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Full Length Research Paper

Measures and applications of the Turkish Ice Hockey Federation during the COVID-19 pandemic

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ABSTRACT

COVID-19 virus, which broke out in Wuhan city of China in 2019 and has nearly brought the sports industry to a standstill, has spread to all stages within the organizational structure of sports. In this period, it can be said that sports clubs were affected economically, and coaches, managers and other stakeholders remained inactive. In this period, issues such as the creation of financial support packages for sports clubs and online education came to the fore. Therefore, strategies and applications of sports federations which are the competent authority of sports in the national platform, in this process have become a determinant for most work areas such as sports clubs, coaches, executives and referees to sustain their activities. This study was conducted to examine the education, development and health applications followed by the Turkish Ice Hockey Federation during the COVID-19 pandemic. In this study, the general screening method was used. It is expected that the applications carried out in the 2019-2020 and 2020-2021 seasons will set an example for other sports organizations.

Keywords: Ice hockey, COVID-19, sports management.

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INTRODUCTION

COVID-19 virus (2019-nCoV) which broke out as an unknown case in Wuhan city of China in December 2019 and has affected the whole world, has undoubtedly made major changes in the sports industry (Gough, 2020; Alam and Abdurraheem, 2021). Of these changes, it is possible to say that the primary one was to postpone the Summer Olympics which was planned to be organized in Tokyo in 2020, until 2021. Postponements and cancellations were not limited only to the Olympics and the European Football Championship EURO 2020, one of the most popular athletic organizations in the world, was postponed by the UEFA until 2021 with the approval of 54 federations. In addition, many international organizations in other branches have been canceled due to COVID-19. Most sources of income related to tickets, broadcasting and spectators have been interrupted and the sports industry has been put through the most important test in its history.

Social distancing, especially when maintained over time, reduces human contact and slows the rate of infection transmission and has proven to have positive

results in many parts of the world (Greenstone and Nigam 2020). Memish et al., (2019) have stressed that crowded and collective organizations on music, religion, or sports where people gather together undoubtedly make a negative contribution to the spread of infectious diseases. Accordingly, the COVID-19 pandemic has caused most mega sports activities worldwide to be canceled or postponed in the course of time (Clarkson et al., 2020). Sports federations provide opportunities for clubs to carry out their activities. Organizations with a certain date have reduced their economic losses by using the postponement option. At this point, we cannot say the same for clubs. Because of the clubs (players, coaches, etc) activities under the auspices of the federations and related ministries. Cancellation and postponement decisions directly affected the clubs. As a result of all these, primarily sports organizations, sports clubs and players have undoubtedly faced significant financial losses and unfortunately, it is foreseen that they will have these financial problems for a longer time.

Sports federations that act as a building stone within

the sports organization have some national and international responsibilities concerning the branch they represent. Among these responsibilities is the health of athletes, coaches, executives, and referees.

In this study, the measures and applications conducted by the Turkish Ice Hockey Federation since the beginning of the COVID-19 pandemic will be examined.

Covid-19

A new coronavirus type which was identified as the cause of a few pneumonia cases in Wuhan city of China in late 2019 and had not been identified before, has been declared as a "pandemic" by the World Health Organization (WHO 2020). Known as "Coronavirus disease 2019" (COVID-19), the disease was responsible for millions of infectious cases and deaths worldwide due to its rapid contagion (Lu et al., 2020), COVID-19 pandemic thus posed an extraordinary public health concern. Although a variety of public health measures have been taken by governments, non-governmental organizations and individuals worldwide to prevent the spread of the virus (e.g., social distancing, washing hands frequently, wearing masks, travel restriction, gathering in large groups and public places, etc.), it is argued that many other things (though no one clearly or decisively knew what they were) were to be undertaken to "flatten the curve;" i.e., in terms of spread and reduce the impact of the pandemic (Mann et al., 2020). Although athletes are usually believed to follow a healthy lifestyle in a disciplined way, tend to be younger than the general population, and are likely to have fewer comorbidities—all pointing them to be at a lower risk of serious diseases or death, it is necessary to protect those with a higher risk of contracting COVID-19 due to their value as athletes in the sports industry (Toresdahl and Asif, 2020).

