Making FIFA World Cup Qatar 2022 Truly Healthy and Safe: Strategies and Legacy for Present and Future Sporting Events

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Abstract

Aside from the FIFA men's World cup, fewer other global sporting events have the potential to attract the undivided attention of global leaders and citizens. It is arguable the most influential global sporting event. Thus, the FIFA World Cup Qatar 2022 has been themed "Healthy 2022 World Cup - Creating Legacy for Sport and Health", and the goal is to make the event the most successful, healthiest, and safest sporting event in recent human history. The event is meant to rekindle the global conversation around the double disease pandemic that is presently ravaging the world. The fast and furious Covid-19 and the subtle and steadily progressing non-communicable diseases (NCDs). The event organizers also intend to use the platform to provide and implement health promotional strategies that will successfully prevent and control the spread and progression of these diseases and influence most global football enthusiasts to cultivate healthy and sustainable lifestyle changes. A successful event may likely be a model and legacy for future sporting or social events. However, for the FIFA World cup Qatar 2022 to be effective in changing unhealthy behaviours and in promoting safe and healthy lifestyles, it should have some vital components. The planning and execution of such a project need to be systematic, comprehensive, and evidence-based. This review briefly discussed the global impacts of Covid-19 and NCDs, the importance of combating these diseases through the FIFA World cup Qatar 2022, and finally suggested strategies that will likely ensure the event achieves its set goals and objectives.

Keywords: Covid-19, FIFA World cup Qatar 2022, Health Promotion, Healthy lifestyle, non-communicable diseases, Safety.

Introduction

The FIFA men's World Cup tournament is, by all standards, the epitome of global singlesporting events [1]. It is arguable the most widely viewed and most influential global sporting event in recent human history [2]. It was estimated that about 3.57 billion people (aged 4 years and above) globally, which translates to more than half (51.3%) of the global population, watched on media at least one of the football matches of the FIFA World Cup Russia 2018 [2]. Thus, the 4-yearly event meant a lot to the unity, peace, and economic development of many nations. The tournament also affords the host nation, in particular, FIFA, and other major stakeholders to communicate their thoughts and positions subtly and overtly on pressing global social issues and propose new initiatives to the world, especially as it relates to global politics and development.

The State of Qatar has always been known to be a strong advocate for sport and its potential in promoting good health and in reducing the burden of non-communicable diseases (NCDs). This, the nation has demonstrated through different innovative programs and initiatives, such as the National Sports Day, the National Nutrition and Physical Activity plan, etc. [3]. Through these noble programs and initiatives, Qatar has been able to set standards and

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roadmaps for achieving adequate physical activity and a healthy lifestyle for its approximately 2.8 million citizens and residents [3]. The chance to host the FIFA World Cup in 2022 came at no better time for Qatar to communicate to the world the potential mutual benefits of sport and health, and by so doing, may bring a positive change and a legacy to the world [4]. A unique opportunity that the nation cannot and definitively will not allow slipping away [1].

Methods

The review was based on the available English literature from electronic databases in Google search engine, Google scholars, Academia, ResearchGate, and MEDLINE database. The websites of reputable and relevant public health organizations and institutions, such as the Supreme Committee for Delivery & Legacy, FIFA, World Health Organization (WHO), World Economic Forum (WEF), American College of Lifestyle Medicine (ACLM), Public Health Ontario, National Association of Chronic Disease Directors, National Institute of Health (NIH), Wellness Council of America (WELCOA), etc., were also visited for relevant and current information. Some of the keywords that were searched include FIFA World cup, FIFA World Cup Qatar 2022, double disease pandemic, Covid-19 prevention and control, non-communicable diseases (NCDs) prevention strategies in mass gathering, healthy lifestyle and safety in mass gathering, lifestyle medicine, etc. The inclusion criteria were - topics relating to Health promotion and FIFA World Cup Qatar 2022; article type from review, case report, and original research; articles published between 1998 and 2021; and articles written in English language only. While editorial, letter to the editor, and commentary articles were excluded from the review. A total number of 4,521 articles were retrieved. They were visualized, profiled, cleansed, prepared, analyzed, and summarized, out of which 35 most relevant articles were utilized for the review.

