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ORIGINAL

EPIDEMIOLOGY OF OVERUSE INJURIES IN YOUTH SPORTS: TRENDS AND PREVENTION STRATEGIES

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ABSTRACT

The athletes must be educated about which factors can cause overuse injuries. In this way, by properly understanding the epidemiology of Overuse Injuries, we can educate athletes about overuse injuries as well. The research determines the trends and prevention strategies related to youth sports. For measuring the research, used Theoretical analysis and SPSS software related to indicators. If there is any abnormality in normal physical and mental health, the risk of injuries can easily be known before time. For example, suppose there is any abnormality in bone composition. In that case, it gives us the idea that the risk of injury to bones is high so such strategies are suggested to athletes which can prevent bone injury. The other important implication of the epidemiology of Overuse Injuries in Youth Sports is the aspect of training load management. As we know, excessive duration of training may also cause injuries, which can lead to Overuse Injuries in athletes. So, the training load for that particular athlete can be managed according to their individual needs. This aspect will not only help improve performance but will also help prevent overuse injuries in youth sports. Overall, research found that epidemiology directly links with overuse injuries in youth sports. The important implication of the epidemiology of overuse injuries in youth sports is that it can help monitor the health parameters of athletes. The knowledge and understanding of the epidemiology of overuse injuries provide us with parameters that can be effectively used to monitor athletes' physical and mental health, which can give an idea about the risk of injuries.

KEYWORDS: Epidemiology (EE), Overuse Injuries (OI), Youth Sports (YS), Trends (TT), Prevention strategies (PS).

1. INTRODUCTION

Epidemiology means studying health-related events in a given population for a specific time interval. The term Overuse Injuries means the cumulative and repetitive injuries that may lead to permanent damage to that part of the body. Because of overuse Injuries, muscles at that place can no longer regain their original composition and structure. If such injury occurs to the bone, the bone becomes stiff and will not be able to move even from the place of joints. In this introduction, we are going to overview the epidemiology of overuse injuries in youth sports and how strategies can prevent them. It has been seen that the trend of Overuse Injuries has been increasing in the past few years mostly in youth sports(Ritzer et al., 2021). As we know, the risk and rate of injuries in athletes is quite high compared to layman, but if there is no proper treatment of these injuries, it will prove disastrous for athletes and their careers. There are many reasons for Overuse Injuries (Stefano et al., 2023). One of the important and foremost reasons is the aspect of unawareness of injury. Usually, in the youth generation, there is more energy and power in the body so there are fewer pain sensations and inflammation factors. Because of this factor, youths receive little or no attention toward injuries. In some cases, it has been seen that the athlete is unaware of his injury(Hootman et al., 2007). This aspect may lead to poor healing of wounds or injury and may also result in Overuse Injuries that can prove fatal for athletes and their careers. It has also been observed that few injuries are common in particular sports. For example, few sports are named high-intensity sports because of the demand for high energy in these sports. In such kinds of sports, there is high-level movement of body parts, which can result in injuries. For example, scientific studies have proven that knee, elbow, and lower back injuries are more common in football, badminton, cricket, squash, and other sports. In these sports, there is more risk of injuries and if these injuries are not treated well, it can result in overuse injuries(Emmet et al., 2022). The other reason for overuse injuries is the continuous training and competition schedule. As we know, training is the decisive factor in the performance of athletes, so there is a need for proper and continuous training for effective performance in sports during competition. But at the same time, if an Injury has occurred, there is a specific time interval for the Injury to be treated and healed. If an athlete undergoes the process of training in case of injury, it can lead to overuse injury. Sometimes, there is incomplete healing of Injury, but it seems to be recovered. In such conditions, if any party is taken in competition, it can cause stress to that injury again and may result in Overuse Injuries, which become difficult to treat. Such injuries take a long time to heal, thus extending the rehabilitation period for athletes(Emery & Pasanen, 2019). The other reason for the overuse of injuries is the scarcity of medical resources to heal Them. There are some areas in which all the medical facilities are not available. In such cases, an athlete does not find resources to heal Injury, which will result in Overuse injury in athletes. There are different and versatile types of strategies to prevent Overuse Injuries.

