

ASSESSING THE ACHIEVEMENT OF SDG 3 Good Health and Well-being in Connection with Recent Global Events

AVALIANDO A CONQUISTA DO ODS 3 Saúde e Bem-Estar em Conexão com Eventos Globais Recentes

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Abstract

This paper reviews current global events recorded via published news articles on the internet or in newspapers concerning the United Nations Sustainable Development Goals (SDGs) and can be positive or negative to its development. The paper analyses eight news articles that focus specifically on the global progress of the achievement of SDG 3: 'Good Health and Well-being'. The importance of goal 3 is it plays a vital role in every individual's way of life, physically and mentally, highlighting how essential these targets are to be achieved. The paper considers this on a global scale, introducing the synergy of the development goals and the theories and concepts that interfere with equal achievement of the goal. The use of qualitative methods including SWOT analysis, the poster method and photo collage, provide current research-oriented data that is examined, to build a greater understanding of the current development of SDG 3. The findings are grouped into 3 sections, including disease outbreaks, climate vulnerability and pollution-caused illnesses, that link with SDG's sub-targets 3.8, 3.3. and 3.9. Highlighting that low-income countries face the biggest challenges in reaching health targets and are directly affected by the changing climate and conflict. In conclusion, international cooperation, strengthening healthcare systems, and achieving other synergetic SDGs are important.

Keywords: sustainable development, health, pollution, disease, environment.

Resumo

Este artigo revisa eventos globais atuais registrados por meio de artigos de notícias publicados na internet ou em jornais, relacionados aos Objetivos de Desenvolvimento Sustentável (ODS) das Nações Unidas, podendo ter impactos positivos ou negativos em seu desenvolvimento. O artigo analisa oito matérias jornalísticas que abordam especificamente o progresso global na conquista do ODS 3: "Saúde e Bem-Estar". A importância desse objetivo reside no papel fundamental que desempenha na vida de cada indivíduo, tanto fisicamente quanto mentalmente, ressaltando a necessidade essencial de alcançar essas metas. A pesquisa considera essa questão em escala global, introduzindo a sinergia entre os objetivos de desenvolvimento e as teorias e conceitos que interferem na realização equitativa desse objetivo. O uso de métodos qualitativos, incluindo análise SWOT, método do pôster e colagem de fotos, fornece dados orientados para a pesquisa atual, que são examinados para ampliar a compreensão do estado atual do ODS 3. Os resultados são agrupados em três categorias: surtos de doenças, vulnerabilidade climática e doenças causadas pela poluição, que se relacionam com os subalvos 3.8, 3.3 e 3.9 dos ODS. O estudo destaca que os países de baixa renda enfrentam os maiores desafios para atingir as metas de saúde e são

*diretamente afetados pelas mudanças climáticas e pelos conflitos. Conclui-se que a cooperação internacional, o fortalecimento dos sistemas de saúde e a consecução de outros ODS sinérgicos são fundamentais para o avanço dessa agenda.
Palavras-chave: desenvolvimento sustentável, saúde, poluição, doença, meio ambiente.*

Introduction

The Sustainable Development 2030 Agenda was designed to unite countries and collectively work on the 17 Sustainable Development Goals (SDGs). The United Nations during 2015 set up this framework for 193 member states to work towards by 2030. The goals collectively have 169 targets that provide a blueprint for ending or reducing deprivation, and inequalities, while preserving the environment and encouraging economic growth (United Nations, 2024). Each goal builds on a new aspect of development, this paper will focus on SDG 3. The main goal is to 'Ensure healthy lives and promote well-being for all at all ages', it is a vital target as health is a human right and from an individual view standpoint vital for their quality of life and a national perspective essential for the economy, society and the countries development (United Nations, 2024). This paper evaluates the current achievement of SDG 3 targets on a global scale and identifies the consequences of not reaching this goal. While considering the different achievement stages between the Global North and Global South. The framework of SDG 3 will be analysed along with 3 of its 13 targets, 3.8 'Achieve universal health coverage', 3.3 'Communicable diseases', 3.9 'Reduce illnesses and death from hazardous chemicals and pollution', and climate vulnerability. The paper's focus is research-oriented, with secondary data and materials used throughout to form a developed framework that includes a historical timeline of events, SWOT analysis, and the poster method.

Literature Review

WHO (2024) describes health as an individual condition of being physically and mentally well, with the promotion of health and reduced burden of disease. To provide a foundation for this paper a brief history timeline will be analysed of past events that have led to the impact of SDG 3's development. An important issue to discuss is health outbreaks such as COVID-19, with unequal distribution of vaccines (Steinert et al, 2022). A study by Steinert et al (2022) found that low-income countries had a longer waiting list for vaccinations than high-income countries, highlighting the distribution's ethical, political and economic inequality. Discussing vaccine nationalism and stockpiling high-income countries had.

