

# Awareness of injury among young athletic in western region of Saudi Arabia

Saad S AlFawaz<sup>1\*</sup> 

<sup>1</sup>Department of Physical Therapy, Faculty of Medical Rehabilitation Sciences, King Abdulaziz University, Jeddah, SAUDI ARABIA

\*Corresponding Author: [saadfawaz@kau.edu.sa](mailto:saadfawaz@kau.edu.sa)

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## ABSTRACT

The subject of injury awareness has largely received wide concern among the current scholarly studies and relevant work particularly in the developed contexts, thus this current study aims to investigate this topic with more focus on a developing setting of Saudi Arabia for further exploration the importance role of level having adequate knowledge and awareness of different sports injuries among young athletes in the area of western region of Saudi Arabia. The study was a descriptive nature and used the survey questionnaire for data collected purposes from different location in western region of Saudi Arabia for further perceptions in this topic. A total of 257 sample participated in this study with a response rate of 83%. The results revealed the young athletes had adequate awareness and knowledge about the injury rehabilitation and preventive exercise under professional supervision. The study provided practical implications that indicated the need to aware with the significance role of providing medical and injury therapy rehabilitation, which enable the athletes recognized to the best methods handling and treating the different types of injuries while sports activities and competition to minimize the risks of having serious injuries.

**Keywords:** injury awareness, rehabilitation, young athletes, Saudi Arabia

## INTRODUCTION

The evidence that supports the benefits come from healthcare awareness of athletics in various sport activities. However, the studies also revealed that the excessive practices of sport activities particularly in the competition settings are associated with increasing risks of many different injuries [1]. The sport injuries are also linked with direct and indirect high risks and costs, further this can lead to sports retirement early of the athletes. Moreover, the sport injuries might lead to decrease levels of sports involvement and participation, which in turn cause large rates of morbidity or overweight/obesity [2]. The literature discussed through cross-sectional studies from the young athletes' perspectives the rates of injuries prevalence, which the result found five times higher than the general population [3]. The multiple techniques contribute to explain the growing high prevalence of the sports injuries among competitive athletes, and the awareness of this issue indicated to the importance factor of the training volume, which is associated with the sport injuries. In general, the nature of training such as number of hours had significantly correlated with the presence of injuries. Further, the high training programs also confirmed the increasing of the risks and maintaining the acute injuries in the team sports [4].

The competitive sports atmosphere among the younger athletes significantly contributes to the patterns of their training, and the rising amounts of the sports activities and achievements in the sports encourage the athletes to educate

themselves about training and management to avoid hard injuries [5]. The young athletes' knowledge about the injuries when they pursue to keep give out an exemplary performance, they can be motivated to the learning and training. The notions and attitudes of athletics achievements and skills endure the hard circumstances as results of the experience, which trigger the awareness of the young athletes [6]. On other hand, the competitive context of sports usually inspires the younger athletes to impose some physical training, which brings out the body risks. Due to the body having some limits of the capabilities to recover from numerous factors and body risks such as fatigue, this would impose the forceful knowledge and training to make the body out of be a vulnerable to the potential injuries [7]. The importance of establishing and increasing an awareness about athletics injuries and the methods would help make a control and management of these injuries like warm up and cool down encourage the current studies to explore this topic and support the need to socialize the athletes since there are many athletes still consider this lower importance and numbers of sports coaches pay less attention to this factor with more focus to the awareness core of the injuries knowledge and targets the younger athletes. Therefore, the key purpose of this study was to address and analyze the awareness injury of young athletes involved in different sport disciplines in western region of Saudi Arabia. This study aims to describe the state of the injury awareness among the young athletes in western region of Saudi Arabia, and to determine if this awareness about injuries is associated with the risk factors. To our knowledge, research trends about

awareness injuries are scarce. Thus, the current study was conducted to contribute to the research knowledge gaps, stand with the current available findings, and offer further implications.

