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Research Article

ANALYSIS OF MANAGEMENT OF SPORT-RELATED CONCUSSIONS IN ADOLESCENT ATHLETES IN PAKISTANI ENVIRONMENT

¹Dr Madiha Irshad, ²Ahmad Raza, ³Abuzar Ghaffari

¹Health republic centre 439J block DHA EME sector Lahore, madihashah0341@gmail.com ²Basic Health Unit Pindi Porbian, Zafarwal Narowal, dr_ahmadraza11@yahoo.com ³Rural Health Centre Zafarwal, Narowal, abuzar153@gmail.com

Abstract:

Introduction: Concussions are the most common form of traumatic brain injury (TBI) in sports and are considered a growing health concern among children and young adults participating in organized athletics. Aims and objectives: The basic aim of the study is to analyze the management of sport-related concussions in adolescent athletes in Pakistani environment. Methodology of the study: This cross sectional study was conducted at Services Hospital Lahore during September 2018 to December 2018. Data were collected as part of a larger prospective investigation of the influence of sport-related concussion measures of impairment and HRQOL. In-person, qualitative interviews were conducted with participants and their parents during the sub-acute phase after a sportrelated concussion (approximately 15-30 days), with follow-up interviews during the first 2 months after the concussion. Results: The data were collected from 15 participants who divided into focus groups. Five categories emerged during the data analysis regarding the perceptions of the adolescent athletes' lived experiences following a sport-related concussion: effect of symptoms, impact on emotions, effect on school role, effect on societal/social role, and minimizing/masking symptoms. Conclusion: It is concluded that concussion management needs to move beyond the monitoring of impairments and address the whole person to adequately evaluate all domains of health status and to develop concussion management strategies that are sensitive to emotional, social, and psychological stressors.

Key words: Concussion, Management, Sports, Stress

Corresponding author: Dr. Madiha Irshad, Health republic centre 439J block DHA EME sector Lahore, madihashah0341@gmail.com



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INTRODUCTION:

Concussions are the most common form of traumatic brain injury (TBI) in sports and are considered a growing health concern among children and young adults participating in organized athletics. Our endeavors ought to accordingly be coordinated to moderate such dangers of damage, instead of attempting to totally dispose of such dangers. Sportrelated concussions in youth are normal and can have huge long haul antagonistic effect on competitor's life¹⁻².

Sport-related concussions are a huge general wellbeing worry among youth and juvenile competitors. Every year, somewhere in the range of 1.1 and 1.9 million sport-related concussions happen in the United States, with a larger part happening inside the pediatric and youthful age gatherings. Blackout brings about an assortment of side effects, shortages in discernment, and parity debilitations that may influence the day by day working of the patient notwithstanding confining support in sport³. Generally, thinks about concentrated on the intense impacts of blackout related debilitations, including side effect introduction, cognizance, and equalization from the season of damage through come back to play⁴.

Wellbeing related personal satisfaction (HRQOL) is an idea that considers the physical, mental, and social parts of one's wellbeing and is characterized by the person's encounters, convictions, desires, and view of his or her capacity to work in various areas of wellbeing and well-being⁵. Sport-related blackout side effects and weaknesses can adversely impact parts of HROOL and ought to be a significant segment of blackout assessment⁶. Various preventive measures and systems have been created and attempted with variable viability. Essential anticipation of blackout is a tricky idea in light of the fact that in many sports, each time a competitor is by and by or game there is a hazard for concussion⁷. The main sure method for not having a sport-related blackout isn't to take an interest in sports with hazard for concussion⁸. Since not taking an interest sports isn't such a reasonable choice, our endeavors are, best case scenario aimed at optional and tertiary counteractive action of blackout and its complications⁹.

Background of the study

In adolescent athletes, assessment and the executives of concussions should consider the formative phase of the pre-adult. The intellectual, physical and psychosocial formative stage has direct ramifications for the assessment, the board and creating anticipation procedures for concussions in teenagers. Early youthful advancement is portrayed by solid speculation, worry about physical changes in the body, and physical appearance. During this time the pre-adult will be unable to completely comprehend the centrality of present moment and long haul impacts or intricacies of concussions¹⁰. Teenagers at this stage may not think of it as imperative to report head effects or side effects. They likewise are less inclined to hold fast to a prescribed treatment plan. During assessment, a more straightforward addressing is appropriate¹¹.

Aims and objectives

The basic aim of the study is to analyze the management of sport-related concussions in adolescent athletes in Pakistani environment.

