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# Health Effects Associated with Working Postures Among Beauticians

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#### **ABSTRACT**

**Background:** In the beauty industry the people who are working are named as cosmetologists, aestheticians, beauticians, massage and beauty therapists. Progression of musculoskeletal disorders occurs in this work area due to constrained body positions, repeated movements, and energy concentration on small parts of the body, like the hand, wrist, place of work that does not allow satisfactory recovery among movements. So the aim of the study is to determine the prevalence of disorders among beauticians in Ahmedabad.

**Method:** A total of 150 beauticians were contacted out of which 19 beauticians dropped out of study as they were not willing to participate. A questionnaire-based survey was done on remaining 131 beauticians who were between the age group of 20 to 50 years, having work experience of 5 to 30 years including both genders. Beauticians filled the questionnaire on their own.

**Results:** The preference of work postures was different amongst beauticians. 120 beauticians complained of fatigue. 92% beauticians prefer to work in standing posture; however only 15% beauticians work in sitting postures. 55% of them complain of low back pain, 48% had pain in lower limb, 25% complained of neck pain and 20% suffered from shoulder pain. 18% of beauticians complained of vertigo and dizziness (BPPV).

**Conclusion:** This study concluded that the musculoskeletal ailments, 55% of them complained of back pain, 48% had pain in lower-limb. Almost 120 beauticians complained of fatigue throughout the year which hiked during cultural functions or occasions.

Key words: beauticians, musculoskeletal disorders, vertigo, dizziness, posture

### INTRODUCTION

In 21<sup>st</sup> century it is observed that beauty has become a necessity rather than a luxury. Hence, a number of people who are accepting the field of enhancing beauty as their profession are on rise. Beauticians are working passionately and tirelessly to beautify an already beautiful world by working as skin experts (cosmetologists), hair dressers, make-up artists, and so on. However, in doing so, they compromise their own fitness and encounter with numerous physical and/or mental ailments which later results in fatigue.

Consequently, various adverse health outcomes, like occupational-related musculoskeletal disorders are also very susceptible to the beauticians which leads to pain. Occupational-related Musculoskeletal Disorder (MSDs) is one of the major concerns of public health which impact overall quality of life. The 2010 global burden of disease study estimated that low back pain ranked highest in terms of years lived with disability (YLDs), and sixth in terms of overall burden disability-adjusted living years (DALYs).

Hair dresser was found to be more affected from chronic low back pain<sup>2</sup> also the mechanical neck pain was also found to be more due to their altered posture during working, more work load during occasion and festivals, anxiety as well as depression.<sup>3</sup> It may cause microtrauma in the connective tissues due to both psychological and excessive physical strain which increased muscular tension and pain.<sup>4</sup>In 2017 Persistent postural-perceptual dizziness (PPPD) was defined by the International Classification of Vestibular Disorders.<sup>5</sup> Hence the aim of the study is to determine the prevalence of musculoskeletal disorders among beauticians.

#### **METHODOLOGY**

A questionnaire-based study was conducted among 131 beauticians of Ahmedabad. Consent was taken, and the procedure of the study was explained to them. Beauticians with age group of 20 to 50 years including both male and female, having work experience of 5 to 30 years were included in the study. Subjects who were not willing to participate and non cooperative was excluded from the study.

Questionnaire contain total 15 questions out of which 4 questions were of demographic detail and 11 questions were related to occupation like basic posture during working, total hours of working in a day, how many years in the profession, complain of any musculoskeletal or vestibular problems, complain of fatigue, etc.

Beauticians were contacted from all over Ahmedabad and questionnaire was filled by them. After filling the form, certain exercises were taught to them like free active movements of all joints, breathing exercises, stretching and relaxation exercises.

# STATISTICAL ANALYSIS AND RESULTS

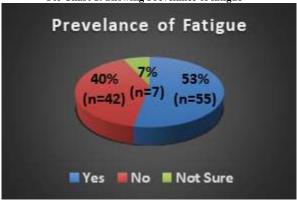
Analysis was done using Microsoft excel version 7. 92% beauticians prefer to work in standing posture, 15% in sitting postures. 55% of them complain of back pain, 48%

had pain in lower limb, 25% had neck pain and 20% had shoulder pain. Almost 120 beauticians had complained of fatigue throughout the year which hiked during cultural function and occasion and 18% had a complain of vertigo and dizziness. Also a complain of fatigue was found to more during walk standing and stride standing posture.

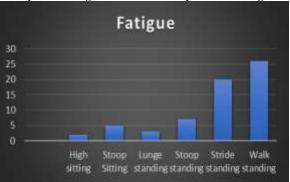
Table 1: Demographic details

Number of subjects	131
Age	20 to 50 years
Male	38
Female	93

Pie Chart 1: Showing Prevelance of fatigue



Graph 1: showing co-relation between posture and fatigue



#### **DISCUSSION**

The present study was conducted to determine the prevalence of disorders among beauticians of Ahmedabad. Result shows that 92% preferred to work in standing posture. Majority were having complain of back pain and pain in the lower limb. Also the complain of fatigue was more prevalent among walk standing and stride standing posture and 18% were having complain of vertigo and dizziness.

When there is an imbalance between and physical requirements of the job and physical capabilities of the worker it leads to Work related musculoskeletal disorders (WRMSDs). Because of the prolonged exposure to ergonomic risk factors leading to musculoskeletal discomfort.<sup>6</sup> Common risk factors includes frequent repetition of movements, maintenance of awkward postures or unsupported positions or static postures for prolonged periods of time, sudden bending or twisting movements, use of vibratory tools, compressive forces from use of grasping sharp edges like tool handles and inadequate recovery time which ultimately lead to stress and strain on the low back which causes micro trauma leading to wear and tear of the intervertebral disc region causing low back pain.<sup>7</sup>

Study done by O.H Okojie and E.C Isha in 2001 futher supported the present result which shows that 55% were estimated of having backpain. A study done on 100 subjects on Beauty service business employees in Karad shows that female were more prone for having mechanical neck pain also age group between 20-30 years had 39% pain, 30-40 years had 46% pain and 40-50 years have 15% pain.

Study done on 17<sup>th</sup> August 2019 on the study title Musculoskeletal health, work-related risk factors and preventive measures in hairdressing: a scoping review concluded that there was evidence for work-related risk factors for MSD in hairdressers and indicate that there should be an intense focus on preventive measures. High quality and long-term interventional studies are needed to clarify the effectiveness of complex preventive concepts in hairdressing.<sup>9</sup>

Limitation of the study is gender distribution was not done, total working hours was not mentioned, pulmonary symptoms were not taken into consideration.

Conclusion: This study concluded that the musculoskeletal ailments, 55% of them complained of back pain, 48% had pain in lower-limb. Almost 120 beauticians complained of fatigue throughout the year

which hiked during cultural functions or occasions.

# Ethical Approval: Approved

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#### **Conflict of Interest:** None

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