Results

Healthy 2022 World Cup: The Plan

Armed with the desire to leave a legacy through the 2022 World cup, the State of Qatar teamed up with FIFA and the WHO to start a project that may have a remarkable and lasting impact on the world and may forever change the direction of global public health, economy, and the global developmental indices. The FIFA World Cup Qatar 2022 has been themed "Healthy 2022 World Cup - Creating Legacy for Sport and Health". The goals and aspirations of the State of Qatar are to host a successful sporting event, but more importantly, to be a beacon for global health promotion by hosting the healthiest and safest sporting event in recent human history. The event is meant to increase the awareness and promotion of physical and mental well-being among the local populace, participants, spectators, and the entire interconnected world. Furthermore, it is meant to create a legacy that ensures that health and safety are vital considerations and focus for future major sporting events [5-9].

As informed by the WHO, the organizers of the event are meant to engage in joint activities that will ensure that the promotion of physical and mental well-being, healthy lifestyle, and health security, are the central focus of the FIFA World Cup Qatar 2022 [5]. The event is meant to leverage football's global power and influence to ignite, catalyze, and probably cement the aspiration for a healthy and active lifestyle, disease prevention, and a safer world in the hearts and minds of every global football enthusiast [6]. Ultimately, the global mega sporting event is meant to support the actualization of certain global public health and developmental initiatives, such as the WHO's strategic vision of "Health for All by All," by 2023, the UN's Sustainable Development Goal

(SDG) 3, and the Generation Amazing program [3, 5].

To achieve these, the organizers of the event had set up a team called the Host Country Health and Safety Assurance team, which is meant to work in collaboration with other internal and external stakeholders to achieve the set goals. The team's primary responsibilities are to deploy different strategies to promote the awareness, advocacy, and encouragement of safe and healthy lifestyle practices during the World Cup tournament. Some of such strategies include the delivery of health awareness and education messages and initiatives via different media on the need to increase the consumption of healthy diets, increase engagement in physical activity, promote mental health; stop the use of tobacco products; promote health security, and safe mass gathering by ensuring strict compliance with health and safety standards at all official and non-official sites; regular conduction of health and safety inspection and audit; routine health screening for the stakeholders; and encourage workplace health promotion initiatives for the event workers. These are meant to be commenced right from the FIFA Arab Cup Qatar 2021, all through the FIFA World Cup Qatar 2022 and beyond, impacting the present and future generations [3, 5-7, 9].

Discussion

The Double Global Pandemic in the Lens of the FIFA World Cup Qatar 2022

The 'Healthy 2022 World cup' is a noble and divine initiative that came at no better time than now, when the world is battling to survive under the burden of a double disease pandemic. On one side, the fast and furious Covid-19 pandemic is revenging the world, overwhelming many communities, bringing many health systems and economies to chaos, and claiming many lives prematurely. Just about 2 years since its

outbreak, Covid-19 has been confirmed in more than 330 million people, and it has directly caused more than 5.5 million deaths globally (Figure 1) [10]. Indeed, Covid-19 is arguably the world's most devastating health crisis in living memory [6]. Despite the invention of vaccines and other innovative public health and clinical prevention and treatment strategies, the frequent surge in Covid-19 waves in many communities and constant mutation of variants shows how ruthless and resilience the SARS-Cov-2 virus can be and the constant threat it poses to global health, stability, and development. The FIFA World Cup Qatar 2022 offers another golden opportunity to demonstrate stronger global resolves and resilience against the Covid-19 pandemic.

Although it may not be obvious to many, another group of diseases of pandemic proportion is subtly and steadily traversing the length and breadth of the world, causing far more havoc than Covid-19 [11-13]. These diseases even hold the potential to drag the economy of many nations into recession and perhaps depression in the next few decades. Noncommunicable diseases (such as hypertension, heart disease, diabetes mellitus, obstructive pulmonary diseases, obesity, cancers, etc.) presently account for the highest morbidity and mortality rates globally. For instance, among the global population (18 years and above), about 22% (25% of men and 20% of women) are presently living with high blood pressure, 9% are diabetic; while about 1.9 billion are overweight, and another more than 650 million are obese [14]. Combined, NCDs account for about 41 million global deaths annually. This is equivalent to about 71% of all global deaths every year (see figure 2) [14,15]. Furthermore, the burden of NCDs is striking hard on the productive force of the world, killing more than 15 million people between the ages of 30 and 69 years every year [15].