The first and foremost strategy for preventing Overuse injury is education. This is not ordinary education; it is education related to Health, which must be provided to every athlete. This aspect will help them to take good care of their health to prevent injury. This education related to health is important to the extent that it will enable athletes to heal their injuries properly, thus preventing the risk of overuse injuries(Stein & Micheli, 2010). There is an aspect of health education called biomechanical analysis, which helps to understand the effects of force and pressure on the body. These aspects will help stabilize the body and correct the body's posture, which will help in injury prevention. This education related to health will also help people perform such exercises at home, which will help to fasten the recovery rate(Paterno et al., 2013). These exercises will also help to reduce the risk of overuse injuries. Proper athlete training is the second strategy for reducing the risk of overuse injuries. The training for increasing muscle strength and power so that the injury risk may be reduced. The other exercises included in the training are body posture maintenance, better diet, sleeping schedule, proper supplement intake, and others(Steffen, 2016). These factors will help to make the body strong and flexible to perform well in sports and reduce the risk of injury. The main aspect of training is to make the body able to heal after injury. The medical studies proved that physical and mental health are mandatory(Caine et al., 2008; Roos et al., 2015). Regular checkups of Physical and mental health must ensure athletes' health to perform well. If any injury has occurred, proper medication and treatment must be done until the Injury is healed. Even after treatment of these injuries, proper monitoring of that injury area must be performed to prevent any possible risk of overuse injuries. These strategies will help minimize the risk of Overuse Injuries shortly(Luke et al., 2011).

1.1 Research objective

The main objective of this research is to understand the term Overuse Injuries, its causes, and strategies for prevention of Overuse Injuries. This introduction has effectively explained those strategies that will help to prevent and heal Overuse Injuries. The research study describes the Epidemiology of Overuse Injuries in Youth Sports. The research paper is divided into five specific chapters. The first portion represents an introduction related to the variable and also explains the objective of the research. The second section describes a literature review. The third portion describes the methods of research. The fourth section represents the result and its descriptions. The last section summarizes the overall research and explains the recommendation about the topic.

2. Literature Review

Scholars explain that overexploitation wounds upshot from Micro trauma because of redundant stacking joined with deficient Kleenex recuperation

period & may bring about the two prompt & Long haul span misfortune from athletics. Overexploitation wounds may force a huge weight on school & secondary school competitors. Intercessions tending to anticipation of abuse wound are required(Roos et al., 2015). Researchers investigate the relationship between Overscheduling & athletics-linked abuse & intense wounds in youthful competitors & to distinguish different expected conducive variables to make a functioning explanation for Overscheduling wounds. An Overscheduling wound might be characterized as a physical issue connected with unreasonable arranged actual work unless there is a satisfactory period for sleep and recuperation, involving instructional meetings/rivalries & successive time(Luke et al., 2011). Studies reveal an outline of the scientific parts of chiropractic games with the study of disease transmission, zeroing in on wound chance elements & protective estimates. The audit demonstrates that a couple of alterable wound chance elements came to be measurably assessed, & very few examinations became intended to decide the impact of wound anticipation estimates in chiropractic games(Caine et al., 2008). This study examines the ongoing information on wound chance in young people and juvenile first-class competitors partaking in athletics addressed at the Global Athletic Competition Advisory group coordinated by YOL. Orderly wound reconnaissance of this profoundly serious populace is expected to screen wounds, distinguish greater chance athletics, & guarantee current information on wound patterns, which frame the reason for additional examination on wound chance elements, components, &, in the last stage, wound avoidance(Steffen, 2016). Researchers reveal that young athletics support is useful in several degrees; it is also connected with an expanded gamble of wounds. Gamble elements for wounds in kids and young people incorporate the appearance of development ligament, presence of brawn lopsidedness, & strain to contend despite agony and weariness. However, legitimate schooling, management, and preparation might assist with diminishing the gamble of such wounds and work with initial intercession(Stein & Micheli, 2010). Studies suggest that cooperation in game and diversion has significant definite ramifications for general well-being beyond the life expectancy; be that as it may, the weight of game-associated outer muscle wounds is critical, with the most serious gamble being in young & youthful grown-ups. There's proof to help the utilization of propping in tip-top game to lessen the gamble of repetitive lower leg wrench wounds yet not so much for utilize to forestall the essential wound, & carpus monitors are defensive of wrench wounds in skiing alpines(Emery & Pasanen, 2019). The basic objective of this study is to portray various games explicit and summed up procedures for counteraction of abuse wounds in the young competitor, & furthermore, to survey late conversations of premature game field when it connects with chiropractic and juvenile abuse wounds. Young competitors are by expanded gamble for creating abuse wounds because of their juvenile apprehensive and outer muscle frameworks & requirements extraordinary to young athletics. To give proof-based and athletic-explicit rules to forestalling

