

Myths Vs Facts Concussions

Anonymous

Department of English, Anoka Ramsey Community College

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Professor: Chris McCarthy

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Headaches, nausea, and vomiting...oh my! When those words are brought up you probably think of the flu or some sort of stomach bug, but these are some of the most common symptoms of a concussion. But why should people be aware of concussion symptoms? After all, many people share the belief that concussions are no big deal. How often do you hear of lives being ruined by one measly bump to the head? Some people recognize the dangers of concussions but think that because their children aren't in sports they are safe from concussions, or they put their children in non-contact sports to keep their kids from getting hurt. Others may believe that concussions are dangerous, but that helmets and padding will surely do their job at preventing head injuries, or that if their child gets a concussion it will heal faster than an adult and won't be a big deal. The truth, however, is though most concussions are not life threatening, the impact they create on a person's life is extensive. No matter what lengths one takes to prevent concussions, there is no completely effective way to stop them from happening. Helmets and padding can reduce the chances of concussions and impact blows but will not eradicate concussions in contact sports. Non-contact sports still have a risk and even by taking sports completely out of the picture everyday accidents can cause concussions. Children, though more resilient in most natures of illness and injuries than adults, are just as susceptible to the lengthy concussion recovery as an adult is. I have had multiple concussions and hope to educate people about the impact they create. One thing I regret about my experience with concussions is not taking them seriously.

Most people have heard the word concussion, and they understand that it is an injury pertaining to the head, but concussions are more complex than many people believe. In "Concussions 101, Episode 1", Cantu (2022) describes concussions as a type of traumatic brain injury caused by violent shaking of the brain due to a blow either directly to the head or a blow creating rapid movement of the neck causing the brain to shake. So, we know that concussions are caused by the brain moving in the skull, but why is this dangerous? Concussions are typically not life threatening injuries but International Concussion Society (2019) states, "In addition to potentially life-long issues, including physical, mental and emotional

difficulties such as post-traumatic headache, there is also a possibility of school difficulties and depression post-concussion. Though extremely rare, not adequately treating a concussion could lead to second impact syndrome.” Concussions may not be life threatening but if left untreated or misdiagnosed it can lead to serious problems. So how do you know when to get yourself or a child checked out? Taking a trip to the doctor every time someone bumps their head can get expensive. This reason is why knowing symptoms of concussions can be particularly helpful. According to the Mayo Clinic (2024), “Physical symptoms of a concussion may include: Headache. Ringing in the ears. Nausea. Vomiting. Fatigue or drowsiness. Blurry vision....Confusion or feeling as if in a fog, Amnesia surrounding the event, Dizziness or ‘seeing stars.’” It is important to understand what a concussion is, why they are dangerous and what to look out for as you never know what might happen. It is also useful information to keep in mind as we investigate the myths vs facts about concussions in this essay.

Knowing the dangers of concussions one can understand why a parent would think of keeping their kids out of sports or putting them in non-contact sports such as tennis or gymnastics instead of football or soccer. They are attempting to limit a child’s exposure to the forceful tackles that are known to cause injuries. The truth is that all activities have risk of injury or concussion. If a child were to be jumping on a trampoline at home they could potentially fall off and hit their head causing a concussion. As for sports, it’s true that many sports have higher rates of concussions due to their aggressive nature. In “Incidents and risks of concussions in youth athletes: comparisons of age, sex, concussion history, sport, and football position,” Tsushima, et al. (2018) reports that “From among the various sports, the highest concussion risks were from participation in wrestling/martial arts (20.8%), followed by cheerleading (15.9%), and football (15.4%). The lowest risks were in cross country (3.2%), tennis (3.6%), and water polo (4.0%).” These statistics support the view of contact sports having increased rates for concussions; however, it also shows that even non-contact sports such as water polo, tennis and cross country have risks for concussions. These numbers are low but considering how many kids participate in sports, many playing multiple sports, the chance of concussion only increases.

If your child has their heart set on playing football or soccer, you might take solace in the fact they are wearing helmets and padding to protect themselves, which is what it is designed for. While protective gear and padding significantly decreases the chance of severe injury, it does not completely protect against concussions. In the article “Helmets and Mouth Guards: The Role of Personal Equipment in Preventing Sport-Related Concussions” Davenshvar, et al. (2011) states “Several studies have provided biomechanical evidence of the reduction of impact forces to the brain due to the use of specific headgear or helmets. However, in the majority of sports, these results have not translated into observed differences in rate or severity of concussion.” Concluding that helmets cannot stop concussions from happening completely, they continue, however to state that “For some sports in which contact with hard surfaces is possible, such as skiing, snowboarding, and cycling, there is evidence that helmets greatly reduce the incidence of head injuries in general; therefore, helmets are an important part of injury prevention and should be recommended in these sports.” Davenshvar, et al. (2011). So, do helmets help? Well, yes and no. Helmets and other headgear can help reduce concussion risks but like many other forms of padding and protection work better in some situations than others. There is no sure way to stop concussions, but there are ways to prevent them. In another article, “Long Term Consequences: Effects on Normal Development Profile after Concussion,” Davenshvar, et al. (2011) reports “...This could be accomplished through several means, such as decreasing the number of contact practices an athlete participates in each week; practice alone is responsible for up to 1500 impacts of 10g or more for some football players.... Additionally, sport specific rule changes might help reduce the frequency of unnecessary and dangerous collisions, thereby decreasing athletic concussion burden.” Referring to ways to keep athletes safe while still getting to play the sport they love.