## LITERATURE REVIEW

Generally, sports activities provide many grateful benefits considering human aspects such as physical, mental as well psychosocial. The people who participate in these activities have healthy both emotional and intellectual ability through their work or academic life. Even though, sports exercises are also at risk in the health problems. The main negative consequences of being a sports participant are the risks of injuries [8]. However, the sport injuries indicate a critical burden on society and constitute main human health problems amongst the sports athletes in different ages and levels [9]. The higher incidences of sport injuries apply especially to physical education at academic institutions such as schools or universities. The literature showed that the students made use of medical care because of the frequented injuries annually [10]. A study conducted at different students ages at universities revealed that sport injury was the most major cause in the emergency and hospital cases [11]. The most common injuries in the sports world that are tissues damage, bones or joints broken or strain caused by different reasons like collision or tough activity, which exceed overload or overtraining, thus the muscles and joints have no longer within good anatomical status.

Furthermore, the factors that could cause sport injuries can result due to the variety of intrinsic factors like age, injuries history, body anatomy or size, fitness, muscle strength, psychological, mental, and psychosocial abilities [12], these different extrinsic factors on other hand include accident, poor practices, inappropriate equipments, lack of physical preparation with inadequate previous heating and stretching [13]. The studies addressed the effects and knowledge of sports injury showed that the effect of sport injury during the training and competition contributed to the sports difficulties, which reduces the sports activities and performance [14]. Additionally, it was explained that the deficiencies in sports injuries care at schools in all factors examined: immediate healthcare, first aid training, and injury scenarios and performance [15]. During the implementation of learning the games, the students were very vulnerable to experiences of accidents and injuries. Thus, the injuries that happen at the exercises time should get greater focus and attention to provide proper treatment with adequate injury experience [16]. The different studies also showed the method would help to prevent expected sports injuries. Preventive actions include primary prevention acts since the target in this phase is the pre-injury process, which covers sets of requirements for physical pre-action with the proper efforts to train the athlete. Furthermore, another strategy aims also to reduce the consequences and effects of the injury events, this encourages the early studies to note the abilities to perform exercises, for instance the athletes can practice a conditioning drill, which integrate these strategies to teach the athletes how to recover from injury [17]. The post injuries phase or main prevention pursues to reduce the long-term detrimental effects of the injury by using medical services and adhere to rehabilitation process as a strategy in the post-injury phase.

It is known that sports play an important role in people's health. The sport activities are seen as the most important etiologic factor for different injuries. Presenting the timely developments are made in the various sport activities, the risks of injuries has increased among the athletes [18]. Moreover, the sport activities represent to one third of the dental injuries for example, the rate of injuries differs in several studies, which depend on the number, athletes ages and types of sport activities [11]. For example, contact sports activities and younger athletes are vulnerable to these injuries, and they are most commonly prone to sport-related injuries. The findings of the studies, which addressed the reasons behind the growing rate of incidences of injuries are the athletes' inability to identify or detect the injurious situations [19]. Some injuries like traumatic ones do not only occur during the games, but during the training and exercises as well. In addition, the severity and frequency of the contacts are major reasons of such these injuries [20]. However, there are growing risks of these injuries during contact sports such as football, boxing, and hockey. After injuries, athletes can lose their teeth, which can occur even in a treated condition.

Subsequently, the athletes may also constantly undergo some procedures like repair, injury treatment, or use of advanced techniques. The awareness about the injuries can enable a considerable psychological and socioeconomic effect. The procedures of treatment for the injuries lead to work or school absenteeism [21]. The sport coaches and medical team deal with the processes of prevention as well treatment of the activities sport related injuries. The risks can be minimized by providing knowledge about prevention of injuries and management these situations once occur to enhance the awareness in this issue. Injury awareness evenly develops the forces of the effects throughout the injured body parts and hence reduces the effects of injury [22]. Often, athletes make their awareness about the injuries from different sources whether formal or informal, the reliability of these sources contribute to raise this awareness and support the efforts to manage and treat the injuries. Although some studies have confirmed the positive effect of injuries-related knowledge, it has become compulsory for athletes to focus on this knowledge for better understanding injuries treatment and management [23]. Accordingly, the sports injuries are relatively high among younger and contact sport athletes. The most common and the prevalence of injuries in young athletes are similar to the studies conducted to address the occurrence of injuries during sporting activities.

