is 71.73%, yet increasing access to the integrated national laboratory system is by 27.52 percent. Therefore, significant clusters of low health center access are associated with high poverty hence, a health disparity existing in rural populations facing disportionately long travel time to health center compared

to wealthier urban residents (Nicholas Dowhaniuk, 2021)

Health Status

The country total child nutrition status remains poor as there exist country disparities in stunting and underweight rates across the country. Looking at determinants of child nutrition among children aged below 5 years, significant under-five mortality that is characterized by stunting and underweight, increasing prevalence of anemia still show a worsening health inequality in Ugandan rural communities (Alex *et al.*, 2022; Sarah & Ibrahim, 2013).

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List of Abbreviation

SDH: Socio-economic determinants of Health

BHS: Basic health services

NCDs: non-communicable diseases.

Aim: To uncover a description of the social economic determinants of health and health disparities in Uganda.

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