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COVID-19, networks and sport

ABSTRACT

This commentary serves to provide a rapid analysis of the impact of coronavirus disease 2019 (COVID-19) on sporting mass gatherings. The focus of this commentary surrounds sporting mass gatherings and strategies to mitigate the spread of COVID-19, with a particular focus on the UEFA EURO 2020 competition. Further references to the 2020 Olympic Games, and community recreational football are made. The intention is to stimulate discussion, analysis, interest and research on what the initial impact of COVID-19 has on sport. COVID-19 could fundamentally change the way sport operates in the future and requires further analysis. We hope this commentary provides an interesting record and reference point for future research and practice of those operating in sporting organisations. Learning lesson from this crisis, must ensure sport managers and practitioners are better prepared in sport and society for similar events in the future.

KEYWORDS: Coronavirus, Covid-19, Sport, Football, Networks

The coronavirus disease 2019 (COVID-19), lays bare the society we have created, centuries of global processes and the cultivated, networked society and its interdependent infrastructural architecture. This pandemic has no regard for geography, it has a global reach, and no continent is out of its clutches (WHO, 2019). Make no mistake, the magnitude of this disease is daunting to all public health institutions, irrespective of the ideologies and historical interaction that formed them. We also find challenges that cut to the very core of our processes and decision-making for political, economic and social institutions, with no stronger example than mass gatherings and sporting events (WHO, 2015). This has particular

resonance given that human beings are inherently social and gatherings are symbolic, embodied, loaded with cultural meanings.

COVID-19 is a severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), highly infectious through human (and animal) interaction. From similar outbreaks of other contagious diseases in recent times, namely Ebola and SARS (see Chapter 10, Barabasi, 2015), it is known throughout the health and political authorities that preparation for pandemics and reducing the risk of global spread is fundamental. In this respect, the literature highlights that mass gatherings presents a unique challenge to public health and governments (WHO, 2020a). In the absence of availability of no-specific drug or vaccine, the potential for global spread to uniquely overburden health systems is acute. As such, approaches to minimise the global spread is important. Memish et al (2019) highlighted that mass gatherings whether music, religious or sport have no-doubt contributed to the spread of infectious diseases. Given the networked nature of the global sport industry and its associated events programme, which brings together athletes, employees and fans only serves to heighten the potential threat to a sustained global spread. The summer of 2020 throws up two such hazardous events, the EURO 2020 men's international tournament located across 12 European cities; and the 2020 Summer Olympic Games where, 206 nations potentially gather in Toyko, Japan.

Yet, despite improvements in measures to limit the public health risk of mass gatherings (WHO, 2011), any gathering whether it is an individual professional football match, horseracing festivals, or a local grassroots / community football field, offers a genuine risk. To that end, this is therefore relevant at both elite and localised level. This commentary offers a brief analysis of the (in)actions of leading authorities related to mass gatherings in sport, namely elite European professional football and EURO 2020, and the 2020 Tokyo Olympics, alongside small yet considerable community-based gatherings associated with community recreational (or grassroots) football (in England), during the early outbreak of COVID-19 (March 2020).

In recent decades much work has been undertaken, led by the WHO, to better prepare and protect health systems during mass gatherings (WHO, 2011). One aspect of this is community mitigation strategies, which Ebrahim and colleagues (2020) identify as:

- Cancellation of ad-hoc events and suspension of events with super-spreader potential;
- Use of social distancing measures to reduce direct and close contact between people in the community;
- Travel restrictions, including reduced flights and public transport and route restrictions without compromising essential services;
- Voluntary home quarantine of members of household contacts;
- Changes to funeral services to minimise crowd size and exposure to body fluids of the diseased;
- Clear communication from national and international health authorities to ensure verified information and avoid fake news, rumours, and panic.

These strategies can be considered recommendations and are intended to be implemented urgently, to contribute to delaying the spread of an outbreak until such time as a drug or a vaccine becomes available (Qualls et al., 2017; Markel et al., 2007; Pandey et al., 2014; Ebrahim et al., 2020). This undoubtedly means that any mass gatherings should be restricted, given the likelihood of transmission through crowd density (Pandey, et al., 2014; Rashid et al., 2008; Ebrahim & Memish, 2020; Russell et al., 2016). Similarly, the threat posed should be extended to smaller gatherings such as a community recreational football fixture given the significant number of people involved (i.e., some recreational sports ground attract between 1000-5000 people during one Saturday of football fixtures),

