

ORIGINAL ARTICLE

A Study Assessing the Practices and Motivation for Seeking Tattoo Removal

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Abstract**Background**

As the number of patients getting tattooed is increasing, so is the number of patients seeking removal of tattoos. The primary objective of this study was to assess the reasons as to why patients got tattoos and also seek tattoo removal. The secondary objective was to study the demographics and the knowledge they had regarding tattoo removal.

Methods

A cross sectional study was done among 250 consecutive patients who attended the Dermatology centre seeking tattoo removal. A questionnaire was used to fill in the details.

Results

167 males and 83 females were included in the study. Majority of patients were in the age group of 21 to 30 years (43.8%) followed by 31-40 years (26.7%). 56.6% of patients had got tattoos in the third decade and 35.1% in the second decade. 52.6% of those seeking tattoo removal had got their tattoos from amateur artists, village fairs or roadside tattoo shops. 45.8% did not have a specific reason for getting a tattoo and were decorative tattoos. 34.7% had names of their beloved or family members. 29.5% were seeking removal for professional reasons and 23.1% due to changes in relationship status.

Conclusion

Patients seek tattoo removal mainly for professional reasons, changes in personal relationships when they have name tattoo and due to complications. Most of the patients were in the third decade of life. It is important to educate school going children and youngsters regarding the permanent nature of tattoo and its complications.

Key words: *Tattoo, Laser removal, Awareness*

Introduction

Tattooing is a common and popular form of body decoration especially among younger individuals. Tattoo is a permanent change brought about in the skin by injection of a dye molecule into the dermal layer. Tattoos may be decorative, medical or accidental depending on whether the dye was introduced intentionally or by accident.¹ Medical tattoos are done for cosmetic camouflage in vitiligo, permanent hair loss, scars and areola reconstruction after surgery.² Tattoos are part of the cultural heritage of various tribes. It used to be an indicator of social status or a victory.³ With modernisation, tattoo has become more of a fashion statement.

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There are limited studies regarding the motivation for tattoos and for reasons requesting its removal.^{3,4}

The objective of this study was to evaluate what motivated the participants to get tattoo and why they were seeking the removal.

Materials and Methods

Study design

A cross sectional descriptive study was conducted between Jan 2019 and Jan 2021. A sample of 250 consecutive patients who attended the centre seeking removal of tattoos were included in the study. Written informed consent was taken from the participants to use their data. Patients who did not consent were excluded from the study.

Methods

A questionnaire in the language known to the patient was used to collect the data regarding the demography, education, age at which tattoo was done, reason for the tattoo, amateur or professional, site and number of tattoos, if they were aware that the tattoo was permanent, why they were seeking tattoo removal and if they had tried other methods of removal. The responses were coded from 1 to 5 according to questions and entered in excel sheet. Approval was taken from institutional ethics committee.

Data was entered in excel sheet and analysed using SPSS software. Results were expressed in percentage.

Results

Out of 250 participants in the study, 167 were males (66.5%) and 83 were females (33.1%). The analysis of demographic data showed that 110 of participants were in third decade (43.8%), 67 in the fourth decade (26.7%), and with almost equal number of participants in remaining age groups (**Table 1**).

Table 1. Age of the patients seeking tattoo removal

Age in years	Number	Percentage %
<20	24	9.6
20-30	110	43.8
30-40	67	26.7
40-50	25	10
>50	24	9.6

The number of participants from the urban area was slightly higher than the rural. (57.4%). Among the participants, one hundred and seven were graduates, (50.6%), 77 had studied up to higher primary level (30.7%) and 46 were either illiterates or dropped out of primary school (18.3%). Majority of patients 142 (83.7%) patients had got their first tattoo in the third decade (56.6%) and 88 in second decade (35.1%).

Professional tattoos were seen in one hundred and seventeen (46.6%) (Figure 1) and 132 had amateur tattoos (52.6%) (Figure 2). Majority of the participants (71%) from rural areas had amateur tattoos whereas 61% of those from urban areas had professional tattoos. Single tattoo was seen among 210 participants (83.7%). A large number of participants (45.8%) did not have a specific motive to get a tattoo, it was for decorative purpose. 74 of them had a tattoo to symbolise a romantic relationship and 13 (5.2%) for a family member.

Only 18 (7.2%) were under the influence of alcohol at the time of tattooing. Decorative tattoos (46.6%) were the most common, followed by names of friends or family members (34.7%), (Figure 3) and 26 (10.4%) had inspirational and religious quotes. (Figure 4) Forearm was the most common site for tattoo in 113 (45.0%), followed by chest in 73 (29.1%), shoulder and neck in 38 (15.1%), bindi and lower back in 9 each (3.6%). Only 35 participants (13.9%) were not aware about the permanent nature of the tattoo. 74 wanted tattoo removed for professional reasons (29.5%), 58 due to separation from partners (23.1%), 43 due to tattoo reactions (17.1%), 31 due to family pressure (12.4%) and 29 due to regret (11.6%).

As high as 85% of those who wanted tattoo removal for professional reasons were educated higher primary and above and 86% were men. Most common reason for women seeking removal was separation from partners (38%) followed by pressure from family members in 18%. 69.7% of reactions were in men and 30.3% in women. (Figure 5) Local measures like application of lime (Figure 6), cuts, burning with candles and incense stick was tried by 33 participants (13.1%), before consulting specialists.