Impacts of the COVID-19 pandemic on Ice Hockey and measures taken by the Turkish Ice Hockey Federation

One of the sports branches affected by the COVID-19 pandemic is undoubtedly ice hockey. Postponement/cancellation of international leagues and organizations by relevant authorities upon the emergence of the COVID-19 pandemic has also affected the local organizations, thus resulting in many changes (IIHF, 2020, More Cancellations).

In March 2020, the International Ice Hockey Federation (IIHF) announced that they had canceled more than 20 world championship organizations, primarily the top-class world championships as precautionary health measures of all constituents; i.e., athletes, referees, coaches, officials, and viewers (IIHF, 2020).

The Stanley Cup organization which is accepted to be

the most prestigious ice hockey organization in the world with 5.3 million viewers on average, could not be held on the scheduled event date for the first time in its history of 101 years due to the COVID-19 pandemic (NHL, 2020).

In the light of all these developments, the Turkish Ice Hockey Federation made the following suggestions for games in the Super League play-off final and consolation series continuing in the 2019-2020 season in the measured circular issued on 13 March 2020 (TIHF, 2020):

- The games will be played without viewers.
- The ceremonies will be performed after the games; however, there will be no handshaking.
- No one will be allowed into changing rooms except for players and team authorities.
- Referee desks and team banks will be disinfected and liquid hand sanitizers will be kept available in these areas.
- Minimum number of personnel will be assigned in the games.

In addition, it was announced on March 13, 2020, that the Men's Premier League, Youth Men's League, Youth Women's League, Junior and Star Leagues and April 23 Cup were postponed until a second announcement.

The Turkish Ice Hockey Federation announced that 120 female/male athletes in the candidate line-up of the national team continued their training at home with online support as of April 2020. Likewise, the athletes in the Sportive Talent Screening Project continued their training at home with online support.

On 5 June 2020, the Pandemic Commission was established within the body of the Turkish Ice Hockey Federation (TIHF, 2020) and the commission advised athletes, clubs, coaches and referees with the principle of "Safe Return". For clubs and athletes to sustain their training properly throughout the pandemic, Phase-1, Phase-2 and Phase-3 covering 15-page measures and guidelines were issued by the Pandemic Commission (TIHF, 2020). It can be asserted that training modules included in this context are intended to have a positive impact on active field use and effective use of time spent on the ice.

Online activities

In 2020, online development seminars were organized in five contents for coaches. These seminars covered such topics as home training, pass and quick play and organized during full/partial lockdown for extending an opportunity of development for coaches.

Further, online "Parent Meetings: Being a Parent of an Athlete" comprising topics such as points to take into consideration for parents of athletes during the pandemic,

athlete and parent psychology during a game, have provided an opportunity to solve similar situations experienced by families in different cities. Also, online seminars comprising topics such as "Sports Injuries" and "Sports and Genes" are deemed to be important for parents and coaches.

In addition, the online development seminars for team executives and referees in six different contents helped reinforce the existing rules and explain the updated instructions. Also, these activities conducted during full/partial lockdown saved time and space. Visa seminars were also conducted during this period for coaches and referees to fulfil a duty in the league.

FINDINGS

As of the 2020-2021 season, the federation applied to the PCR (Polymerase Chain Reaction) testing for athletes, officials (coach, team manager, medical person, equipment manager, etc) and referees in all categories from 7 November 2020 to 4 July 2021. The application was planned to be conducted under the responsibility of the Federation Medical and Anti-doping Committee on Wednesday before the weekend of the games in Ankara, Erzurum, Istanbul and Izmir provinces, and the tests were done in the ice rooms in line with the viewer lists coming from the teams. Athletes, officials, or referees taking the

tests through their own means had to report their negative test results to the federation 24 hours until the game. In the statuses named "Pandemic League Line-up Structures" issued by the Turkish Ice Hockey Federation, the minimum line-up numbers were revised and the compulsory number was reduced. In case of a line-up reduction to be caused by positive cases in the teams, it was expected that the game would be postponed (TIHF, Status, 2020). Therefore, it was ascertained that all of the people in the operation area had negative test results.