Sports mass gathering have featured previously and been delivered successfully (McCloskey, et al., 2014), even during periods when the World Health Organisation (WHO) declared Public Health Emergencies of International Concern (McCloskey et al., 2020). During the H1N1 influenza pandemic two mega-sport events took place: the Vancouver 2010 Winter Olympics and the 2010 Fédération Internationale de Football Association (FIFA) World Cup in South Africa. During the outbreak of the Ebola virus disease, the 2015 Africa Cup of Nations (in Equatorial Guinea) was staged, along with the Rio 2016 Olympics in

Brazil, during the outbreak of the Zika virus, although some athletes, in particular the golfing contingent, did not attend because of the threat of infection. Each were delivered without any major disease issues (Blumberg et al., 2016; Petersen et al., 2016; McCloskey et al., 2020). Despite this, COVID-19 offers a renewed challenge and has provided a polarised focus on local, international and global mass gathers and events.

EURO 2020 is UEFA's flagship international event. Euro 2020 was uniquely designed, it demonstrated the cultural togetherness and fluidity of the Eurozone, spanning across 12 countries to mark 60 years of competition. Indeed, by-proxy the tournament also celebrates the network society of modern Europe and the virtues of the European Union – especially freedom of movement (Widdop et al., 2020). Indeed, EURO 2020 was truly a pan-European competition, ranging from cities including Baku, Bucharest, and Bilbao. Whilst, this collaborative approach had been welcomed by economic scholars and commentators who have previously provided evidence to point towards poor returns of investment associated when hosting sport mega-events (Giulianotti et al., 2015), this new multi-city approach would reduce the financial risk and poor return on investment for the selected host. Yet, it is this networked strength that has proven EURO 2020's Achilles heel. Figure 1 demonstrates this networked society associated with the event, documenting movements that players, teams and fans across the different host cities throughout the EURO 2020 tournament would be required to take. The map illustrates a highly structured network of cities and the significant movement of people across the Eurozone.

XX INSERT FIGURE 1 XX

Figure 1: Network map of EURO 2020 Fixtures: Data sourced from UEFA (UEFA, 2020)

It is discerning that travel is one of the key contributors to disease transmission (Tian et al., 2020). Travel bans may accelerate fear and in turn impact the supply of essential items. Therefore, it is essential, that reduced frequency of transport such as trains and flights are incorporated with route restrictions to lessen the demand for travel (Tian et al., 2020). We live in a networked society, one that witnesses unprecedented movements of people, growing

connectivity, globalised operations, and effortless travel across geographic borders. As such, it emphasises the vital importance of networks and how people are connected. As such, the movement of people across these geographies would not only add a burden to already stretched public services but would most certainly intensify the spread of COVID-19.

The itinerary schedule of the Euro 2020 competition would have required several games including semi-final and finals to be played at Wembley stadium, London. The United Kingdom (UK) has experienced 10 years of austerity policy, which has reduced spending on public services, including the National Health Service (NHS). The consequences of austerity have seen the NHS have real-term reductions in budgets, albeit with an ever increasing patient demand. This is a broad debate, yet, economic analyses and statistics demonstrate the effect reductions in public spending have had in many European societies, including the UKs (Watkin et al., 2017; Stuckler et al., 2017; Antonakakis and Collins, 2015; Kerasidou and Kingori, 2019). Therefore, any competition, including EURO 2020 and the associated matches in the UKs major cities would have been beyond irresponsible given the heightened risk of spreading the COVID-19. Especially as these mega events already place great burdens of the public services of the host cities.

As a mirror to our networked society and globalised operations, Football is fundamentally a networked game. When prominent sociologist Howard Becker (1982) described a social world, he would first begin by listing all the people who are essential in delivering an event and their interactions and division of labour. Think of all the people involved in delivering a football game, it quickly becomes a daunting prospect (Becker, 1982). The football world with stakeholders interconnecting every continent and across Europe in particular, the player trading alone highlights this (Bond et al., 2018; Bond et al., 2019). Therefore, it is commendable that UEFA have taken the decision to postpone EURO 2020, which will now take place in the summer of 2021. Whilst many would say this is a common sense, indeed, an evidence-based approach, this decision was undertaken on the 18th March 2020. It was not until the 24th March 2020 and the International Olympic Committee (I.O.C.) who oversee the Tokyo Olympics 2020 made the decision to postpone the sport mega-event.