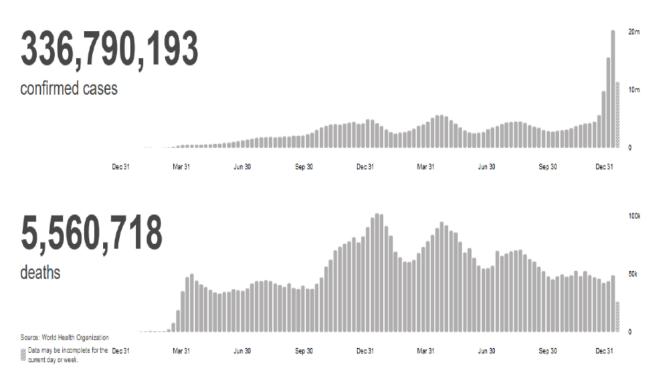


Figure 1: Timeline of Covid-19 morbidity and mortality rates from December 2019 to December 2021

Source: World Health Organization [10]

▶ 31% Cardiovascular diseases	> 15% Other NCDs
▶ 16%	20%
Cancers	Communicable, maternal, perinatal and nutritional conditions
▶ 7%	0.00/
Chronic	9%
respiratory diseases	Injuries
> 3%	
Diabetes	

Figure 2: Percentage of Global Mortality Rates from different diseases in 2016

Source: World Health Organization [14]

The direct and indirect costs of treating NCDs are also enormous for many individuals and nations. Every year, every person diagnosed with NCDs that are living in low-income countries spent about US\$ 25, those in lowermiddle-income countries spent about US\$ 50, and those in upper-middle-income countries spent about US\$ 139 to manage these sets of chronic diseases [16]. This direct cost of NCDrelated healthcare is expected to rise to more than US\$ 30 trillion worldwide, while the global cumulative output loss from NCDs has been estimated to rise to about US\$ 47 trillion over the next two decades [16]. Consequently, the annual death rates and negative health and economic impacts resulting from NCDs alone are more than those from Covid-19, malaria, HIV/AIDS, birth-related conditions, natural disasters, and terrorism, all combined [14, 15].

Even the comparatively high incidence, hospitalization, and case-fatality rates of Covid-19 that were recorded in many countries have been strongly associated with the high prevalence of underlying NCDs among the people living in such countries [17-19]. The presence of most NCDs tends to create chronic systemic inflammation in the body, which often enhances the pathophysiological processes that are involved in the disease evolution of Covid-19, thereby worsening the prognosis of the disease [17-19]. More alarming, all projections suggest that the prevalence and mortality rates of NCDs will continue to increase globally. By 2030, the global average age-standardized NCDrelated mortality rate is expected to rise to about 510.5 per 100,000 population, while the global average mortality for NCD-related deaths is expected to rise to about 75.3% of total deaths [20]. This paints only a gloomy, uncertain, and dangerous future for everybody in the world, regardless of their geographic location and socioeconomic status.

Unhealthy lifestyle and behaviours (such as frequent consumption of unhealthy diets, physical inactivity, overweight/obesity, substance abuse, poor sleep, poor stress management, and social isolation/loneliness) in the presence of a favourable environment are the root and underlying determinants responsible for the rising global burdens of both Covid-19 and NCDs [21-24]. Consequently, measures that successfully change people's unhealthy behaviours and lifestyles practices, improve their health consciousness and literacy, and ensure a healthier and sustainable environment, will most likely result in the downward spiral of these two deadly pandemics [24, 25]. Particularly, if well executed, the FIFA World Cup Qatar 2022 will be the ideal event to orientate and motivate the world on how to prevent, treat, and sometimes reverse NCDs through health promotion and lifestyle medicine principles [3].