As shown in Table 1, a total of 1,343 PCR tests were applied in Ankara province in the 2020-2021 season, of which 8 positive cases were reported (all on 21-22 November 2020). Since the ice rink is used by 7 clubs in Ankara, the number of cases is important. Many teams have to make accommodation for the matches they will play in Ankara. If an Ankara team can't play due to the epidemic, it will affect other teams as well. Therefore, Ankara teams must be protected from the epidemic.

Likewise, a total of 1,135 PCR tests were applied in Istanbul province in the 2020-2021 season and only one positive case was reported (Table 2). Istanbul is the city with the busiest ice hockey operation. Istanbul, with a population of 20 million, has only one Olympic-sized ice hockey field. Since any quarantine situation will affect all ice sports, it is recommended to apply strict rules in Istanbul.

Table 1. Ankara Province PCR applications.

| Ankara | | | | | | |
|---------------------|--|------|----|-----|------|---|
| Activity date | Activity name | Α | 0 | R | - | + |
| 7-8 November 2020 | Super League Competitions | 49 | | 21 | 70 | |
| 14-15 November 2020 | Super / Women's League | 42 | | 17 | 59 | |
| 21-22 November 2020 | Super / Women's League | 50 | 10 | 8 | 60 | 8 |
| 15 February 2021 | Club Athletes Check-up | 37 | 1 | | 38 | |
| 27-28 February 2021 | Super League Competitions | 36 | | 5 | 41 | |
| 6-7 March 2021 | Super / Women's League | 77 | | 16 | 93 | |
| 13-14 March 2021 | Super / Women's League | 72 | 1 | 20 | 93 | |
| 20-21 March 2021 | Super League Play Off / Women's League | 69 | | 12 | 81 | |
| 27-28 March 2021 | Women's League / Premier League | 72 | 4 | 18 | 94 | |
| 3-4 April 2021 | Super League Play Off / Women's League | 80 | | 20 | 100 | |
| 10-11 April 2021 | Super League Play Off / Women's League | 50 | 4 | 15 | 69 | |
| 17-18 April 2021 | Women's League | 16 | 1 | 4 | 21 | |
| 24-25 April 2021 | Premier League | 39 | | 4 | 43 | |
| 22-23 May 2021 | U-20 Youth Men's League | 90 | 1 | 15 | 106 | |
| 29-30 May 2021 | U-20 Youth Men's League | 79 | | 14 | 93 | |
| 5-6-7-8 June 2021 | U-20 Youth Men's League | 86 | | 15 | 101 | |
| 11-12-13 June 2021 | U-18 Youth Women's League | 44 | | 12 | 56 | |
| 19-20 June 2021 | U-18 Youth Women's League | 19 | | 11 | 30 | |
| 3-4 July 2021 | U-20 Youth Men's League | 74 | 1 | 12 | 87 | |
| Total | | 1081 | 23 | 239 | 1335 | 8 |

A: Athlete O: Official R: Referee -Negative +Positive.

