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STUDENTS' CORNER

Perspective From a Varsity Athlete Seeking Concussion Information to Help Recovery

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Abstract

The purpose of this paper is to share my experience, as a varsity rugby player, in seeking guidance and accurate and accessible concussion education and information through online web-based platforms after suffering multiple concussions. My experience is not unique; I am one of countless young adults who search the web for knowledge and information through online search engines for health-related advice. Young adults utilize the internet for accurate and relevant health information, as the digital age has reshaped how one obtains relevant information to change their knowledge and behaviour. When my sports medicine physician informed me that I could not participate in rugby-related contact practices for a lengthy period of time, I, as an athlete, needed to further my knowledge on the intricacies of the brain and the impact that multiple concussions may have. I also wanted to understand why I had to take so much time off to heal when, physically, I was feeling fine. Knowing that I would be missing provincial rugby tournaments and a tour to Ireland, I wanted to find answers beyond those provided by my healthcare provider. Through my online search for information, I discovered a lot of information on concussions, but I still had trouble finding answers from one trusted and reputable source. In this commentary, I discuss my experience with concussions, how I used the internet to obtain credible information and what I found, how social media provided me with additional support, and why finding accurate concussion information is important for recovery. Health & Fitness Journal of Canada 2021;14(4):10-15. https://doi.org/10.14288/hfjc.v14i4.362

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Introduction

The digital era has revolutionized information seeking. Older adults prefer reaching out to healthcare professionals for health education, and lack trust in the internet as a reliable source of information (Fergie et al., 2015). Conversely, young adults, commonly referred to as "Gen Z", are the first generation to have been fully immersed on the internet and have consumed modern technology through

their lives (Cain et al., 2020). In light of this "Digital Age", medical knowledge is not exclusively accessed via in-person with communication medical professionals, but accessible resources have allowed Gen Z to have more personal involvement in their own care. Given that individuals now have access to a plethora of web-based information, which in turn allows them to take more control of their health, it is important for this generation

to know where to find reliable and credible health resources.

My Personal Experience in Dealing with a Concussion

Before experiencing my first diagnosed concussion during my second year of playing varsity rugby, I had little information or knowledge about what a concussion was, and specifically, how to recover from a concussion. The current concussion policy for UBC athletes is that after a suspected concussion, athletes will be asked to seek medical attention (Thunderbird Student Athlete Portal. 2021). After seeing my doctor following my third concussive hit within a span of five months, I was told it was time to take a prolonged break from playing rugby. I was advised that I should no longer engage in any contact training until the following season, which was approximately six months later, in order to give my brain some time to rest and recover. I was told my brain was swelling, and even a small hit would result in new or worsened concussion symptoms, possibly prolonging my recovery. My doctor addressed the issue of Second Impact Syndrome and physical and emotional changes that may result from repetitive impacts; however, I felt that I needed to know more about this unique injury and that I lacked in-depth concussion knowledge and education. My main concern was that I could not understand why I needed to be absent from the sport that I love and play, especially when I was not experiencing any physical pain.

My position as a varsity athlete allows me expedited access to medical professionals, and I was scheduled to see my doctor weekly following my third concussion. My doctor was my primary source of information; however, I felt that

I needed more information to assist with my recovery. I therefore turned to the internet to gain as much accurate information as possible. When you break a bone or tear a muscle, there are tests that show evidence of damage. concussions, or mild Traumatic Brain Injury, are completely different – and the experience and recovery may vary from person to person. Previously, my other two concussions put me out of play for a period of only one week. I wanted to know understand what made concussion different from my first or second concussion. For this concussion. my sports medicine physician informed me that I could not participate in rugbyrelated contact practices for a period of six-months. What dictates recovery time? How would I know when I could return to my sport? I inquired about seeing a concussion specialist, and my doctor said he was knowledgeable in concussions, and that my brain was swelling and needed time to recover. In the past, I never researched concussion and recovery, but this time was different as I wanted to understand mv doctor's better rehabilitation plan. An individual's main motive behind becoming more health conscious via online resources are to become a more informed patient, learn about personal health conditions, and for additional support (Fergie et al., 2015). Similarly, I used the internet for this information and to try and reinforce and understand the recovery timeline given to me by my doctor.

As I reflect back, I remember how desperate I felt for help and answers and, in the end, I never found what I was looking for. Although an excess of information was available on the internet, I did not know which websites to trust, or where to find credible resources. I felt

more confident in the information on scientific websites rather than blogs. Fergie and colleagues (2015) described that young adult reported official websites as more reliable than user generated content, which can feel more like an opinion. It felt overwhelming to read pages of information; the most helpful sites were those that summarized information. Concussion awareness and education is not something that I was taught when I joined a contact sport like rugby in grade eight. Having this knowledge and education is vitally important for one's health. It would have allowed me to better understand how to recognize and respond to this injury. Receiving relevant and concise information from a trusted source on proper knowledge in recognizing and responding to a concussion would allow for a better recovery trajectory. Finding and having this information is important because it can be very difficult to get an appointment with a doctor immediately following a concussion; thus, knowing what to do, what to look for, and how to manage a concussion would be beneficial.

