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Diabetes Disease in Geoff Marsh Film Documentary, Implication for Sub-Sahara Africa and the International Community

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Abstract

The global burden of non-communicable diseases is increasing daily. Non-communicable diseases like hypertension, cancer, and diabetes have caused the death of more people in 21st-century sub-Saharan Africa than it has ever done. Also, the world celebrates 100 years of insulin, however, many, children and people in the Sub-Sahara with type 1 and type 2 diabetes die for lack of access to insulin or diabetes medications. Worse yet, the present status of diabetes in Sub-Saharan Africa is not well-known. The article uses content analysis and agenda-setting theory to examine Geoff Marsh's documentary on diabetes in Sub-Saharan Africa. The documentary was produced with the support of AstraZeneca, Medtronic, and copyrighted by Springer Nature LTD 2021 (the video was downloaded from YouTube). The analysis of the documentary linked the death toll resulting from diabetes to a change in lifestyle and the government's meagre budget for the health sector in Sub-Saharan Africa. Filmmakers in the Sub-Saharan region should advocate and prioritize the maintenance of a healthy personal diet, engage in regular physical exercise, and maintain a normal body weight in their films. Sponsored radio and television programs focusing on managing and preventing the disease are needed across countries in the sub-Sahara.

Keywords: agenda, awareness creation, diabetes, film documentary, sub-sahara africa

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INTRODUCTION

Filtered through the lens of the filmmakers, movies have the power to impact an audience. Through their diverse delivery of critical messages, film documentaries can create critical perspectives and make direct recommendations on health-related issues (Camila Oliva 2024). Diabetes disease is a critical subject that demands critical attention, especially in Sub-Sahara Africa where many are not aware of the causes and management of the disease. For their relative shortness, film documentaries that focus on a particular theme would be a crucial avenue for awareness creation especially, in the Sub-Sahara where many are not new to the use of the media (Blessing 2022). The question one would ask at this point is, how could the documentary film medium help in setting the agenda for creating awareness about Diabetes in Sub-Saharan Africa? Before we examine the question, let us first briefly look at the state of diabetes in the Sub-Sahara.

According to the World Health Organisation (WHO), Diabetes mellitus (DM), commonly called diabetes, is a group of metabolic disorders and diseases characterized by high blood sugar levels over a prolonged period., the signs of high blood glucose (sugar) levels include increased thirst, increased hunger, and frequent urination (WHO 2013). Diabetes disease is a universal illness affecting men, women, young, old, rich and the poor. While the rich may be able to manage the illness with medication because of their financial stability, the poor, particularly in poorer countries in Sub-Saharan Africa, can neither get access to the medications nor afford them because they are expensive. Change of lifestyle, including diet and physical exercise, could help in the management of the disease. However, very few victims of the disease are aware.

In 1901, Albert Cook, a medical missionary in Uganda, reported that "diabetes is rather uncommon and very fatal" (Cook 1901). Not just diabetes, many diseases continue to cause a burden not only in Africa but globally. However, the effect of disease burden varies significantly between countries. Differences in social, political, economic, and particularly regional factors may be responsible. For example, diseases like diabetes, cancer, hypertension, and sickle cell cause more burden to people living in developing countries like Sub-Sahara Africa, than the rest of the world, reason, bending on, not having money to procure the needed drugs either because of the poor economy, poverty or unavailability of the medications in the region. While individuals, governments, NGOs, artists, medical scientists, and

practitioners across the globe are working hard to find lasting solutions to some of these diseases, young people, old people, women, men and children in developing countries (Sub-Sahara Africa, especially) continue to suffer and die from some of these diseases daily.

We take as a yardstick the diabetes disease. The *global burden of disease* study by the World Health Organisation (WHO) estimated that 177 million people in the world had diabetes in the year 2000 (WHO 2003, Dean T et al 2006). Due to the increased number of cases, especially in Sub-Saharan Africa, diabetes has been listed by the World Bank as one of the leading causes of death in sub-Saharan Africa. This enlistment was to enable the World Bank to identify ways to prevent and manage the causes of ill health (Dean T et al 2006).