abuse wounds, researchers need further powerful, explicit, & planned investigations(Emmet et al., 2022). This review equates to intense & abuse wounds utilizing a broad delegated test of secondary School competitors. The intense wound estimate was more than the abuse wound estimate amid the two macho & woman competitors. Contrasted by intense wounds, abuse wounds were bound to bring about period misfortune from athletics investment of less than multi Week between the two young men & young ladies and beyond best games. Intense and abusive wounds show numerous distinctions that give amazing open doors to information-aware competitor planning, therapy, and recovery, which might decrease wounds and further develop wound results in secondary School sports(Ritzer et al., 2021). Scholars suggest that the discernment that naturopathic sports & recreation wounds in the US have expanded somewhat recently occurs to be not valid. The evident misguided judgment of an expanded pace of wound might, as a matter of certainty, be because of expanded seriousness of wounds, abuse wounds, or expanded determination, yet isn't because of expansion in the all out several intense wounds. Sympathy, the pattern of naturopathic sports and recreation-associated wounds, may assist subsequent wound-avoidance endeavors(Lykissas et al., 2013; Ubillus et al., 2022). Studies elaborate that the beginning and span of the development of kids and youths happens with impressive changeability in companions of a similar ordered era. The outer muscle framework alterations in extent beyond the long run, & switch limb variations, modified person adaptability, & power result in to mature explicit wound designs in young athletics. To acquire data regarding the organic time of kids is testing. Various strategies came to be examined and approved. Be that as it may, the execution of such strategies for a huge scope is just on the horizon(Zwick & Kocher, 2014). Studies claim that the jostle is a typical place of muscular wound in the chiropractic populace. The quantity of such wounds keeps on rising pursuing expanded degrees of support in chiropractic sporting and serious game. The ramifications of intense and abuse wounds & the chance of extremely durable harm ought to be perceived by guardians, mentors and the competitors. Estimates to forestall jostle wounds ought to incorporate legitimate instructing, workout, refereeing, regulation, clinical aptitude and defensive stuff. There exist yet numerous open doors for imminent examinations and different exploration programs amid youthful competitors in different games(Magra et al., 2007). The purpose of such methodical audit were to examine the approach of distributed examinations with respect to lower leg and hoof overexploitation wounds in various games corrections & to sum up Epidemiology-based information of lower leg and hoof overexploitation wounds. Procedure of best investigations on occurrence and pervasiveness of lower leg and hoof abuse wounds is lacking. In light of the outcomes, scholars prescribe creators to obviously characterize situation, portray evaluation strategies & account test attributes satisfactorily(Sobhani et al., 2013). Researchers summarize that athletic field is hypothesized to expand the gamble of

