

info@biocham.com

info@hpu.edu.sy

- This work is a collaboration between Al-Hawash Private University and BioCham Company, while the team work consists of:
- Dr. Baraa Almansour (Aroma therapist), Dr. Aktham Hyfaa (Physical therapist) and graduation students from Al-Hawash Private University which offers the latest professional information on cosmetology industry trends, health care techniques, and tools, along with BioCham company for sustainable products representative by Ms. Roula Ali Adeeb who provided the study with organic massage oil.
 - Over the past decade, Syria has suffered from war and its aftermath, resulting in significant social and geopolitical changes that have negatively affected physical and mental health. This pilot study aimed to improve the participant's quality of life (QOL) by using aromatic massage interventions.
 - A quasi-experimental pre-post intervention study design was conducted on a sample of 15 male and female participants from the Syrian community, aged between 18 and 55 years. Participants diagnosed with physical pain for at least 2 year accompanying psychological fatigue.

The intervention was applying sessions of aroma massage for hand and feet lasted 30 minutes over a period of two months, with a rate of two sessions per week, it has been run by two students from The Faculty of Cosmetology and Health Care /Al Hawash Private University following a specific protocol guided by Dr. Aktham as (Physical therapist) and Dr. Baraa as (Aroma therapist) using organic massage oil (Relax) as graduation project, with showing all participants how to apply this protocol in their daily basis by themselves.

- This study based on the premise that meeting the challenges of the current era and achieving high levels of quality of life for people in Syria, both quantitatively and qualitatively, requires improving human performance and improving health.
- Self-nursing that strengthen the body and mind is very important in conflict time, so adapting specific, internationally approved massage techniques with chosen oils could be considered as innovative treatment, aims to bridge the gap between popular knowledge and scientific foundations by reviewing some documented clinical studies in this field.



Applying an aroma massage involved the use of selected essential oils diluted with different carrier oils; all the used oils demonstrated below with details:

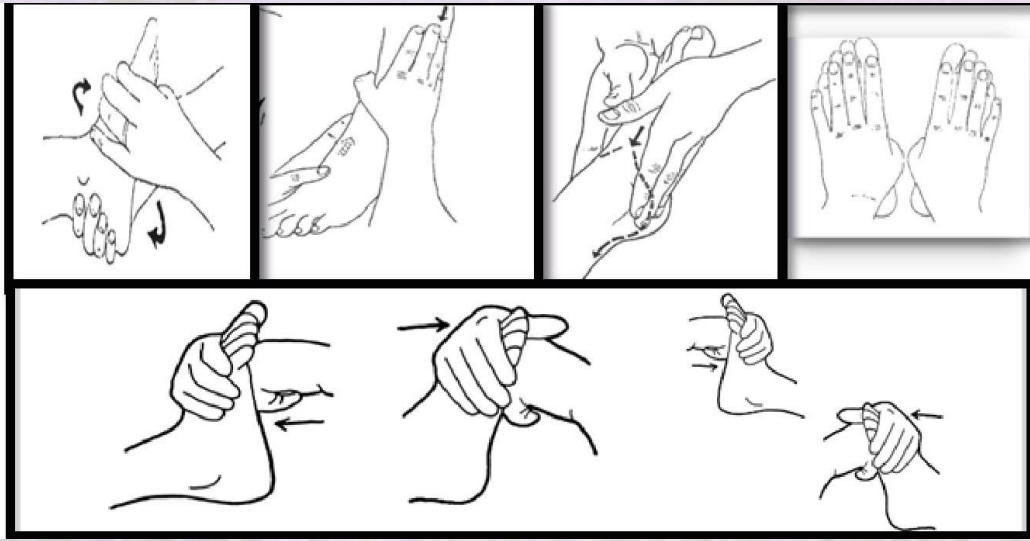
Scientific name	Most effective chemical compounds	Physical effect	Psychological effect
Grapefruit peel essential (<i>Citrus paradisi</i>) 0.6%	Limonene, Myrcene, A-Pinene, β -Pinene.	Antioxidant, antibacterial, antifungal, Immune system booster	Mood enhancer
Clove essential oil (<i>Syzygium aromaticum</i>) 0.4%	Eugenol, Eugenyl acetate B-Caryophyllene.	Pain reliever, Anti-inflammatory, blood circulation Stimulator, antioxidant.	Anti-anxiety with calming effects.
Lavender essential oil (<i>Lavandula Latifolia</i>) 1%	Linalool, camphor, 1,8- cineole (eucalyptol) and camphene.	Pain reliever, Anti-inflammatory, wound healer, Blood pressure regulator.	Antidepressant, Anti-anxiety, mood enhancer Improve sleep quality
Flaxseed carrier oil (<i>Linum usitatissimum</i>) 48%	Linoleic acid, Oleic acid Omega (3-6-9), Vitamin E	Anti-inflammatory, enhancing skin hydration, antioxidant, increasing softness of skin and improves its elasticity.	reduce depression symptoms and mental fatigue with Cognitive Function Enhancement
Peach Kernel carrier Oil (<i>Prunus persica</i>) 50%	Oleic acid, Linoleic acid, Palmitic acid, Vitamin E.	Anti-inflammatory, antioxidant, Improves cardiovascular health.	promoting relaxation and well- being by allowing oils to be more effectively delivered to the skin

