Knowledge on dehydration during physical activity among physical education teachers in Jaffna district.

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Abstract - In recent years, dehydration issues are increasing dramatically in Jaffna district. An awareness level of physical education teachers on preventing dehydration is considered as one of the main factor. Major objective of this study is to assess the level of knowledge on dehydration during physical activity among physical education teachers in Jaffna district. One hundred and twenty three physical education teachers were randomly selected as subjects from 180 teachers. The data were collected by self-administrated questionnaire. Collected data were statistically analyzed by descriptive statistic technique. The results revealed that the knowledge level of the teachers in Jaffna district was 33.292 out of 100. Study revealed that physical education teachers' level of knowledge on preventing dehydration issues in Jaffna district was poor. Hence, effective dehydration education will support to enhance knowledge level of physical education teachers on preventing dehydration issues in Jaffna district was recommended.

Key words: Dehydration, Knowledge, Physical, Prevention.

1. INTRODUCTION

There are many different levels of the physical activities different from the track events, field events and games. Each requires different degrees of ability, fitness, skills and commitment. Dehydration issues are most common due to prolong repetitive movement therefore physical demand play an important role in the performance. Physical requirements of the participants and dehydration proportions have been analyzed time to time to enrich performance of the participants and minimize dehydration issues ratio. *(R. Bartlett)*

The present study also intent to identify the physical education teachers' knowledge level on preventing dehydration issues in Jaffna district towards safer future. Dehydration issues end many sportsmen career in Jaffna district. The number of issues can be anticipated to increase because of the increasing popularity of the sport in Jaffna district. Injury prevention is an effort to prevent or reduce the severity of injuries caused by internal and external mechanisms. Injury prevention is a component of safety and players health, and its goal is improve the sports performance and health of the players by preventing injuries and improving quality of sports life. *(Benjamin F. Johnson)*

The role of water and hydration in physical activity, particularly in athletes and in the military. During challenging athletic events, it is not uncommon for athletes to lose 6–10% of body weight in sweat loss, thus leading to dehydration if fluids have not been replenished. However, decrements in physical performance in athletes have been observed under much lower levels of dehydration, as little as 2%. Under relatively mild levels of dehydration, individuals engaging in rigorous physical activity will experience decrements in performance related to reduced endurance, increased fatigue, altered thermoregulatory capability, reduced motivation, and increased perceived effort. Rehydration can reverse these deficits, and also reduce oxidative stress induced by exercise and dehydration. Hypo hydration appears to have a more significant impact on high-intensity and endurance activity such as tennis and long-distance running than on anaerobic activities such as weight lifting or on shorter-duration activities, such as rowing. During exercise, individuals may not hydrate adequately when allowed to drink according to thirst. After periods of physical exertion, voluntary fluid intake may be inadequate to offset fluid deficits. Thus, mild to moderate dehydration can therefore persist for some hours after the conclusion of physical activity. Research in athletes suggests that, principally at the beginning of the season, they are at particular risk for dehydration due to lack of acclimatization to weather conditions or suddenly increased activity levels. A number of studies show that performance in temperate and hot climates is affected to a greater degree than performance in cold temperatures. Exercise in hot conditions with inadequate fluid replacement is associated with hyperthermia, reduced stroke volume and cardiac output, decreases in blood pressure, and reduced blood flow to muscle. During exercise, children may be at greater risk for voluntary dehydration. Children may not recognize the need to replace lost fluids, and both children as well as coaches need specific guidelines for fluid intake. Additionally, children may require longer acclimation to increases in environmental temperature than do adults. Recommendations are for child athletes or children in hot climates to begin athletic activities in a well-hydrated state and to drink fluids over and above the thirst threshold. *(Barry M. Popkin, Kristen E. D'Anci, and Irwin H. Rosenberg)*

A physical education teacher may also be a coach can make the potential changes in cricket performance through application of appropriate preventive measures. Hence the purpose of the study was 'Towards dehydration free sport through identifying the physical education teachers' knowledge level on preventing dehydration issues in Jaffna district'.

OBJECTIVE OF TH E STUDY.

To assess the level of knowledge on dehydration during physical activity among teachers of physical education in Jaffna District.

