

Original Article

Training Adaptations and Seasonal Health: Their Cumulative Effect on the Physical Fitness Profile of All India Inter-University Athletes

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Abstract

Purpose: To examine the effect of seasonal diseases on women netball player during all India inter-university Netball women's tournament held at the central university of Haryana.

Material and method: In this tournament, 40 players from different universities suffered severe illness due to the environment. Those age ranging from (18 to 25). In this competition, many players were admitted/attend to the health center due to different seasonal diseases, due to which their team performance was affected. Headache, fever, cough, cold, sore throat, vomiting, loose motion, stomach pain and weakness have been seen more often. That's why we sucked these as variables.

Results: We found by our observation method that there were two players were suffered by stomach pain and vomit, one player who suffered by stomach pain and cough, five players were suffered by weakness and nausea, three player by cold and cough, three players by fever and cough, five players by sore throat and cough, two players by fever and headache, two players by fever and common cold and two players suffered by common cold and headache.

Conclusion: In the last, we can say that teams from different states of India come to this tournament, which have their own culture, different environment and weather. This affects their performance because this competition was organized in Haryana in winter, so many teams whose training is not in this environment. Because of environmental adaptation many team players suffered from different types of diseases, and it impacted his team performance.

Keywords: Seasonal diseases, Environment, Performance, Adaptation, Netball, Women

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Introduction

Netball is the most popular game in the world and it is played all over the world as well as India as a team game. As we know that the environment of different country is varied to each other (George & Dhull, 2023; Nara, 2015; Nara & Singh, 2020; Sagre & Ahlawat, 2023). Similarly, to every state of India have different environment and weather to each other. So, the player of different states is played and trained in different type of environment (Deepak et al., 2022a; Kumar, Dhull, et al., 2023).

All India inter university woman netball tournament was organized 15 to 18 February 2023 at central university of Haryana (Deepak Kumar, 2023; Deepak et al., 2022a, 2022b; Kumar, Dhull, et al., 2023; Kumar, Nara, et al., 2023; Kumar & Dhull, 2023; Nara, Kumar, Rathee, & Kumar, 2022; Singh & Sharma, 2020). At that time there was winter session that is very different from other states of country. The team which were belong south reason of India felt very cold and which team belong to Delhi, Punjab etc. were felt cold at night and heat at day temperature. Mostly teams were affected by environment seasonal diseases. It was observed and all data collected from the health center of central university of Haryana. To know how many player was affected and by seasonal diseases and which seasonal diseases affect more (Deepak et al., 2022a; Henriksson et al., 2019; Kumar & Dhull, 2023; Nara, Kumar, Rathee, & Phogat, 2022).

Seasonal disease/infection

Seasonal infections include illnesses like the rainy season and winter illnesses that are more common during specific periods of the year. In order to be ready for them, we must remain educated about their causes and symptoms.

“Seasonal infections of humans range from childhood diseases, such as measles, diphtheria and chickenpox, to faecal–oral infections, such as cholera and rotavirus, vector-borne diseases including malaria and even sexually transmitted gonorrhoea”^[1]

Both temperate and tropical climates experience seasonal variations in the prevalence of infectious diseases. With rare exceptions, the processes underlying the occurrence of seasonal diseases and the associated epidemiological effects are not well known. The consequences for treatments that themselves may be periodic, such as pulse vaccination, have not been officially studied.^[1]

Methodology

Woman netball all India inter university tournament was organized at the central university of Haryana. More than 70 universities apply to registration but participant universities were only 52 from different states. Most of them face the environmental problems and seasonal diseases such as fever, cold, cough etc. they were admitted or attend to the health center of central university of Haryana. Data was collected from the health center of university. Those entire women netball players were selected who was belonging to other than central university of Haryana because player of this university was adapted of this environment. Those players also excluded which was injured during the tournament.

Only those netball players selected who was suffering from Headache, fever, cough, cold, sore throat, vomiting, loose motion, stomach pain, weakness etc. In this tournament, 40 players from different universities suffered severe illness due to the environment. Those age ranging from (18 to 25). Most of them were suffering two or more diseases such as any player suffering by cough and fever, any player suffering by cold, cough and sore throat and any player suffering by stomach pain and loose motions etc.

Results

According to the data collected from health center of the university there were more than 60 players were attend or admitted at health center but in this study only 40 players were selected those suffered by common seasonal diseases. We found by our observation method that there are 7 players who have fever, 9 players who have common cold, 11 players who have to cough, 8 players who have headache, 5 players who have sore throat, 6 players who have stomach pain, 4 players who have loose motion, 5 players who have vomit and 5 players who record weakness.

