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10:1136/bmjqs-2013-002293.78

Background This study aimed to identify theoretically based modifiable factors that predict whether chiropractors manage patients with low back pain without ordering lumbar x-rays.

Methods A mailed survey with psychological measures was collected from a random sample of Ontario (Canada) and Practice Network (US) chiropractors. The outcome measures were behavioural intention and behavioural simulation (scenario decision-making). Explanatory variables included constructs from motivational theories (Theory of Planned Behaviour (TPB), Theory of Interpersonal Behaviour (TIB)), action theories (Operant Learning Theory (OLT) and Planning (action and coping)), and two other constructs: personal moral norm and habit as measured by the Self-Reported Habit Index (SRHI). Multiple regression analyses examined the predictive value of each theoretical model individually for simulation and intention outcomes.

Results 31% of North American chiropractors returned completed questionnaires. Overall, TPB and TIB, followed by personal moral norms and OLT best explained behavioural simulation. Theory level variance explained among Ontario and US chiropractors was respectively: TPB 59%; 52.0%, TIB 57%; 54.0%, personal moral norm 49%; 46.0%, OLT 49%; 52.0%, action planning 28%; 29%, and SRHI 42%; 48%. Constructs from TPB and TIB best explained behavioural intention. Theory level variance explained was respectively: TPB 85%; 74%, TIB; 83%; 81%, OLT 62%; 69%, and SRHI 59% and 52% for SRHI.

Conclusion These models explained up to 59% of the variation in behavioural simulation and up to 85% in intention to manage back pain patients without x-rays. Results may inform development of theory-based behaviour change interventions to implement imaging guideline recommendations among North American chiropractors. These models explained up to 59% of the variation in behavioural simulation and up to 85% in intention to manage back pain patients without x-rays. Results may inform development of theory-based behaviour change interventions to implement imaging guideline recommendations among North American chiropractors.

048

DEVELOPMENT OF FIRST AID GUIDELINES FOR RECREATIONAL ATHLETES BY BELGIAN RED CROSS-FLANDERS

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10:1136/bmjqs-2013-002293.79

Background Belgian Red Cross-Flanders (BRCFI) is active in many fields including first aid training, for which BRCFI develops evidence-based guidelines according to AGREE II.

Objectives Development of evidence-based recommendations for recreational athletes who perform one of 15 sport disciplines, defined by popularity, medical costs and injury risk in Flanders (Belgium). Initiatives concerning wording and accessibility were taken to develop implementable guidelines adapted for laypeople. These guidelines will also be used by the Flemish Government to update its information sources.

Methods 10 databases for guidelines, systematic reviews or individual studies were searched and draft recommendations were formulated based on the best current evidence. The quality of evidence was assessed using the GRADE approach. A guideline development group, including a multidisciplinary expert panel (co-authors PV, JB, RM and KP), discussed the draft recommendations while taking into account the evidence, and validated the final recommendations.

Results 32 systematic reviews and 2 guidelines that met the methodological criteria were identified as valuable source of studies. Additionally, 73 individual studies were included. The overall quality of the body of evidence varied from moderate to very low. Recommendations, written in active and explicit wording, were organised in a structure in order to be searchable via sports discipline, anatomical localisation, type of intervention, and injury.

Discussion Preferences of the target group were taken into account when selecting the sport disciplines and when formulation the evidence-based recommendations.

Implications for Guideline Developers/Users Involving the target population is an added value for developing an implementable evidence-based guideline.

049

EVIDENCE BASED TREATMENT GUIDELINES: AT WORK IN A MICROCOSM

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10:1136/bmjqs-2013-002293.80

Background Medical treatment under workers' compensation represents just a miniscule portion (about 3 percent) of total medical costs in the US Furthermore, legislation and rules are determined autonomously by each state. Worker' comp medical care, and the outcomes of that care, in each state theoretically can represent a microcosm of what could be achieved in an entire country. Impact of Evidence-based Treatment Guidelines: A trend began in 2003, starting with California, for states to consider adopting Evidence-Based Treatment Guidelines as a mechanism to insure timely and quality care for injured workers by following the least invasive, most-effective treatments today's science has to offer. Bi-products to the effective implementation of EBTG, include earlier return to work, better outcomes resulting in reduced indemnity costs, less friction in the system (providers know what treatments are authorised and will be paid for), fewer episodes of over-utilisation of services, and decreased medical costs, benefiting employers, insurers, providers and business. Outcomes where true EBTG have been implemented: Ohio adopted EBTG in 2003. A Pilot conducted in 2005 showed a