An international sport like marital arts, which has a heavy emphasis on the prevalence of injuries encourage the coaches and medical teams to offer training about possible injuries and raise the knowledge about the possible ways and methods to handle and control the injuries once occur. The athletes of Taekwondo sports for example are three times riskier of maxillofacial injuries than other non-contact sports and the incidences of these injuries ranged up to 34% [24]. The World Taekwondo Federation in 2001 introduced a new scoring system, which gives additional points for head kicks. This scoring system led to an increase in facial injuries. The injuries include different soft tissue laceration, bone, and teeth fractures. Even though, prevention is the best proactive approach to avoid such these injuries as the treatment procedures are more complicated and expensive [25]. A study examined the incidences of both dental and facial injuries, and the habits as well awareness regarding wearing a safety helmet

or mouthguard, the awareness regarding the prevention and management of facial and teeth injuries. In a study conducted on the marital arts athletes during a national championship, about 96% of the athletes wore and adhered to the mouthguard compared to only 5% wore custom-made ones and about 62% of the study participants sustained serious injuries [26]. In the same vein, it was evaluated the level of protective tools like mouthguard, attitude and awareness issues among Korean athletes, the findings showed although the information provision on using the mouthguard inadequate, the majority of athletes consider the mouthguard one of effective prevention devices against facial and teeth injuries [27]. A study on 162 different athletes found about 24% of the taekwondo athletes had suffered at least one type of dental injury and only 10% used the mouthguard during the game [28].

The literature through an investigation about the awareness and knowledge of an injury e.g concussion, the perceptions of youth athletes stated some ways and efforts could help to raise the awareness about concussion among youth sports to make an effect. The most youth in this study stated also they heard of the concussions, and they believed it was a critical issue for them. The athletes through this issue do not believe in the care of their friends about concussion. Moreover, the results of the studies while addressing the knowledge about sports injuries among the youth contribute to provide a good amount of description for some injury like concussion that required adequate level of knowledge about this injury. The results suggested that youth athletes up to 15 years may be receptive to injury treatment like message, and the given results showed the younger athletes were more likely than older to consider the critical issue of concussion and hold a positive perception about the concussion importance. Similarly, the findings that published relate to healthcare communication about injury and negative practices like smoking among athletes demonstrated the early perceptions and knowledge about critical issue of athletes' healthcare led to greater outcomes and sustain their health. Thus, this can contribute to lower rates of injuries during training and games and minimize the related costs and expensive procedures needed to manage and cure sports injury. However, the exploratory studies through the more research warrant a further exploration of the critical finding regarding athletes' injury, but unfortunately the Saudi Arabia setting has not adequately conducted studies in this topic, which limit this section while discuss the current topic. Thus, this study is an attempt to cover the existing research gaps and knowledge in the topic of injury awareness among athletes with more focus on the developing contextual setting.

## METHOD

A cross-sectional approach study using the quantitative method research of 257 athletes were participated in the current study from different areas of western region of Saudi Arabia due to the large numbers of sports centers and activities in this region of the kingdom. More than 45 teams participated in the local community sports tournaments. The study sample participated if their aged ranged between 18-30 years old of both genders and the participants with some selected diseases like chronic neuromuscular/musculoskeletal were excluded. The research procedures were conducted, and the participants were contacted by using social media channels such as

