

CONCUSSION KNOWLEDGE AND BEHAVIOUR IN NEW ZEALAND CYCLISTS

CONCUSSION KNOWLEDGE

Knowledge of concussion was very high.

99% had heard of the term concussion.

98% of participants were aware concussion is a form of traumatic brain injury.

80-95% participants knew that signs or symptoms of concussion included:

- amnesia (poor memory)
- confusion
- loss of consciousness (being knocked out)
- headache
- dizziness
- poor balance (unsteady)
- vacant expression
- blurred vision
- nausea (feeling sick)

Only 54% knew that insomnia (difficulty sleeping) was a possible symptom of concussion.

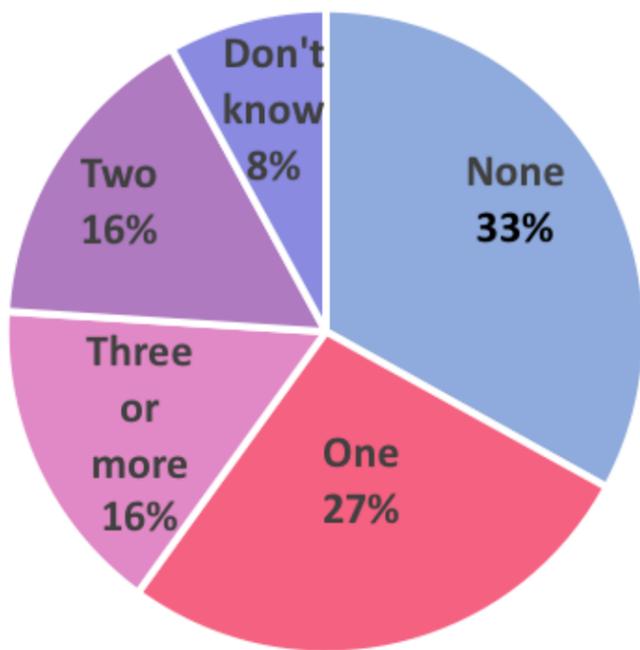
Only 13% knew that tonic posturing (arms extended and stiff) was also a sign of concussion.

99% of participants knew symptoms of concussion can occur several hours or days later.