Reflecting on this brief insight, what is striking, is football's leadership and forward-thinking approach to the crisis. On 13th March 2020, the English Premier League, The Football Association (FA), English Football League, Barclays FA Women's Super League and FA Women's Championship collectively agreed to postpone the professional game in England until Friday 3 April at the earliest. This postponement has since been extended until 30th April 2020. On Monday 16th March 2020, the English football authorities also postponed all (community recreational) grassroots and community football. On the 27th March 2020, this decision evolved, and non-league football and grassroots football was confirmed as 'null and void'. The consequences of these decisions are untold. Yet, from the perspective of mitigating the spread of COVID-19, whilst the density of the crowd is an overriding issue for mass gatherings, it is the close proximity of people that contributes to spreading COVID-19. Importantly, the original decision by football authorities on the 13th March 2020, was ahead of the government's promotion of social distancing measures. Social distancing is ultimately to decrease the frequency and duration of social contacts across the lifespan (Russell et al., 2016). This is just as important in a community recreational football gathering as it is in larger sport mass gatherings.

At the time of UEFA's and the English football authority's decisions, schools, universities and childcare facilities, leisure and entertainment centres – all remained open. Whilst, the UK Government showed a relative inaction, many events continued. For example, the major horseracing event, The Cheltenham Festival took place between the 16th to 19th March 2020, attracting in the region of 60,000 visitors per day. Therefore, football could be commended for their leadership during COVID-19. In addition, football, through FIFA, have contributed \$10 million USD to the WHO COVID-19 Solidarity Response Fund, alongside a football relief fund and showing leadership through direct cooperation with WHO.

At present, the Formula 1 Grand Prix season is postponed, as is the Six Nations Rugby Championship and the one of the most watched, historic and famous sporting events in the world, the horseracing Grand National 2020 (Aintree, Liverpool), is cancelled. All these decisions were made ahead of the I.O.C. and the organisers of the Tokyo 2020 Olympic and Paralympic Games, who finally bowed to the inevitable decision to postpone. That said, this delay could signal a lack of leadership from the governing body. Yet, the I.O.C. has a

well-developed strategic working relationship with WHO, so the delay is worthy of further analysis in the future.

The impact of COVID-19 for sport mega-events will take some time to play out. Whilst, the evidence base is still developing on the infectious disease transmission during sport mega-events (Memish et al., 2019), it is likely that any forthcoming event will attract intensified media interest which will impact public and political perceptions and expectations (Ippolito et al., 2020; McCloskey et al., 2020), whether it is in 2020 or 2021 and beyond. Therefore, as we look forward, it is pertinent for sport leaders and authorities to examine new WHO recommendations for mass gatherings.

WHO have developed a number of recommendations for those seeking to manage the public health elements of mass gatherings, which is directly important for sport mega-events (WHO, 2020b). In McCloskey et al. (2020) these were updated with recommendations for COVID-19 (WHO, 2020b) and technical guidance on COVID-19 (WHO, 2020c), to develop a risk assessment for mass gathers during COVID-19 pandemic, covering the following areas:

- General considerations at the beginning of the planning phase:
- COVID-19 specific considerations;
- Specific action plan for COVID-19;
- If the decision is made to proceed with a mass gather, measures the planners should consider;
- Risk communication and community engagement;
- Risk mitigation strategies.

Such a tool could be important in the decision-making processes of leaders in sport, in particular. If events are cancelled without a risk assessment being done, the social and economic consequence of cancelled events may prove costly, both human and financial.

Undoubtedly, slowing down the spread of COVID-19 to manageable levels for the health systems to operate is a number one priority. Re-thinking sport, whether elite or community recreational will have played a significant part of that. The consequences of these postponements and cancellations is unknown, yet many commentators and those within the game expect this to fundamentally change the way sport operates in the future. We urge our colleagues in academia to examine the impact of these changes in elite and community recreational contexts from a socio-cultural, economic and political perspective. Finally, and personally, it has been a quiet release for the authors to share this analysis spanning our interests in sport, from elite and community football contexts. It is difficult to view that society and sport can return to the status quo in the impending years. Yet, we are certain that sport will continue to play an important role society in the future. In the meantime, we will continue to observe how sport positively contributes to slowing down the spread of COVID-19 and fully expect the events of this year to add intensified scrutiny to sport, football and events in the future, as stakeholders tread the fine line between prosperity and protection of global health. Importantly, we should examine sports actions related to COVID-19, as there are important lessons to be learned. Certainly, when the next pandemic comes (which it will), we are better prepared in sport and society.