**Table 1.** Demographics profile

| Demographics     | Frequency | Percentage (%) |
|------------------|-----------|----------------|
| Gender           |           |                |
| Male             | 241       | 93.8           |
| Female           | 16        | 6.2            |
| Age              |           |                |
| 18-22            | 174       | 67.7           |
| 23-26            | 54        | 21.0           |
| 27-30            | 29        | 11.3           |
| Nationality      |           |                |
| Saudi            | 230       | 89.5           |
| Non-Saudi        | 27        | 10.5           |
| Region           |           |                |
| Riyadh           | 25        | 9.7            |
| Makkah           | 211       | 82.1           |
| Eastern Province | 8         | 3.1            |
| Bahah            | 3         | 1.2            |
| Asir             | 4         | 1.6            |
| Al-Madinah       | 4         | 1.6            |
| Other            | 2         | 0.8            |

WhatsApp, team coaches, players, and administrators. An approval from all participants through a consent form was obtained before conducting this study and distributing the survey questionnaire, which has been adapted from the literature to collect the required data. The questionnaire survey includes some basic information like age, gender, nationality, and region, as well some information regards suffering from any diseases, level of activity, exercise intensity, warming up before the exercise, if they were injured during last period and so on. Regarding the process of data collection method, the study used a self-structured questionnaire for data collection purpose related to different types of athletes' injuries.

The study measurements were validated by a panel of experts and professionals in this field, then it was reviewed by senior researchers and sports coaches to ensure it can measure well the concepts involved in this study. The study instrument of questionnaire was edited in both Arabic and English to ensure large participation in this study and get variety of perceptions of the sample. The study through the statistical analysis process used the descriptive analysis that mainly used both frequency and percentage of study factors. All analyses were performed by using statistical package for the social science SPSS version 21. Once the study instrument validated and got permission from the target respondents, the study questionnaire was sent into the sample after explaining the study objectives. A consent form was also attached with the questionnaire, and only who gave consent to use the data were involved in the analysis. A total of 310 questionnaires were distributed and 257 were received back with a response rate of 83%. 257 questionnaires were received and filled up, so the study excluded incomplete submission, missing information, not filling in appropriate data or double-answer questions. The study has used descriptive statistics to achieve its stated objectives and answer the research question.

## RESULTS

The study results are given by running the descriptive statistics using SPSS software. The results are presented in **Table 1**, which shows the demographics profile of the study participants.

**Table 2.** Activity level and exercise intensity

| Factor  | Frequency | Percentage (%) |
|---|-----------|----------------|
| Do you suffer from any diseases                   |           |                |
| Yes   | 15        | 5.8            |
| No  | 242       | 94.2           |
| Level of activity                                 |           |                |
| Very high   | 12        | 4.7            |
| High  | 33        | 12.8           |
| Moderate  | 78        | 30.4           |
| Mild  | 101       | 39.3           |
| Sedentary   | 33        | 12.8           |
| Exercise intensity                                |           |                |
| Less than 45 min.                                 | 80        | 31.1           |
| 45-60 min.  | 72        | 28.0           |
| 1-2 hours   | 87        | 33.9           |
| More than two hours                               | 18        | 7.0            |
| Warm up before exercise                           |           |                |
| Yes   | 59        | 23.0           |
| No  | 198       | 77.0           |
| Warm up time amount                               |           |                |
| 1-5 min.  | 103       | 40.1           |
| 6-10 min.   | 103       | 40.1           |
| 11-15 min.  | 46        | 17.9           |
| 15-20 min.  | 5         | 1.9            |
| Do you do any prophylactic exercise               |           |                |
| Yes   | 181       | 70.4           |
| No  | 76        | 29.6           |
| Preventive exercises are under the supervision of |           |                |
| Personal  | 167       | 65.0           |
| Coach   | 51        | 19.8           |
| Doctor  | 19        | 7.4            |
| Therapist   | 20        | 7.8            |