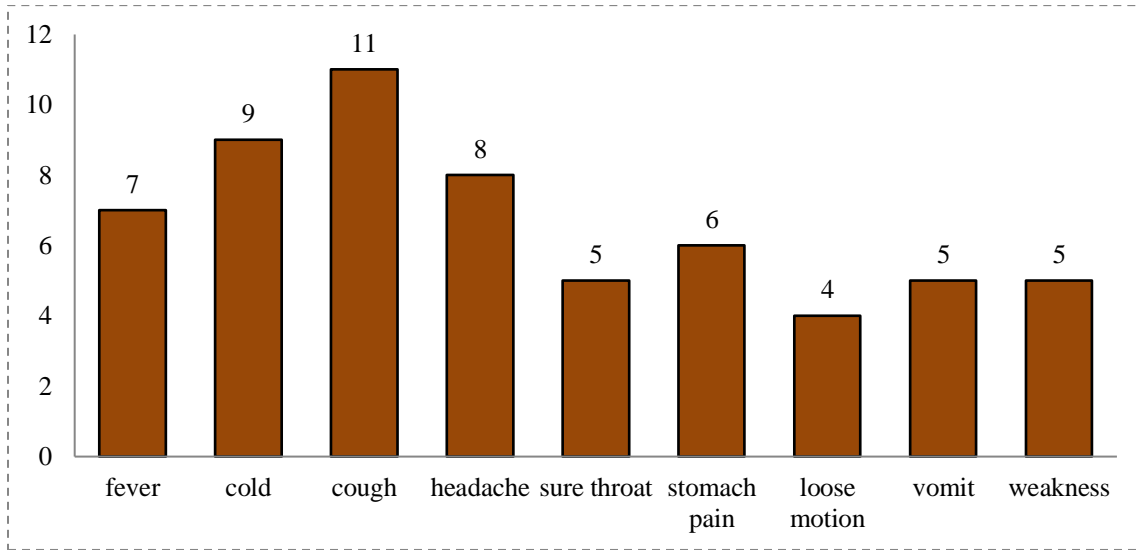


Figure 1 Shows the prevalence of seasonal disease

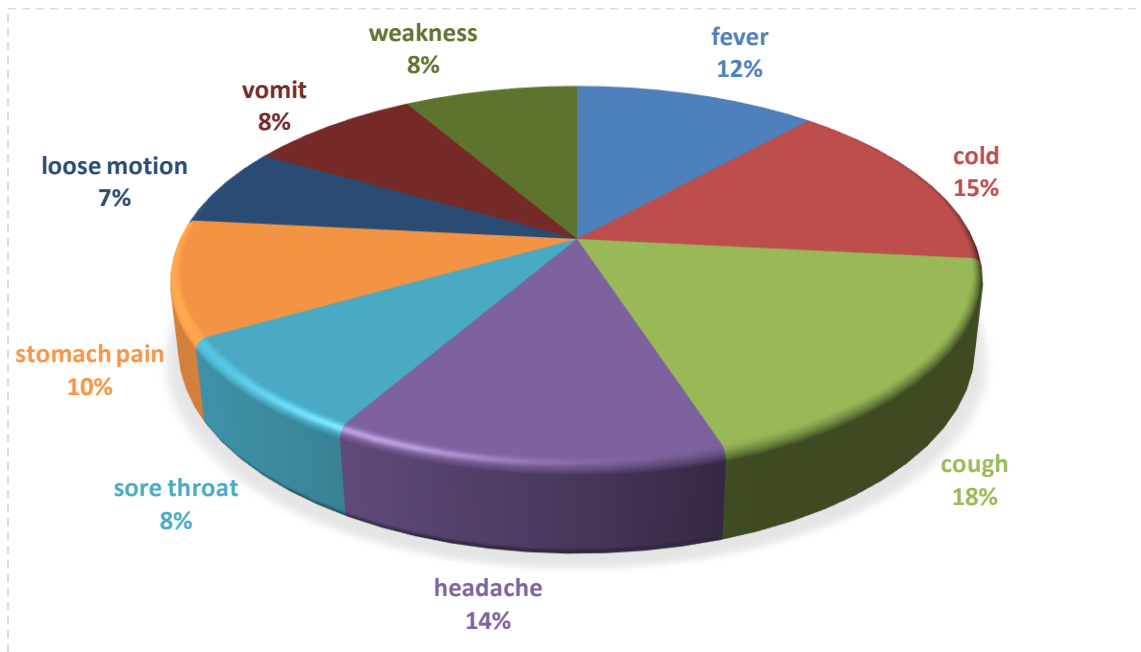


Figure 2 Frequency distribution (Percentage) of players in context of health-related outcomes

Player who suffered by only single disease: - Two players who was suffered by only common cold, two players suffered by only cough, four players by only headache, three players by vomit, four players by loose motion and three players were suffered by stomach pain.

Player who was suffered by more than one disease: - two players were suffered by stomach pain and vomit, one player who suffered by stomach pain and cough, five players were suffered by weakness and nausea, three players by cold and cough, three players by fever and cough, five players by sore throat and cough, two players by fever and headache, two players by fever and common cold and two players suffered by common cold and headache.