supporting overexploitation outer muscle wounds. Competitors with greater specialty toward expanded gamble of supporting an abuse wound contrasted and competitors with depressed & temperate field. Competitors with temperate specialty were at a greater gamble of wound contrasted(Bell et al., 2018). Studies show that athletics wounds in youthful competitors are a general medical problem that merits unique consideration. Compelling avoidance might be accomplished with preparing programs starting from the area of exercise based recuperation and medication. For counteraction projects to diminish athletics wounds, basic variables should be thought of, like preparation Content, length and recurrence, along with competitor consistence(Frisch et al., 2009). The basic role of such survey was to give engaging the study of disease transmission of athletics-associated wounds processed in crisis divisions for kids and young matured five to nineteen. Researchers summarize that wound anticipation projects in Canada ought to zero in on further developing proof based projects to lessen the weight of wounds in all games(Fridman et al., 2013). The purpose of this survey is to investigate the estimates, dangers, and conveyances of abuse requirements among young & secondary School soccer performers. Overexploitation requirements mightn't offer an essential worry in young and secondary school soccer performers. But, contrasts endured among the two degrees of rivalry. Albeit extra examination on the rate of abuse requirements beyond entire adolescent and secondary school athletics is required, such discoveries might feature the requirement for scheduling that is well defined for rivalry degree(Morris et al., 2017). Studies explain that in chiropractic sufferers, outer muscle overexploitation wounds are normal medical objections. This survey will zero in on prospective gamble elements for overexploitation wounds, involving such characteristic and outward in young competitors. Researchers as well write down a portion of the further normal overutilization wounds found in the short term medical context, their findings, & therapy in view of present proof based writing(Magrini & Dahab, 2016). Scholar studies reveal that all year serious, individual-athletic preparing starting early on is an undeniably normal pattern in the adolescent competitor populace. Former game specialization might be incapable for long haul sport achievement and add to an expanded gamble of actual wound & wear out. The clinical local area has noticed that redundant development examples might happen in non-enhanced action and this might add to overutilization wound in youthful competitors(Puzzitiello et al., 2021). Researchers determined that young people have extremely elevated support and wound paces in athletic. Athletic is the main source of wound in young people. Athletic wound diminishes subsequent cooperation in actual work that unfavorably influences subsequent wellbeing. Athletic wound might prompt corpulent/heftiness & post awful arthrosis. There's proof for the viability of contractile organ preparation methodologies in the decrease of wound in various group activities. Absence of take-up and continuous support of these projects is a continuous interest. An emphasis on execution is basic to impact information, conduct alteration and

supportability of proof notified wound counteraction convention(Emery et al., 2015). Studies has drawn in bad clinical & general press consideration owed, to some degree, to the chance of an expanded gamble of intense and overutilization wounds. The motivation behind this survey was to efficiently survey accessible exploration on young people athletic specialty and outer muscle wound. The essential proof that as of now prevails concerning former game specialty is scant, review, & presents just unassuming relationship among former games specialty & overutilization wound(Fabricant et al., 2016). Studies investigate the normal overutilization disorders in young competitors and evaluate danger elements, mechanism of disease, & protective estimates. Former games specialty, cultural tensions, & serious requests prompt to tedious stress wounds. Expanding athletics, restricting preparation time, & a strong emotionally supportive network is prescribed to neutralize the psychological impacts of serious specialty. Scholars summarize that a comprehensive methodology is expected to handle overutilization disorders, stressing expansion, training, & a decent way to deal with athletics(Trojner & Kelc, 2023). This review assessed the situation with athletics support and preparing recurrence over educate a very long time to distinguish associated elements for wounds in the overall Japan populace. Advancing games testing using middle school eras and managing the preparation recurrence might diminish the event of wounds in youthful competitors(Nagano & Oyama, 2023). Scholars reveal that somewhat recently, the rate of pediatric sports-related concussion introducing to the emergency room in the United States has diminished. This is reasonable influenced by decline in extent of soccer & b-ball associated wounds, which thus has prompted an expansion in extent of woman pediatric sports-related concussion which all the additional normally outcome from different games. The Coronavirus epidemic brought about various pattern abnormalities which have as generally settled(Lu & Niazi, 2023). Researchers elaborate that regardless of the familiar wellbeing and prosperity advantages of partaking in athletic for kids and young people, it is accounted for that athletics support decays over pre-adulthood. In general, guys were multiple times bound to partake in coordinated young people athletic than woman' members, with such pattern obvious over every age classifications & beyond best games(Emmonds et al., 2024). Researchers intended to break down wound patterns and the potential impacts of the COVID illness (Coronavirus) epidemic on the frequency paces of wound in youthful world class soccer performers. Soccer performers in more established age bunches support a bigger several wounds, perhaps because of a larger certain games & more prominent preparation force. This review revealed a descending pattern in wounds in the members before the epidemic, with a clear expansion in the occurrence pace of wound over the Coronavirus epidemic(Škomrlj et al., 2024).

3. Methodology

The research study determines the Epidemiology of Overuse Injuries in

Youth Sports. The research based on primary data analysis for measuring the study used questions related to variables included dependent and independent. To determine these data SPSS, software was used for numerical analysis, also the research explained the theoretical analysis between them. the descriptive statistical analysis, the paired correlation analysis, also that explain the graphical test analysis between them.

