Abstract

Background: The inclination to get tattoos has been increasing in our country. While its history depends on the ancient past, feelings and thoughts of tattooed people about tattoos, and their awareness on complications and removal methods has not been investigated completely. Aims: Our aim is to learn the approach of individuals on tattoos and getting tattoos. Settings and Design: We have planned a cross-sectional survey study for tattooed and non-tattooed people. Materials and Methods: Twenty four multiple-choice and one open ended question were prepared for people with tattoos, and seven questions were prepared for people who don’t have tattoos. Four questions were common in both groups. Statistical Analysis Used: For statistical analyses, SPSS (IBM Corp. Released 2013. IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp) was used. Statistical significance of the difference between common questions was determined with chi-square test, and the effect of different groups on answering the question was analyzed with Cramér’s V test. Results: About half of people with tattoos had their first tattoo when they were between ages 18-29, and 38.2% had a single tattoo. 16.7% of individuals got their first tattoo below age 18. Women often preferred their wrists and ankles for tattoos, while men preferred arms, neck, legs and trunk. While women preferred to get a tattoo about a loved one, men rather got tattoos to look cool. 37.7% of people who don’t have tattoos said they did not get one since they might regret it later, 25.4% stated they did not get one since it did not comply with the rules of their religion. 20.2% did not like seeing tattoos in others. Conclusion: The rate of getting tattoos in minors is higher in our country compared to other countries. The majority of people who want their tattoos to be removed got tattooed when they were minors. There is a higher rate of men than women who get their tattoos removed. 4.2% of tattooed people regret their tattoos in the process of getting them. It was observed that tattooed people were not aware of the risk of disease transmission by getting tattooed.

Keywords: Attitude, personality, psycho-dermatology, tattoo

Introduction

Tattooing involves the placement of dye into the dermis with the help of a needle, and it is permanent. Getting tattoos have become increasingly popular all over the world in the last decade.[1] The same trend has been observed in our country as well.

The possession of the oldest known tattoo belongs to Ötzi, the Iceman, who lived 5300 years ago and is recognized as the oldest mummy of the world.[2] Throughout history, tattoos have been used for various purposes. Convicts were marked with tattoos in the old ages, whereas Nazis marked Jews with tattoos in concentration camps in the Second World War.[3,4] In our day, there are recommendations for people with disabilities who cannot express themselves to get tattoos for this purpose.

These numeric tattoos carry the person’s identity information and it is possible to reach the disabled person’s family when they are lost. Tattoos are also used for permanent makeup, reconstructing the appearance of nipples after mastectomy or disguise pigment disorders like vitiligo.[5]

Although the history of tattoos goes back to ancient ages, it is still not investigated why people get tattoos, what kinds of tattoos they prefer, what do they feel during and after getting tattoos, the complications of tattoos, and their awareness on removal methods. It is also not known how nontattooed people see tattooed people, their opinions about them, the reasons underlying their choice of not getting tattoos, and...
how will they react if one of their loved ones wanted to get a tattoo. Furthermore, there is no detailed investigation on whether there are differences on people’s opinion about tattoos with regard to age, gender, or educational status. We have planned a cross-sectional survey study to learn the opinions and approaches of individuals in our country on tattoos and getting tattooed.

**METHODS**

The approval of the Istanbul Medeniyet University Göztepe Training and Research Hospital Ethics Committee was taken for the study (2019/0065).

Survey questions about tattoos were formed by the investigators by reviewing and discussing literature about the subject. Survey form included participants’ sociodemographic characteristics, why, where, when, how and in what way people get tattoos, how they feel after, reactions of their loved ones, their opinions about tattoos and their awareness on the complications of tattoos, the reason why people do not get tattoos and whether they want to get tattooed, and their perspective on tattooed people. Twenty-four multiple choice and one open-ended question were prepared for people with tattoos, and seven questions were prepared for people who do not have tattoos. Four questions were common in both groups. The common questions were the reactions of people who are dependent on them after they got their tattoo, and their reactions when they saw tattoos in public officers. Survey was answered by the participants without any time limitation, independently, and without getting any help.

For statistical analyses, SPSS (IBM Corp. Released 2013. IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY, USA: IBM Corp) was used. Statistical significance of the difference between common questions was determined with the Chi-square test, and the effect of different groups on answering the question was analyzed with Cramér’s V-test. Values of $P < 0.05$ were considered as statistically significant.

**Results**

The survey was applied to literate people with or without tattoos who have applied to Istanbul Medeniyet University Göztepe Training and Research Hospital Dermatological and Venereal Diseases Clinic for various reasons between March and August 2019, and accepted to participate in the study.

There was no statistically significant difference in the distribution of age, gender, and education level between tattooed and nontattooed groups [Table 1].