2. METHODS

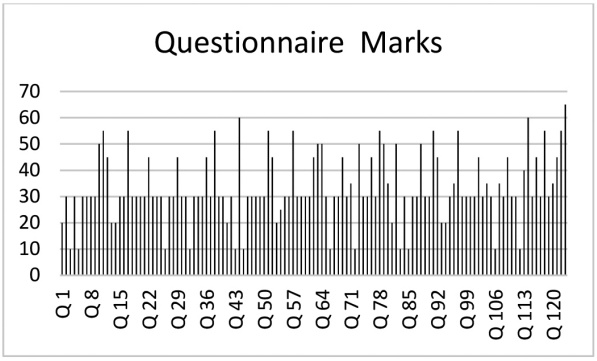
To achieve the purpose of these study 123 physical education teachers were selected from Jaffna district purposive sampling with random group design. Data were collected by using self- administrated questionnaire.

First four chapters of the questionnaire included minor objectives details or questions. Fifth chapter of the questionnaire is the major objective of this study. Final part of the questionnaire included suggestions or recommendations of the study.

The analyzing of this study was descriptive statistic method with frequency and mean, conducted by two types that is first four part analyzed questions collectively. Fifth part of major objective questions analyzed separately. That means each and every questionnaire got 100 marks for major objective part. Mean or average of the major objective part of the all 123 questionnaires showed the result of this study.

3. RESULTS

The collected data were analyzed and presented in this chapter. The charts were drawn by the 2013 Microsoft excel. The results revealed each and every 123 samples marks.



3.1 Statistical Analysis.

=AVERAGE(20,30,10,30,10,30,30,30,30,50,55,45,20,20,30,30,55,30,30,30,30,45,30,30,30,10,30,30,45,30,30,10,30,30,30,45,30,55,30,30,20,30,10,60,10,30,30,30,30,30,55,45,20,25,30,30,55,30,30,30,30,45,50,50,30,10,30,30,45,30,35,10,50,30,30,45,30,55,50,35,20,50,10,30,10,30,30,50,30,30,55,45,20,20,30,35,55,30,30,30,30,45,30,35,30,10,35,30,45,30,30,10,40,60,30,45,30,55,30,35,45,55,65)

=33.292.

4. DISCUSSION

Physical activity is a most important by both men and women in the world and the severity of the dehydration issues also differ from track events to field events. Dehydration issues are most common due to prolong repetitive movement therefore physical demand play an important role in sports performance. Physical requirements of the students and dehydration injury proportions have been analyzed time to time to enrich performance of the students and minimize dehydration injury ratio. *(A Sheikh)*.

The present study also intent to identify the physical education teachers' knowledge level on preventing dehydration issues in Jaffna district towards safer future.

Playing condition and temperature can affect the students in many ways. Pre-hydration (drinking water before exercise) reduces the physiological strain on the body in hot and humid environments. Pre and post-match snacks with adequate hydration by pure filtered water or diluted fresh juices can prevent the injuries. According to these factors this study was conducted in Jaffna district.

The total outcome of this study revealed that the knowledge level of the physical education teachers in Jaffna district was 33.292. From the result it was concluded that level of knowledge on dehydration issues in Jaffna district was poor.

5. CONCLUSION

From the results of the study the following conclusions were drawn. To assess the level of knowledge on dehydration during physical activity among teachers of physical education in Jaffna District was the major statement of this research study. Survey questionnaire was the key element to analyze the knowledge and the theoretical understanding to preventing dehydration issues in Jaffna district towards safer future.

Questionnaire included as important sectors of the dehydration injury prevention, the knowledge level of physical education teachers on preventing dehydration issues in Jaffna district by their knowledge and attitude on warm- up, warm -down, playing condition, temperature, strength and conditioning with intellection about the dehydration problems, causes and mechanism of the injuries and preventive measures with effectiveness of the preventive measures. Questionnaire data can generate the expected or anticipated outcomes by the objectives of the research study. Here some limitations also was influenced the outcomes. So above objectives was analyzed by the descriptive statistical method to get the outcomes or results correctly.

The total outcome of this study revealed that the awareness level of the physical education teachers in Jaffna district was 33.292 in terms of warm-up and warm-down, hydration and dehydration. From the result it was concluded that level of knowledge on preventing dehydration issues in Jaffna district was poor.

6. RECOMMENDATIONS

From the result of the study the following recommendations were drawn. Physical education teachers, students or players and the parents must consider the knowledge of dehydration issues and injury prevention.

Dehydration awareness program must be conducted for at least three months per year to the physical education teachers of Jaffna district by resource persons to improve the defects. Dehydration education must include in the school curriculum of the students for all sports. Facilities of the schools and sports medicine care centers must develop quickly all around the district. Qualified teachers or coaches only coach for the students. Further research and sports dehydration awareness workshop must be conduct with physical education teachers and students for better understanding about the dehydration issues are needed to strengthen the field study.

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