A poorly planned or managed FIFA World Cup in 2022 may not help the course, and the event may just be a perfect platform to add to the growing global burden of NCDs. Historical antecedents have shown that previous megasporting or mass social events are potential public health risks. They are potential avenues and opportunities for some athletes and spectators to engage in many unhealthy behaviours and lifestyles, such as tobacco use, risky alcohol use, consumption of unhealthy foods, poor sleep, risky sexual exposure, etc. [2,26]. These disease-promoting unhealthy behaviours and lifestyles, which are usually fueled by peer pressures and the feeling of the need to 'enjoy the moment', may just escalate during the FIFA World Cup Qatar 2022, contrary to the tournaments' set goal and objectives [27-29].

The world is presently at an unprecedented crossroad; anymore indecision or wrong steps as regards public health policies and programs may set the global developmental indices back, possibly far into the stone age. More than ever before, the world needs to come together, be more deliberate, and more strategic in fighting the two 'dreaded pandemics' that are threatening to reverse the hard earn global growth and development. We must stop the onslaught of Covid-19 through better global coordination and collaboration. More importantly, and perhaps more urgently, we must jointly find solutions to the rising global burden of NCDs and their threat to global stability and economic growth. The theme and objectives of the FIFA World Cup Qatar 2022 came at no better time. Events, such as the FIFA World Cup Qatar 2022, offer an opportunity for the State of Qatar and the entire Arab nations to not only make a stronger statement against Covid-19 and NCDs but also provide direction to the world on how best to tackle these global menaces, and how to make global health systems more lifestyle-sensitive and health promotion oriented [3].

Moreover, a situation in which leagues of and international national sporting and entertainment champions and influencers are professing the same goodwill messages on healthy lifestyle and safety, through a global platform like the FIFA World Cup Qatar 2022, may likely have an immediate and long-term positive impact on the global community [3]. The event may just be the right spark to positively change the course of global public health history forever. For the first time in a long while, a global sporting event may mean more than just promoting entertainment, peace, unity, and wealth; it may also provide direction in the pursuance of global good health and sustainability of lives.

However, the task of using sport to promote health and prevent diseases through a global mega sporting event such as the FIFA World Cup is a delicate operation that may end up as a mere delusion and a sheer waste of energy and resources, if not well planned and executed. Moreover, the preparation, delivery, and outcomes of a poorly planned or executed project may have significant negative impacts on the socio-economy and health system of the host country and a negative legacy for future sporting or social events [4]. Thus, what is worth doing is worth doing well. It is worth it that the FIFA World Cup Qatar 2022 event focuses its energy on promoting health and preventing diseases; it will also be much more worth it if the project is delivered in a systematic, comprehensive, and scientific manner, following international best practices.

Recommendations

The Strategic Plans of Delivering an Evidence-based Healthy 2022 World Cup

Based on the available evidence, the incidence, hospitalization, and case-fatality rates of COVID-19 can be significantly reduced through public health and behavioural change strategies that effectively prevent humans from

having contact with the SAR-CoV-2 virus and optimize the resilience of the human immune system against the virus. Such measures may include - good personal hygiene and protection, adequate environmental sanitation, appropriate physical distancing and avoidance of crowded healthy lifestyle gatherings. practices, vaccination, routine screening for infected cases, and isolation of suspected and confirmed Covid-19 cases [30,31]. Also, since the onset and progression of most NCDs are lifestyle-related, the rates of developing these sets of diseases and their related disabilities can be effectively reduced through positive lifestyle and behavioural changes that minimize the influence of the risk factors on the pathophysiology of the chronic NCDs [21, 22].

To achieve an effective campaign against NCDs in particular, studies have shown that mass health awareness and educational messages coupled with routine health screening programs alone, as planned by the organizer of FIFA World Cup Qatar 2022, may be ineffective and grossly insufficient. Available documents suggest that the organizer might have inadvertently adopted a health promotion intervention strategy called 'activity-centred approach', and not the more evidence-based 'results-oriented approach [32].' The central focus of the 'activity-centered approach' is to plan and implement a series of presumed appropriate health promotion activities, some of which may neither impact the desired outcome of the event organizers nor the health needs of a significant number of the target population. While the central focus of the 'result-oriented approach' is to implement health promotion intervention strategies that have the potential to impact the organizer's desired outcome as evidenced by improved health indices of a significant number of the target population [32]. As opposed to the 'activity-centered approach', the interventions in the 'results-oriented approach' are systematically researched, and diligently designed and implemented, tailored to

the health needs of most of the target population [32].