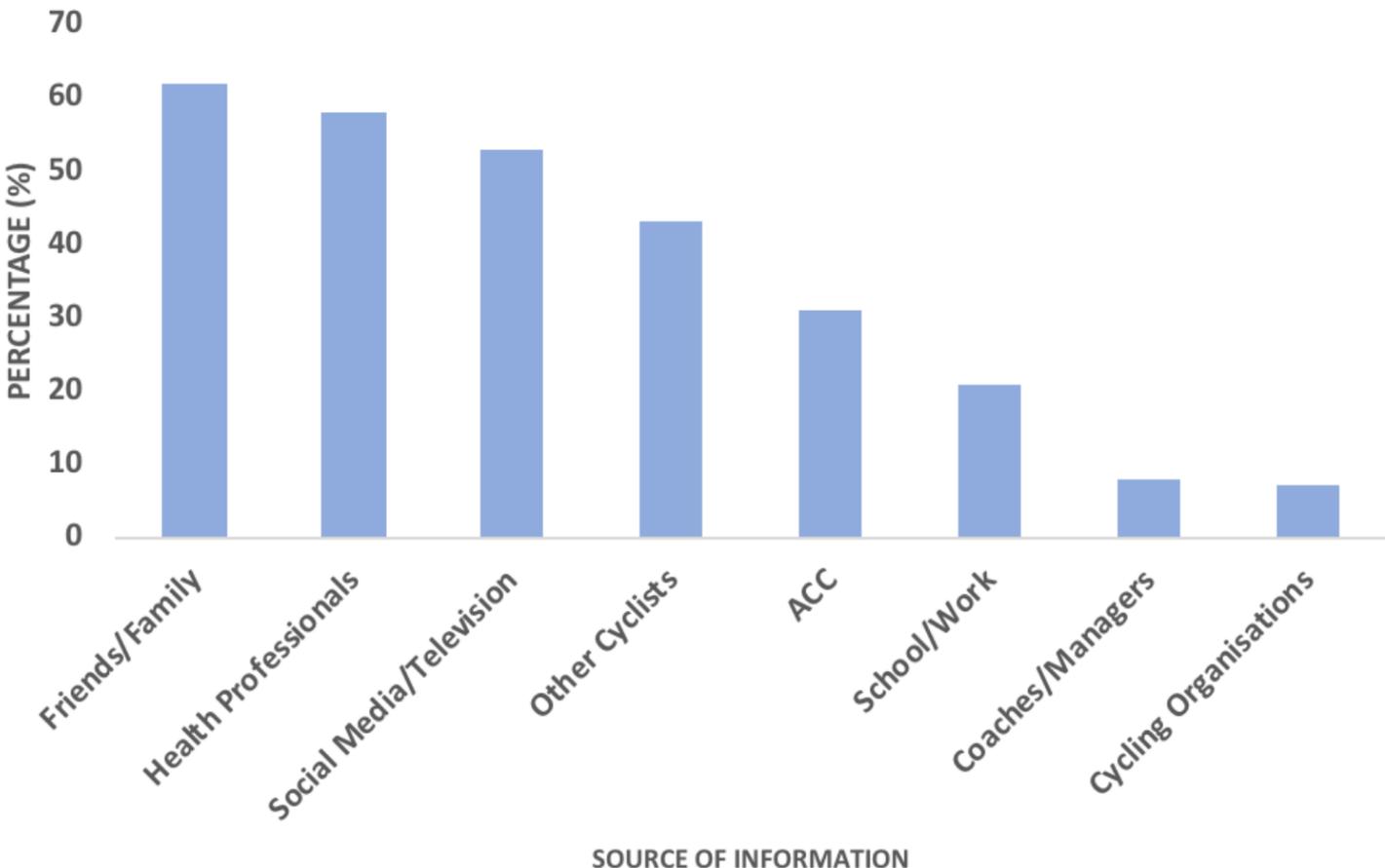
98% knew you do not have to lose consciousness for a concussion to occur.

However, 23% believed you had to have a direct hit to the head to experience a concussion.

NUMBER OF CONCUSSIONS EXPERIENCED



WHERE CYCLISTS OBTAINED CONCUSSION INFORMATION



SEEKING MEDICAL ASSISTANCE

97% believed a medical professional should be consulted after suffering a concussion.

However, participants reported many barriers such as:

- the concussion not being 'severe' enough
- unaware of having had a concussion
- time, cost and location to the medical professional
- not wanting to withdraw from event
- not worth it
- not wanting to over-react
- an attitude of "it's fine" or "take a concrete pill"
- concerns about the ability of medical professionals to diagnose and/or manage concussion effectively
- participants also reported cyclists being encouraged to continue cycling after a knock to the head

Only 50% of participants with a suspected concussion had sought medical assistance in the past.

CYCLING HELMETS

92-94% correctly identified helmets help to absorb the impact of a fall and reduce the risk of skull fractures.

87% incorrectly believed helmets reduce the risk of concussion.

99% wore a helmet when riding.

37% had continued to use the same helmet after a hit to the head.