Jean-Claude Mbanya and Kaushik Ramiaya (2006) extensively researched Diabetes Mellitus in Sub-Saharan Africa and stated that the International Diabetes Federation's Diabetes Atlas estimated that 194 million people had diabetes in the year 2003, and about two-thirds of these people lived in developing countries (IDF 2003). Interestingly, in the past 50-60 years, Communicable diseases have made up the greatest disease burden in Sub-Saharan Africa. Hypertension and diabetes, which are non-communicable diseases, were rare. Sadly, however, the story is different today. Jean-Claude Mbanya and Kaushik Ramiaya projected in 2006 that by 2020, non-communicable diseases, including hypertension and diabetes, would outstrip communicable diseases as a cause of death in Africa (Murray and Lopez 1997). And that this would be a result of demographic change (populations with older age structures), increasing urbanization (WHO 1998), and associated changes in risk-factor levels, such as tobacco smoking, obesity, and physical inactivity (Hunter et al. 2000; Kaufman et al. 1999; Pavan et al. 1997). The reality of that projection is felt in the 2020s Sub-Sahara Africa, and it is ongoing. According to the WHO (14 Nov.2022), the African region tops the world in undiagnosed diabetes. Only 46 per cent of people with diabetes in the African region know their status, raising the risk of severe illness and death, potentially worsening the situation in the region, which already has the world's highest mortality rates due to the disease.

The need to create awareness for people living in the sub-Sahara is urgently needed. The responsibility lies with those in the medical field, especially health workers and Art practitioners, including playwrights and filmmakers. The media, especially radio, television, and film, are also a popular medium to do so. Playwrights and community theatre practitioners have a role to play in advocacy and awareness creation. People living in local and urban communities in sub-Saharan Africa are in dire need of sensitization. The internet, particularly social media, has the potential to reach millions of people in a short period of time. Health workers, particularly doctors and nurses, meet people with diabetes on a regular basis. They are in the best position to give needed information to Art practitioners who would translate the information to the general public in the form of play text, poems, and films. Short film documentaries specifically produced for the target audience (in the sub-Sahara) and posted on social media, especially YouTube and other social media platforms, would be a unique and viable tool for awareness creation. Almost every family in 21st-century sub-Saharan Africa is connected to the internet. They also can see popular media content posted on popular platforms. On a daily basis, YouTube has over 122 million active users and 1 billion hours of content watched across the world every day. This shows how relevant the medium is for awareness creation.

Now, let us go back to the question we raised in the concluding part of the opening paragraph. What role have film documentaries, played on the subject, to create awareness and make recommendations for victims, and local and international communities? The media in general, and film documentaries, in particular, can set an agenda of making certain issues known to the public. This purposeful creation of agenda for popular education and awareness creation for the public is drawn from agenda setting theory.

Theories. The agenda-setting theory states that the mass media have the power of influence and can intentionally "set a particular agenda which can influence the opinions of the public" (Nor 2014). Further, agenda setting "covers how the mass media including film documentaries colors a particular event for their media audiences (Matsaganis 2005)" McCombs and Shaw (1972) state that with the agenda setting, readers, (viewers included) "learn not only about a given issue but also how much importance to attach to that issue from the amount of information in a news story (film documentary) and its position" (176). Also, agenda

theory in media studies "refers to the power of the media to draw attention to certain issues and make them prominent through the placement of the issues on front pages, if it is print media, and mentioning them first in headlines if it is electronic media. It also applies to the frequency with which these issues are treated in the media (Bala 2020).

Further, agenda-setting theory suggests that media have a powerful influence in shaping public awareness by prioritizing certain topics over others (McCombs and Shaw 1972). In the context of Sub-Saharan Africa, where diabetes awareness is often limited, agenda-setting through film documentaries can serve as a tool to promote public understanding of non-communicable diseases (NCDs). Additionally, health communication theory underscores the role of media in disseminating critical health information, further establishing the significance of film as a medium for raising awareness (Bala 2020).

METHODS

The Geoff Marsh Film Documentary was purposively selected for the study. The documentary was selected because of its direct attention and broad scope of the Sub-sahara. Further, the study uses content analysis and subjective interpretation to examine the documentary.

RESULTS AND DISCUSSION

Geoff Marsh's documentary focuses on the state of diabetes in Sub-Saharan Africa. Going through the streets of Cameroon and other African countries to capture images of the causes, management, and particularly the present state of the disease in the region. In the early 60s, diabetes was rare in Sub-Sahara Africa, but today, the disease is so common that you see it everywhere on the continent. Jean Claude Mbanya, professor of medicine and endocrinology at the faculty of medicine and biomedical sciences, University of Yaounde I, Cameroon. Extensively spoke on diabetes in the region, creating awareness. His experience working in the field of diabetes mellitus disease since the 1990s gave the documentary an accolade.

