



KNOWLEDGE, ATTITUDE, AND AWARENESS OF THE GENERAL POPULATION TOWARDS FACIAL YOGA, FACIAL MASSAGE AND FACIAL EXERCISES.

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Abstract :

Intoduction: With the emerging beauty trends, facial yoga, facial massage and facial exercise has taken its own stand making it one of the most influential beauty trends in the past few years. The aim of the present study was to assess the knowledge regarding pros, cons and proper technique of facial yoga, facial massage and facial exercise amongst the general population.

Materials and Methods: A questionnaire study was conducted among the general population to assess the knowledge, attitude and awareness of facial yoga. The structured, self-administered, and close-ended questionnaire was designed to collect the data which consist of four parts and comprised of 29 questions related to the topic. The reliability and validity of the questionnaire were calculated (Cronbach alpha - 0.662). Informed consent was also taken from all the participants. Statistical analysis was done using descriptive statistics.

Results: In this study, there were a total of 150 participants out of which 100 were females and 50 were males, Maximum participants were between 18-25 years of age. Around 61.3 % of the participants were aware about face yoga and 50.7 % of the participants performed facial yoga, massage and exercise to lift facial skin for younger looking appearance. The majority of participants were unaware the facial exercise can also cause wrinkling if not done properly.

Conclusion: The overall study concluded that knowledge and attitude of face yoga is average among general population, and it is occasionally practiced among people.

KEYWORDS:

Facial yoga, facial massage, facial, exercises, botulinum toxin, wrinkles.

IndexTerms - Component,formatting,style,styling,insert.

I. INTRODUCTION

With the emerging beauty trends, facial yoga, facial massage and facial exercise has taken its own stand making it one of the most influential beauty trends in the past few years. Facial yoga is a better alternative approach to aesthetic corrections performed by plastic surgeons and dermatologists such as botulinum toxin injections, facelifts, laser treatments, chemical peels etc and is less

invasive and less expensive.¹ Facial yoga is the workout of facial muscles followed by massage to relieve the tension within the facial muscles hence giving a youthful glowing appearance.²

Facial yoga can be practiced from the comfort of one's home and is a more hassle free and pain free approach than opting for services provided by plastic surgeons and dermatologists in their clinics. However, it can take more time, a week, a month or years to achieve the same results which can be achieved within minutes in a dermatologist's clinic.

The benefits of combining facial yoga, massage and exercise is that muscle activity increases the production of collagen and elastin.³ But facial exercise which is the use of only facial muscle activity increases the tension within the facial muscles which in turn increases the appearance of fine lines and wrinkles, hence if followed by facial massage which is use of hand to massage the muscles of the face increases the blood flow and lymphatic drainage and relieves the tension within the muscles thus counterbalancing the ill effects of facial exercise.

As there are repercussions to excessive manipulation of the skin and facial muscles such as sagging and wrinkling.⁴ The bio-molecular effects of face yoga helps to improve the antioxidant status by modulating the expression of relevant genes like glutathione peroxidase, catalase and superoxide dismutase. Thus face yoga helps in generating better stress response and minimal cellular damage

There are repercussions to excessive manipulation of the skin and facial muscles such as sagging and wrinkling.⁴ Thus the aim of the present study was to assess the knowledge and attitude regarding advantages, disadvantages and proper technique of facial yoga, facial massage and facial exercise amongst the general population. Whether the general population think it is better to perform facial yoga or take the quicker route by opting for aesthetic correction services at a plastic surgeon's clinic.

II. MATERIALS AND METHODS

A questionnaire study was conducted among the general population in Pune city. The study duration was about 3 months. The study population belonged from a wide range of age group from 16 to 58 years of age. The calculated sample size was 148 using G* Power software version 3.1.9.2 (Heinrich Heine University, Düsseldorf). The final considered sample size for the study was around 150. The convenient sampling technique was used in the study. A structured, self-administered, and close-ended questionnaire were designed to collect the data which consisted of four parts and comprised of 29 questions related to knowledge, attitude and practices of facial yoga, facial massage and facial exercise practices amongst the general population. The first part consisted of demographic data, the second part consisted of questions related to knowledge, the third part consisted of questions related to attitude, and the fourth part consisted of questions related to practice of facial yoga, facial massage and facial exercise. The questionnaire was prepared using Google forms (Google LLC, Mountain View, California, United States) and the link was distributed to the selected participants through e-mail, WhatsApp number, and other social media platforms (Instagram, Telegram, etc.). A pilot study was conducted initially comprising of 25 participants mostly belonging to age group of 18-25 years of age. The reliability statistics were calculated and Cronbach alpha value was 0.662. A brief introduction about the study was given. Data collected were entered in a spreadsheet (Microsoft Excel, 2016). Statistical analysis was done using descriptive statistics (number and percentage) Statistical Package for the Social Science 23.0 version software (IBM Chicago, Illinois, United States).

