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Comparative Analysis of Self-Confidence, Endurance, and Physical Ability among Indigenous Sports Players at University Level

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Abstract

Physical education plays a vital role in enhancing both psychological and physiological capacities of university students. Indigenous sports, rooted in traditional cultural practices, contribute significantly to the development of physical fitness and personality traits among players. The present study aims to conduct a comparative analysis of self-confidence, endurance, and physical ability among university-level indigenous sports players. Indigenous games such as Kabaddi, Kho-Kho, and traditional wrestling demand agility, stamina, coordination, and mental resilience, which positively influence athletes' performance and personality development.

The study adopts a comparative research design involving university players actively participating in indigenous sports and those involved in general physical activities. Data were collected using standardized psychological scales and physical fitness tests. The findings indicate that indigenous sports players demonstrate higher levels of endurance, improved physical efficiency, and greater self-confidence compared to non-indigenous sports participants. The study highlights the importance of promoting indigenous sports within university curricula to achieve holistic development and preserve traditional sporting culture.

Keywords

Indigenous Sports, Self-Confidence, Endurance, Physical Ability, University Players, Physical Fitness

1. Introduction

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A mathematical non-linear model of the dynamics of co-infection with Rubella and influenza-like illness after Rubella immunization

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Abstract-

The purpose of this research was to investigate the possibility of using Rubella vaccinations to mitigate the spread of influenza-like illnesses. There is a striking similarity between these two diseases in terms of their epidemiological and clinical features. To better comprehend the interplay between Rubella and other influenza-like illnesses, we construct and examine a mathematical model in the form of nonlinear simultaneous differential equations based on the concept of compartments. In order to account for the impact of limited treatment resources in preventing further Rubella outbreaks, we have added the saturated treatment rate into our work. This model answered the question of which disease, if either, will eventually be eradicated from the human population by using a multi-step mathematical modeling analysis that included a stability analysis and a "next generation matrix" (NGM). Two fundamental reproduction numbers (R_{01} for Rubella and R_{02} for ILI) were calculated using the next generation matrix and the disease-free critical point. Under the first scenario, where $R_{01} < 1$ and $R_{02} < 1$, the disease-free critical point will be stable, leading to the eradication of Rubella and ILI from the human population. The second scenario, when $R_{01} > 1$ and $R_{02} < 1$, causes the previously disease-free critical point to become unstable, indicating the presence of Rubella-infected individuals in the population. Under the third scenario, in which $R_{01} < 1$ and $R_{02} > 1$, the human population will have ILI. We conclude by conducting numerical simulations of the co-infection model to investigate how changing the model's parameters affects the population's compartmentalization.

Keywords- Rubella epidemic disease, ILI, Basic reproduction number, Disease free equilibrium (DFE)

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