If a child becomes concussed, many people think that the recovery time would be shorter than the average adult because kids are typically able to heal from injuries faster due to their fact they are still growing, and therefore biologically have more cell production. This thought process, though reasonable isn't necessarily true when it comes to concussions. No concussion is the same. Many take a couple

weeks, and some can take up to months to heal from. Children are no different, and in fact, concussions can be even more dangerous in children as their brain is not fully developed. The CDC (2022) claims “Recovery from a mild TBI or concussion may be slower among: Older adults, Young children, Teens, People who have had a concussion or other TBI in the past.” Because of the nature of concussions, when a child gets concussed they may need more recovery time as their brains aren’t fully developed. It is important to make sure there are no lasting effects. If there are lasting effects, recovery will take longer. Concussions are on a case-by-case basis and as stated before, none can be treated the same because they are not the same.

Most people believe that treatment of concussions consists of complete and total rest in a dark room. This was the case for a while, but recent studies find that it may only hinder the healing process. In the ted talk “Concussion: hard hitting facts,” Pieroth, E. (2021) argues about the previous mistreatment of concussions. Emphasizing that although rest is important in the healing process, it is crucial to get up and move around as sitting in bed in a dark room while people wait for their symptoms to go away only makes people think about their symptoms more. Thinking about their symptoms as they do nothing else will only make people with concussions more vigilant about their symptoms, therefore, prolonging recovery. Elizabeth recommends that doctors provide simple exercises such as dog walking to get people out of the house and prevent them from focusing on their symptoms. This is just one example of why the current thinking of protocol is outdated. The idea of sitting in a dark room, unable to read, talk, text, or watch TV is an idea that is outdated but still prescribed. It’s crucial to not partake in activities too straining. CDC (2010) “While you are healing, you should be very careful to avoid doing anything that could cause a bump, blow, or jolt to the head or body. On rare occasions, receiving another concussion before the brain has healed can result in brain swelling, permanent brain damage, and even death, particularly among children and teens.” While movement is important for recovery, people shouldn’t do activities that could put themselves at risk of injuring themselves further. Concussion recovery should be taken in small steps at a pace that is comfortable, especially with children who may not be able to

describe how well or unwell they feel. Youth suffering from concussion should rest for a day or two and when they are ready, slowly start introducing things such as going for walks, then schoolwork, and when they are cleared (if they are an athlete) they can get back to the game.

Concussion treatments are not a one size fits all, whatever works for one person might not work for another, but regardless concussions can leave one feeling incapacitated. One might think that children with concussions would be grateful to get out of school and homework for a while but kids being removed from after school programs and sports as well as missing school could set them back and leave them feeling lonely, depressed, and stressed. In a personal story, “Changing course: Finding new passion after concussion” Julia Scoles, (2020) reports her experience with concussions “Seeing friends while walking around campus became an emotionally taxing façade. Everything I once knew about myself was stripped away. I lost my joyful personality, my identity as a student, an athlete, and as a teammate. I felt like I was letting down the people in my life because I was not the same Julia, and it was obvious. The people I was closest to stuck by my side and helped me get through this arduous time. Words cannot express my gratitude for the support system I was blessed with.” As someone who also has personal concussion experience, I felt like I would never catch up in school. I didn’t get to hang out with my friends and on top of it all, I was unable to play the sports I loved. All of these made me try and rush my recovery. I pushed myself farther than I should have in school and in my training recovery program. I didn’t want to tell anyone if I had symptoms because I thought it would keep me away from living my life longer. When I finally got back to sports about a month later, I felt out of place. I had a tough time keeping up and I had to work harder to compete at the level I was at before. In my experience, concussion recovery is a long road, and it takes time. Kids don’t have fun when they lay at home in bed or are kept out of school. They’re bored and restless and frustrated that their symptoms can’t be willed away.

There are many false narratives about concussions from not recognizing the dangers, to thinking that a little cushioning will stop them entirely, or that the recovery is a couple days of bedrest and you’re back on your feet. Concussions can be incapacitating the recovery can be strenuous. The days missed can be

hard to catch up on and children especially are at risk of long-lasting effects. I completely support youth participation in sports and other activities. I think it provides a sense of community and creates friendship but as parents and coaches it is our responsibility to do everything in their power to keep kids safe and part of that is educating ourselves on what signs to look out for and how to prevent them from happening again. Many people's first concussion is easier to get through than the second and the more we understand concussions, the more prepared we are to protect ourselves and the people we care about from suffering from them. My experience with concussions, and injuries as an athlete in general, has ignited a passion in me to help those who suffer from injuries like I have. In fact, my high school athletic trainer, who treated both my concussions, is a big inspiration for my career path. Growing up as an athlete, I understand how not every injury calls for a visit to the doctor, but if you notice someone experiencing concussion symptoms after getting hit and they tell you it's probably something they ate before practice, which is what I thought was happening with my first concussion, recommend that they get checked out.

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