Mbanya mentioned that people, particularly in sub-Sahara Africa, die from type 1 and type 2 diabetes because of a lack of access to medications and medical treatment. It was made clear that in this region, diabetes especially type 2, has emerged as the most important cause of morbidity and mortality in recent times. Mbanya stated:

If you look at the ideas of the diabetes atlas of 2019, you see that the projection in sub-Saharan Africa is exponential. If you think that diabetes would increase from 19 19million to about 47 47million from 2019 to 2045, which is an increase of 143 per cent, which is rated the greatest increase in the world.

He mentioned that the cause of the increase can be traced to the embrace of economic development and change in diet. Africans have lost some of their cultural norms, like walking and riding. During the early 1960s, there were very few cars. Hence, people either walked on their feet or rode on bicycles. In fact, very few also had a bicycle at that time. The majority of individuals walk on foot to their farms, visit friends, and go to work. During this time (the 1960s), the diet of an African was mostly non-refined carbohydrates. Mbanya mentioned that modern Africans have changed the way they live, changed what they eat, and then they have become physically inactive. This state of physical inactivity contributes to the increased rate of Type 2 diabetes, especially in this region.

Further, the governments, well-meaning individuals, and NGOs operating in these regions are also blamed for the increased death rate caused by diabetes. In sub-Saharan Africa, there is no social insurance or health insurance system provided by the government. Every patient has to pay for their drugs even when they have a chronic disease like type 1 diabetes. The situation is alarming, said Mbanya. Alarming because, in type 2 diabetes, for example, patients need tablets, they need monitoring, and then some eventually need insulin. Very few people can afford modern treatment, including drugs, injectables, and insulin that are not found everywhere. The situation has led many to depend on generic drugs. The documentary made it clear that, while few individuals can opt for the best treatment in the region due to their buoyant financial background, the problem of accessibility is also present. Mbanya acknowledged;

Even if the patient has the money for the best medications, but he lives in a rural village that is 400 or 500 kilometres from the centre, it would be difficult for him to have the best drugs.

The health budget in the countries in Sub-Sahara Africa is also a crucial factor for the increased rate of illness. The documentary states that: while all the generic drugs are present in most places, access to new proven medications that reduce morbid mortality of type 2 diabetes is uncommon, not only because the patients cannot afford them, but because the government cannot procure these types of drugs with their meager health budget.

For patients, particularly with type 1 diabetes, the supply of insulin by the international community is emphasized in the documentary. The crucial aspect of this is that most people who have type one diabetes are children, and without insulin, they are going to die. And because relations cannot afford insulin, victims die. This is sad when compared to the attention the international community gives to communicable or infectious diseases. The documentary stated that in almost all regions of the world, Patients with infectious diseases like HIV and Aids have everything, including free medications, at their disposal. Unlike those with a non-communicable disease like diabetes or high blood pressure, who are going to die because there is no universal health coverage for these two diseases in sub-Saharan Africa. What countries in Sub-Sahara Africa need is the introduction of a singular or unified healthcare system whose responsibility would be to care for patients with severe communicable and non-communicable diseases.

The documentary mentioned that sub-Saharan Africa is experiencing the same situation that happened in 1921, where children, especially those with type 1 diabetes who had no access to insulin, died, which prompted the production and distribution of insulin. From 1921 to 2021 is 100 100 years. And while the world is celebrating 100 100 years of insulin, sub-Saharan African children continue to die, not only because of a lack of access to medications and other diabetes supplies, but also because of a lack of insulin. It is obvious that Africans had not benefited from the invention of insulin. Therefore, Mbanya suggests an international solidarity for insulin where those who need insulin have access to the insulin wherever they live in the world, just like the one we had with HIV Aids. In Mbanya's words,

If you live in a high-income country and you have insulin, and people are dying in low-income countries because of a lack of access to insulin, what are we celebrating? 100th anniversary of insulin for the rich or the poor? What you need is international solidarity like the one we had in HIV/AIDS,

where the World Bank, governments, private sectors, donors, and the WHO all came together to procure medications for HIV Aids, and today, HIV Aids has been transformed into a chronic disease. Why can we not do this for diabetes, especially type 1 diabetes, as we celebrate 100 years of insulin?'