METHODOLOGY OF THE STUDY:

This cross sectional study was conducted at Services Hospital Lahore during September 2018 to December 2018. Data were gathered as a feature of a bigger planned investigation of the impact of sport-related blackout proportions of impedance and HRQOL. Face to face, subjective meetings were directed with members and their folks during the sub-intense stage after a sport-related blackout (roughly 15-30 days), with follow-up meetings during the initial 2 months after the blackout. With the end goal of this investigation, the emphasis was on the underlying meetings with the youths, which tended to their lived encounters following a sport-related blackout, with HRQOL as a hypothetical system.

Data collection

A convenience sample of 15 secondary school competitors from two school locale was enlisted. Members were between 14-17 years old at the season of analysis and included 13 guys and 2 females. Members were isolated into center gatherings dependent on sexual orientation and school. School financial status was dictated by middle family unit pay per area and level of governmentally supported snacks. Members were recognized through athletic coaches utilized by a University Sports Medicine focus to give healthcare administrations to territory secondary schools.

Statistical analysis

Student's t-test was performed to evaluate the differences in roughness. Two-way ANOVA was performed to study the contributions. A chi-square test was used to examine the difference in the distribution of the fracture modes (SPSS 19.0 for Windows, SPSS Inc., USA).

RESULTS:

The data were collected from 15 participants who divided into focus groups. Five categories emerged during the data analysis regarding the perceptions of the adolescent athletes' lived experiences following a sport-related concussion: effect of symptoms, impact on emotions, effect on school role, effect on societal/social role, and minimizing/masking symptoms (table 01).

Category	Frequency	No. of Cases
Effect of symptoms	General	11
Effect on school role	General	11
Effect on societal/social role	General	11
Impact on emotions	General	10
Minimizing/masking symptoms	Typical	7

Table 01: Analysis of participant	cases according to category
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Regardless of sex, number of days lost or socioeconomic status (SES), all participants described anxiety, which led to frustration during prescribed cognitive rest. A feeling of "falling behind" in school resulted in reported frustration in 13 participants and anxiety in all 15 participants.

Gender	Grade	Type of sport	Previous history of	Time loss following		
			concussion	concussion		
М	10	Football	1 in football	2 days		
М	11	Football	1 outside sports	30 days		
F	9	Women's basket ball	0	28 days		
М	10	Football	1 in football	20 days		
F	10	Hockey	1 in football	42 days		
М	10	Football	1 in football	7 days		
М	11	Football	0	7 days		

 Table 02: Demographic information for Participants

DISCUSSION:

Most reports on the occurrence of sport-related concussions in young people recognize that when all is said in done there is a huge degree of under acknowledgment and under revealing of concussions. Depending up on the prompt significance and centrality of proceeded with support in the training or game, the immature, and in numerous examples the sport authorities numerous not report the concussion¹². The juvenile might be worried that the individual will be hauled out the game. Since side effects of blackout are frequently unobtrusive and non-explicit, they either go unrecognized or their hugeness might be minimized¹³.

Immature competitors can exhibit for restorative consideration during the training or game to the athletic mentor or other healthcare supplier on location giving therapeutic inclusion to the occasion. They may likewise be seen by their very own PCP later for an assessment, development or freedom for come back to play visit. As a rule, the indications or indications of blackout may resolve just to repeat later¹⁴. Then again, signs and manifestations of blackout may initially seem a few days or weeks following the blackout. Numerous understudy competitors present to their clinician just because looking for medicinal consideration when they see

weakening in their scholastic working or change in state of mind or behavior¹⁵.

In the clinical assessment of the juvenile competitor for blackout, there is generally a past filled with effect to the head or other piece of the body from impact with another player, being hit in the head by a ball or other item, for example, a puck or bat, or a tumble to the ground¹⁶. Note that blackout can happen without direct hit to the head or body. At times, different players or another person at the training or game may see that the competitor isn't carrying on properly or not ready to pursue the headings. This should raise doubt of blackout. Most usually the competitor with blackout is confounded, bewildered and not ready to pursue basic bearings inside the setting of the game¹⁷.

Young people who took part in center gatherings revealed feeling baffled and on edge during endorsed subjective rest and a definitive reintegration into scholastics. The increased disappointment and nervousness were exacerbated by poor correspondence and absence of joint effort among clinicians and instructors, which may have brought about longer recuperation periods from concussion¹⁸. The primary stage wherein a clinician can bolster the patient is during the underlying endorsed intellectual rest stage when all psychological burden is expelled. As per Sady et al., understudy competitors who take part in psychological action (e.g., perusing, considering) while symptomatic experience compounding side effects and possibly drawn out recovery¹⁹.

CONCLUSION:

It is concluded that concussion management needs to move beyond the monitoring of impairments and address the whole person to adequately evaluate all domains of health status and to develop concussion management strategies that are sensitive to emotional, social, and psychological stressors. Health care providers and school personnel managing concussion need to understand the possible impact of the injury on areas outside of sports participation and institute policies to aid the individual through recovery.

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