As they use to say, 'old habits die hard'. Any health promotion and change of behaviour strategy or approach that is not comprehensive, systematic, evidence-based, and expertly delivered may likely not be sufficient to change age-long disease-promoting unhealthy lifestyles. The appropriate health promotion strategies should allow the target population to increase their control over and improve their health through a wide range of evidence-based health educational and behavioral change strategies, delivered systematically in a supportive environment [33]. Consequently, the organizers of the FIFA World cup Oatar 2022 should consider some important evidence-based and result-oriented health promotion strategies and initiatives in their quest to achieve a successful 'Healthy 2022 World Cup'. Such strategies should include:

Employ the Services of Public Health Promotion and Lifestyle Intervention Specialists

Public health promotion and lifestyle intervention specialists should be included in the core event planning team. These experts are to review all the proposed plans and programs of the events guided by the theme and objectives of the tournament. They are to ensure that the planning, execution, and evaluation of the event reflects the principles of health promotion and lifestyle medicine [3]. When necessary, the team is meant to consult with relevant national and international experts to deliver a comprehensive, culturally sensitive event that is executed to international standards and may be easily replicable by other similar future events.

The Event should be Guided by Evidencebased Theoretical Frameworks

The planning and execution of the event should be done with the guidance of specific theoretical frameworks or models in health promotion and behavioural change. Using these

theories as a guide will ensure that the entire planning and executions of the different health promotion activities of the FIFA World Cup Qatar 2022 are evidence-based and grounded in solid theories of health promotion. This may result in higher rates of successful and sustainable behavioural change among the target populations. Since the event is a mega-event that involve multiple, will and sometimes simultaneous, activities, it is best if the event is planned around one primary theoretical model, after which multiple secondary theoretical models may be used at different points of the event - depending on the nature of the health promotion activities and the target population.

The Ecological model of health promotion and behavioural change is an ideal model that may be adopted as the primary theoretical model for the FIFA World Cup Qatar 2022 [3, 33]. The Ecological model highlights how peoples' physical, social, and psychological factors interact with their environments. It further suggests how different interventions can take advantage of the multilevel interactions to ensure sustainable behavioural change [3, 33, 34]. The Social Cognitive Theory (SCT) is another good primary theoretical model that can be used successfully during the FIFA World Cup Qatar 2022. The SCT describes the dynamic relationship between peoples' personalized factors and environmental factors and how such can assist in changing unwanted behaviours and lifestyles [33, 34].

The secondary theoretical models that should be considered at different points and for different events during the FIFA World Cup Qatar 2022 tournament are the Health Belief Model (HBM) and the Transtheoretical Model (TTM). The HBM may be used as a guide when designing and delivering different generalized and targeted health awareness and educational messages during the event. The TTM may be useful after health and/or lifestyle screening is done, in which specific health risks have been identified, and specific behavioural change intervention needs to be implemented for different people based on their level of readiness to change [23, 33, 34].

The Event should be Guided by Evidencebased Conceptual Frameworks

Since the process and contents of a project are both essential to its success, the 'Healthy 2022 World Cup' should also be delivered with the guidance of a solid conceptual framework. This will ensure that a systematic and stepwise process is followed in the execution of the project. A result-oriented conceptual framework will also ensure that all the contents of the project are comprehensive, meet the health needs of the target population, and are expertly guided by the events' theme and objectives. Many conceptual frameworks are available for use during FIFA World Cup Qatar 2022. However, any evidence-based conceptual framework should emphasize at least three basic areas of influence - the physical environment, the psychosocial environment, and the personal health resources [35].