Table 2. Istanbul Province PCR Applications

| Istanbul | | | | | | |
|---------------------|--|------|----|-----|------|---|
| Activity Date | Activity Name | Α | 0 | R | - | + |
| 7-8 November 2020 | Super League Competitions | 67 | 7 | 12 | 85 | 1 |
| 14-15 November 2020 | Super / Women's League | 105 | | 8 | 113 | |
| 21-22 November 2020 | Super / Women's League | | | 9 | 9 | |
| 15 February 2021 | Club Athletes Check-up | 47 | 2 | | 49 | |
| 27-28 February 2021 | Super League Competitions | 57 | 4 | 10 | 71 | |
| 6-7 March 2021 | Super / Women's League | 81 | 3 | 9 | 93 | |
| 13-14 March 2021 | Super / Women's League | 59 | 4 | 9 | 72 | |
| 20-21 March 2021 | Super League Play Off / Women's League | 109 | 3 | 9 | 121 | |
| 27-28 March 2021 | Women's League / Premier League | 40 | 5 | 9 | 54 | |
| 3-4 April 2021 | Super League Play Off / Women's League | 93 | 6 | 12 | 111 | |
| 10-11 April 2021 | Super League Play Off / Women's League | 89 | 11 | 12 | 112 | |
| 17-18 April 2021 | Women's League | 48 | 6 | 9 | 63 | |
| 24-25 April 2021 | Premier League | 21 | 2 | | 23 | |
| 22-23 May 2021 | U-20 Youth Men's League | 65 | 1 | 7 | 73 | |
| 29-30 May 2021 | U-20 Youth Men's League | 68 | 2 | 7 | 77 | |
| 5-6-7-8 June 2021 | U-20 Youth Men's League | 64 | 1 | 9 | 74 | |
| 11-12-13 June 2021 | U-18 Youth Women's League | 31 | | 9 | 40 | |
| 19-20 June 2021 | U-18 Youth Women's League | 29 | | | 29 | |
| 3-4 July 2021 | U-20 Youth Men's League | 58 | 1 | 6 | 65 | |
| Total | - | 1131 | 58 | 146 | 1334 | 1 |

A: Athlete O: Official R: Referee -Negative +Positive.

A total of 543 PCR tests were applied in Kocaeli province in the 2020-2021 season and 4 positive cases were reported (Table 3). Since Istanbul and Kocaeli are neighbors, we can talk about the excess of athlete circulation. Many players stay in Kocaeli and play ice hockey in Istanbul. There are only 2 teams in Kocaeli.

A total of 504 PCR tests were applied in Erzurum

province in the 2020-2021 season and no positive case was reported (Table 4). Erzurum is the city where the most ice hockey fields are located in Turkey. We can explain the fact that no positive cases have been found with the number of facilities being 5. In this way, the teams continued their activities in isolation from each other.

Table 3. Kocaeli Province PCR applications.

| Kocaeli | | | | | | |
|---------------------|--|-----|----|----|-----|---|
| Activity Date | Activity Name | Α | 0 | R | - | + |
| 7-8 November 2020 | Super League Competitions | 38 | | 1 | 39 | |
| 14-15 November 2020 | Super / Women's League | 57 | | 2 | 58 | 1 |
| 21-22 November 2020 | Super / Women's League | 35 | 12 | 10 | 54 | 3 |
| 15 February 2021 | Club Athletes Check-up | 31 | | | 31 | |
| 27-28 February 2021 | Super League Competitions | 33 | 3 | 10 | 46 | |
| 6-7 March 2021 | Super / Women's League | 50 | 3 | 11 | 64 | |
| 13-14 March 2021 | Super / Women's League | 55 | 1 | 8 | 64 | |
| 20-21 March 2021 | Super League Play Off / Women's League | 52 | | 8 | 60 | |
| 27-28 March 2021 | Women's League / Premier League | | | | 0 | |
| 3-4 April 2021 | Super League Play Off / Women's League | 38 | 2 | 2 | 42 | |
| 10-11 April 2021 | Super League Play Off / Women's League | 18 | | | 18 | |
| 17-18 April 2021 | Women's League | 25 | | 2 | 27 | |
| Total | | 432 | 21 | 54 | 503 | 4 |

A: Athlete O: Official R: Referee -Negative +Positive.