References

- Antonakakis, N., & Collins, A. (2015). The impact of fiscal austerity on suicide mortality: Evidence across the 'Eurozone periphery'. *Social Science & Medicine*, 145:63–78. doi: 10.1016/j.socscimed.2015.09.033
- Barabasi, A. L (2015). *Network Science*. Cambridge University Press
- Becker, H.S. (2008 [1982]). *Art worlds*. University of California Press.
- Blumberg., L., Regmi, J., Endricks, T., McCloskey, B., Petersen, E., Zumla, A., & Barbeschi M. (2016). Hosting of mass gathering sporting events during the 2013–2016 Ebola virus outbreak in west Africa: experience from three African countries. *International Journal of Infectious Diseases*, 47: 38-41. doi: 10.1016/j.ijid.2016.06.011

Bond, A., Widdop, P., & Chadwick, S. (2018). Football's emerging market trade network: Ego network approach to world systems theory. *Managing Sport and Leisure*, 23(1-2), 70–91. doi: 10.1080/23750472.2018.1481765

Bond, A., Widdop, P., & Parnell, D. (2019). Topological Properties of the European Football Loan System: An Economic Network Perspective. *European Sport Management Quarterly*. <https://doi.org/10.1080/16184742.2019.1673460>

Ebrahim, S.H., Ahmed, Q.A., Gozzer, E., Schlagenhaut, P., & Memish, Z.A. (2020). Covid-19 and community mitigation strategies in a pandemic, *BMJ* 368: m1066. <https://doi.org/10.1136/bmj.m1066>

Ebrahim, S.H., & Memish, Z.A. (2020). Covid-19: preparing for superspreader potential among Umrah pilgrims to Saudi Arabia. *Lancet*, 395:e48. doi:10.1016/S0140-6736(20)30466-9

Giulianotti, R., Armstrong, G., Hales, G., & Hobbs, D. (2015). Sport Mega-Events and Public Opposition: A Sociological Study of the London 2012 Olympics. *Journal of Sport and Social Issues*, 39(2), 99–119. <https://doi.org/10.1177/0193723514530565>

Ippolito, G., Hui, D.S., Ntoumi, F., Maeurer, M., & Zumla, A. (2020). Toning down the 2019-nCoV media hype and restoring hope. *Lancet Respiratory Medicine*, 8: 230-231

Kerasidou, A., & Kingori, P. (2019). Austerity measures and the transforming role of A&E professionals in a weakening welfare system, *PLoS One*, 4(2):e0212314. doi:10.1371/journal.pone.0212314

Markel, H., Lipman, H.B., Navarro, J.A. Sloan, A., Michalsen, J.R., Stern, A.M., & Cetron, M.S. (2007). Nonpharmaceutical interventions implemented by US cities during the 1918-1919 influenza pandemic. *JAMA*, 298:644-54. doi:10.1001/jama.298.6.644

McCloskey, B., Zumla, A., Ippolito, G., Blumberg, L., Arbon, P., Cicero, A., Endericks, T., Lim, P.L., & Borodina, M. (2020). Mass gathering events and reducing further global spread of COVID-19: a political and public health dilemma, *Lancet*, doi: [https://doi.org/10.1016/S0140-6736\(20\)30681-4](https://doi.org/10.1016/S0140-6736(20)30681-4)

McCloskey, B., Endericks, T., Catchpole, M., Zambon, M., McLaughlin, J., Shetty, N., Manuel, R., Turbitt, D., Smith, G., Crook, P., Severi, E., Jones, J., Ibbotson, S., Marshall R., Smallwood, C.A.H., Isla, N., Memish, Z.A., Al-Rabeeah, A.A., Barbeschi, M., Heymann, D.L., & Zumla, A. (2014). London 2012 Olympic and Paralympic Games: public health

surveillance and epidemiology, *Lancet*, 383: 2083-2089. doi: 10.1016/S0140-6736(13)62342-9

Memish, Z.A., Steffen, R., White, P., Dar, O., Azhar, E.I., Sharma, A., & Zumla, A. (2019). Mass gatherings medicine: public health issues arising from mass gathering religious and sporting events. *Lancet*, 393: 2073-2084. doi: [https://doi.org/10.1016/S0140-6736\(19\)30501-X](https://doi.org/10.1016/S0140-6736(19)30501-X)

Pandey, A., Atkins, K.E., Medlock, J., Wenzel, N., Townsend, J.P., Childs, J.E., Nyenswah, T.G., Ndeffo-Mbah, M.L., & Galvani, A.P. (2014). Strategies for containing Ebola in west Africa. *Science*, 346:991-5. doi:10.1126/science.1260612

Petersen, E., Wilson, M.E., Touch, S., McCloskey, B., Mwaba, P., Bates, M., Dar, O., Mattes, F., Kidd, M., Ippolito, G., Azhar, E. I., & Zumla, A. (2016). Rapid Spread of Zika Virus in The Americas--Implications for Public Health Preparedness for Mass Gatherings at the 2016 Brazil Olympic Games. *International Journal of Infectious Diseases*, 44:11-5. doi: 10.1016/j.ijid.2016.02.001.

