Ergonomics and Mindfulness for preventing musculoskeletal pain and a better quality of life

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Main Information

Primary registry identifying number
LBCTR2022095130

Protocol number
CEHDF2040

MOH registration number
CEHDF 2040

Study registered at the country of origin
Yes

Study registered at the country of origin: Specify

Type of registration
Prospective

Type of registration: Justify
N/A

Date of registration in national regulatory agency
19/09/2022

Primary sponsor
Dr Sandra Kobaiter Maarrawi

Primary sponsor: Country of origin
Lebanon

Date of registration in primary registry
18/10/2022

Date of registration in national regulatory agency
19/09/2022

Public title
Ergonomics and Mindfulness for preventing musculoskeletal pain and a better quality of life

Acronym

Scientific title
Effect of ergonomics and mindfulness on musculoskeletal pain and quality of life for office workers: a randomized controlled trial

Acronym

Brief summary of the study: English

With the introduction of computers on a global scale, we find their increasing use, especially in workplaces. Although computer use has improved worker productivity, this change has also led to adverse health impacts including work-related musculoskeletal disorders and consequently a deterioration in the quality of life. Pain is often reported in these disorders and is one of the early signs of their development. Determining its presence in professional life and identifying the factors that cause it is important in order to take the necessary corrective measures and plan preventive actions. Office workers are known to be exposed to major stress and to sit in a static position for a long period of time, which make them at risk of developing potentially chronic pain and quality of life deterioration. This could be prevented by implementing interventions that target the multiple aspects of pain (physical and mental) and improve quality of life. Ergonomic interventions are proven to be effective in fixing bad posture by adapting the office environment, which has a positive impact on musculoskeletal pain. Moreover, Mindfulness interventions are a growing interest since its emergence in 1990. By establishing a new way of thinking, consciousness without judgment of the present experience, it has been proven to reduce stress and improve well-being. The aim of this study is to evaluate the effect of multifactorial interventions (ergonomics and mindfulness) in reducing pain and improving quality of life in office workers.

Brief summary of the study: Arabic

في ظل الإنتشار العالمي لأجهزة الكمبيوتر، نجد تزايد في إستخدامها وبصورة خاصة في أماكن العمل. من المؤكد انّ استخدام الكمبيوتر أدى إلى تحسين إنتاجية العمال ولكن لا بد من الإشارة أن هذا التغيير ينتج أضرار صحية منها الاضطرابات العضلية الهيكلية المرتبطة بالعمل وبالتالي تدهور جودة الحياة. غالبًا الألم في هذه الاضطرابات يعتبر اشارة مبكرة لتطورها، لذلك من المهم تحديد وجودها في الحياة المهنية وتحديد العوامل المسببة لها من أجل اتخاذ الإجراءات الصحيّة والوقائية. إن العاملين في المكاتب معرضين لضغط كبير ولفترة جلوس طويلة، ما يزيد من خطر إصابتهم بآلام مزمنة وما يؤثر سلبًا على مستوى حياتهم. من الممكن منع هذه الأضرار من خلال تنفيذ تدخلات جسديّة وعقليّة لأماكن الألم . فقد أثبتت التدخلات المريحة فعاليتها في إصلاح المشاكل من خلال تكييف بيئة المكتب، ما يخفف من آلام العضلات والعظام. كما يمكننا القول ان ، من خلال إنشاء طريقة جديدة في التفكير. فقد ثبّت أنها تقلل التوتر وتعزز ١٩٩٠تدخلات اليقظة اثبتت اهتمامًا متزايدًا منذ ظهورها في عام الرفاهية. فالهدف من هذه الدراسة هو تقييم تأثير التدخلات متعددة العوامل (بيئة العمل واليقظة) في تقليل الألم وتحسين نوعية الحياة للعاملين في مكاتبهم.

Health conditions/problem studied: Specify

Musculoskeletal pain - prevention
well being of office workers

Interventions: Specify

Name : Ergonomics
-Description : workstation adjustments based on anthropometric measures, and follow-up visits, once a week for a duration of 5 weeks.