The documentary also focuses on changes in the lifestyle of individuals in Sub-Sahara Africa and its implications for the increase of diabetes patients, prevention, and control. The National Institutes of Health (NIH) says that a means to preventing diabetes health problems is by keeping blood glucose levels on target. Healthful eating helps keep blood glucose, or blood sugar, in a target range (NIH 2020). Also, Physical activity is an important part of staying healthy and controlling blood glucose. For those who have contracted diabetes, the National Institutes of Health (NIH) continues that "you can take care of yourself and your diabetes by learning what to eat, how much to eat, and when to eat" (p 3). The institute advises that each patient should talk with their doctor about how many meals and snacks to eat each day. Also, individuals need to talk with their doctors about what type of exercise is safe for them (NIH 2000). Awareness about the disease would not only help to reduce possible contact but also management. According to (Chinaza et al 2020), a combination of insufficient exercise and excessive body weight is the most common cause of insulin resistance conditions in which the cells fail to properly respond to insulin. Adequate dieting, with good nutrition and regular exercise, is very important in preventing or controlling diabetes (Chinaza 2020 and NIH Oct. 2000).

Poor body exercise and a change in diet caused by industrialization are the two lifestyle changes the documentary film emphasized. Individuals in Sub-Sahara Africa would need to modify their lifestyles. Interestingly, lifestyle modification reduces the risk of being overweight. Regular exercise and weight loss are powerful means of silencing diabetic genes even when one is disposed to the disease. The documentary mentioned that Africans, over the years, particularly from the 1960s, have changed their lifestyle, namely, physical exercise as well as diets, factors beckoning modernization, economy, and a decline in cultural norms. (walking and riding). Engagement in walking and physical work is an advisable lifestyle, not only for patients with diabetes but for others who may be predisposed to the disease. Therefore, one of the central messages in the film documentary is that physical

exercise reduces the risk of contracting diabetes. Correspondingly, experts say that "physical exercise is an effective solution to reducing death rate and contract rate of the disease" (TVC (Nigeria) news report, Oct. 18, 2018).

For one to maintain good health, one needs to also maintain a healthy diet. Chinaza (2020) defines a healthy diet as any diet that helps to improve or maintain overall health. Lean (2015) also stated that a healthy diet is one that provides the body with the essential nutrition: fluid, micronutrients, macronutrients, and adequate calories. Diets that contain whole grains, fruits, and vegetables, and include little or no processed foods and sweetened beverages are healthy diets (Chinaza 2020). WHO (2019) stated that maintaining these healthy diets helps protect the individual from chronic non-communicable diseases like heart disease, cancer, and, particularly, diabetes. Therefore, people need to eat a variety of diets and consume less salt, saturated and industrially-produced trans-fats, and sugars. Sub-Sahara Africa should go back to their farms, Plant, and harvest natural food for healthy living.

Further, people in Sub-Sahara Africa, and the rest of the world, need to engage in physical activities and exercise. Physical activity includes all movement that increases energy use, whereas exercise is planned, structured physical activity (Sheri R. Colberg 2016). The importance of these physical activities is improved blood glucose control, reduced cardiovascular risk factors, contribution to weight loss, and improved well-being. Sheri (2016) stated that the adoption and maintenance of physical activity are critical foci for blood glucose management and overall health in individuals with diabetes and pre-diabetes. Schellenberg (2013) emphasized that regular exercise may prevent or delay type 2 diabetes development.

The role of the governments of the Sub-Sahara and their meagre health budget concerning diabetes in the region is also emphasized. Citizens stand to benefit from government provision and subsidization of social services. Electricity, education, transport, and particularly health care. These are some of the provisions the government owes its subjects. While some of these are provided substantially by governments of developed countries, citizens in developing countries, including the Sub-Sahara Africans, yearn to benefit. The primary reason is the government's meagre budget for these sectors and subsectors of the economy. WHO (2003) stated

that "the Member States of the African Region of the World Health Organization are on average still far from meeting key health financing goals such as the Abuja Declaration target of allocating 15 per cent of the government budget to health. In Nigeria, for example, health care, treatment, and promotion are under the jurisdiction of the Ministry of Health. However, the government's weak budget for the sector has limited the progress towards achieving the health MDGs. This happens not only in Nigeria but the entire Africa (WHO (JAN.) 2013). Geoff Marsh's film documentary proposes that every country's citizen in the sub-Sahara with type 1 or type 2 diabetes should live without the fear of financial hardship as a result of having to pay to access insulin and other diabetes services. Besides recommending universal health coverage where everybody has access to good, quality health services, each federal and state government in the Sub-Sahara needs to be actively involved in the promotion, prevention, management, and treatment of people with diabetes with an increase in the health budget of the sub-sectors.