Over the past years, many factors have affected human health that have been human-enhanced, including pollution. Several types of pollution are currently creating health problems; however, the main type is air pollution worldwide, ranking second in the global risk factors for death for the global population and children under 5 (UNICEF, 2024). In Table 1 the data collected provides statistics on global deaths and diseases related to air pollution from 2018 to 2021. The deaths recorded are high relative to the decline in disease, yet these numbers remain extremely high. These problems and factors are urgent and extremely important for attaining the goals set for the world's health that should provide people with a better, safer way of life.

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Year	Deaths by Risk Factor Global Air Pollution (outdoor & indoor)	Disease Burden by Air Pollution (outdoor & indoor)
2018	8.04 million	245.53 million
2019	7.97 million	240.58 million
2020	7.72 million	229.58 million
2021 (most recent data)	8.08 million	235.97 million

The 'Global South' concept is valuable when explaining inequalities and impacts within different countries. Figure 1 captures this in a map, showing the countries that are included in the 'Global South'. The term refers to less economically developed countries than the 'Global North'. Inequalities are clear when comparing the terms and their countries, linking them to differences in politics, resources, economic exploitation, and imperialism. Concerning this report regarding health in the 'Global South', Montenegro et al (2020), discuss the difficulties in teaching global health education to lower-income countries and provide an insight into the power structures and the differences. This is just one political and economic reason that health varies within countries, considering this the report will discuss how current events have made this worse and may affect reaching the Sustainable Development Goals.

An important theory to consider is the Structural Violence Theory, structures that have been set up, some through institutions that prevent individuals from accessing necessities for their health (Daniel & Schwebel, 1997). Daniel and Schwebel (1997) discuss the theory of how unequal distribution of resources leads to economic and social divides, this deprivation in areas can lead to conflict and rebellion. Regarding SDG 3, this theory links to inequalities that several countries face due to access inconsistency like Sudan and the problems many face that affect their physical health and access (Al-Maghafi, 2024).

Another factor to consider is the social determinants of health (SDH), according to the World Health Organization (2018), are circumstances and factors that influence an individual's situation, because of how they were set up in life. Some examples of determining factors are income, education, food insecurity, conflict or the environment, highlighting the synergy of the sustainable development goals. These factors can challenge different geographical locations, the new articles collected for this paper analysis focus on aspects including climate vulnerability, access to medication, funding, health, and vaccine inequalities. Highlighted throughout the news articles collected, in locations of the 'Global South' including Ghana, Brazil, the Democratic Republic of Congo, India, and Sudan. These articles provide information collected from different world locations and aim to aid the paper's findings while taking a global approach. The reported theories, concepts and historical timeline form the theoretical foundation of this paper.

The 'Global South'

As defined by the Organization for Women in Science for the Developing World, a unit of UNESCO



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Methodology

This report is research-orientated and utilises secondary data gathered from various recent news articles, sourced from a reputable source, the BBC News. BBC News follows procedures set out by the UK's government, aiming to provide impartial news for the country and regulated by Ofcom (Tyler-Todd & Lalic, 2024). Over the semester, 8 news articles were collected (see Table 2) on present matters regarding health globally, many linked to other SDGs as well. After reading and choosing reliable sources the next step was to analyse the data using the SWOT analysis process. SWOT analysis identifies the article's social, political, and environmental dimensions, looking specifically at the event's strengths, weaknesses, opportunities and threats. Using this method provides an overview of what areas face the greatest problems, invites room for solutions and looks at individual and collective impacts (Teoli, Sanvictores, & An, 2023). With aims to collect data on the current problems that need to be focused on to achieve or maintain the past and future targets of the Sustainable Development Goals. These events will be looked at from a global perspective rather than individually analysed, as the poster method and picture collage are used to do this. The poster method involved establishing a connection between the news and the chosen SDG, including the historical context, the problems that needed to be addressed, and solutions. Lastly, the picture collage (see Figure 2) uses images taken from these events, and then are used to depict a more meaningful outlook. Using a mixture of methods allowed a detailed results section to be created on this matter.

Figure 1 - Diagram representing the countries classed in the 'Global South' in the highlighted red colour (Source: World Economic Forum, 2023, World Economic Forum).

