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Soccer in times of COVID-19: remarks on the contamination of Brazilian soccer players

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Abstract. This manuscript discusses the contamination and dissemination of COVID-19 within sports competitions. Data related to the number of athletes in the first division of Brazilian soccer were used as a starting point. After the competition was resumed, 302 out of 653 players tested positive for COVID-19. Compared to the rate for the total population of Brazil, that number is extremely high and reveals major differences in implementing preventive measures as well as controlling transmission. This can be explained by differences in financial resources to support protocols in strict ways, or even by the fact that the individual social dynamics of athletes did change despite the new life style imposed by the pandemic.

Keywords: soccer; covid-19; sport; pandemic

INTRODUCTION

In early 2020, as we know, the World Health Organization (WHO) declared a new pandemic. The virus responsible for spreading COVID-19 has plagued all parts of the planet and caused intense transformations in different spheres of society (Martins et al., 2021).

The sports sector has suffered significantly due to social changes imposed by the pandemic (Hammerschmidt et al., 2021). At first, the main action taken by sports leagues and championships around the globe was to suspend training and competitions. For example, the 2020 Olympic Games, in Tokyo, were postponed (Taku & Arai, 2020). Besides, matches in the European Champions League and in national soccer championships, such as in Brazil, Italy, and England, were suspended (Drewes, Daumann & Follert, 2020).

Leagues and teams were forced to adapt to these changes, so that some sports competitions could be held in compliance with strict protocols designed to reduce transmission of the virus. Under the conditions of these protocols, it was possible to resume competitions, support the financial recovery of clubs and leagues, and limit the infection rates among athletes and staff. For instance, the NBA managed to create a sort of 'bubble' for all players and teams, so that they could carry on with the 2020 season (Vaudreuil et al., 2021).

Most sports championships in Brazil were suspended in March 2020 (Boschilia, Moraes & Marchi Junior, 2020). According to Agência Brasil (2020), on March 20, 2020, the last state soccer championship still in course was interrupted. Therefore, professional soccer activities in the country were completely stopped. Most of the regional competitions were resumed in July. The idea was finishing them as soon as possible. The Brazilian Soccer League, which is the main soccer competition in the country, was resumed on August 8, 2020, almost 4 months after its official kick-off. The season was concluded only at the end of February 2021.

However, not all the leagues that resumed their matches managed to ensure the due preventive measures against the virus. Therefore, the aim of this text is to discuss the impact of COVID -19 on the 2020 season of the Brazilian Soccer League.

SPORTS AND COVID-19 LIERATURE REVIEW

The advent of the COVID -19 pandemic and its impacts on society, which includes the sports field, led to the emergence of a research agenda (Evans et al, 2020). Due to the scientific urgency of knowing the impacts of the pandemic and the perspectives imposed by this new context, several research efforts have been made in different areas of sports sciences.

Among the studies already developed, those that have a stronger connection with aspects directly related to health can be highlighted. As an example, there are studies that analyze the influence of physical exercise on the clinical condition caused by COVID-19 (Dwyer et al., 2020; Crisafulli & Pagliaro, 2020). Another perspective is the analysis of the effects and sequelae presented by athletes who have been infected by the virus (Baggish et al., 2020; Rajpal et al., 2020).

Through a more sociocultural viewpoint, we can mention studies that analyze the impact of the pandemic and its restrictions on sports economy management (Parnell et al., 2021). Beyond the financial health of clubs and leagues, there are also studies that sought to analyze a more micro-sociological dimension by focusing on the effects felt by the players, not only regarding their performance in competitions, but also at the economic, training, and psychosocial levels (Bowes, Lomax & Piasecki, 2020).

Some researchers have also investigated how sports activities were resumed. In this context, some studies presented methods and protocols to be followed (Mohr et al., 2020; Castagna et al., 2020), while others analyzed the procedures adopted by leagues and championships (Meyer et al., 2021). In light of the foregoing, seeking to enhance information and qualify the discussions regarding the recent or, perhaps, momentary research agenda on

COVID-19, we aim to discuss the contamination of Brazilian soccer players after resuming the main national soccer league.

CONSEQUENCES FACED BY SOCCER IN THE PANDEMIC

After the first public pandemic-related decrees were published, the Brazilian Soccer Confederation (CBF) suspended the main soccer league in the country. After a few months, the Brazilian Soccer League was resumed, in August 2020.