The study results revealed that the majority of the study sample was male about 93.8% of the overall study participants, meanwhile the female participants were only 6.2%. It could conclude from this result the prevalence of young athletes in the western region of Saudi Arabia due to society culture in this region, which still more conservative in such issues with little allowance for females to be involved in sports events and tournaments. In terms of the sample ages groups, the results revealed the most age group were 18-22 years old followed by those aged 23-26 years old. This result may refer to the younger individuals who are involved mainly in sports events. On other hand, the study analyzed the percentage of nationality of the young athletes participated in this study, the findings showed the majority of the participants were Saudi nationality about 89.5%, meanwhile the non-Saudi nationality participants around 10.5%. Since the study conducted in western region of Saudi Arabia, it attempts to reach out the most cities of this region, thus the results revealed that the most of participants were from Makkah about 82.1% and the Riyadh comes at the second order 9.7%. This could explain the wide distribution of the sports events and competitions in these cities.

The study further concerns addressing some issues related to physical therapy coaching and the participants were asked about essential statements to know their perceptions towards different factors contribute to better understand this subject. **Table 2** presents the participants' activity level & exercise intensity. The results showed 64.3% had sport coaching training certificate compared to 35.7% state had no such this certificate, this explains the interest of the coaches and physical education teachers to involve with professional training in the physical therapy. In addition, the numbers of coaching years were varied among the participants, most of

**Table 3.** Types of athletes injuries

| Factor                               | Frequency | Percentage (%) |
|--------------------------------------|-----------|----------------|
| Play other sports besides football   |           |                |
| Yes                                  | 92        | 35.8           |
| No                                   | 165       | 64.2           |
| Have an injury during last 12 months |           |                |
| Yes                                  | 141       | 54.9           |
| No                                   | 116       | 45.1           |
| Type of injury                       |           |                |
| Muscle injury                        | 62        | 24.1           |
| Ligament injury                      | 38        | 14.8           |
| Cartilage injury                     | 18        | 7.0            |
| Fracture                             | 9         | 3.5            |
| None                                 | 130       | 50.6           |
| Hip joint injury                     |           |                |
| Yes                                  | 234       | 91.1           |
| No                                   | 23        | 8.9            |
| Once                                 | 16        | 6.2            |
| Twice                                | 4         | 1.6            |
| 3 times                              | 1         | 0.4            |
| More than 3 times                    | 2         | 0.8            |
| Knee joint injury                    |           |                |
| Yes                                  | 179       | 69.6           |
| No                                   | 78        | 30.1           |
| Once                                 | 53        | 20.6           |
| Twice                                | 14        | 5.4            |
| Three times                          | 5         | 1.9            |
| More than three times                | 6         | 2.3            |
| Ankle joint injury                   |           |                |
| Yes                                  | 139       | 54.1           |
| No                                   | 118       | 45.9           |
| Once                                 | 46        | 17.9           |
| Twice                                | 38        | 14.8           |
| Three times                          | 15        | 5.8            |
| More than three times                | 19        | 7.4            |
| Foot injury                          |           |                |
| Yes                                  | 112       | 43.6           |
| No                                   | 145       | 56.4           |
| Once                                 | 61        | 23.7           |
| Twice                                | 37        | 14.4           |
| Three times                          | 10        | 3.9            |
| More than three times                | 37        | 14.4           |
| Need a surgery for your injury       |           |                |
| Yes                                  | 233       | 90.7           |
| No                                   | 24        | 9.3            |

them had one-five coaching years with a percentage of 33.7% of the overall sample participate in this study followed by those with six-10 coaching years about 18.4%. On other hand, only 14.3% of the participants stated they have a sports physiotherapist at the schools, this may refer to the cost of hire this position in the schools, which cannot afford financially this job position. The coaches varied based on their specialties, the majority were football coaches 32.7% and the second specialty was athletics about 21.4%. The typical gender of physiotherapist according to the participants were both of male and female about 65.3%, which indicate great capabilities of physiotherapist for both genders.