Table 4. Erzurum Province PCR applications.

| Erzurum | | | | | | |
|---------------------|--|-----|---|----|-----|---|
| Activity Date | Activity Name | Α | 0 | R | - | + |
| 7-8 November 2020 | Super League Competitions | 23 | | 2 | 25 | |
| 14-15 November 2020 | Super / Women's League | 43 | | 12 | 55 | |
| 21-22 November 2020 | Super / Women's League | 20 | | 9 | 29 | |
| 15 February 2021 | Club Athletes Check-up | 35 | | | 35 | |
| 27-28 February 2021 | Super League Competitions | 30 | | 9 | 39 | |
| 6-7 March 2021 | Super / Women's League | 38 | | 10 | 48 | |
| 13-14 March 2021 | Super / Women's League | 37 | | 11 | 48 | |
| 20-21 March 2021 | Super League Play Off / Women's League | 37 | | 13 | 50 | |
| 27-28 March 2021 | Women's League / Premier League | 18 | | | 18 | |
| 3-4 April 2021 | Super League Play Off / Women's League | 20 | | 2 | 22 | |
| 10-11 April 2021 | Super League Play Off / Women's League | 19 | 3 | 5 | 27 | |
| 22-23 May 2021 | U-20 Youth Men's League | 15 | | 2 | 17 | |
| 29-30 May 2021 | U-20 Youth Men's League | 19 | | 9 | 27 | |
| 5-6-7-8 June 2021 | U-20 Youth Men's League | 19 | | 7 | 26 | |
| 19-20 June 2021 | U-18 Youth Women's League | 12 | | | 12 | |
| 3-4 July 2021 | U-20 Youth Men's League | 19 | | 6 | 25 | |
| Total | - | 404 | 3 | 97 | 504 | 0 |

A: Athlete O: Official R: Referee -Negative +Positive.

A total of 145 PCR tests were applied in Izmir province in the 2020-2021 season and no positive case was reported (Table 5). There is only 1 club owned by the municipality in Izmir. The team was formed by players living in Izmir. We can say that the absence of clubhouses and shared accommodation has prevented the spread of the epidemic. The Turkish Ice Hockey Federation did a total of 3670 PCR tests to fight against the pandemic during league activities in the 2020-2021 season and 13 (0.3542%) of these tests were reported to

be positive.

Considering that before the epidemic period, the Turkish Ice Hockey Federation only held 2 seminars each season (TBHF, Statuses). In 2020, online activities with 16 different contents were organized by the Turkish ice hockey federation (Table 6). It can be said that these activities are important in terms of sustainable education models. For developing countries like Turkey, not only players' education but also managers' and parents' education is a prerequisite.

Table 5. Izmir Province PCR applications.

| Izmir | | | | | | |
|-------------------|--|-----|---|----|-----|---|
| Activity Date | Activity Name | Α | 0 | R | - | + |
| 10-11 April 2021 | Super League Play Off / Women's League | 23 | 1 | 15 | | |
| 29-30 May 2021 | U-20 Youth Men's League | 24 | 1 | 16 | | |
| 5-6-7-8 June 2021 | U-20 Youth Men's League | 21 | 1 | 10 | | |
| 3-4 July 2021 | U-20 Youth Men's League | 21 | | | | |
| Total | | 110 | 4 | 41 | 145 | 0 |

A: Athlete O: Official R: Referee -Negative +Positive.

CONCLUSION

Those who have most been affected by the pandemic period include sports clubs and federations that are not allowed to keep a great number of reserves. These clubs and federations usually have financial difficulties and thus face bankruptcy arising from inadequate income. In this

process, sports organizations have become unable to provide financial support to their athletes due to a decline in their income. In this context, as the wage of executives, coaches, athletes and officials, depends on the income of sports organizations, they have faced the risk of unemployment. During the pandemic, athletes have experienced financial loss and their psychological

Table 6. Educational activities.