3.1 Theoretical analysis

The branch of medical science that is related to the study of health parameters in a given population for a specific time is termed epidemiology. Overuse injuries refer to those injuries that have undergone stress because of again and again injury to the same site of the body. As we know, the risk of injuries is very high in athletes in high-intensity sports because of the extensive use of force. These injuries may lead to Overuse Injuries if they are not properly looked after and treated well. The main implications of the epidemiology of Overuse Injuries in Youth Sports have been discussed as follows, which can help in adopting preventive strategies as well:

3.1.1 Athlete's Education, proper monitoring of health parameters of athlete, training load management

As athletes are at high risk of overuse injuries, the proper and foremost way to prevent such injuries is to provide education to athletes related to overuse injuries and their prevention. When we studied biomechanical Analysis of sports, we came to know that there are Effects of force and pressure in different ways on the bodies of athletes. Some joints and muscles in the body can bear more stress compared to delicate muscles and joints of the body. When proper education is provided to athletes, they can handle pressure and stress in a better way during training and performance as well. This aspect can help in injury prevention in athletes to much extent. But despite these preventive measures, an injury may occur. If these injuries are not given proper time to heal and recover, these injuries may result in Overuse Injuries that can be fatal to the career life of athletes. So there is dire need of providing education to athletes related to Overuse Injuries as well. The athletes must be educated on what Strategies have to be adopted in post-injury duration.

3.1.2 Policy development, coach education, equipment, and technology development

All the policies related to sports are formulated according to the needs of the body and factors that are involved in improving performance and preventing injuries. But if there is a policy of extensive training for high-intensity sports, this extensive training may also result in a high risk of Injury, and such injury may result in Overuse Injuries. So there is a need of such policy development in which such factors are considered deeply which can result in Overuse Injuries in Youth The

other important implication of the epidemiology of Overuse Injuries in Youth Sports is the aspect of education of coaches as well. As we know the training period training type, sessions of training, and other many factors depend upon the coach as well. If there is proper education of the coach, there will be betterment in the performance of the athlete as well because of better guidance from the Coach. But it has also been seen that extensive exercises and prolonged duration of training in athletes may cause Injury in them. If there is no proper treatment for such injuries, it can result in Overuse Injuries as well. So epidemiology of Overuse injury suggests that education must be provided to coaches as well related to Overuse Injuries. This strategy will help prevent Overuse Injuries caused by excessive exercise. The other important implication of the epidemiology of Overuse Injuries is the equipment and technology development. Science and technology have had tremendous success in each field of life, including sports as well. There is introduction of such equipment in sports can help athletes enhance performance and prevent major injuries as well. By proper understanding of the epidemiology of Overuse Injuries, we can develop friendly technologies that will help athletes prevent Overuse Injuries. These technologies may include wearable technologies that can help to monitor the physical parameters of the health of athletes. All of these implications convince us about the importance of epidemiology of Overuse Injuries in Youth Sports.

3.1.3 Research, interdisciplinary collaboration

The epidemiology of Overuse Injuries in Youth Sports convinces us that there is a stringent need for research to be done in the field of medical science related to preventing overuse injuries. This research will be aimed to know that how minor injuries can also lead to Overuse Injuries. These researches will also focus on strategies for preventing the high risk of Overuse Injuries in athletes. This research will lead to much betterment in the field of medical science related to the health of athletes. The other important implication of the epidemiology of Overuse Injuries is that it can lead to interdisciplinary collaboration. There is a need for collaboration among medical expert's athletes and coaches to understand the basics of Overuse Injuries and such collaboration will help in preventing Overuse Injuries.

