INPLASY PROTOCOL

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None declared.

EFFECTIVENESS OF BACK CARE EDUCATION PROGRAMME AMONG SCHOOL CHILDREN: A SYSTEMATIC REVIEW OF RANDOMIZED CONTROLLED TRIALS

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Review question / Objective: **i. What are the back care education programmes in different schools? ii. How effective has these back care education programmes been in treatment and prevention of future occurrence of back pain in children? iii. What are the factors that may affect the effectiveness of these back care education programmes? iv. What benefits can be derived from these back care education programmes in schools to the children, parents and society at large**
Information sources: **i. PubMed ii. PEDro iii. Cochrane library iv. Google scholar v. HINARI.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 15 January 2023 and was last updated on 15 January 2023 (registration number INPLASY202310044).

INTRODUCTION

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Rationale: **Back pain is prevalent in our world today and many treatments have been employed, some of which are very**

helpful and some which are not. Back care is a great tool for both prevention and treatment of back pain when the knowledge is being put into correct practice. In many schools around the world, back care education has been incorporated as part of school's programmes. The goal of primary prevention of back pain and other spine and musculoskeletal disorders has created a need for learning the practice of back care by children. Studies has shown evidence of efficacy of back care programmes among children (Habybabady, et al., 2012; Dolphens, et al., 2011 & Akbari-Chehrehbargh, Tavafian, & Montazeri, 2020) but there is a need to review these studies done in different countries to ascertain if back care programmes is generally effective in prevention and management of back pain in children. Therefore, this study aims at back pain management and prevention through the use of different methods of back care education programmes done in elementary and tertiary schools by reviewing literatures on back care education done in different countries.

Condition being studied: Back pain.

METHODS

Search strategy: Search strategy involves the use of medical subject headings, text terms, keywords and word variants that represented programmes on back care (back school OR back education programme OR back health OR postural education) and terms that captured their measure of effectiveness (efficacy OR effectiveness OR importance) in children (children OR adolescents OR school-aged children) combined using the Boolean operator "AND". The search applied no search limits during the search.

Participant or population: Children.

Intervention: Education.

Comparator: studies that compare back care education to other treatment protocols like exercise, massage, passive mobilizations, acupuncture etc., no intervention and placebo.

Study designs to be included: Randomized Controlled Trials.

Eligibility criteria: 1. Population; this review included studies done among children of ages 6 to 18 years of age2. Intervention; available studies on back care education programmes and back schools both as a preventive and management strategy for back pain carried out by teachers, physiotherapists or any other health care professional.3. Intervention settings; studies done in schools which include elementary and high schools in any country.4. Study design; randomized controlled trials (RCTs) that investigated the use of back care education programmes.5. Language: this review included studies published in English language.6. Comparators: studies that compare back care education to other treatment protocols like exercise, massage, passive mobilizations, acupuncture etc., no intervention and placebo.7. Timing: there are no restrictions to timing. Available studies are recruited irrespective of their date of publication.8. Outcomes;· Primary outcomes: back behaviour, knowledge, pain intensity, and back pain prevalence.· Secondary outcomes; self-efficacyExclusion criteriaThis study excluded;1. Studies done in tertiary institutions.2. Studies on secondary data which include; systematic reviews, narrative reviews, scoping reviews etc.3. Papers with only abstracts and no access to their full documents.

Information sources: i. PubMed ii. PEDro iii. Cochrane library iv. Google scholar v. HINARI.

Main outcome(s): Back behaviour, knowledge, pain intensity, and back pain prevalence.

Additional outcome(s): Self-efficacy.

Data management: Results from the search was imported into Rayyan to check for duplication of results and consequent

deduplication. Evaluation and screening of the articles by title, abstract and full text based on the inclusion and exclusion criteria stated above was also done using the Rayyan software. Eligible articles were then selected for the study.

Quality assessment / Risk of bias analysis: The methodological quality of the included studies was assessed using the PEDro scale. The PEDro scale is an effective tool for the measurement of the methodological feature of clinical trials (de Morton, 2009). It relays internal validity and interpretability which is used to access each of the selected studies (Kamper, et al., 2015). Quality is accessed by the level of score allocated. Scores less than 5 indicates low quality while scores greater than 5 indicates a high quality. Based on the PEDro assessment and sample size used, the level of evidence was assigned to each study. High quality RCTs (rated as high or excellent by PEDro with sample size ≥ 100) was considered as having level 1 evidence, whereas lower-quality RCTs (rated as low by PEDro with sample size less < 100) was considered level 2 evidence.
The scale were demarcated as Yes or No. A score of one was allocated to each "Yes" answer and zero to "No" answer. The overall score was reported as a tally of all yes answers out of 11 based on the appropriate answers for each study.

Strategy of data synthesis: Data was synthesized separately to answer the objective questions. Qualitative Synthesis and Thematic Analysis was used to analyze the extracted data. The review findings was subsequently combined to form a wider narrative of findings.

Subgroup analysis: Children with low back pain.

Sensitivity analysis: The study being a secondary data; studies not assessible online; studies that had no specific outcome measure.

Language restriction: English language.

Country(ies) involved: Nigeria.

Keywords: Back Education, school children, back pain, Back care, knowledge, backschool.

Dissemination plans: The work has been presented at a conference on 22nd december, 2022 presentation at workshopsJournal publication Authority to cite.

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