| Activity Date | Activity Name | Participants | | |
|--------------------------------|---|---------------------|--|--|
| 29th April 2020 | Coaching Seminar: Training at home | 42 | | |
| 6 th May 2020 | Coaching Seminar: Pass and quick play | 45 | | |
| 13 th May 2020 | Coaching Seminar: Forecheck | 40 | | |
| 20th May 2020 | Coaching Seminar: Defansive Systems | 33 | | |
| 27 th May 2020 | Coaching Seminar: Breakout | 38 | | |
| 3th May 2020 | Online Webinar: Being an athlete parents | 82 | | |
| 9 th May 2020 | Online Webinar: Sports & Genes | 72 | | |
| 10 th May 2020 | Referee Seminar: On Ice | 27 | | |
| 17 th May 2020 | Referee Seminar: Management Standarts | 21 | | |
| 31st June 2020 | Referee Seminar: Uncommon Situations | 30 | | |
| 6 th June 2020 | Referee Seminar: Penalties | 31 | | |
| 14th June 2020 | Referee Seminar: Off-Ice & Online Systems | 67 | | |
| 17 th May 2020 | Referee Seminar: Statuses | 44 | | |
| 30 th May 2020 | Online Webinar: Sports Injuries | 62 | | |
| 19 th December 2020 | Coaching Seminar: Development | 19 | | |
| 20th December 2020 | Coaching Seminar: Youth coaching | 20 | | |
| Total | | 673 | | |

and physical performance have been also adversely affected (Devecioğlu, 2020).

In the study by Göksel (2020), it was indicated that starting sports organizations within the frame of certain policies and rules will cost extra expenditures for sports clubs and federations and all governments and international confederations (such as FIFA, UEFA) are to provide more financial support to the sports industry and undertake a part of possible economic burdens on clubs and federations in the normalization process. From this point of view, the Turkish Ice Hockey Federation must undertake the financial obligation of 3670 PCR tests (costing about 103,000 USD as of 2021) for clubs to sustain their economic existence.

Sports federations are obliged to protect their shareholders, especially in crisis times. Sports clubs are the most important shareholder of federations in sustaining their activities, as well. In crises like pandemics where sports clubs continue to have expenditures without earning income, national and international sports organizations are expected to prepare emergency support packages. Besides the economic dimension, sports clubs need psychologically and physiologically good executives, coaches and athletes for stability and success. COVID-19 has undoubtedly affected all circles in the sports industry negatively in both dimensions. Therefore, sports federations are to follow policies that may protect, support, and encourage all their shareholders.

The main source of finance for ice hockey clubs in Turkey is dues payments. With the onset of the pandemic, the Turkish government bans the activities of athletes under the age of 20. Therefore, we can say that there is a great decrease in the financial resources of

sports clubs. The Turkish ice hockey federation has committed to providing financial assistance to the clubs in line with their activities. (TBHF, Players and Coaching Support Instruction). According to this instruction, clubs will be able to receive financial support from the federation if they employ foreign players and coaches. Sports clubs generally use this financial aid for coach and player salaries and equipment.

Turkish ice hockey federation has provided financial support to sports clubs with the pandemic financial support package it has published, even if they do not participate in activities.

Many ice hockey clubs around the world shut down due to covid-19 (Mendlowitz et al., 2021). We can say that the free education activities of the Turkish Ice Hockey Federation and the financial aid it provided to sports clubs have kept the clubs alive during the covid-19 period. Many sports federations in Turkey such as handball and basketball have requested PCR test applications from sports clubs (Turkish Handball Federation, 2021). From this point of view, the fact that the Turkish ice hockey federation covers the PCR test cost of approximately 103,000 dollars can be considered as an important support for sports clubs.

Based on the study, the following suggestions can be made for all sports organizations:

- Create sustainable sports policies.
- Prepare immediate action plans to manage crises,
- Provide dominance in all operation areas and increase controllability.
- Establish financial support funds,
- Plan corporate communication in such a way that all communication channels within the organizational

hierarchy remain open.

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