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Does teaching correct sitting and sleeping postures help people with low back pain?

Submission date
31/03/2025

Recruitment status
No longer recruiting

Registration date
01/04/2025

Overall study status
Completed

Last Edited
04/04/2025

Condition category
Musculoskeletal Diseases

[_] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[_] Results
[_] Individual participant data
[_] Record updated in last year

Plain English summary of protocol

Background and study aims
This study examined whether educating people on correct sitting and sleeping methods could help reduce non-specific low back pain.

Who can participate?
Adult Medical students who reported back pain in the last three months and had not received other treatments.

What does the study involve?
The participants were given simple, practical advice and education about healthy sitting and sleeping positions during daily activities (sitting and sleeping). The study then compared their pain levels before and after receiving this education, after a follow-up of two months (two reminders in between).

What are the possible benefits and risks of participating?
There was no materialistic benefit or risk, nothing was offered as a reward and no penalties if the participant withdrew during the study. Many participants withdrew from our study of their own will. The regulations of Yarmouk University give the participant the full power to engage in or withdraw from the study at any time.

The only thing that participants get is the printed brochure in order to read and re-read whenever they want to remind themselves of the instructions that the team gave. Those brochures were given as a courtesy to the students who answered with no back pain in the last three months, and weren't enrolled in the study.

It is hoped that, whatever the results, the instructions and brochures were beneficial for everyone who got the brochure in their hands. Because they included universal scientific information that will do no harm at all but will lead to a healthier lifestyle, if followed.

Where is the study run from?
Yarmouk University, Faculty of Medicine, Jordan

When is the study starting and how long is it expected to run for?
April 2024 to November 2024

Who is funding the study?
Investigator initiated and funded

Who is the main contact?
Dr Mohammad Akram Awwad, mohammad.awwad@yu.edu.jo

Contact information

Type(s)
Public, Scientific, Principal investigator

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Study information

Scientific Title
Impact of awareness and adherence to correct sitting and sleeping positions on low back pain: a prospective interventional study

Acronym
IAA CSS

Study objectives
Participants who receive education on correct sitting and sleeping positions are expected to experience a reduction in the severity and frequency of low back pain compared to their baseline condition.

Ethics approval required
Ethics approval required

Ethics approval(s)

Approved 23/05/2024, Institutional Review Board (IRB) at Yarmouk University (Shafiq Irshaidat street, P.O Box 566, Irbid, 21163, Jordan; + 962 2 7211111; irb@yu.edu.jo), ref: IRB/2024/239Ins

Primary study design
Interventional

Study design
Prospective single-arm before-and-after design interventional study

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Non-specific muscular back pain

Interventions
This prospective interventional study follows a single-arm, before-and-after design. Participants were initially assessed at baseline, educated on correct sitting and sleeping positions, and reassessed after a two-month follow-up period, with reminders provided in between. No control group was included.

Education on healthy sitting and sleeping positions was delivered one-on-one through high-quality brochures featuring demonstration pictures and video links. To encourage adherence to healthy postures, follow-ups were conducted via WhatsApp messages and official emails at 2 weeks and 4 weeks after the initial interview. The second interview, conducted face-to-face, took place two months after the first interview.

Intervention Type
Behavioural

Primary outcome(s)
Change in pain intensity measured using the Numeric Rating Scale (NRS) at the time of the first interview (before adherence to healthy postures) and at the time of the second interview (after two months of adherence to healthy postures).

Key secondary outcome(s)
The following secondary outcome measures were assessed at the time of the first interview (before adherence to healthy postures) and at the time of the second interview (after two months of adherence to healthy postures):
1. Use of over-the-counter painkillers measured using a categorical variable which is (used painkillers) or (didn't use)
2. Absenteeism from university classes due to back pain measured using a categorical variable which is (yes, I missed classes because of pain) or (No, I didn't miss classes)
3. Sleep disturbance due to back pain measured using a categorical variable which is (yes, pain woke me up from sleep) or (no, I wasn't woken up from sleep)

Completion date
01/11/2024

Eligibility

Key inclusion criteria
Medical students who reported back pain in the last three months

Participant type(s)
Learner/student

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Upper age limit
24 Years

Sex
All

Total final enrolment
84

Key exclusion criteria
1. Known musculoskeletal or neurological conditions affecting back pain
2. A history of skeletal spine diseases such as scoliosis or disc prolapse with herniated discs
3. A history of any neurological disorder (central or peripheral)
4. Those undergoing medical treatment for back pain at the time of enrollment

Date of first enrolment
12/08/2024

Date of final enrolment
01/09/2024

Locations

Countries of recruitment
Jordan

Study participating centre
Yarmouk University, Faculty of Medicine
Shafiq Irshaidat street, P.O Box 566

Irbif
Jordan
21163

Sponsor information

Organisation
Yarmouk University

ROR
https://ror.org/004mbaj56

Funder(s)

Funder type
Other

Funder Name
Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan
The dataset generated during and or analyzed during the current study will be available upon request from Dr Mohammad Akram Awwad, mohammad.awwad@yu.edu.jo.

The types of data will be shared include Excel sheets of the whole dataset, anonymous, but with age, sex, which level (year of studies), weight, height, BMI, any chronic diseases, any history of back pain trauma or illness, activity level, sleeping hours, pain measure at 1st interview, pain measures at 2nd interview (after two months). Level of adherence to healthy sitting and sleeping positions during the two months (low: 25% or less, moderate: more than 25% to less than 75% and high: more than 75%). Please note: when students got the data, they had to know the names because they wanted to send participants reminders through WhatsApp and email. Data in the subsequent Excel sheet contained only numbers instead of names. All the statistics were done on anonymous data.

The brochure's language is Arabic. The timing of availability is upon request. Consent was required and obtained, using the official consent form from Yarmouk University for trial studies. No other ethical or Legal constraints.

IPD sharing plan summary
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet			01/04/2025	No	Yes
Protocol file	version 1.0	03/04/2025	04/04/2025	No	No