	NEWS ARTICLE TITLE	SOURCE
1	Gaza – WATERBORNE DISEASES 'Diseases spread in Gaza as sewage contaminates camps and coast'.	BBC News
2	Brazil – LEPTOSPIROSIS AND HEPATITIS A 'Waterborne disease outbreak after Brazil floods kills four'.	BBC News
3	Democratic Republic of Congo – MPOX 'The children bearing the brunt of the mpox outbreak'.	BBC News
4	Sudan – CHOLERA 'Hundreds die from cholera as war rages in Sudan'.	BBC News
5	Pakistan and India – AIR POLLUTION 'Schools close in Lahore as pollution hits record level'.	BBC News
6	South Sudan – WATER CONTAMINATION 'Dying of thirst' as climate-driven floods mix with oil'.	BBC News
7	Ghana – WATER CONTAMINATION 'We are poisoning ourselves': Ghana gold rush sparks environmental disaster'.	BBC News
8	Brazil – DROUGHT 'It kills everything' - Amazon's indigenous people hit by record forest fires in Brazil'.	BBC News

Results

The data findings were categorised into 3 sections, which include (i) disease outbreaks, (ii) climate vulnerability, and (iii) pollution-caused illnesses. The articles cover several locations in the 'global south', including, Sudan, Brazil, Gaza, Ghana, Pakistan, India and the Democratic Republic of Congo.

The outbreak of Mpox in the Democratic Republic of Congo was declared a public health emergency by the World Health Organization. The worst cases are seen in the most vulnerable groups including children with services being overwhelmed (Jolaoso & Murhabazi, 2024). Mpox is a highly contagious disease transmitted through skin-to-skin contact or breathing close to another person. The infection causes flu symptoms and skin lesions, leading to around 450 deaths since the initial outbreak. Mpox has been recorded in other areas of Africa and the rapid spread is worrying, vaccines are essential to prevent infections, yet are not easily accessible (Gallagher & Jolaoso, 2024). Airborne diseases are not only a concern that can lead to outbreaks as waterborne diseases are also rising.

Waterborne diseases are carried in contaminated water and the ingestion of pathogens spreads both bacterial and viral diseases, including cholera, hepatitis A, diarrhoea, polio and typhoid. The articles collected highlighted several case study disease outbreaks that include cholera in Sudan (Kupemba, 2024); polio in Gaza (Nour et al, 2024); and hepatitis A in Brazil (Cursino, 2024). These health outbreaks are linked directly with



Figure 2 - Collage of photographs taken from articles used within the study (Source: Graham, 2024).

SDG 6, which aims to improve sanitation and access to clean water, and SDG 1: no poverty (WHO, 2023). WHO (2023) recorded that in 2022, around 2.2 billion individuals lacked access to safe water and sanitation services. To reduce the cases of waterborne diseases targets of SDG 6 and SDG 1 are a significant place to start.

Displacement caused by the war has enhanced the South Sudan cholera cases; the crowded refugee camps lack proper sanitation spreading disease quickly. Pressure from the outbreak has led to schools closing and services collapsing, with the country struggling to cope with the cases (Kupemba, 2024). Cholera is highly contagious and fast-developed with symptoms including dehydration and diarrhoea, which is preventable and treatable with the right vaccinations and sanitation (WHO, 2024). The impact of the war complicates treatment and food reaching affected areas, with climate-related stresses additionally affecting the area (Kupemba, 2024).

The Gaza polio outbreak spread as sewage-contaminated water has increased the rate of the disease spreading. Crowded camps generate pressure on the surrounding area, on water and sanitation, allowing polio to spread easily. A 10-month-old baby became partially paralysed after contracting the disease (Nour et al, 2024). Poliomyelitis (polio) is highly infectious, it invades the nervous system and can lead to paralysis. The disease mainly affects children under 5 and can be damaging to their future (WHO, 2024). The war puts barriers in the way of humanitarian aid reaching the area (Nour et al, 2024). SDG 16: which promotes peaceful and inclusive societies for sustainable development, is important to consider regarding the wars in Sudan and Gaza that have been discussed. The sub-target 16.3: 'The rule of law at national and international

levels', this target promotes global equality in justice. This term justice would reduce inequalities and protect human rights, which includes SDG 3 (UNICEF, 2024).