Name : Mindfulness
-Description : new mindfulness-based program, administrated as group sessions once a week for a duration of 5 weeks.
Control : placebo

Key inclusion and exclusion criteria: Inclusion criteria

-Office workers aged between 18 and 64-year-old (legal work age in Lebanon)
-Female (because pain perception defers based on sex)
-Experiencing non-specific pain related to work
-Work for at least 20h / week

Key inclusion and exclusion criteria: Gender

Female

Key inclusion and exclusion criteria: Specify gender

Key inclusion and exclusion criteria: Age minimum

18

Key inclusion and exclusion criteria: Age maximum

64

Key inclusion and exclusion criteria: Exclusion criteria

-Obesity (IMC > 30 Kg/m2)
-Not having a fixed workstation, sharing a workstation with a co-worker, using a laptop computer, using two monitors
-Having undergone surgery in the previous six months
-Pain due to a medical condition, pregnancy or menstruation
-Taking pain medication on a regular basic

Type of study

Interventional

Type of intervention

Preventive measures

Type of intervention: Specify type

N/A

Trial scope

Safety

Trial scope: Specify scope

N/A

Study design: Allocation

Randomized controlled trial

Study design: Masking

Blinded (masking used)

Study design: Control

Placebo

Study phase

N/A

Study design: Purpose

Prevention

Study design: Specify purpose

N/A

Study design: Assignment

Parallel

Study design: Specify assignment

N/A

IMP has market authorization

IMP has market authorization: Specify

Name of IMP

Year of authorization

Month of authorization

Type of IMP

Pharmaceutical class

NA

Therapeutic indication

prevention of musculoskeletal pain

Therapeutic benefit

better well being, alleviate and prevent musculoskeletal pain

Study model

N/A

Study model: Explain model

N/A

Study model: Specify model

N/A

Time perspective

N/A

Time perspective: Explain time perspective

N/A

Time perspective: Specify perspective

N/A

Target follow-up duration

Target follow-up duration: Unit

Number of groups/cohorts

Biospecimen retention

None retained

Biospecimen description

NA

Target sample size

80

Actual enrollment target size

30

Date of first enrollment: Type

Actual

Date of first enrollment: Date

03/10/2022

Date of study closure: Type

Actual

Date of study closure: Date

19/12/2023

Recruitment status
Recruiting

Recruitment status: Specify

Date of completion
03/07/2023

IPD sharing statement plan
No

IPD sharing statement description
NA

Additional data URL
NA

Admin comments

Trial status
Approved

Secondary Identifying Numbers

Full name of issuing authority	Secondary identifying number
Saint Joseph University of Beirut (USJ)	LAREN_22-23_Ergo

Sources of Monetary or Material Support

Name
Saint Joseph University of Beirut (USJ)

Secondary Sponsors

No Sponsors

Contact for Public/Scientific Queries

Contact type	Contact full name	Address	Country	Telephone	Email	Affiliation
Public	Dr Sandra Kobaiter Maarrawi	USJ - Faculty of Medicine - Laboratory of Research in Neuroscience	Lebanon	009611421677	sandra.kobaitermaarrawi@usj.edu.lb	Saint Joseph University of Beirut
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Centers/Hospitals Involved in the Study

Center/Hospital name	Name of principles investigator	Principles investigator speciality	Ethical approval
Laboratory of Research in Neuroscience	Dr Sandra Kobaiter Maarrawi	Neuroscience	Approved
Institute of Occupational Therapy (ergonomics)	Dr Carla Matta Abi Zeid	Psychomotricity	Approved

Ethics Review

Ethics approval obtained	Approval date	Contact name	Contact email	Contact phone
Hotel Dieu de France	25/07/2022	Pr Michel Scheuer sj	cue@usj.edu.lb	009611421229

Countries of Recruitment

Name
Lebanon
Lebanon

Health Conditions or Problems Studied

Condition	Code	Keyword
Musculoskeletal pain	Pain, not elsewhere classified (R52)	pain
well being	2-Propanol (T51.2)	quality of life

Interventions

Intervention	Description	Keyword
Mindfulness	new mindfulness- occupational based program, inspired from conventional MBCT and MBSR, administrated as group sessions once a week for a duration of 5 weeks.	Mindfulness
Ergonomics	workstation adjustments based on anthropometric measures, and follow-up visits, once a week for a duration of 5 weeks.	ergonomic

Primary Outcomes

Name	Time Points	Measure
Pain	at baseline, During the 2 weeks following end of treatment, and after 6 months	Visual analog scale
Quality of Life	at baseline, During the 2 weeks following end of treatment, and after 6 months	The 12-Item Short Form Health Survey (SF-12)

Key Secondary Outcomes

No Outcomes

Trial Results

Summary results

Study results globally

Date of posting of results summaries

Date of first journal publication of results

Results URL link

Baseline characteristics

Participant flow

Adverse events

Outcome measures

URL to protocol files