- Blending has been done in BioCham Company as mentioned above in the table .
- Protocol of hand and feet massage delivered by Dr. Aktham (specialized in physical therapy) after placing a sufficient amount of oil in the palm of hand, and warming it between the palms.
- Each used bottle of massage oil was supplied with a batch number, expiry date and GCMS.

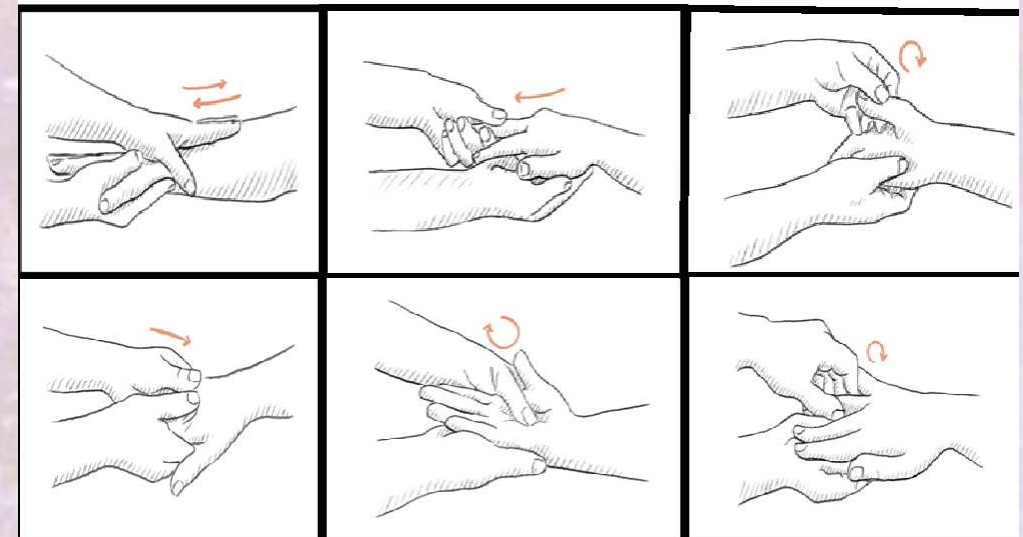
Number of patients	Treatments	Reason given	Comments
15	Aroma massage Session for hand and feet lasted 30 minutes over a period of two months, with an intervention rate of two sessions per week.	Physical pain (Muscle pain, Osteoarthritis in the knees, and Muscle spasms in the neck and back along with chronic fatigue and poor mental state, restlessness and along with chronic anxiety resulting from the surrounding circumstances.	A significant improvement in physical condition, in addition to improved sleep quality and reduced stress levels, which was reflected in the psychological state of patients.

- The followed protocol was described in details and has been done by students as following:

Foot Massage:

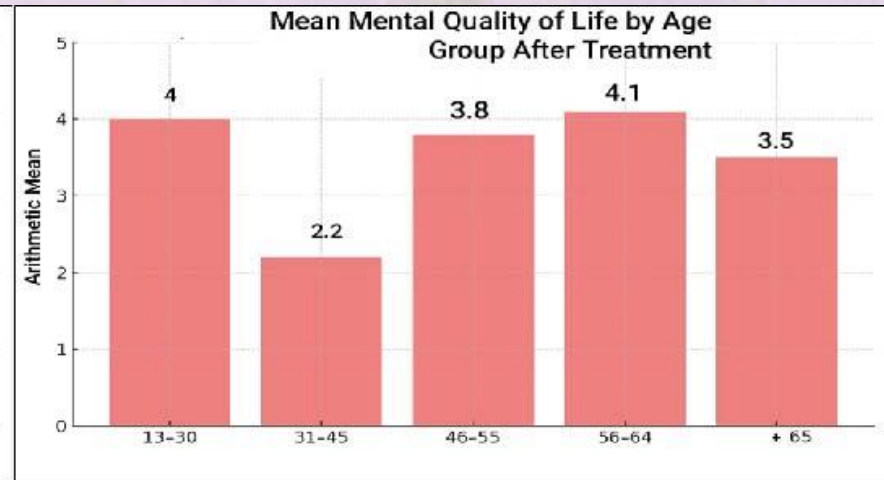
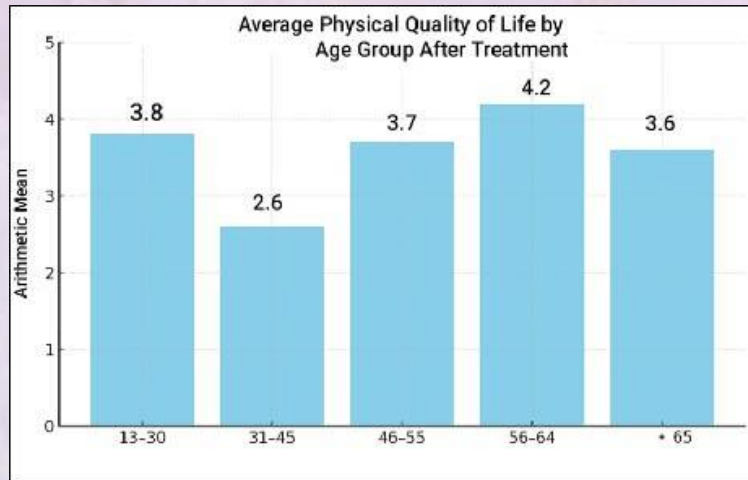
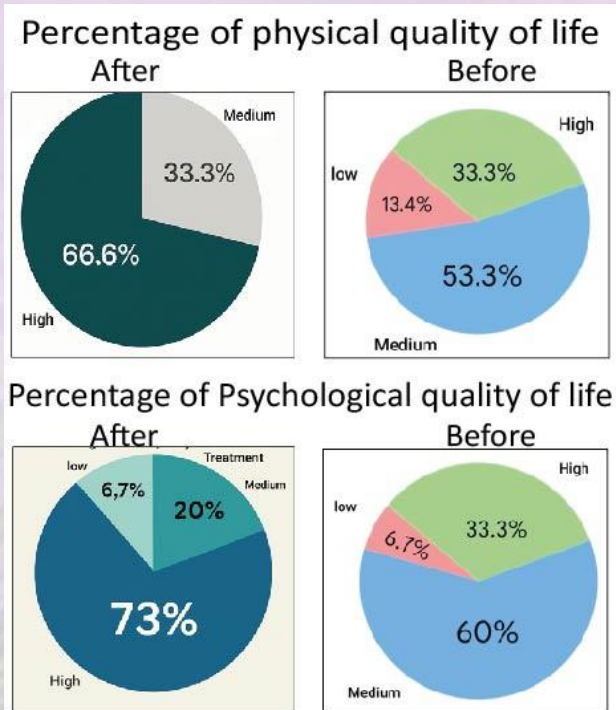


Hand massage:



- A quasi-experimental pre-post intervention study was designed.
- The intervention mechanism was to fill An Arabic interviewed questionnaire using abbreviated quality of life scale designed by the World Health Organization (WHOQOL-BREF, 1998) by patients before the experiment,
- While each participant was given a bottle of massage oil, and it has been requested to be used twice a week following the explained massage protocol, then the questionnaire was refilled after two months of applied regular massage sessions.

The collected data were entered into an Excel spreadsheet, where the Average mean of the quality-of-life scale was calculated in its (physical and psychological) domains, to evaluate the change in the quality-of-life index after applying regular aroma massage sessions, while the results were as demonstrated below.



- This study comes within the context of a complex reality faced by individuals within Syria, where security, economic, and livelihood crises intersect with daily psychological pressures that have clearly affected individuals' quality of life.
- The results validated aromatherapy massage as an evidence-based method to enhance quality of life in post-conflict populations. Its preventive potential supports resilience and self-care.
- From the age analysis the overall conclusion was that aroma massage has its good effects across all age groups, but to varying degrees.
- In addition to its therapeutic role, Aroma massage can be employed as a means of preventing stress and psychological breakdown, especially among groups facing chronic pressures in daily basis.