For the first time in history, all matches were held with no fans in the stadiums. Additional measures were taken to minimize the risk of transmission, including protocols for personal hygiene, wearing masks, distance from the field, and regular tests for the diagnosis of COVID-19 (CBF, 2020). However, despite the measures suggested by CBF and all the adaptations required, 302 out of 653 (46.2%) players eligible to compete for the 20 clubs registered in the first division of the league ended up being infected by the virus during the 2020 season.

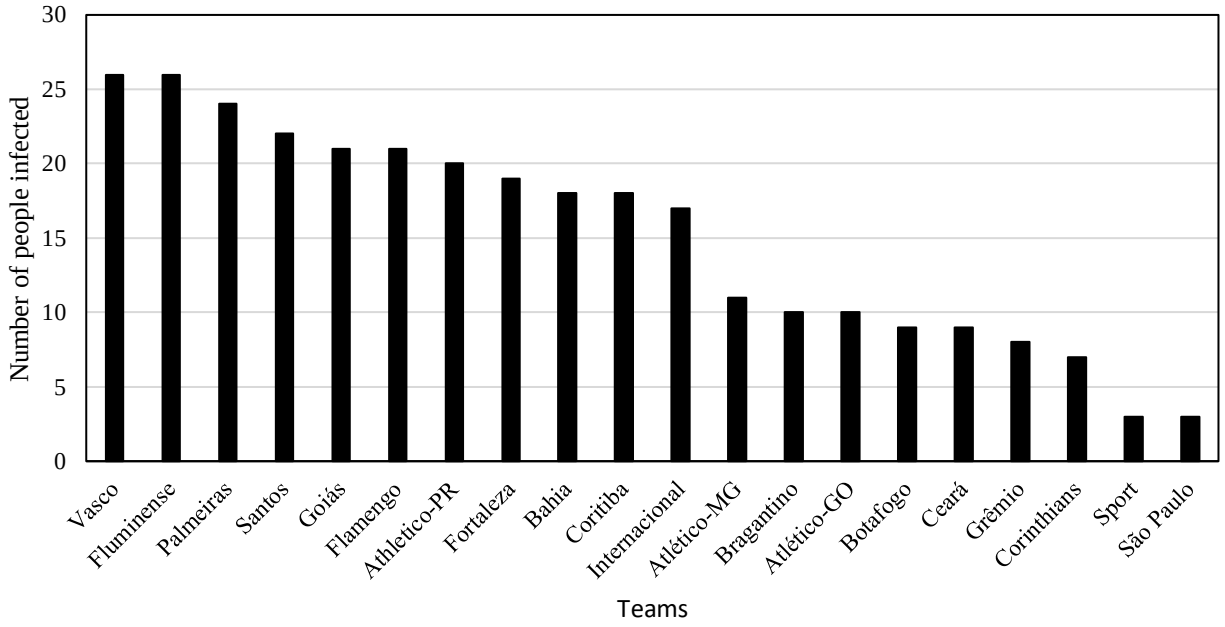

Figure 1. Number of athletes infected per team.

The data show a different reality from that disclosed by a CBF report on the effectiveness of the protective measures among players. According to the report, the positivity rate among soccer players in the league in question was 3.1% of the 11,514 tests performed (CBF, 2021). However, each player underwent multiple examinations over the course of 38 rounds in the competition, and this is why the data brought by the report are deceptive.

These results are far from those of the German soccer league, in which only 22 players tested positive for COVID-19 by the end of season (Meyer et al., 2021). Yet, the Brazilian scenario is similar, even in a distant reality, to the data presented by the Premier League (England), which, from August 2020 to April 2021, had 256 positive results for COVID-19, including players and the coaching staff (Premier League, 2021).

It is important to mention that, in the Brazilian League, 18 people were infected among over 600 members of the coaching staff, which corresponds to less than 3%. However, this rate refers to all the people identified by the clubs as members of the coaching staff, which includes all the professions involved in a soccer competition. However, not all of them stay around the field during matches, and it is unknown whether they are included in the data provided by CBF.

According to CBF (2021), an analysis of clinical records shows that there was no evidence of contamination through interactions during matches. Yet, it is important to note that the

preventive measures requested from clubs did not include isolating their players in certain areas. Therefore, they were able to approach or have physical contact with members of the clubs and people from the external community, who could be vectors of the virus.

That was not something unexpected, since soccer players in Brazil were seen at parties and nightclubs during the period of social restrictions (Globo Esporte, 2020).