III. RESULTS

In Table 1. There were a total of 150 participants out of which 100 were females and 50 were males. Maximum participants were between 18-25 years of age.

In Table 2. 61.3 % of the participants were aware about face yoga. 49.3% of the participants think that face massage involves use of hands and movements of facial muscles. 38% of the participants learned about facial yoga from the social media and internet. Among facial exercise, massage and yoga 35.3% of the population thinks facial massage is better for toning and sculpting of the face while 36% agrees with facial yoga. 50.7 % of the participants perform facial yoga, massage and exercise to lift facial skin for younger looking appearance. About 43.3% of the participants are aware about face rollers as an additional tool for facial massage. About 34.7% of the participants think that fat reduction occurs the most in double chin area and 32.7% thinks it helps in reduction of buccal fat. Regarding the side effects 43.3% of the participants think facial exercise does not have any ill effects.

In Table 3. 35% of the participants Disagrees that facial exercise increases the appearance of fine lines and wrinkles. 38% of the participants agree that long term facial exercise can do more damage than good. 35.3% of the participants agree that Botox is a better alternative to facial yoga.

In Table 4. 44.7% of the participants practice facial yoga or exercise and 31.3% of the participants rarely opt for paid facial yoga or massage services. Only 11.3% consult with a specialist before practicing facial yoga and exercise. 14% of participants use additional tools and serums while practicing facial yoga.

TABLE 1. DEMOGRAPHIC DETAILS OF STUDY PARTICIPANTS (N=150)

| Sr.no | Demographic details | Responses | N | % | Total N(%) |
|-------|---------------------|-----------|-----|------|------------|
| 1. | gender | Female | 100 | 66.7 | 150 |
| | | Male | 50 | 33.3 | |

| | | | | | |
|----|-----|-------|-----|-----|--|
| 2. | Age | 18-25 | 123 | 82 | |
| | | 26-35 | 18 | 12 | |
| | | 36-45 | 4 | 2.6 | |
| | | 46-55 | 5 | 3.3 | |

TABLE 2. KNOWLEDGE RELATED QUESTION RESPONSES OF STUDY PARTICIPANTS (N=150)

| Sr.no | Questions | Responses | Number (N) | Percentage (%) | Total |
|-------|--|---|------------|----------------|-------|
| 1. | 1) what is face yoga? | Massage of the face | 10 | 6.7 | 150 |
| | | Exercise of facial muscles | 21 | 14 | |
| | | Stimulation of blood circulation and lymphatic drainage in the face | 27 | 18 | |
| | | All the above | 92 | 61.3 | |
| 2. | What do you understand by face massage? | Use of hands and tools to stimulate facial muscles | 44 | 29.3 | 150 |
| | | Use of hands and movements of facial muscles | 74 | 49.3 | |
| | | Only moment of facial muscles | 25 | 16.7 | |
| | | None of the above | 7 | 4.7 | |
| 3. | what does facial massage do? | Relieves tension in the facial muscles | 12 | 8 | 150 |
| | | Increase blood circulation and lymphatic drainage | 33 | 22 | |
| | | Firms and tones skin | 9 | 6 | |
| | | All of the above | 95 | 63.. | |
| 4. | what is facial exercise? | Use of hands and tools to stimulate facial muscles | 30 | 20 | 150 |
| | | Use of hands and movements of facial muscles | 78 | 52 | |
| | | Only moment of facial muscles | 32 | 21.3 | |
| | | None of the above | 10 | 6.7 | |
| 5. | what are the effects of facial exercise? | It improves structural appearance of the face | 37 | 22.7 | 150 |
| | | It causes wrinkles | 26 | 17.3 | |
| | | Younger looking appearance | 24 | 16 | |
| | | All of the above | 63 | 42 | |
| 6. | where did you learn about facial yoga? | Social media or internet | 57 | 38 | 150 |
| | | Aesthetician or beautician | 44 | 29.3 | |
| | | Friends or family | 41 | 27.3 | |