The physical environment includes all the external factors that may enhance or obstruct health and safety practices during the event. These may include equipment, marketplaces, recreational parks, restaurants, nightclubs, climatic conditions, etc. The psychosocial environment includes the event's health and safety culture, as well as the perceived attitudes, beliefs, values, daily practices, and commitment towards the success of the project by both the organizers and the target population. The personal health resources are all the health promotion information, services, resources, and opportunities that are provided to the target population to motivate or support their plans to improve or maintain personal safety, healthy lifestyles, and optimal physical and mental health throughout the event [35]. The personal health resources of the FIFA World Cup Qatar 2022 should prioritize Covid-19 prevention initiatives and target the six pillars of Lifestyle Medicine intervention (diet, physical activity, sleep, stress, substance abuse, and social connectedness/positive psychology) [3, 23].

Furthermore, the event's conceptual framework should be a stepwise process that contains the following five basic steps: assessment, prioritization, operational plan, specific interventions, and evaluation [35, 36].

a. Assessment of the Health and Safety needs of the Participants

The assessment of the health and safety needs of all the people involved in the FIFA World Cup Qatar 2022 should be done as baseline data. This is perhaps the most important step toward achieving a healthy and safe event [36]. It will allow the organizers to know the exact health and safety needs they should focus their intervention on and provide them with data that can be used for proper planning, monitoring, and evaluation. Using standardized tools (confidential surveys or checklists), data should be collected on - peoples' personal health data (including health and lifestyle risks, underlying diseases, attitude to behavioral change, etc.), and the physical environment of the event (including possible hazards, existing health and safety protocols at all official and non-official sites, etc.). All these should be well documented and promptly analyzed.

b. Prioritization of the Identified Health and Safety Needs

Using predefined criteria, the health needs of the participants should be prioritized. The criteria may include considerations such as ease of implementing the solutions, the severity of risks, direct cost-benefit analysis, indirect costs of ignoring the identified needs, etc.

c. Design an Operational Plan for the Event

A comprehensive operational plan should be crafted. The operation plan is meant to be the central document that will guide all the stakeholders on the role they are meant to play at a particular time. It will also contain all the health promotional strategies that can be best adapted for each identified health and environmental need and the cost implication of each intervention.

d. Implement Specific Interventions

Some of the interventions may include - the delivery of generalized and specific awareness and education messages via different media platforms; personalized therapeutic lifestyle prescription; behavioural change counseling; enforcement of personal protective wears and other health and safety measures; provision of affordable healthy foods and other health promotional resources (such as gym, smartwatch, easy-to-read booklets and books, websites, wellness Apps, etc.), access to healthoriented restaurants and recreational parks, etc.

e. Evaluation of the Planning and Delivery of the Event Programs

The whole process should be adequately monitored, while appropriate follow-up and referral processes should be implemented. Also, a comprehensive evaluation should be done after the event. All the learned lessons and challenges should be well documented for use as a guide by future mega-events.

Careful implementation of these strategies may be particularly important in preventing and controlling the incidence of Covid-19 and the prevalence of NCDs during a mega public event, such as the FIFA World Cup Qatar 2022 [6]. In addition, the strategies may likely achieve the following among the target population – better physical and mental resilience; improvement in cardiometabolic, musculoskeletal, immune, mental, and emotional health; reduction in the onset and progression of many cancers; prevention and control of obesity; foster stronger social connectedness and friendship; improve overall wellbeing; ensure healthy aging and better quality of lives; and prolong their life expectancy, regardless of the gender or age group [3, 6, 22, 23].

Conclusion

Counting on the right political will, the collaboration and coordination of all stakeholders, the availability of resources, and the adoption of the right health promotion strategies, the vision and goal of a 'Healthy 2022 World Cup' can be driven effectively into the hearts and minds of every football lover, and healthy lifestyles may become the habits of many people in the world starting from 2022. A well-executed Healthy Qatar 2022 may serve as a turning point and a guide to the world in the global quest to prevent, control, and reverse the rising global double burdens of Covid-19 and NCDs. Indeed, the FIFA World Cup Qatar 2022 may be regarded as the healthiest and safest mega-event in recent human history. Thus, the FIFA World Cup Qatar 2022 offers a rare and golden opportunity to the State of Qatar and other stakeholders. The organizers must fully seize the opportunity and ensure the event leaves an indelible mark on the sands of history.

Conflict of Interest

The author declares no conflict of interest.

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