**Table 3** presents the types of athletes' injuries in western region of Saudi Arabia. The study showed an interest to examine other factorial issues related to the awareness of athletes about injuries. Therefore, they were asked if they suffer from any diseases, the results revealed about 94.2% stated have no chronic disease such as blood hypertension, osteoporosis, or diabetics. Meanwhile, about 5.8% of the participants stated they suffer from diseases like blood



**Table 4.** Athletes injuries rehabilitation

| Factor  | Frequency | Percentage (%) |
|---|-----------|----------------|
| Injury rehabilitation                         |           |                |
| Yes   | 154       | 59.9           |
| No  | 103       | 40.1           |
| Approval of injury rehabilitation             |           |                |
| Personal                                      | 103       | 40.1           |
| Coach   | 43        | 16.7           |
| Doctor  | 67        | 26.1           |
| Therapist                                     | 44        | 17.1           |
| Who did injury rehabilitation                 |           |                |
| Personal                                      | 122       | 47.5           |
| Coach   | 37        | 14.4           |
| Doctor  | 36        | 14.0           |
| Therapist                                     | 62        | 24.1           |
| How was long injury rehabilitation            |           |                |
| Less than one month                           | 125       | 48.6           |
| 1-3 months                                    | 63        | 24.5           |
| 4-6 monts                                     | 31        | 12.1           |
| 7-12 months                                   | 20        | 7.8            |
| More than one year                            | 18        | 7.0            |
| Did you come back to exercises                |           |                |
| Yes   | 34        | 13.2           |
| No  | 223       | 86.8           |
| Who give a permission to return to the sports |           |                |
| Personal                                      | 158       | 61.5           |
| Coach   | 33        | 12.8           |
| Doctor  | 35        | 13.6           |
| Therapist                                     | 31        | 12.1           |

hypertension, osteoporosis, and diabetics. The level of sports activity ranged from very high to sedentary, and the results presented about 39.3% of the sample mildly practiced sports activity, and only 4.7% of them showed very high level of activity. In terms of the exercise intensity, the results were varied and revealed the majority of the sample about 33.9% their exercise intensity ranged one-two hours and only 7.0% with exercise intensity more than two hours. However, the warming up before the exercise and the amount of time spent in this aspect is most important for athletes, thus the study interested with this issue and asked the participants with the length of time used to war up before the exercise, the findings showed about 77% did not do any warmup before the exercise and only 23% did warm up. The length of time for those who did warm up before the exercise, the results state that around 40.1% did up to 10 minutes of warming up before starting any exercise. Preventive exercises are the most important helpful method minimize the risks of injury; therefore, the study asked the participants if they do these exercises, the majority about 70.4 answered yes they did like these exercise. Doing this exercise need technical and experienced supervision, so the participants were asked if they did this exercise under a professional supervision or not, the results showed about 65.0% did this exercise under a personal supervision and about 7.8% and 7.4% under a supervision of therapist and doctor, respectively.

The study also showed an interest in addressing the injuries rehabilitation among young athletes. **Table 4** presents the rehabilitation of these injuries. The results presented demonstrated about 59.9% stated they did an injury rehabilitation to reduce the risks of their injury and make a well recovery. And about 40.1% of the athletes had got their rehabilitation approval personally, and around 26.1% got this approval from a doctor and only 16.7% from their coaches. Furthermore, the study asked the participants about whom did

the injury rehabilitation, the results revealed about 47.5% of the participants stated they did a self-rehabilitation and about 24.1% used a therapist to conduct this procedure. On other hand, the study concerned with knowing about the length of time being used to conduct injury rehabilitation, the majority showed about 48.6% their injury rehabilitation time was less than one month and only 7% more than one year. The study results also showed an interest to know if the young athletes come back to exercise again after they had an injury, the findings showed only 13.2% of the respondents stated yes, but the majority answered no may be for a serious injury, which led to dysfunctional capabilities for athletes or their intention not to repeat this pain again and sustain their body health. The results regarding to know about who give a permission to athletes to return to sports and exercises, the results showed about 61.5% of the respondents stated they at personally risk return to exercises and sports activities, and only 13.6% rely on their doctor's decision to play again. From these results, the study can explain the little concern of injury rehabilitation procedures particularly from professional and practitioners, since the most decision of conducting this procedure at athletes' their own responsibility without refereeing to doctor or therapist supervision or advice.

