PARTICIPATION IN PARKOUR

Aims Participation in sport and recreation may improve both physical and mental health, reduce crime levels, generate employment and encourage a more positive attitude to education. More young people are engaging in informal sporting activities, rather than participating in more traditional structured team sports, as witnessed in Olympics 2020. Paediatricians may see young people with sporting injuries and a 15 year old boy admitted with a head injury, sustained while participating in parkour, lead us to conduct a literature review to study this activity in more detail.

Methods Literature review.

Results Parkour is the art of moving fluidly from one part of the environment to another as quickly and efficiently as possible. It involves running, climbing, swinging, vaulting, rolling, crawling, jumping and leaping across natural or architectural obstacles such as trees, walls, fences, staircases or roofs. Participation in parkour has grown in recent years with internet forms, UTube videos and films such as Casino Royale featuring parkour, contributing to its popularity. The sport aims to build confidence, determination, self-discipline and self-reliance, and encourages community spirit and respect for others.

Various injuries have been reported in the literature with high-energy trauma resulting in severe impairment if not properly treated. A retrospective cross-sectional online questionnaire study involving 266 parkour participants found that on average, each sustained 1.9 injuries/year, or 5.5 injuries/1000 hours training. The upper extremity was the most affected body region (58%). Of all injuries, the most common were skin abrasions (70.3%), muscle injuries (13.1%), dislocations (6.1%), and soft tissue (e.g., ligaments, tendons) injuries (5.3%). Other injuries described include fractures, sprains and strains, contusions, lacerations, spinal cord injuries and traumatic carotid-cavernous sphenoidal sinus fistulas.

Most injuries occur as a result of striking objects or occur on landing (61% injuries), with athletes developing multiple movement patterns to deal with their momentum during landing, dissipating the impact. Overestimation accounts for 23% of parent/carer feedback surveys were sent to 37 parents and responses received from 20 parents and carers (54%). The median age of feedback respondents was 35 years (IQR = 30-45). The majority of respondents (80%) were parents, 10% were carers, and 10% were both. The median duration of care was 6 months (IQR = 3-12). Qualitative analysis of feedback identified six main themes: (1) early, holistic, and individualised care; (2) knowledge and experience of EDs amongst various professionals; (3) partnership between the service, patient, and their families; (4) providing support for parent/carers; (5) potential improvements; and (6) external barriers to the care and support of the patient. These themes led to 2 main areas identified for improvement: education of ward-based staff who are not part of the ED team, including nurses, health care assistants and domestic staff serving meals to patients and earlier/ increased psychological support for CYP and their parent/carer’s.