All this information combined with data on the distribution of infected individuals per club show that the control measures within the clubs had more influence in terms of transmission than those measures related to the matches. In other words, the strictness of the clubs' internal control accounts for much of the discrepant result among them, since some teams had 26 athletes infected, whereas others had only three.

In addition to the data presented, it is important to highlight that Brazil still ranks as a country of great inequality, and that situation has been even worsened by the pandemic. Another aspect is that Brazilian public policies to fight COVID-19 have presented weaknesses. The data disclosed in this short communication refers to the highest elite of national soccer, where teams' structure includes medical departments, which is not the case of teams from lower or regional divisions.

REPORTS ON THE INFECTED

None of the 302 cases of players infected in the Brazilian Soccer League required hospitalization. However, their physical conditions for performance in professional soccer were affected either by the interruption of their training routine or by the consequences of the virus. In the former case, an athlete stated the following 'During the second half, my pace was unstable. That's because I spent ten days inside my house doing nothing, since I couldn't go out' (Matheus Henrique, 2021). Regarding the latter case, another player said 'It was very difficult to get back to work. I felt very tired until I reached my level again. I think it was about 30 days' (Everton being interviewed by Viana, Branco & Maleson, 2021).

However, the experience of the members of the coaching staff was different, because these people were older than the players were. Thus, they were at a higher risk. A coaching staff member reported the following about his infection:

> I left the hospital 33 pounds thinner. I lost a lot of muscle mass and it directly impacted my motor coordination. So, I couldn't stand up. At the most critical moment of my clinical condition, I had a lot of hallucinations. I thought I had been cremated from the waist down, and that they were preparing my funeral (Hugo Paulista interviewed by Viana, Branco & Maleson, 2021).

Cuca was another coaching staff member who was contaminated by the coronavirus and faced complications. The coach of one of the greatest Brazilian soccer clubs, Santos, was hospitalized and spent 6 days in an intensive care unit (ESPN, 2021). The disease affected both his physical and mental conditions. Even though there are no records of hospitalization of soccer players, it is not known whether those who have already been contaminated will have problems or not. Eventual occurrences could include heart and respiratory problems. Thus, it is important to follow up the athletes during the following months (Baggish et al., 2020; Rajpal et al., 2020).

FINAL CONSIDERATIONS

During the pandemic, major sports competitions had their activities suspended, postponed, or even concluded in different parts of the world. After months, Brazilian soccer activities were resumed in the middle of 2020, with social distancing and a set of precautionary sanitary

measures. One of the most noticeable measures has been the absence of spectators at the stadiums.

However, not even the restrictive measures adopted inside the stadiums were enough to stop the spread of the virus within the Brazilian soccer community. Unfortunately, those measures have been limited to the competition environment. Anyhow, it is the responsibility of all clubs, as well as the athletes themselves, to care for their health, even though both the economic power of the clubs and the local culture have a great negative influence on this scenario.

REFERENCES

Baggish, A., Drezner, J. A., Kim, J., Martinez, M., & Prutkin, J. M. (2020). Resurgence of sport in the wake of COVID-19: cardiac considerations in competitive athletes. British Journal of Sports Medicine, 54(19), 1130-1131. http://dx.doi.org/10.1136/bjsports-2020-102516

Boschilia, B., Moraes, L. C. L., & Marchi Junior, W. (2021). Football and COVID-19: the effects of the pandemic on training and performance of South American and Brazilian referees. Soccer & Society, 22(1-2), 58-65. https://doi.org/10.1080/14660970.2020.1829597

Bowes, A., Lomax, L., & Piasecki, J. (2020). The impact of the COVID-19 lockdown on elite sportswomen. Managing Sport and Leisure, 1-17. https://doi.org/10.1080/23750472.2020.1825988

Castagna, C., Bizzini, M., Leguizamon, A. P., Pizzi, A., Torquati, R., & Póvoas, S. (2020). Considerations and best practices for elite football officials return to play after COVID-19 confinement. Managing Sport and Leisure, 1-8. https://doi.org/10.1080/23750472.2020.1783841

Confederação Brasileira de Futebol (2020). Medical Guide to protective suggestion for returning to Brazilian football activities. Recovery from https://conteudo.cbf.com.br/cdn/202006/20200610151650_484.pdf

Confederação Brasileira de Futebol (2021). Relatório operacional da comissão médica especial da CBF. Recovery from https://conteudo.cbf.com.br/cdn/202103/20210310110835_974.pdf

Crisafulli, A., & Pagliaro, P. (2020). Physical activity/inactivity and COVID-19. European Journal of Preventive Cardiology. https://doi.org/10.1177/2047487320927597