Table 1: Result of Descriptive Statistics

DESCRIPTIVE STATISTICS					
	N	**MINIMUM**	**MAXIMUM**	**MEAN**	**STD. DEVIATION**
EPIDEMIOLOGY 1	50	1.00	3.00	1.5200	.61412
EPIDEMIOLOGY 2	50	1.00	3.00	1.5000	.54398
OVERUSE INJURIES 1	50	1.00	3.00	1.5600	.61146
OVERUSE INJURIES 2	50	1.00	3.00	1.5200	.57994
TRENDS AND PREVENTION STRATEGIES	50	1.00	3.00	1.4000	.53452
VALID N (LISTWISE)	50				

The above result of table 1 describe the descriptive statistical analysis result demonstrate that mean values, standard deviation also that minimum and maximum rate of descriptive statistical analysis. The epidemiology 1,2 both are considering as independent variable according to the result its mean value is 1.5200 and 1.5000 the standard deviation rate is 61% and 54% deviate from mean. The overuse injuries 1, and 2 both are considering as dependent variable result describe mean value is 1.5600 and 1.5200 the standard deviation rate of both indicator is 61% and 57% deviate from mean value. According to the result overall minimum rate is 1.000 the maximum rate is 3.000 and the total observation used for analysis is 50. Similarly, the trend and prevention strategies is mediator variable result describe that mean value is 1.4000 and the standard deviation rate is 0.5345 shows that positive and 53% deviate rate from mean values.

Table 2: Result of Total Variance Explained

TOTAL VARIANCE EXPLAINED						
COMPONENT	INITIAL EIGENVALUES			EXTRACTION SUMS OF SQUARED LOADINGS		
	TOTAL	% OF VARIANCE	CUMULATIVE %	TOTAL	% OF VARIANCE	CUMULATIVE %
1	1.942	38.837	38.837	1.942	38.837	38.837
2	1.082	21.636	60.473	1.082	21.636	60.473
3	.833	16.655	77.128			
4	.695	13.900	91.028			
5	.449	8.972	100.000			
Extraction Method: Principal Component Analysis.						

The above result of table 2 demonstrate that total variance explained analysis result represent % of variance value, % of cumulative rate, also that explain the total value related to the initial eigenvalues and extraction sums of squared. According to the result overall total rates related to the initial eigenvalues is 1.942, 1.082, 0.833, 0.695 and 0.449 shows that positive initial rates. According to the result % of variance value is 38.837, 21.636, 16.655, 13.900 also that 8.972 its shows that positive % of variance each component. Similarly, the cumulative values describe that positive rates included 60.473, 77.128, 91.028 respectively.

Table 3: Result of Model Summary

MODEL SUMMARY				
MODEL	R	R SQUARE	ADJUSTED R SQUARE	STD. ERROR OF THE ESTIMATE
1	.521[a]	.271	.206	.47624
a. Predictors: (Constant), Overuse Injuries 2, Epidemiology 1, Overuse Injuries 1, Epidemiology 2				

The above result of table 3 demonstrate that model summary result present R value, R square value, the adjusted R square rate, also that explain the standard error of the estimated value of model. The overall R rate is 0.521 its shows that 52% model fit for analysis and 27% positive link between dependent and independent variables. similarly, the adjusted R square value is 0.206 and the standard error of the estimated rate is 47% respectively.

Table 4: Result of ANOVA[a]

ANOVA[a]						
MODEL		**SUM OF SQUARES**	**DF**	**MEAN SQUARE**	**F**	**SIG.**
1	Regression	3.794	4	.948	4.182	.006[b]
	Residual	10.206	45	.227		
	Total	14.000	49			
a. Dependent Variable: Trends and Prevention Strategies						
b. Predictors: (Constant), Overuse Injuries 2, Epidemiology 1, Overuse Injuries 1, Epidemiology 2						

The above result of table 4 describe that sum of square values, the mean square values the result shows that F statistic also that significant level of each model included regression and residual. The first model is regression, which shows that the sum of the square value is 3.794, the mean square value is 94%, also, the significant level is 0.006 shows positive and 6% significant level between them. the residual is second model its shows that 10.206, rate related to sum of square. According to the result the mean square rate is 0.227 its shows 22% average square level respectively.

