



## Impact on Health Related To Dust on Playfields In Physical Education Colleges



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### A B S T R A C T

*Sports and Games as a vital component of social and cultural life are embedded in the Indian heritage, found in archaeological excavations of Mohenjo-Daro and Harappa, Vedic literature, Ramayana and Mahabharata, Puranas, literary works of Kautilya, Kalidasa, Panini and Dandin and in Buddhist and Jain literatures. Recently, standards and levels of endurance, fitness and performance displayed by sportspersons have improved exponentially; the number of competitive sports disciplines has increased with inclusion of many new games. Massive growth and sophistication in the spheres of media and communications and the visibility of competitive sports has grown enormously. Maximum research has been conducted related to low level of participation in physical activity but the health problems and diseases associated with poor quality of Play fields and Track in Physical Education [PE] colleges is also a major concern for research. Findings in this study provide evidence that the subjects are medically unfit with the present condition of playfields / grounds / Track(s) in PE colleges and are suffering from various health problems due to impact of non availability of proper playfields / grounds / Track(s) as per norms in PE colleges.*

### Introduction

Professional lives of teachers have significantly changed during past few decades. Education reforms and IT has brought fresh knowledge which has challenged the current nature of PE. Many researchers have pointed out that the improvements in the quality of teachers' instruction and pupils' learning are, to some extent reliant upon improvements in the quality of teachers' professional learning (Borko, 2004; Fishman, Marx, Best, and Tal, 2003). Compared with the research on professional development of teachers in other educational fields, research development on PE teachers has been slower.

Lucas and Wallace (1971) have suggested moving the classroom onto the playground or rather making the playground a classroom is the need of an hour. In PE students learn spontaneously through their interaction with other students on playfields, which is a place where this can occur within the framework of the curricula provided proper guidance of teacher and the initiative of the students are utilized. Playground/ field are not a flat, treeless, dusty playing field.

The new concept of playground is to develop the outdoors to its fullest potential as a learning center. It utilizes students natural "work play" in spontaneous and planned learning situations. The teacher participates in, but remains a background figure in all practical activities in PE curriculum. The playground therefore becomes a flexible, changing environment where the students can acquire new skills and strengthen old ones. It will help further for the cognitive growth by psychomotor and effective learning. The assimilative adjusts external reality to the self, while the accommodative adjusts the students' reality to exter-

nal forces. Lucas and Wallace have described play as the expression of inner feelings, curiosity and creativity that involves exploratory behaviours problem solving. On the playground in PE teachers want to stimulate creative and imaginative play by fabricating an environment that will challenge the students mind and body with interesting activities. Play grounds in PE colleges should be high places, open space, flat places and for Track, curved objects and straight objects. Playgrounds and fields should be opposite of sun and shade, smooth, grassy and paved and dry.

### Symptoms of asthma

\* Coughing, o Wheezing (a whistling or squeaky sound during breathing)

\* Chest tightness, o Shortness of breath Symptoms can vary in severity; they can be mild or moderate and affect activity levels, or they can be severe and life threatening. Asthma triggers and symptoms vary from one person to another. Some children have asthma symptoms only occasionally, while others have symptoms almost all the time.

### Common Asthma Triggers

Although triggers that cause an asthma episode vary among individuals, there are several common triggers.

- ❖ Allergens such as pollen, animal dander, dust mites, cockroaches, and molds
- ❖ Irritants such as cold air, perfume, pesticides, strong odors, weather changes, and chalk dust
- ❖ Respiratory infections such as a cold or the flu
- ❖ Physical exercise, especially in cold weather.

Construction of the playground  
A Project Team planning should be the primary focus while initiating a playground construction project. Plan-

ning new playground must be a cooperative effort of experts and trained teachers considering latest patterns and desires. Some code of behaviour must be made for safety, clean-up and maintenance of the playground to remain dust free. One of the most critical considerations of the playground planning process involves is its maintenance. Regular and continuous inspections and maintenance are required to keep the new playground functional, safe, and attractive and in compliance with prescribed norms.

Vandalism, weathering, heavy use, and other factors have a tremendous impact over the life of the playground. A comprehensive maintenance program must include regular inspections, a procedure for repairing components that break, wear out, or are vandalized, raking or sweeping of the surface, etc. In addition, annual playground renovation elements may include adding surfacing material, painting equipment, and completing major repairs must be done. The planning needs to factor in future maintenance costs when looking at the life cycle costs of the playground.

During the planning process, it is important to recognize that some playground designs translate into higher maintenance costs than other designs. Similarly, loose-fill surfacing materials (sand, gravel, etc.) require considerably more maintenance than unitary surfacing materials (rubber mats or composite surfacing) over the life of the playground. Most unitary surfacing materials, including rubber mats, tiles, and poured-in-place surfaces are considered to be accessible if properly installed.