The spread of these diseases differs depending on the access countries have to sanitation and water, the conflict complications they face and the climate vulnerability. Weather events play a determining role in the transmission rate, especially with heavy rainfall as the drainage systems become overwhelmed by the volume of precipitation; the overflow of water can lead to cross-contamination of waterpipes and sewage, which increases the exposure to waterborne diseases (Cann et al, 2013). The Brazil leptospirosis and the hepatitis A virus (HAV), spread from contaminated flood water (Cursino, 2024). Leptospirosis is the contamination of water sources from infected animal urine. It is more evident during heavy rains, targeting the organs and the severity is determined by the immune response, which is treated through antibiotics (Haake & Levett, 2015). The spread of HAV leads to liver inflammation, and while vaccines are available to prevent the virus, they are not widely accessible (WHO, 2023). The chances of the disease spreading in the article were high, with 54 reported cases (Cursino, 2024).

Housing affects health equity, with slums and informal settlements being overcrowded, and lacking basic resources. Without proper sanitation and access to water, waterborne diseases can spread in addition to airborne diseases from close contact (WHO, 2018). Another factor affecting health and medical care is conflict, with around two billion people living in areas affected by conflict or classed as fragile. Conflict can prevent medical care from getting to those who need it, food insecurity, displacement and/or lead to the spread of infectious diseases (Garry & Checchi, 2020). Furthermore, the climate, emissions and chemicals are having adverse effects on health (Perera & Nadeau, 2022). SDG 13: Climate action, targets to promote adaptation and mitigation practices in the face of climate change which would reduce the hard-felt effects of climate change on health (UNICEF, 2024).

Pollution-caused illnesses are on the rise with around 9 million deaths recorded per year around the world, from air and water pollution. With 90% recorded in low-income to middle-income countries. Water pollution is the release of human-created waste and chemicals that contaminate waterways, including mercury, phosphorus, plastic, pesticides and nitrogen. These chemicals and heavy metals can enter the food chain and cause adverse health outcomes (Fuller et al, 2022).

The mercury and cyanide-polluted river in Ghana, caused by illegal mining, affects the local's access to water. The chemicals, once entered the waterways, can enter the food chain and crops through irrigation (Wilberforce & Nunoo, 2024). The consumption of these chemicals can have both acute and chronic effects, with exposure early in life has lasting effects on the immune and nervous systems (WHO, 2023). The increased economic activities and industrialisation create more pressure and increase levels of pollution, along with climate change (Kılıç, 2021). The South Sudan oil contamination of waterways was worsened by seasonal flooding, with oil now contaminating the water table. The case study recorded deaths in cattle and people with diarrhoea and abdominal pain. Furthering worries that the contamination is related to children being born with abnormalities in the region (Ajak & Stafford, 2024).

Air pollution is a risk factor for respiratory infections, impaired lung growth, and bronchitis (Perera & Nadeau, 2022). Lahore has seen unprecedented air pollution, exceeding three times the benchmark of the Safe Air Quality Index by WHO, causing schools to close. Inhaling the toxic air has consequences for health, including heart disease, lung cancer or strokes (Comerford, 2024). Other cases have been recorded in Delhi, India, as toxic smog that can affect 25 million people living in the area. Air quality has worsened with

industrial emissions and transport fumes (Baloch & Ellis-Petersen, 2024). Therefore, closely linked to climate change as the increase of greenhouse gases impacts both. The higher temperatures have been linked to increased concentrations of particulate matter (PM 2.5). Air pollution impacts vulnerable groups including children, particularly their physical and mental health development, with the consequences being seen later in life (Perera & Nadeau, 2022). SDG 12.4: 'By 2020, achieve the environmentally sound management of chemicals and all wastes', the pollution-related case studies that have been discussed have shown this sub-target hasn't yet been achieved and would be an essential step, reducing the global rate of pollution currently experienced (UNICEF, 2024).

Moreover, SDG 3 is facing new and growing challenges with an increasing human population, that has exceeded 8 billion. The increased global production, consumption and demand for human activities place great pressure on the environment and contribute to climate change. The SDGs are essential in promoting a more sustainable future and encouraging more affluent countries to take responsibility (Wilmoth et al, 2023).

Conclusion

In conclusion, the data gathered on UN SDG 3, the sub-targets; 3.8, 3.3, and 3.9, researched are not in line with being achieved in the allocated time. The targets are challenging to achieve with many varying factors that affect them globally, however, not enough is being done on an international scale (SDG 16) to achieve them. Stakeholders play a vital role in the quality of health care areas receive, unfortunately, in the global south low-income countries bear the brunt of these results. Access to vaccinations, clean water and extreme weather defence could prevent the spread of many diseases discussed as they are preventable or treatable should the right frameworks be agreed upon & implemented. However, pollution is a growing problem worldwide, especially in cities and internationally. The problem needs to be prioritised. Moreover, the individual achievement of SDGs 1, 6, 12, and 13 could aid in the prevention of disease or increased pollution.

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