The documentary did not leave behind the international community. It emphasizes the need for international solidarity for Insulin. Since the discovery of insulin in the 1920s, researchers have intensified efforts toward improving its quality with the support of governments and international organizations. Such effort has triggered the discovery of other hormones such as glucagon (Vecchio 2018). Sadly, however, in a report on insulin availability and cost, sorted by IDF region, insulin is universally not free in North America, whereas 23 of 25 reporting countries in Europe provide insulin at no cost to the patient. In Africa, only two countries provided insulin free of charge when it was available (Larry, ND). Why is there a poor supply of insulin or lack of it in countries in North America and Africa, but readily available in most countries in Europe? The goal of the international community, especially the World Bank and WHO, should be that the discovery of Insulin be a representation of lifesaving therapy for all people suffering from diabetes, irrespective of ethnicity, language, and region (Md Saidur 2001), especially children with type 1 diabetes. Therefore, there should be international solidarity for the provision of insulin, the same way it was in the case of HIV Aids. Insulin should be made available and free for all.

CONCLUSION

The goal of this study was to analyse the content of Geoff Marsh's Documentary and its implications for individuals in Sub-Sahara Africa, the governments, and the international community. The study concludes that the documentary film created awareness of the causes, prevention, and management of diabetes disease, and recommended a healthy personal diet and regular physical exercise for people living in the Sub-Saharan. Therefore, the World Bank, WHO, and other organizations should collaborate with the governments of the countries in Sub-Sahara Africa and work out to put in place mechanisms to protect the poor and vulnerable population groups, including measures to abolish or reduce type 1 or type 2 diabetes user fees at the point of access to health services. Also, the international communities need to provide international solidarity for the provision and distribution of insulin. Particularly, individuals who have type 1 and type 2 diabetes must strive to maintain healthy diets and regular physical exercise. Television programs, film documentaries, and news reports are popular avenues for the awareness creation of a health issue. For the prevention and treatment of diabetes, filmmakers in Sub-Saharan Africa and indeed the rest of the world need to advocate and prioritize the maintenance of a personal healthy diet, engagement in regular physical exercise, and maintaining normal body weight. A healthy diet, such as a low-fat diet, a low-calorie diet, or a very low-carbohydrate diet, which can help prevent or manage diabetes, could be a popular media agenda for awareness creation.

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REFERENCES

- Bala, M.D., and S. Halima. 2020. "Agenda Setting and Framing Theories: A Methodological Review of Selected Empirical Studies." MCC 4(1):35–54.
- Blessing, A. 2022. "Media Usage, Media Violence and the Nigerian Child." Language, Discourse & Society 10(1):1–13.
- Chen, L., J.H. Pei, J. Kuang, et al. 2015. "Effect of Lifestyle Intervention in Patients with Type 2 Diabetes: A Meta-analysis." Metabolism 64:338–347.
- Chinaza, G.A., K.E. Chinelo, and S.I. Victory. 2020. "Diabetes and Nutrition and Diets for Its Prevention and Treatment: A Systematic Review and Dietetic Perspective." Health Sciences Research 6(1):5–19.
- Cook, A.R. 1901. "Notes on the Diseases Met with in Uganda, Central Africa." Journal of Tropical Medicine 4:175–78.
- Dean, T.J., G.F. Richard, W.M. Malegapuru, R.B. Eduard, et al., eds. 2006. *Disease and Mortality in Sub-Saharan Africa*. 2nd ed. Washington, DC: The International Bank for Reconstruction and Development / The World Bank.
- Feachem, R.G., M.W. Makgoba, et al., eds. 2006. *Disease and Mortality in Sub-Saharan Africa*. 2nd ed. Washington, DC: The International Bank for Reconstruction and Development / The World Bank.
- Geoff, M., Springer Nature LTD, and AstraZeneca Medtronic. 2021. Diabetes Disease in Sub-Saharan Africa: A Documentary Interview with Jean Claude Mbanya, Professor of Medicine and Endocrinology at the Faculty of Medicine and Biomedical Sciences, University of Yaounde I, Cameroon.
- Hunter, J.M., B.T. Sparks, J. Mufunda, et al. 2000. "Economic Development and Women's Blood Pressure: Field Evidence from Rural Mashonaland, Zimbabwe." Social Science and Medicine 50:773–95.

- International Diabetes Federation (IDF). 1998. Access to Insulin: A Report on the
- Diabetes Federation.