## DISCUSSION

The topic of awareness related to sports or exercises injuries has given powerful research implications for those interested in the participation in rehabilitation procedures for great functional as well emotional well-being outcomes of athletes. Addressing issues of the injury awareness is considers an integral component for many different rehabilitation programs, thus the current study through the findings and review the literature ultimately identified a variety of awareness attitudes and interventions among young athletes in western region of Saudi Arabia, which include holistic injury orientation and rehabilitation processes. The results of this study facilitate these attitudes and structure some approaches and experiences to directly confront the best injury techniques with cognitive therapy and behavioral interventions. The discussion over these results through the identified approaches was addressed in terms of the practical bases and research evidence. The distinction for the awareness and intervention approaches for athletics injuries would be due to the factors of the unawareness or. The results in this context can stand with the literature (e.g., [29]), which confirmed the socio-cultural effect of awareness as a third factor that presented in a psychosocial framework and help to guide health decisions about injury awareness.

The main research considerations are related to the embedded important nature of the awareness about injury and interventions within the rehabilitation procedures, thus the need for individuals to tailor effective rehabilitation and awareness programs. The different responses according to the level of knowledge and unawareness of the injury risks deduced the body distress for some athletes. This study of the literature pertained to the awareness about injury for young athletes with several injuries and identified a theoretical basis from which injury knowledge is derived, span the social, cognitive psychology and occupational therapy. The education through a more sophisticated and theoretical model of the awareness integrated several key approaches to draw multiple techniques and create adequate injury and health awareness

with tailored interventions to the given injury types [30]. Furthermore, the discussion of the study had proposed that a psychosocial approach to better understand the awareness limitation was used to guide the therapists during the choice of the appropriate approach for athletes. In term of the limited empirical studies, the methodological issues associated with conducting intervention studies in this field were addressed, and the future need to develop innovative research methods to critically evaluate the driven evidence of injury awareness [31].

However, the study results supported the growing injuries for younger athletes during games or exercises, which increase the importance of raising the awareness about these injuries to effectively reduce their risks [32]. This shed lights also launch an innovative research implication in this subject that looks to point toward the integration therapy activities and medical professional activities within the sports activities in Saudi Arabia for theoretically cover the analysis gaps of this area with whether a single case experimental design or qualitative research work. For example, the qualitative evaluation of changes in individuals' self-perceptions throughout the rehabilitation as stated by [33] with indicated the alternative sports treatment studies employed a clear setting some inclusion criteria to represent underlying factors of injury awareness and to be evaluated by using matched comparison approaches. Generally, the increased awareness given among the study discussion has related to a better functional outcome in numbers of studies (e.g., [34]), which recommended an investigation into the processes of awareness development and include qualitative evaluation methods from the individuals' perspectives. The results have also drawn more attention to the issue of developing awareness practices which are a consideration involve guidelines required for further awareness topic understanding.

Athletes returning to sport activities and exercises from an injury have been reported with a feeling of isolation or sometimes with a lack of athletic identity and unsupported feelings within the recovery to return to sports. These feelings which may include lower engagement and isolation from training and team partners could occur as a recovery phase for the athletes and remove from their normal training and sports competitions as well spend more time in the rehabilitation phases [35]. The senses of the alienation of athletes' body, which no longer practice the key necessary tasks that required to compete the negative effects of athletes' health state of the injury recovery thus return to sport activities again. Moreover, the findings showed that the injured athletes consistently reported their concerns about maintaining athletic supervision that given an intention to come back to practice exercise and involve more with their usual sports activities [36]. This supports the study of [37] that indicated the athletes perceived their therapists and coaches to be more distant to their injury cases and did not provide sufficient rehabilitation guidance. Similarly, the athletes in this investigation indicated a little functional support from coaches and therapists as they re-initiate the athletics participation.