| | | | | | |
|-----|---|---|----|------|-----|
| | | Magazine or books | 8 | 5.3 | |
| | | | | | |
| 7. | why according to you do people perform facial yoga or massage or exercise? | To strengthen facial muscles | 23 | 15.3 | 150 |
| | | To lose fat from the face and Neck area | 27 | 18 | |
| | | Lift facial skin for younger looking appearance | 76 | 50.7 | |
| | | Try to change the bone structure of the face | 24 | 16 | |
| | | | | | |
| 8. | what are the side effects of facial exercise? | Drooping or sagging of the skin after sometime | 20 | 13.3 | 150 |
| | | Cause wrinkles after sometime | 30 | 20 | |
| | | Increase wear and tear of collagen fibres | 35 | 23.3 | |
| | | No side effects | 65 | 43.3 | |
| | | | | | |
| 9. | what additional tools of facial massage are you familiar with? | Gua Sha | 43 | 28.7 | 150 |
| | | Face rollers | 65 | 43.3 | |
| | | Face lifting belts | 17 | 11.3 | |
| | | No tools , only hands | 25 | 16.7 | |
| | | | | | |
| 10. | Which of the following do you think is better for toning and sculpting of the face? | Facial exercise | 22 | 14.7 | 150 |
| | | Facial Massage | 53 | 35.3 | |
| | | Facial Yoga | 54 | 36 | |
| | | None of the above | 21 | 14 | |
| | | | | | |
| 11. | what do you think is the best way to learn facial yoga or exercise or massage? | Esthecian | 20 | 13.3 | 150 |
| | | Yoga instructor | 45 | 30 | |
| | | Internet (YouTube, blogs, articles) | 79 | 52.7 | |
| | | Books or magazines | 6 | 4 | |
| | | | | | |
| 12. | What according to you are better alternative to facial yoga? | Botox and fillers | 34 | 22.7 | 150 |
| | | Plastic surgery | 18 | 12 | |
| | | Laser | 15 | 10 | |
| | | None of the above | 83 | 55.3 | |
| | | | | | |
| 13. | How often do you think one should attempt face yoga to see noticeable difference | A week | 30 | 20 | 150 |
| | | A month | 41 | 27.3 | |
| | | 2 to 6 months | 60 | 40 | |
| | | > 6 months | 19 | 12.7 | |
| | | | | | |

| | | | | | |
|----------------------------------|---|---------------------------|-----|-------|-----|
| 14. | What all facial muscles are involved in facial yoga? | Buccinator | 11 | 7.3 | 150 |
| | | Masseter | 15 | 10 | |
| | | Zygomatic minor and major | 15 | 10 | |
| | | All of the above | 109 | 72.7 | |
| | | | | | |
| 15. | where according to you does fat reduction occurs the most? | Double chin | 52 | 34.7 | 150 |
| | | Buccal Fat | 49 | 32.7 | |
| | | Accentuate Jaw line | 25 | 16.7 | |
| | | None of the above | 13 | 8.7 | |
| | | All of the above | 11 | 7.3 | |
| Table 3 Attitude based questions | | | | | |
| 1. | Facial exercise increases the appearance of fine lines and wrinkles | Strongly agree | 20 | 13.3 | 150 |
| | | agree | 42 | 28 | |
| | | Neutral | 30 | 20 | |
| | | Disagree | 53 | 35 | |
| | | Strongly Disagree | 5 | 3.3 | |
| | | | | | |
| 2. | Facial yoga is alone sufficient for younger looking appearance | Strongly agree | 16 | 10.7 | 150 |
| | | agree | 44 | 29.3 | |
| | | Neutral | 29 | 19.3 | |
| | | Disagree | 53 | 35.3 | |
| | | Strongly Disagree | 8 | 5.3 | |
| | | | | | |
| 3. | Do you think you should consult with a yoga instructor or a doctor before doing any face yoga? | Strongly agree | 20 | 13.3 | 150 |
| | | agree | 94 | 62.7 | |
| | | Neutral | 20 | 13.3 | |
| | | Disagree | 13 | 8.7 | |
| | | Strongly Disagree | 3 | 2 | |
| | | | | | |
| 4. | Do you agree that long term facial exercise can do more damage than good? | Strongly agree | 2 | 1.3 | 150 |
| | | agree | 57 | 38 | |
| | | Neutral | 40 | 26.7 | |
| | | Disagree | 35 | 23.3 | |
| | | Strongly disagree | 16 | 10.7 | |
| | | | | | |
| 5. | Do you agree that facial yoga helps relieve the tension in muscles but facial exercises can instead increase tension in the facial muscles? | Strongly agree | 4 | 2.7 | 150 |
| | | agree | 43 | 28.7 | |
| | | Neutral | 63 | 42 | |
| | | Disagree | 24 | 16 | |
| | | Strongly disagree | 16 | 10.7 | |
| | | | | | |
| 6. | Do you agree that Botox is a better alternative to facial yoga? | Strongly agree | 4 | 2.7 | 150 |
| | | agree | 29 | 19.3 | |
| | | Neutral | 39 | 26 | |
| | | Disagree | 53 | 35.3 | |
| | | Strongly disagree | 25 | 16.7 | |
| | | | | | |
| 7. | Do you think that facial yoga helps in fat reduction from face? | Strongly agree | 19 | 12.7. | 150 |
| | | agree | 93 | 62 | |
| | | Neutral | 19 | 12.7 | |
| | | Disagree | 14 | 9.3 | |
| | | Strongly disagree | 5 | 3.3 | |
| | | | | | |
| 8. | Do you feel additional tools E.g Gua sha, face rollers etc are required to | Strongly agree | 20 | 13.3 | 150 |
| | | agree | 67 | 44.7 | |
| | | Neutral | 30 | 20 | |