Table 5: Result of Coefficients

COEFFICIENTS						
MODEL		**UNSTANDARDIZED COEFFICIENTS**		**STANDARDIZED COEFFICIENTS**	**T**	**SIG.**
		B	**STD. ERROR**	**BETA**		
1	(Constant)	2.129	.453		4.702	.000
	Epidemiology 1	-.046	.117	-.053	-.396	.694
	Epidemiology 2	-.450	.140	-.458	-3.211	.002
	Overuse Injuries 1	.102	.122	.117	.839	.406
	Overuse Injuries 2	-.095	.120	-.103	-.790	.434
a. Dependent Variable: Trends and Prevention Strategies						

The above result of table 5 demonstrate that linear regression analysis result describes beta value, standard error value, the t statistic value and significant level of each independent variable. the epidemiology 1 shows that negative but its significant link its rate is -0.396 and 0.694 shows 69% significantly level between them. the second Epidemiology 2 shows that beta

value is0.140 the t statistic rate is -3.211 and its significant level is 0.002 its shows that negative but its 2% significant level between them. the overuse injuries 1,2 is mediator variable result describe that standard error value is 0.122, 0.120 the t statistic value is 83% and -0.790 79% its significant level is 40% and 43% significantly between them.

Table 6: Result of Test Statistics

TEST STATISTICS					
	EPIDEMIOLOGY 1	**EPIDEMIOLOGY 2**	**OVERUSE INJURIES 1**	**OVERUSE INJURIES 2**	**TRENDS AND PREVENTION STRATEGIES**
CHI-SQUARE	18.280[a]	22.360[a]	17.080[a]	19.840[a]	27.160[a]
DF	2	2	2	2	2
ASYMP. SIG.	.000	.000	.000	.000	.000
a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 16.7.					

The above result of table 6 demonstrates that test statistical analysis result shows that chi square value of each variables are 18.280, 22.360, 17.080, 19.840 and 27.160 positive chi square rate of each indicators. according to the result overall significant value is 0.000 shows 100% significantly level between them.

3.2 Control chart

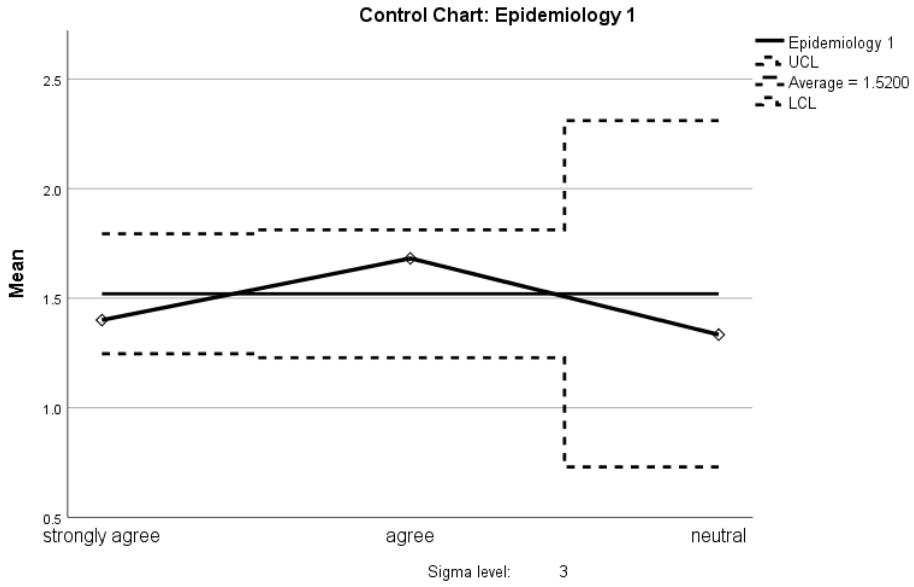

Figure 1: Control Chart

The above graph of figure 1 demonstrate that control chart analysis

result present mean value is 0.5, 1.0,1.5, 2.0 and 2.5 the horizontal side represent strongly agree, agree and neutral level. According to the above-mentioned graph its average value is 1.5200 shows positive average rate between them.

4. Conclusion

After an overview of these important implications of the epidemiology of Overuse Injuries in Youth Sports, we can conclude that epidemiology has gained much importance in the field of Sports. It has introduced us to strategies to prevent Overuse Injuries. The aspect related to physical health can be resolved by exercise and a proper balanced diet but the aspect related to Mental Health can only be resolved by cognitive therapies. The overall research concluded that positive and significant link in between epidemiology of overuse injuries in youth sports. As we know there is a great effect of mental health on healing the Injury in the body. If there is the mental willingness of the Athlete to recover soon, it will automatically maintain the body in such a way that the athlete will recover soon in less rehabilitation period. The other strategy for reducing the risk of overuse injuries is proper medical attention and monitoring.

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