Qualls, N., Levitt, A., Kanade, N., Wright-Jegede, N., Dopson, S., Biggerstaff, M., Reed, C., Uzicanin, A. (2017). CDC Community Mitigation Guidelines Work Group. Community mitigation guidelines to prevent pandemic influenza—United States, 2017. *MMWR Recommended Reports*, 66:1-34. doi:10.15585/mmwr.rr6601a1

Rashid, H., Haworth, E., Shafi, S., Memish, Z.A., & Booy, R. (2008). Pandemic influenza: mass gatherings and mass infection, *Lancet Infectious Diseases*, 8:526-7. doi:10.1016/S1473-3099(08)70186-5

Russell, E.S., Zheteyeva, Y., Gao, H., Shi, J., Rainey, J.J., Thoroughman, D., & Uzicanin, A. (2016). Reactive school closure during increased influenza-like illness (ILI) activity in western Kentucky, 2013: a field evaluation of effect on ILI incidence and economic and social consequences for families. *Open Forum Infectious Diseases*, 3:ofw113. doi:10.1093/ofid/ofw113

Stuckler, D., Reeves, A., Loopstra, R., Karanikolos, M., & McKee, M. (2017). Austerity and health: the impact in the UK and Europe. *European Journal of Public Health*, 27(suppl_4):18–21. doi:10.1093/eurpub/ckx167

Tian, H., Li, Y., Liu, Y., Wu, C-H., Chen, B., Kraemer, M.U.G., Li, B., Cai, J., Xu, B., Yang, Q., Wang, B., Yang, P., Cui, Y., Song, Y., Zheng, P., Wang, Q., Bjornstad, O.N.,

Yang, R., Grenfell, B., Pybus, O., & Dye, C. (2020). Early evaluation of Wuhan city travel restrictions in response to the 2019 novel corona virus outbreak. *Medrxiv*, doi:10.1101/2020.01.30.20019844

UEFA. (2020). Hospitality and fixtures. Retrieved from: <https://euro2020.hospitality.uefa.com/fixtures>

Watkins, J., Wulaningsih, W., Da Zhou., C., Marshall, D.C., Sylianteng, G.D.C., Dela Rosa P.G., Miguel, V.A., Raine, R., King, L.P., & Maruthappu, M. (2017). Effects of health and social care spending constraints on mortality in England: a time trend analysis. *BMJ Open*, 7(11). doi:10.1136/bmjopen-2017-017722

World Health Organization. (2011). *WHO Global mass gatherings: implications and opportunities for global health security*. Retrieved from: <https://apps.who.int/iris/handle/10665/23751>

World Health Organization. (2015). *Public health for mass gatherings: key considerations*. Retrieved from: https://www.who.int/ihr/publications/WHO_HSE_GCR_2015.5/en/

World Health Organization. (2019). *Coronavirus disease 2019 (COVID-19). Situation report 43, 3 March, 2019*. Retrieved from: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200303-sitrep-43-covid-19.pdf?sfvrsn=2c21c09c_2

World Health Organisation. (2020a). *Who, Coronavirus disease (COVID-19) outbreak*. (2020). Retrieved from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>

World Health Organization. (2020b). *Key planning recommendations for mass gatherings in the context of the current COVID-19 outbreak. Interim guidance*. Retrieved from: <https://apps.who.int/iris/bitstream/handle/10665/331004/WHO-2019-nCoV-POEmassgathering-2020.1-eng.pdf?sequence=1&isAllowed=y>

World Health Organization. (2020). *Country and technical guidance—coronavirus disease (COVID-19)*. Retrieved from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance>

Widdop, P., Bond, A., & Parnell, D. (2020). *Covid 19 v Euro 20*. Retrieved from: <https://footballcollective.org.uk/2020/03/11/covid-19-v-euro-2020/>