| | | | | | |
|---|--|-------------------|----|------|-----|
| | do face yoga on a day to day practice? | Disagree | 27 | 18 | |
| | | Strongly disagree | 6 | 4 | |
| 9. | Would you encourage your acquaintance to practice facial yoga? | Strongly agree | 22 | 14.7 | 150 |
| | | agree | 86 | 57.3 | |
| | | Neutral | 26 | 17.3 | |
| | | Disagree | 11 | 7.3 | |
| | | Strongly disagree | 5 | 3.3 | |
| Table 4 Practice Based Questions | | | | | |
| 1. | Have you ever done facial exercise without knowing its untold side effects? | Always | 16 | 10.7 | 150 |
| | | often | 46 | 30.7 | |
| | | rarely | 57 | 38 | |
| | | never | 31 | 20.7 | |
| 2. | Do you use any additional tools or serums while practicing facial yoga? | Always | 14 | 9.3 | 150 |
| | | often | 48 | 32 | |
| | | rarely | 48 | 32 | |
| | | never | 40 | 26.7 | |
| 3. | How often do you practice facial yoga or exercise? | Always | 15 | 10 | 150 |
| | | often | 67 | 44.7 | |
| | | rarely | 49 | 32.7 | |
| | | never | 19 | 12.7 | |
| 4. | How often do u consult with a specialist before practicing facial yoga and exercise? | Always | 17 | 11.3 | 150 |
| | | often | 45 | 30 | |
| | | rarely | 49 | 32.7 | |
| | | never | 39 | 26 | |
| 5. | How often do u opt for paid facial yoga or massage services (E.g facial, massage)? | Always | 19 | 12.7 | 150 |
| | | often | 45 | 30 | |
| | | rarely | 47 | 31.3 | |
| | | never | 39 | 26 | |

IV. DISCUSSION

Human skin ages in a very unique fashion. The ageing of the skin depends upon various factors like genetic metabolism, pollution, chronic light exposure and hormone.³ To achieve healthy complexion, practice facial yoga in morning, once a day for 20 to 30 minutes. It is advised to use facial oil or serum while performing facial yoga as it eases the movements. If done correctly, facial yoga helps to tighten facial muscle.¹ When facial movement is repeated, a groove is formed beneath the skin surface and fine wrinkles develop.^{5,6} According to study conducted by Takacs et al 6 isometric exercises were given to patients, 4 out of 8 patients observed reduction in wrinkles and enhanced facial expression.^{1,7}

According to our study, 41.3% participants agree that facial exercise increases the appearance of fine lines and wrinkles in contrast to study done by Abigail M. Smith where they found that 55% patients found single level improvement.¹⁰

According to study conducted by Lana e Silva et al in 4 patients in age range of 40-51 years of age all patients experienced improvement. There were no differences between the present study and study conducted by Lana e Silva et al and Abigail M. Smith.^{1,11}

Face yoga can help activating the muscles around the cheek neck jawline and the enhancing the tone of the face. This occurs by increasing blood circulation and stimulation of the lymphatic system which decreases puffiness and removes toxins and enhances collagen production and skin elasticity.²

Face yoga and massage therapy can also help in the treatment of Temporomandibular joint disorders. The study conducted by Wieckiewicz and colleagues stated that facial massage can help in correcting the mobility of the jaws. It was found to be effective in 70% of the TMD patients. Face yoga and massage therapy may also help in reducing swelling and pain in the area surrounding the TMJ.⁸

Botulinum Toxin, also known as Botox is a neurotoxin which acts by temporarily paralyzing facial muscle. Patients who regularly undergo Botox treatment should practice facial yoga and exercise and particularly yoga face lift in order to prevent the atrophy of facial muscles due to Botox treatment.⁹

Thus face yoga helps in generating better stress response and minimal cellular damage.³

More studies are also warranted to understand the effects of face yoga as a singular modality as well as in combination with the existing anti-aging strategies.

V. RECOMMENDATIONS

- 1) Yoga instructors, esthetician, dentist and dermatologist should instruct people regarding benefits of performing facial exercise, yoga and massage. And its adverse effect if not performed correctly.
- 2) Training programs on performing facial exercises should be held among the interested population.

VI. CONCLUSION

The overall study concluded that knowledge and attitude of face yoga is average among general population, and it is occasionally practiced among people. Many people need to be made aware of facial yoga, massage and exercise. Its benefits in toning of facial muscles and reducing skin wrinkles.

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