Injury risk perceptions among junior cricketers

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Background

Injury risk perceptions

- Athlete’s personal judgement and evaluation of the risk of sustaining an injury

Health Belief Model

- Risk-benefit assessment based on the potential positive and negative outcomes
- Risk perceptions influence decision making and subsequent actions/behaviours

High perceived risk → likely to avoid the activity
Low perceived risk → likely to engage in the activity

Understanding risk perceptions
Prioritise undesirable behaviours and adapt them into injury protective behaviours

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Justification

Injury risk perceptions in sports at junior level

- Research: Cricket\(^3\), Australian football\(^4\), Soccer\(^5\)
- Useful precursor to understand subsequent risk behaviours and decisions

Junior cricket

- Injury risk perceptions among Australian junior cricketers\(^3\)
- Only study to examine risk perceptions in cricket at any level

Junior Cricket in Sri Lanka

- Different socio-economic and cultural trait
- Potential disadvantages in knowledge and resource availability for injury prevention and risk management

Can have a potential impact on risk perceptions and risk behaviours\(^6\)

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\(^3\) White et al., 2011;  \(^4\) Finch et al., 2002;  \(^5\) Kontos AP., 2004;  \(^6\) Zigon et al., 2005;
Aim

How Sri Lankan junior cricketers perceive the risk of injuries when playing cricket?

Participants

Setting
• Sri Lankan inter-district junior cricket competition - 2016

Participants
• School district cricket team players (boys)
• Under-13 age group (12.9 ± 0.9 years)
• n = 365
Method

- **Design** - Questionnaire based descriptive cross-sectional survey

- **Study instrument** - Australian JECS injury risk perception survey questionnaire

  - Cross-culturally adapted
  - Translated to Sinhala and Tamil languages
  - Content validity assessed

- **Risk perception questions**

  - Playing cricket and other sports
  - Playing cricket in different positions and tasks
  - Playing in different ground conditions

3-point Likert scale

- No chance
- Small chance
- High chance
- Don’t know

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Siesmaa et al., 2011
Results - Cricket vs other sports

Risk perception responses: Cricket vs other sports

- No chance
- A small chance
- A high chance
- Don't know

Highest risk: Cricket

Highest injury rates in collision type sports e.g. rugby, soccer, ice hockey

57% No chance
30% A high chance

Lowest risk: Basketball

Caine et al., 2008; Theisen et al., 2014;
Results - Cricket positions and tasks

- Greater injury rate among fast bowlers \(^{10,11}\)
- Eye and dental injuries in wicket keepers \(^{12,13}\)
- Ball struck on the body while facing a fast bowler \(^{14,15}\)
- Injuries related to misfielding or mishandling the ball \(^{14}\)
- Lack of evidence: association with fielding position or proximity to the batter’
Results - Ground conditions

Risk perception responses: different ground conditions

Association between ground conditions (hardness) and injury risk

- Grass
- Wet ground
- Raining
- Hard ground
- Bumpy ground

Inconclusive evidence

Higher risk
Conclusion

SUMMARY

- Injury risk perception ratings were mostly accurate and logical
- May not reflect the actual injury risk in some instances (e.g. fielding)
- Similar to risk perceptions reported among Australian junior cricketers

PRACTICAL IMPLICATIONS

- Develop injury prevention education interventions among Sri Lankan junior cricketers
- Add to the existing knowledge
- Provides new data from a socio-economically and culturally different junior cricket population

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3 White et al., 2011