IDF Insulin Task Force on Insulin, 1994-1997. Brussels: International

- International Diabetes Federation (IDF). 2003. *Diabetes Atlas*. 2nd ed. Brussels: International Diabetes Federation.
- Jean-Claude, M. and R. Kaushik. 2006. "Diabetes Mellitus." In Disease and Mortality in Sub-Saharan Africa, edited by D.T. Jamison, R.G. Feachem, M.W. Makgoba, et al. 2nd ed. Washington, DC: The International Bank for Reconstruction and Development / The World Bank.
- Kaufman, J.S., E.E. Owoaje, C.N. Rotimi, and R.S. Cooper. 1999. "Blood Pressure Change in Africa: A Case Study from Nigeria." Human Biology 71(4):641–57. Change in Africa: A case study from Nigeria. Human biology.71(4):641–57.
- Lean, M.J. 2015. "Principles of Human Nutrition." Medicine 43(2):61–65.
- Larry, C.D., et al. (special article, ND). "Insulin Availability Among International Diabetes Federation Member Associations: Report of the Task Force on Insulin Distribution." Retrieved from http://diabetesjournals.org/care/article-pdf/17/3/220/442537/17-3-220.
- Matsaganis, M.D., and J.G. Payne. 2005. "Agenda Setting in a Culture of Fear: The Lasting Effects of September 11 on American Politics and Journalism." American Behavioral Scientist 49(3):379–92.
- McCombs, M.E., and D.L. Shaw. 1972. "The Agenda-Setting Function of Mass Media." The Public Opinion Quarterly 36(2):176–87.
- Md Saiduur, R., et al. 2001. "Role of Insulin in Health and Disease: An Update." International Journal of Molecular Sciences 22(12):6403.
- Murray, C. J., Lopez, A.D. (1997). Mortality by cause for eight regions of the world: Global burden of disease study. *Lancet*. 349:1269–76.

- National Institutes of Health. 2000. "What I Need to Know About Eating and Diabetes." U.S. Department of Health and Human Services, National Institute of Diabetes and Digestive and Kidney Diseases, NIH Publication No. 08–5043.
- Nor, R. Binti, and M.Z. 2014. "Agenda Setting Theory." Retrieved from https://www.researchgate.net/publication/321698436_Agenda_Setting_T heory.
- Oliva, Camila. 2024. "Documentaries Are a Tool to Promote Awareness and Invite Further Exploration." King Street Chronicle. Retrieved April 2024 (https://shgreenwichkingstreetchronicle.org/137855/opinions/documentar ies-are-a-tool-to-promote-awareness-and-invite-further-exploration).
- Pavan, L., E. Casiglia, P. Pauletto, S.L. Batista, et al. 1997. "Blood Pressure, Serum Cholesterol and Nutritional State in Tanzania and in the Amazon:

 Comparison with an Italian Population." Journal of Hypertension 15:1083–90.
- Schellenberg, E.S., D.M. Dryden, B. Vandermeer, C. Ha, and C. Korownyk. 2013. "Lifestyle Interventions for Patients with and at Risk for Type 2 Diabetes: A Systematic Review and Meta-Analysis." Annals of Internal Medicine 159:543–51.
- Sheri, R., et al. 2016. "Physical Activity/Exercise and Diabetes: A Position Statement of the American Diabetes Association." Diabetes Care 39(11):2065–79.
- Vecchio, I., C. Tornali, N.L. Bragazzi, and M. Martini. 2018. "The Discovery of Insulin: An Important Milestone in the History of Medicine." Frontiers in Endocrinology 9:613.
- World Health Organization (WHO). 1998. "Population Aging—A Public Health Challenge." Geneva: WHO.
- World Health Organization (WHO). 2003. "The World Health Report 2002— Reducing Risk, Promoting Healthy Life." Geneva: WHO.

- World Health Organization (WHO). 2013. "State of Health Financing in the African Region." Retrieved from https://www.afro.who.int/sites/default/files/2017-06/state-of-health-financing-afro.pdf.
- World Health Organization (WHO). 2013. "Diabetes Fact Sheet No. 312." Geneva: WHO.
- WHO (2019). Global strategy on diet, physical activity & health. Geneva: World Health Organization. Available at https://www.who.int/dietphysicalactivity/diet/en
- World Health Organization (WHO). 2022. "African Region Tops the World in Undiagnosed Diabetes: WHO Analysis." Retrieved November 14, 2022 (https://www.afro.who.int/news/african-region-tops-world-undiagnosed-diabetes-who-analysis).