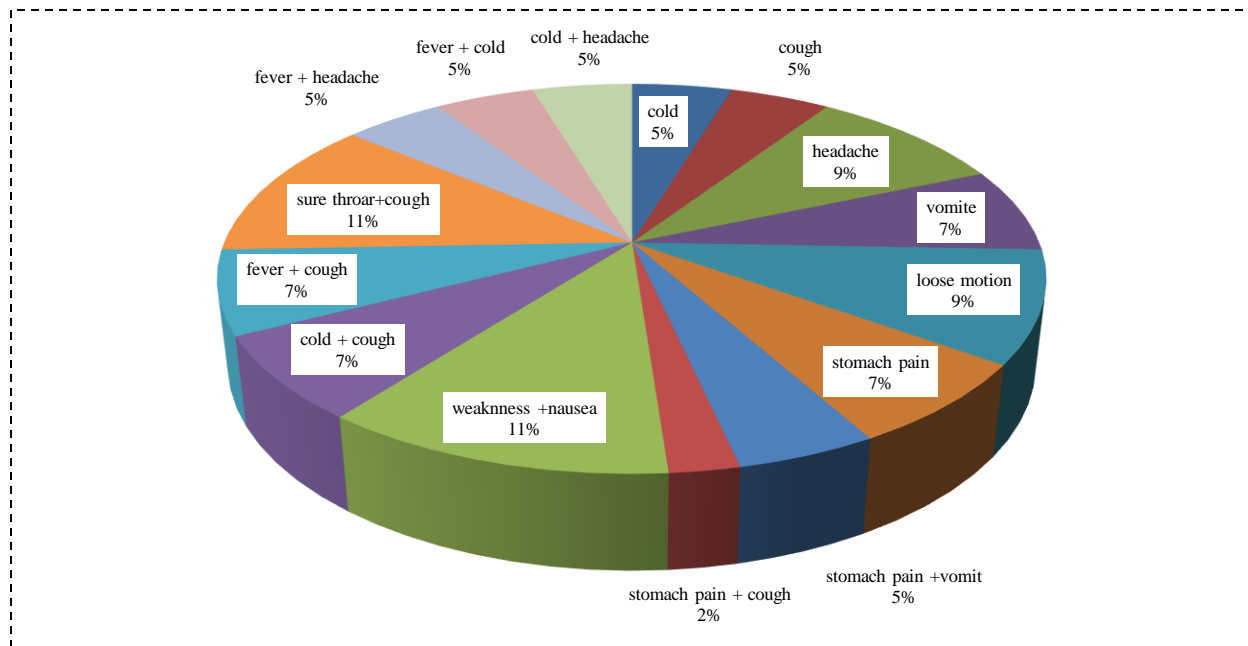


Figure 3 Frequency distribution in terms of percentage

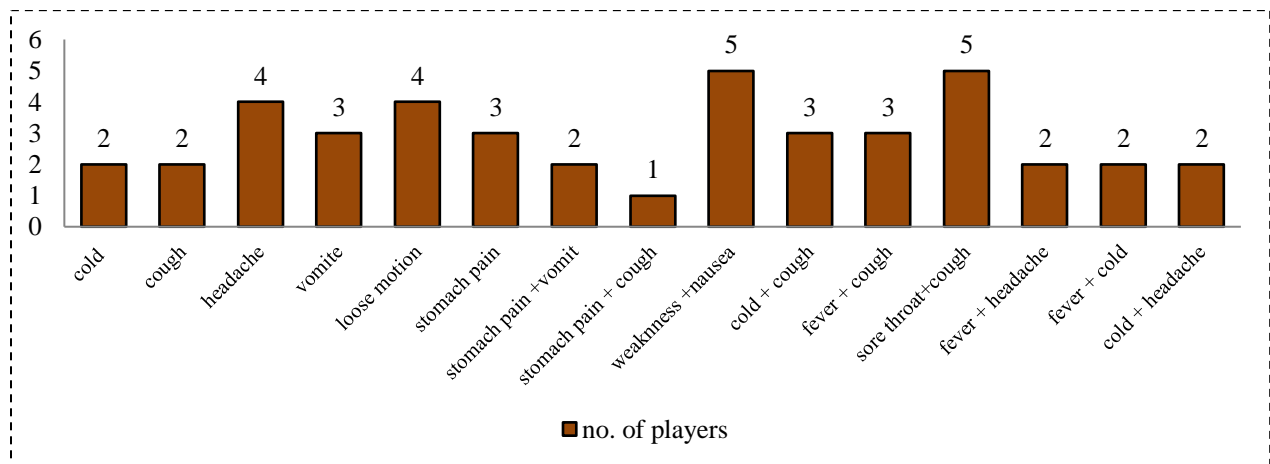


Figure 4 Bar diagram with health-related outcomes

Conclusion

most of them players were suffered by cough fever and common cold. In the last, we can say that teams from different states of India come to this tournament, which have their own culture, different environment and weather. This affects their performance because this competition was organized in Haryana in winter, so many teams whose training is not in this environment. Because of environmental adaptation many team players suffered from different types of diseases, and it impacted his team performance. Hockey world cup was organized at Odissa in India mostly teams were arrived about 20 days before the tournament because of awareness about the adaptation of environment. Lack of adaptation of environment affects the performance.

Conflict of Interest: No conflict among authors

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