



Short Communication

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Impact of bio-bubble on the mental health of elite cricketers during the COVID-19 pandemic: The bio-bubble fatigue

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Abstract

Ever since the resumption of cricket during COVID-19 pandemic, players and support staff have to stay in an isolated environment during the tournaments to prevent the risk of contracting COVID-19 from the external environment. This can have an adverse effect on the mental health of the players as they have to spend a lot of alone time, which can lead to introspection and rumination consisting of constant negative feelings. The authors evaluated media reports published between 1st July, 2020 and 31st May, 2021, on players withdrawing from a tournament midway or players who pulled out of an entire tournament citing bio-bubble fatigue (mental fatigue due to the bio-bubble environment) and found eight such cases. Mental fatigue builds in a cumulative manner, and therefore, more players are likely to suffer from bio-bubble fatigue during the next couple of months if this issue is not addressed. The authors recommend that every team must have a sports medicine physician/ sports psychologist at all times during the tournaments to make sure that the players remain mentally fit during this phase of COVID-19 pandemic.

Keywords: COVID-19, Bio-bubble, Sports psychology, Mental fatigue.

INTRODUCTION

Cricket is a non-contact team sport, and the risk of airborne transmission of coronavirus disease 2019 (COVID-19) from one player to another during a game of cricket is extremely low [1]. On 22 May, 2020, the International Cricket Council (ICC) released guidelines to the member associations for safe resumption of International and domestic cricket [2]. As part of the protocol to create and maintain the bio-bubble, before the tournament, the players are quarantined in their hotel rooms for a time period of ranging from 5-14 days as per the host country/ member association guidelines. During the tournament the players are required to stay in an isolated environment and their movement is restricted to either the hotel or the cricket stadium. Due to the amount of cricket played, most players have been travelling directly from one bio-bubble to another bio-bubble during the past few months.

A total of 19 bilateral international tournament (each tournament consisting of variable number of test matches/ one day internationals/T20 internationals) and 3 franchisee based T20 league tournaments have been held between July, 2020 till May, 2021 in bio-bubbles. The average duration of one international bilateral series during this period was 20.63 days while that of one franchisee T20 league was 41.66 days.

The players have to spend a long period of time away from their families. Moreover, during the pre-competition quarantine phase, players are restricted to their hotel rooms only. This can have an adverse effect on the health of the players as they have to spend a lot of alone time, which can lead to introspection and rumination consisting of constant negative feelings [3]. The players are susceptible to various mental health issues including mental fatigue, depression, anxiety or insomnia [4]. In most of the cases there will be no signs in the athlete on general physical examination and diagnosis need to be made on the basis of the presence of various symptoms including feeling low, sleep disturbances, anxiety, change in eating habits and a lack of motivation. Mental health issue needs to prompt identification and treatment as not only can it affect the performance of the player on the field, but it can also have an adverse impact on his physical health and personal life.

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The authors evaluated media reports published between 1st July, 2020 and 20th April, 2021, on players withdrawing from a tournament midway or players who pulled out of an entire tournament citing bio-bubble fatigue (mental fatigue due to the bio-bubble environment). The reports in which players themselves confirmed having bio-bubble fatigue were included for the final analysis as per the methodology (figure 1). The authors found a total of eight reported cases of bio-bubble fatigue in cricketers during this period. Cricket is a low intensity skilled sport requiring high amount of concentration especially during batting and wicket keeping [5]. Mental fatigue has been directly linked to prolonged to prolonged cognitive activity, therefore batsmen, wicketkeeper batsmen and all-rounders are especially more prone to develop mental fatigue [6]. Similar trend is seen upon the analysis of the playing roles of the eight players who have reported bio-bubble fatigue. Out of these eight cricketers, six players (75%) are batsmen, wicketkeeper batsmen or all-rounders. However, no clinical research study has been published on this issue till date.

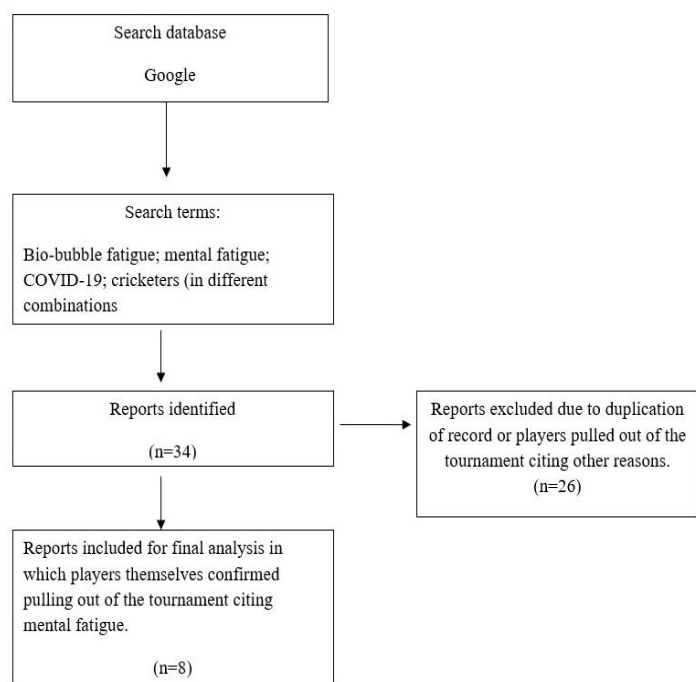


Figure 1: Flowchart summary of the selection process

Some of the techniques which can be used to prevent bio-bubble fatigue among cricketers include: (i) relaxation techniques including yoga exercises, deep breathing, massage, aromatherapy; (ii) group activities and fun games involving other members of the team; (iii) practicing shadow exercises during hotel quarantine period; (iv) develop an attitude of gratitude: players should reminded that they are still able to follow their passion despite the pandemic.

The COVID-19 pandemic is far from over and therefore the cricket tournaments are expected to be held in bio-bubbles only in the near future. Mental fatigue builds in a cumulative manner [7], and therefore, more players are likely to suffer from bio-bubble fatigue over the next couple of months if this issue is not addressed.

CONCLUSIONS

To conclude, the authors recommend that every team must have a sports medicine physician/ sports psychologist at all times during the tournaments to make sure that the players remain mentally fit during this phase of COVID-19 pandemic.

Conflicts of Interest

The authors declare no conflict of interest.

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Authors' contributions

Naveen Bansal conceptualised the study. All authors were involved in data compilation, data analysis and review of literature and manuscript writing. All authors read and approved the final version of the manuscript to be submitted.

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