KNOWING HOW TO FALL

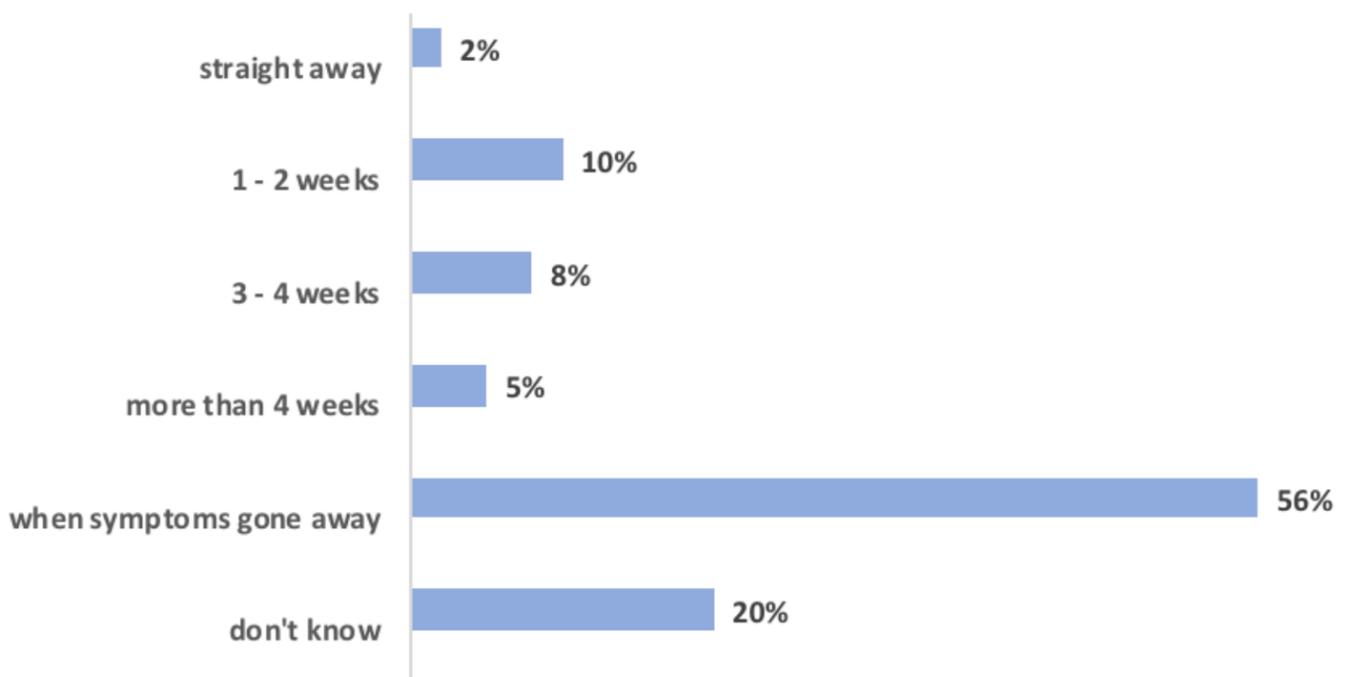
20% had been taught how to fall to reduce the risk of injury.

RETURNING TO CYCLING

84% believed a doctor was the best person to decide if you should return to cycling after a concussion.

89% knew returning to cycling too soon after a concussion can increase symptoms and delay recovery.

TIME BEFORE RETURNING TO CYCLING AFTER A CONCUSSION



Cycling poses specific challenges. Cyclists may be some distance from medical assistance and are often cycling/performing unsighted over challenging terrain in testing conditions, thereby increasing the risk of an undiagnosed concussion following a fall.

KEY FINDINGS

672 participants from various cycling activities completed the questionnaire with the majority being recreational cyclists riding on the road, mountain biking and/or commuting - a huge thank you to everyone who took part.

Participants wanted information on how to choose a helmet and **cycling-specific** concussion education to improve awareness, prevention and management of concussion.

Clarification required of return to cycling protocols after a concussion.

Participants wanted actioned policies which support a culture of assessing, diagnosing and thereby, reporting of concussion within the various cycling communities.

O'Reilly, Mahon and Theadom. Knowledge and Behaviour of New Zealand Cyclists Regarding Concussion. Summary of findings 21/03/2020.

Thank you to Cycling New Zealand for endorsement of this study and thanks to Ride Holidays and Kiwivelo for their sponsorship of the study.