The internet provides multiple outlets through which individuals are able to find support and information, one of which is social media. Social media gives users a platform to share their stories, and connect with others going through similar physical or mental struggles. In the past, it was common for social media users to mostly share their brightest moments their 'highlight reel' - on social media, for example vacations, promotions, athletic success. Now, users such as celebrities, professional athletes, and fitness influencers are becoming more unfiltered and vulnerable. Sharing personal struggles about injuries and mental health helps break the stigma of athletes always having to be tough. During

her recent struggle with her own concussion recovery, Jen Kish, a retired Canadian rugby player, wrote about playing through 15 or more concussions, and the consequences of those decisions: memory loss, mood swings, suicidal ideation, migraines, and her recent bipolar diagnosis. She related her experience to a research study that found head injuries result in an increased likelihood of being diagnosed with mental illness (Orlovska et al., 2013; Robert, 2020; Stein et al., 2019). This particular Instagram post - in which she talked about her struggles with concussions - received five times more comments than her other photos during the same time frame. In the comments section, her followers, including myself, shared brief personal stories about concussion, and expressed appreciation for her encouragement to take time off following her concussion to allow her brain to heal. Rowan's Law Day and Headway's New Tough pact are public initiatives on social media that have helped grow wider concussion awareness in the community. Research shows that emotional, informational, and appraisal support (i.e., giving affirmations that thoughts and feelings are valid) from peer support (i.e., individuals who have gone through a similar circumstance) shows better community integration (Levy et al., 2019). This research is supported by a study analyzing individual posts on 17 public concussion Facebook groups. The coding scheme took into account details of the concussive injury and the purpose for posting. The main findings were that individuals were using this medium to share personal stories with individuals going through similar circumstances (Ahmed et al., 2010). Although I didn't search for an online concussion support group during my recovery period, I did come across the Headway Foundation. The Headway Foundation became a social community for me which shares athlete stories online, including my own, along with quick concussion research developments and facts. Using platforms, such as the Headway Foundation allows engagement with communities and content that athletes may not have been exposed to in their daily life.

Interactive patient support groups show the evolving nature of healthcare. Being diagnosed with a concussion can lead to feeling socially isolated due to the cognitive and physical consequences that prevent individuals from participating in work. social. and sporting school. activities. Social support helps validate struggles individuals deal with when experiencing an invisible injury like a concussion (Kita et al., 2020). My last concussion left me with a depressive cloud over my head. At that time, my rugby team didn't let injured athletes watch practices. The premise was that you were supposed to be focusing on recovery and doing something beneficial with the extra time. Yet, this left me feeling extremely isolated from my team. I had feelings of guilt as my other teammates were playing through visible injuries. Despite these feelings, my teammates reassured me that I needed the time off to heal and recover fully. It was comforting having teammates validate my invisible injury just as much as a visible injury. On my team, players turn to other players who have had similar injury. This was my support group, and now my role in the support group has changed from receiving support to offering it.

Why it Matters

As a student athlete, I am privileged to have a comprehensive health care team – including physiotherapists, sports

nutritionists, and psychologists - readily available to me. Although I was able to easily consult with these professionals about my concussions, I still felt the need to turn to the internet to find the 'why' I needed to refrain from playing rugby for a lengthy period of time. With a lot of concussion myths being accepted as truth, it is important to have easily accessible material for young adults to educate themselves. In order to help generations that increasingly rely on the internet for information, health care providers and sports organizations need to ensure they have reliable online information that is easy to access. I found valuable and credible information related to concussion awareness and recovery after the fact. I became aware of the Concussion Awareness Training Tool (CATT) when my varsity athletics team was asked for concussed athletes to share personal stories and provide feedback on a module that was specifically being built for varsity athletes. I participated because I felt that this tool was exactly what I needed when I was suffering from my concussions. I needed athletes other than football players as the face of concussions, and I needed trustworthy evidence-based information all in one place. I needed to hear the message that it's okay to make the harder decision to tell my coach that I am injured and need to take the time to heal. I learned that 50% of concussions go unreported (Meehan et al., 2013), and that a concussion typically takes 2-4 weeks to heal. Internal and external pressures to 'heal quicker' and return to the field was my downfall, and the reason I have decided to retire my varsity career at the end of next year. Not taking proper care of my brain health has created a passion to inform and educate others to help prevent long-term damage. The CATT provides

evidence-based and informative information on the definition of a concussion, concussion signs and symptoms, everyday struggles, how to get back to normal, and how to cope (Babul & Pike, 2017). Targeting athletes in this generation with online knowledge is the best way to help support the future of learning.