**Objective**

The complex situation, fast changes and various pedagogical traditions complicate the creation of a systematic view of the current PE curricula reforms. The objective of this paper is to highlight the most important health related aspect in PE colleges related to playfields which should also be considered on top priority.

**Purpose**

The study may help to provide information and assistance in the planning, design, installation, and maintenance of playgrounds. The goal is to develop playgrounds that are fun, challenging, and safe for health related aspect in PE colleges. Another purpose it may guide to reduce the frequency and severity of injuries on playgrounds. India is facing a serious double burden of diseases and are being exposed to high levels of pollution. In Indian cities, among the most polluted in the world, available mortality and morbidity statistics indicate that respiratory infections and chronic conditions are widespread.

**Delimitation :-** The study was delimited to the Physical Education colleges affiliated to S.G.B. Amravati Uni-

versity, Amravati having NAAC gradation.

**Limitations**

1. The study was limited to teaching staff, non teaching staff and students of Physical education colleges.
2. The subjects for study should be living and working in that selected areas for more than a year, and be a non smoker.

**Methodology**

A sample of 577 respondents was taken for the study which includes staff and students of PE colleges. A pretested structured interview schedule was prepared to collect the data. Respondents were asked to rate the symptoms. The present study was undertaken to assess the health related aspect of students and staffs of PE colleges.

**Findings**

**Symptoms of diseases**

From the above Table it is analysed that maximum respondents are suffering from Asthma, Nausea, Sneez-

Type of Diseases	No. of Respondents
Asthma	86
Chest pain	12
Cough	51
Dry cough	45
Headache	35
Irritation of eyes	23
Irritation of nose	14
Nausea	78
Nose block	69
Poor eye sight	33
Respiratory infection	44
Skin diseases	15
Sneezing	72

ing, Nose block, Cough, Dry cough, Respiratory infection, Headache, Poor eye sight and very few respondent suffer from Irritation of eyes, nose, Skin diseases and Chest pain due to the effect of dust on playfields / grounds / Track(s) in PE colleges.

**Conclusion**

In conclusion researcher suggests that proper plan for the playgrounds / fields / Track should be prepared and all related norms must be strictly followed. Students can participate in their exercise and games activities and can give optimum performance in their exams and must also exhibit responsibility, thoughtfulness of others which is expected in PE colleges. Efforts should be undertaken to upgrade the facilities and preparation of grounds with the help of technology and adopt eco friendly practices in order to reduce the dust level. Government should take efforts for strictly following the norms as laid for PE colleges. Also, there are a wide variety of site amenities that can be used to complement a playground. In particular,

amenities such as drinking fountains, benches, shade trees, and restrooms that can look attractive should be provided. Site amenity considerations include:

- ❖ Locate a drinking fountain in a central use area.
- ❖ Place benches in shady areas with clear site lines that allow supervision of the playground and be located on an accessible route.
- ❖ Install annual and perennial flowers to add to the sensory interest and learning value of a playground.
- ❖ Place trees where they provide shade during the heat of the day but far enough away that falling branches and other tree litter do not affect the playground.
- ❖ Place bicycle racks adjacent to playgrounds to avoid having bikes in the play area.
- ❖ Put trash and recycling cans with lids near the playground. Lids will discourage animals and vandalism.
- ❖ Security lighting should be provided for nighttime users.
- ❖ Hard surface play areas can be located near a play ground if space is available.
- ❖ All Playground Surfaces must have safe surfaces around playground equipment are at least 12 inches deep and extend at least 6 feet in all directions.
- ❖ Check for open "S" hooks, protruding bolt ends, or sharp points or edges on equipment.
- ❖ All platforms, steps, and ramps have guardrails to prevent falls.
- ❖ Proper watering facilities must be available for play grounds.

## **REFERENCE**

- 1 Allison, L. (2000). Taking sport seriously, Meyer & Meyer Sport. 2nd Edition, Oxford: Uk
- 2 Borko H. (2004) Professional development and teacher learning: Mapping the terrain. Educational Researcher 33(8):315.
- 3 Coakley, J.J. (1998). Sport in Society: Issues and Controversies, (6th ed.) St.Louis.
- 4 Fishman BJ, Marx RW, Best S, Tal R(2003) Linking teacher and student learning to improve professional development in systemic reform. Teaching and Teacher Education 19(6):643-658.
- 5 Lucas J.D. and Wallace G.N.(1971). The Playground as a learning Environment, TTT Early Childhood Training Project, New Mexico.
- 6 Vogler, C. & Schwartz, E. (1993). The sociology of sport: An introduction, Prince Hall, New Jersey.