Drewes, M., Daumann, F., & Follert, F. (2021). Exploring the sports economic impact of COVID-19 on professional soccer. Soccer & Society, 22(1-2), 125-137. https://doi.org/10.1080/14660970.2020.1802256

Dwyer, M. J., Pasini, M., De Dominicis, S., & Righi, E. (2020). Physical activity: Benefits and challenges during the COVID-19 pandemic. Scandinavian journal of medicine & science in sports, 30(7), 1291–1294. https://doi.org/10.1111/sms.13710

ESPN (2021). Cuca, do Santos, pede vacina da covid-19 e relata internação: "Refém". Recovery from https://www.espn.com.br/futebol/artigo/_/id/8035699/cuca-do-santos-pede-vacina-da-covid-19-e-relata-internacao-refem

Evans, A. B., Blackwell, J., Dolan, P., Fahlén, J., Hoekman, R., Lenneis, V., ... & Wilcock, L. (2020). Sport in the face of the COVID-19 pandemic: towards an agenda for research in the sociology of sport. European Journal for Sport and Society, 17(2), 85-95. https://doi.org/10.1080/16138171.2020.1765100

Globo Esporte (2020). Borrero e Marrony são flagrados por organizada em festa dias após surto de Covid

no Atlético-MG. Recovery from https://globoesporte.globo.com/futebol/times/atletico-mg/noticia/borrero-e-marrony-sao-flagrados-por-organizada-em-festa-dias-apos-surto-de-covid-no-atletico-mg.ghtml

Hammerschmidt, J., Durst, S., Kraus, S., & Puumalainen, K. Professional football clubs and empirical evidence from the COVID-19 crisis: Time for sport entrepreneurship?. Technological Forecasting and Social Change, 165, 120572. https://doi.org/10.1016/j.techfore.2021.120572

Martins, D. J. Q., Moraes, L. C. L., & Marchi Júnior, W. (2021). COVID-19 impacts on school sports events: an alternative through E-sports. Managing Sport and Leisure. https://doi.org/10.1080/23750472.2021.1928537

Meyer, T., Mack, D., Donde, K., Harzer, O., Krutsch, W., Rössler, A., ... & Gärtner, B. C. (2021). Successful return to professional men's football (soccer) competition after the COVID-19 shutdown: a cohort study in the German Bundesliga. British journal of sports medicine, 55(1), 62-66. http://dx.doi.org/10.1136/bjsports-2020-103150

Mohr, M., Nassis, G. P., Brito, J., Randers, M. B., Castagna, C., Parnell, D., & Krustrup, P. (2020). Return to elite football after the COVID-19 lockdown. Managing Sport and Leisure, 1-9. https://doi.org/10.1080/23750472.2020.1768635

Parnell, D., Bond, A. J., Widdop, P., & Cockayne, D. (2021). Football Worlds: Business and networks during COVID-19. Soccer & Society, 22(1-2), 19-26. https://doi.org/10.1080/14660970.2020.1782719

Premier League (2021). Latest statement on results of COVID-19 tests. Recovery from https://www.premierleague.com/news/1814863

Rajpal, S., Tong, M. S., Borchers, J., Zareba, K. M., Obarski, T. P., Simonetti, O. P., & Daniels, C. J. (2021). Cardiovascular magnetic resonance findings in competitive athletes recovering from COVID-19 infection. JAMA cardiology, 6(1), 116-118. https://doi.org/10.1001/jamacardio.2020.4916

Taku, K., & Arai, H. (2020). Impact of COVID-19 on athletes and coaches, and their values in Japan: repercussions of postponing the Tokyo 2020 olympic and paralympic games. Journal of loss and trauma, 25(8), 623-630. https://doi.org/10.1080/15325024.2020.1777762

Vaudreuil, NJ, Kennedy, AJ, Lombardo, SJ e Kharrazi, FD (2021). Impact of COVID-19 on Recovered Athletes Returning to Competitive Play in the NBA "Bubble". Orthopaedic Journal of Sports Medicine. https://doi.org/10.1177/23259671211004531

Viana, Branco & Maleson (2021). Brasileirão tem 320 casos de Covid-19 entre atletas e técnicos; veja os times mais afetados. Globo Esporte, Rio de Janeiro. Recovery from https://globoesporte.globo.com/programas/esporte-espetacular/noticia/brasileirao-tem-320-casos-de-covid-19-entre-atletas-e-tecnicos-veja-os-times-mais-afetados.ghtml