Future Considerations

Online platforms, including social media platforms, are here to stay and seem to be the way of the future. I follow concussion education and activism content on social media because it is a resource and a community that provides me with new information or studies in the area of concussion research. Making quality scientific content more readily available on social media could help young adults find valuable information, add credibility to information found online, and counter unproven claims with real data (Waechter, 2019). Concussions and TBIs disrupt social participation and increase social isolation (Tsaousides et al., communities 2011). Virtual give individuals an opportunity to seek emotional and practical support, and feel validated connecting to individuals going through a similar experience (Robinson & Pond, 2019). Thus, integrating virtual support into concussion recovery may provide iniured athletes information/support they need. Student athletes should be required to complete concussion education prior to the start of the season, similar to USPORTS' Canadian Anti-Doping Program, which must be completed before athletes are permitted to compete in USPORTS. Many universities have taken this injury seriously and, as of this year, have mandated concussion education for all their athletes using the

CATT. Playing through injury is normal, and often positively reinforced in sport (Baugh & Kroshus, 2016). Accurate, evidence-based concussion information and the sharing of personal stories are crucial for an athlete to understand what they may be feeling, the importance of telling someone, and how best to minimize long-term consequences. The sharing of stories allows personal them understand they are not alone in their recovery and how others have dealt with a similar situation. Sports culture glorifies individuals who play through injury - it is seen as heroic. But now, through my search for knowledge. I see there is more strength in recovery. The new type of tough is removing yourself immediately at early signs of a concussion, in order to have a longer, more fulfilled career in the future. Athletes need to be more educated on concussions and failure to know the risks associated with a concussion can have a lasting impact on their brain health.

Authors' Qualifications

The authors' qualifications are as follows: Emily Baker BA (c); Shazya Karmali, PhD; Shelina Babul, PhD.

References

Ahmed, O. H., Sullivan, S. J., Schneiders, A. G., & Mccrory, P. (2010). ISupport: Do social networking sites have a role to play in concussion awareness? *Disability and Rehabilitation*, 32(22), 1877-1883. https://doi.org/10.3109/09638281003734409

Babul, S., & Pike, I. (2017). The online concussion awareness training tool (catt). *British journal of sports medicine, 51*(11), A72-A72. https://doi.org/10.1136/bjsports-2016-097270.187

Baugh, C. M., & Kroshus, E. (2016). Concussion management in US college football: Progress and pitfalls. *Concussion*, 1(1). https://doi.org/10.2217/cnc.15.6

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- Cain, J. A., Armstrong, C., & Hou, J. (2020). Somebody Google a doctor! Urgent health information seeking habits of young adults. *Online Journal of Communication and Media Technologies*, 10(2). https://doi.org/10.29333/ojcmt/7853
- Fergie, G., Hilton, S., & Hunt, K. (2015). Young adults' experiences of seeking online information about diabetes and mental health in the age of social media. *Health Expectations*, 19(6), 1324-1335. https://doi.org/10.1111/hex.12430
- Kita, H., Mallory, K. D., Hickling, A., Wilson, K. E., Kroshus, E., & Reed, N. (2020). Social support during youth concussion recovery. *Brain Injury, 34*(6), 784-792. https://doi.org/10.1080/02699052.2020. 1753243
- Levy, B. B., Luong, D., Perrier, L., Bayley, M. T., & Munce, S. E. (2019). Peer support interventions for individuals with acquired brain injury, cerebral palsy, and spina bifida: A systematic review. *BMC Health Services Research*, 19(1). https://doi.org/10.1186/s12913-019-4110-5
- Meehan, W. P., Mannix, R. C., Obrien, M. J., & Collins, M. W. (2013). The prevalence of undiagnosed concussions in athletes. Clinical Journal of Sport Medicine, 23(5), 339-342. https://doi.org/10.1097/jsm.0b013e318 291d3b3
- Orlovska, S., Pedersen, M. S., Benros, M. E., Mortensen, P. B., Agerbo, E., & Nordentoft, M. (2014). Head injury as risk factor for psychiatric disorders: A nationwide register-based follow-up study of 113,906 persons with head injury. *American Journal of Psychiatry*, 171(4), 463-469. https://doi.org/10.1176/appi.ajp.2013.1 3020190
- Robert, S. (2020). Traumatic brain injury and mood disorders. *Mental Health Clinician, 10*(6), 335-345. https://doi.org/10.9740/mhc.2020.11.33

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Robinson, C., & Pond, D. R. (2019). Do online support groups for grief benefit the bereaved? Systematic review of the quantitative and qualitative literature. *Computers in Human Behavior*, 100, 48-59. https://doi.org/10.1016/j.chb.2019.06.01

- Stein, M. B., Jain, S., Giacino, J. T., Levin, H., Dikmen, S., Nelson, L. D., . . . Zafonte, R. (2019). Risk of posttraumatic stress disorder and major depression in civilian patients after mild traumatic brain injury: A TRACK-TBI study. *JAMA Psychiatry*, 76(3), 249–258. https://doi.org/10.1001/jamapsychiatry. 2018.4288
- Thunderbird Student Athlete Portal. (2021, September 6). Retrieved from www.students.canvas.ubc.ca.
- Tsaousides, T., Matsuzawa, Y., & Lebowitz, M. (2011). Familiarity and prevalence of Facebook use for social networking among individuals with traumatic brain injury. *Brain Injury*, *25*(12), 1155-1162. https://doi.org/10.3109/02699052.2011. 613086
- Waechter, F. M. (2019). Social media for science and research: Current trends and future possibilities. Retrieved from https://fmwaechter.com/social-media-science-research/