



## Prevention, Control and Return to Play of Football Concussion in Eswatini

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### Commentary

In the 21<sup>st</sup> century, concussion in sports has become a global prominent sport and public health crisis [1-4]. Football-related concussion in Eswatini football has contributed too much of the epidemiological burden with highest number of affected people compared to other sports country wide, with about 6.5% of professional players and 4.2% of high school and 2.3% female player counterparts, and inspires much of the public awareness of late [5]. Drawing on public newspapers, scientific journals, Eswatini Football Association position on professional team medics' involvement and unlevelled ground on club engagement of football medical personnel policies, this history of the early crisis raises critical questions about solutions being negotiated at present for the future safety of players in curbing the rising football injuries, concussion and off the field player deaths.

Literature reveals that preventing all concussions is unlikely, despite many attempts that have been put in place to reduce the risk of concussion for players [6-8]. These attempts include modifications to protective gear [2], rule changes [4], trying to identify athletes at risk [6], and continuing to educate everyone involved with youth and high school sports about the dangers of concussions [7]. In consideration of the cultural, socio-economic, and contextual factors in Eswatini, the current report proposes the following policy recommendations for the Kingdom of Eswatini:

a) Make government through Ministry of Sports, Culture and Youth responsible to enhance cross-sector collaboration. This includes integrating sporting associations development, sports injury prevention and control into government mandates and the daily work of relevant government authorities and boards such as Eswatini Sports and Recreation Commission (ESRC), Eswatini Youth Council (EYC), Youth Enterprise Revolving Fund (YERF), Eswatini National Council of Arts and Culture (ENCAC) and the National Olympic Committee (NOC), improving and completing the athlete protection policy system, nurturing, encouragement and developing the training of professional medical sports experts.

b) Provide education on sports injuries to all key individuals involved, including athletes, parents, coaches, school administrators, athletic directors, teachers, athletic trainers, physicians, and other health care providers to be able recognize concussion so that they improve provision of care for athletes with concussions [1,6-10].

c) In addition to the above, create better use of health academic institutions to promote academic and educational programmes and campaigns to provide individual and large scale-level awareness on concussion, sudden cardiac arrest, respiratory and cardiology emergencies prevention, control, and treatment; hence implementing a complete revolution of prevention and intervention programmes. Also, related research should be conducted to develop and improving surveillance systems among the country's four regions and at national level.

d) Improve sporting environments and facilities by establishing and improving regulations and policies on sports tournament hostage, involvement of emergency medical services, sporting facilities surveillance and management; encouraging safe sport from schools, clubs, higher and tertiary institutions and; improving land use planning; improving built environments that encourage physical activity; ensuring protected time for adequate safe physical activity in schools; and changing societal norms and culture regarding of viewing physical education and sports as play being done for leisure by creating a balanced social marketing and advertising through traditional mass media and on social media.

e) Improve concussion treatment by the use of standardized clinical guidelines, practice,

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and services; enhancing professional training in concussion diagnosis, prevention, and treatment; and promoting home and club management of patients.

f) Encourage sporting associations and schools to engage and have health insurance policies to facilitate prevention and treatment.

g) Make schools, clubs and individual players return to play after following an individualized course, due to that each athlete will recover at a different pace. Under no circumstances should pediatric or adolescent players with concussion return to play the same day of their concussion. As for adults, no player should return to play while still symptomatic at rest or with exertion [10]. Although, the majority of athletes with concussion will become asymptomatic within a week of their concussion [1,2], literature have demonstrated a longer recovery of full cognitive function in younger athletes following a conservative approach to return to play compared with college-aged or professional athletes [6-8], often 7 to 10 days or longer [4].

The current report also points out directions for future research:

1. Encourage large population across sporting-related concussion research among youth, high school sports and professional sports;
2. Promote research on safe sport policies and interventions;
3. Improve awareness, recognition, and management of concussion;
4. Explore novel research approaches and intervention methods;
5. Enhance research on environmental risk factors for concussion;
6. Increase research on outcome and impact evaluation; and
7. Promote recovery of athletes with concussion should be full rest, both physically and cognitively, until their symptoms have resolved both at rest and with exertion.

The report provides comprehensive references and important guidelines for future work on concussion prevention and treatment in Eswatini. It aims to strengthen research and to promote prevention of concussion, sudden cardiac and respiratory arrest, obesity and cardiology emergencies, multidisciplinary cooperation, development

and implementation of new government policies. The report development process also promoted cooperation and exchanges among domestic and international experts and stakeholders, which will help expand future collaborations. These experiences could provide a useful insight for other low and middle income countries in their efforts to reduce sports injuries.

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