Table 2. Reasons for seeking tattoo removal

Reason	Number	Percentage %
Regret	29	11.6
Professional advancement	74	29.5
Separation from partner	58	23.1
Reactions	43	17.1
Family pressure	31	12.4
Religious obligations	15	6.0

Figure 1. Professional black tattoo



Figure 2. Amateur tattoo



Figure 3. Tattoo of beloved's name



Figure 4. Types of tattoo

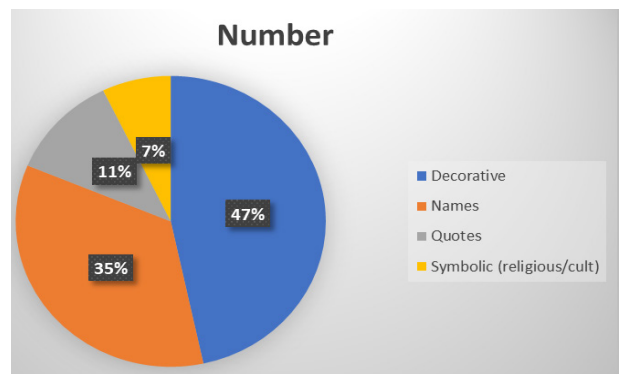


Figure 5. Granulomatous reaction to tattoo



Figure 6. Irritant contact dermatitis due to application of lime to remove tattoo



Discussion

Tattooing has become a common form of body decoration. Being sported by supermodels and popstars, they provide a lot of appeal to the youngsters.⁵

In the study by Thakur et al. of the tattoo practices in North eastern India, more than 50 % patients seeking tattoo removal had got their tattoos in school going age which they attributed to emotional immaturity and influence of fashion. Studies by Varma et al and Ltrielle et al also published that majority of participants got tattoos in second decade.^{5,6} However in our study only 35.1% had got tattoos before the age of 20 years, but majority (56.5%) of patients got their tattoos in third decade. Few of the participants were not aware about the permanency of the tattoo and majority of them were less than 20 years of age. Knowledge among students regarding the safety, permanency and side effects of tattoos in insufficient.⁷ Preventive education in school regarding the permanency of tattoo, possible effects on future employment, risks and complications may help to reduce underage tattooing. Most of them being amateur tattoos, there was obviously no explanation given to the participants about the permanent nature or possible side effects by tattoo artists.

Most of the participants (45.8%) in the study did not have a specific motive for getting a tattoo, it was for decorative purpose. Our study conforms with similar findings of other studies where most of the tattoos are often applied impulsively.^{5,8} 34.7% of participants had names tattooed for sentimental reasons, out of which 85% had their partners' names. More women had tattooed their partners' names (39.7%) than men which was 24.5%.

52.6% had amateur tattoos in our study which is much lower than the study from Eastern India where 94.3% of tattoos were amateur which can be explained by the cultural heritage of tattooing among tribes in North Eastern India.³ No significant difference was noted in the level of education and the place of tattoo. Higher proportion of people from rural areas had

amateur tattoos (70.7%), compared to 60.13 % of those from urban areas who had professional tattoos. This can be explained by the more number of tattoo parlours in urban areas with a lot of advertisements. Also functions like fairs where amateur tattoo artists are in plenty, are not common in urban areas.

The most common reason for removal of tattoos was for employment prospects (74 patients). According to the revised tattoo policy by Indian Army, only tattoos on inner aspect of forearm and dorsum of the hand are permissible. Candidates belonging to tribal communities/from tribal areas, as declared by the Government of India Scheduled Castes and Scheduled Tribes Orders Act/Lists (amended and modified from time to time), are permitted to have permanent body tattoos on any part of the body, as per existing customs and traditions of the said tribe to which a candidate belongs.⁹ Though there are no open policies and guidelines regarding tattoo in any other government sector In India, people applying for Civil services and railways job also sought tattoo removal. 23% were seeking removal of name tattoos due to changes in relationship status. Couples frequently tattoo the names of their partners to show their affection which is regretted when the relationship ends.⁴

Other reasons were family pressure and religious issues. 17% of patients had tattoo reactions like allergic contact dermatitis (commonly to red colour). This is similar to previous reported studies, where allergic reactions are found more frequently to red colour.¹⁰ According to study by Thakur et al to be eligible for armed force jobs was the most common reason for tattoo removal (49.5%), followed by regret (21.7%), elder or school pressure (14.2%), personal (12.7%) and unsightly appearance such as hypertrophic scarring in tattoo (1.9%).³ Similar results were published from a study in Western India.⁴ These were quite different from Western studies.

According to Varma et al the reasons for seeking tattoo removal were improvement of self-esteem (48 patients), followed by social reasons (24 patients), family pressure (13 patients),

improving potential for employment (12 patients) and a change of partner (4 patients).⁵ The reasons also varied according to the age of the patients. Teenagers sought removal mainly due to regret and familial pressure. In the third decade professional eligibility was the most common reason. In those over the age of 30 separation from partners and regret were the reason why they sought removal frequently. Thirty-three patients had tried various methods of tattoo removal like application of lime, soda, burning with incense sticks, scraping with blade which had resulted in infection and scars.

The limitation of this study is that it is a hospital-based study done only on individuals seeking tattoo removal at a single centre. Recall bias and selection bias have to be considered before projecting the results to the community.

Conclusion

Patients seeking tattoo removal which was once done enthusiastically is increasing. Counselling about the permanent nature of tattoo and the significant cost involved in their removal may hinder the impulsive nature in few. Physicians should be aware about the different methods of tattooing, tattoo removal and complications associated with tattoos. Education about the tattoo regulations especially among those seeking to join the armed forces is important. The tattoo artists should also involve in counselling the patients, so potential side effects like regret and seeking removal immediately may be reduced.

Conflict of Interest Declaration

The authors have no conflict of interest to declare.

Acknowledgement

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