The related rehabilitation injury that presented in this paper provided a model for the implementation a psychological intervention, and a motivational model also provide implications for the socioeconomic support based on rehabilitation models and interventions. The literature consists with this finding and asserted that this model may be helpful to give more information about athletes' emotional and feelings aspects within the rehabilitation procedure [38-40]. In

addition, the psychology side might provide further knowledge about sport injury rehabilitation with a comprehensive and sufficient service to the athletes. In the literature evidence, there were limited richness of the empirical studies in the Saudi context about sport injury rehabilitation, hence the effectiveness to describe the injury rehabilitation and interventions was locally unidentified. However, studies on social support are still underdeveloped since this support is a wide subject and possibly can intervene through many different necessary sources of support injury. For future studies, it is important to consider the absence of reliable data about injuries in the popular sports avenues to represent the limits of the studies on sport injury prevention and fill the existing lacks in the literature.

## CONCLUSION

To sum up the importance of being more aware about sports events injury, the current study focused on the role of awareness of the younger athletes in the western region of Saudi Arabia and addressed critical issue in the physical education and medical treatment of injuries resulting of these events or exercise. However, the findings of the studies showed good perceptions of the sample of this study about how to be aware with the best methods and ways could support the knowledge of the athletes regarding the actual or potential injuries. In general, the study stands with the relevant literature and provided some helpful implications with powerful discussions for practitioners and researchers in the future to establish new avenues for research works consider the factors influence the awareness of the young athletes and bring up further understanding of essential subject like the issue being examined in this study. On other hand, the study limitations were associated with a particular region in Saudi Arabia with no similar empirical studies in this setting could support making a comparison with the findings with the previous studies. This study did not conduct an analysis with the role of effects of important different factors such as type of sports or experience of the coaches or athletes.

Furthermore, the sample voluntarily participated in this study and some of them were reluctant and did not show an interest, thus some survey questionnaires were not seriously considered and returned. This study only collected injury awareness related studies and information. The level of awareness about the injury types and level of knowledge among the young athletes, which revealed good well known of this issue. The study further used some open-ended statements with Yes and No questions, thus more different study variables are highly required for qualitative analyses. Future studies are also required to make a comparison of some various sport types that may help to explore and identify further explanation and perceptions about this subject with larger sample size. Being aware of the research limitations, the study found that the majority of the participants were knowledgeable about the different types of injuries that occurred at sports events and exercises. There was no evidence or discussions about how reliable information sources about the injuries can be gained and what is the best mechanism to help the athletes to increase their injuries awareness. The importance of the level of injury awareness is associated with the athletes' experience, which may encourage the future studies to involve with a variety athletes characteristic to enhance the attitudes about injuries awareness.

The developing contextual research also represent lower interests with this topic compared to the developed contexts, this could trace to the limited scholarly concerns with the factorial effects that develop the athletes and coaching experiments at different places towards the injury's awareness and knowledge. This topic moreover links with the importance of being a physiotherapy knowledgeable athletics to expand this knowledge and consider new sample come with different background with numerous characteristics for further research findings and implications. A need for more attention on the significance of integration training programs and workshops would enhance athletics' knowledge with developed and modern circular accompanied with regular practical training sessions to expand and educate the interested coaches and athletes for the better ways and methods of injury management and treatment. It was better to make comparison of various sport types that may help to explore and identify perceptions about athletes with larger sample size. The findings do not fully capture a general spectrum of the coaches' or therapists' knowledge towards incorporate some evidence-based practices in different regions of Saudi Arabia.

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**Data sharing statement:** Data supporting the findings and conclusions are available upon request from the author.

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