About 38.2% of the study participants had 1 tattoo, 29.9% had 2–3 tattoos, 23.6% had 4–9 tattoos, 4.8% had 10–19 tattoos, and 3.5% had at least 20 tattoos. The person with the highest number of tattoos had 85 tattoos in total and got his/her first tattoo at the age of 30 years. The earliest age to get the first tattoo was 11, whereas the latest age was 70 in our study. The mean age for getting the first tattoo was 27.6. 16.7% of individuals got their first tattoo below age 18. 29.2% was female while 70.8% was male among the people who got their first tattoo when they are minors ($P = 0.003$). 72.9% had a black tattoo, 16.7% had a mixed-color tattoo, and it was followed by blue, red, brown, and green, respectively.

When they first decided to get a tattoo, 45.1% faced no family intervention, families of 30.5% supported them, and families of 21.5% of individuals warned them or did not want them to get a tattoo. About 92.4% had their tattoo performed by a professional tattoo artist. 37.5% stated that they got a tattoo to remember nice memories, 31.9% stated that they wanted to carry something they liked on their body, whereas 22.2% stated that they got a tattoo because they wanted to do a different thing. Getting a tattoo of the name of someone they loved was determined to be significantly higher among women ($P = 0.028$), while getting tattoos to be cool was significantly higher among men ($P = 0.025$), and getting tattoos to remember good memories was significantly higher among higher education graduates ($P = 0.004$).

It was stated by 91% that they paid attention to hygiene rules while getting a tattoo, and 77.8% stated that they paid attention to the environmental conditions of the tattoo saloon. Only four people experienced itching and redness on the tattoo area after getting their tattoo. Three of the people who underwent magnetic resonance test had a burning feeling on the tattoo site. The rate of people who thought they might get their tattoo removed at a later date even while getting tattooed was 38.2%. About 53.5% stated that they received positive comments from other people about their tattoo, 35.4% stated that they received both positive and negative comments. Fourteen people regretted getting a tattoo, and six regretted it in the process of getting the tattoo. About 15.3% covered or wanted to cover their tattoo with another tattoo. Those who felt regret were statistically significantly higher among men (11 people), compared to women (3 people) ($P = 0.009$). Among people who regretted their tattoos, the mean age of getting the first tattoo was 21.2% and 50% had their first tattoo before coming

| Table 1: Distribution of age, gender, and education status in tattooed and nontattooed groups |
|-----------------------------------------------|-----------------|-----------------|
| **Tattooed individuals**                          | **Nontattooed individuals** |
| **Mean age**                      | 31±12.5          | 36±12.5         |
| **Minimum and maximum age**       | 16–88            | 16–74           |
| **Gender, n (%)**                 |                  |                 |
| Female                           | 81 (56.3)        | 68 (59.6)       |
| Male                             | 63 (43.7)        | 46 (46.4)       |
| **Educational status, n (%)**     |                  |                 |
| Primary education graduate       | 51 (35.4)        | 43 (37.7)       |
| Higher education graduate        | 93 (64.6)        | 71 (62.3)       |
| **Total number**                 | 144              | 114             |

Primary education graduate represents high school and below, while higher education graduate represents college and above.
of age. The mean period between getting a tattoo and wanting to get the tattoo removed was 7.4 years. 38.9% had a single tattoo and the color of tattoo was black in 77.8%. 66.7% of these people had tattoos in visible areas, 21.2% had tattoos in half-visible areas. 27.8% tried to cover their tattoo with another tattoo in the past. 55.6% of people who considered removing their tattoo had applied to a doctor, and 70% of people who applied were male, whereas 30% were female. 60% of people who have applied had tattoo removal procedure done. 32% of people with tattoos did not know how tattoos were removed. In our study, 19.4% of tattooed people, mostly males, considered having a tattoo may cause a problem in the workplace or while seeking employment in future. Moreover, 8.8% of the nontattooed group said that they did not get a tattoo since it might cause a problem while seeking employment.

When the reason of not getting a tattoo was asked to nontattooed group, 37.7% said that they did not get a tattoo since they might regret it later, 25.4% said that it did not comply with the rules of their religion, 20.2% said that they did not get one since they did not enjoy it, and 21.5% said there was no reason. When asked the possibility of getting a tattoo in future, 44.7% said no, 21.1% said yes, while 25.4% replied maybe. 20.2% of the nontattooed group said that they did not enjoy the sight of tattoos in other people. About 55.3% said that their feelings will change depending on the fact that whether or not they will like the person’s tattoo.

Among the responses to the question “what would you feel if you saw a tattoo on a public officer” in the common questions, the responses “I would like that” by 47.22% and “I would trust them better if they had tattoos” by 9.03% were significantly higher in the tattooed group than the nontattooed group ($P < 0.000; P = 0.039$, respectively). In the nontattooed group, the responses “I would not care” by 73.68%, and “I would not like that” by 14.91% were significantly higher ($P < 0.000; P < 0.000$, respectively). Furthermore, the response “I would trust them better” was significantly higher in men ($P = 0.036$). When asked in what body part did they have a tattoo or would want to get a tattoo, both tattooed people and nontattooed people said they preferred/ would prefer arms and wrists. However, the neck, torso, arms, legs, and hands were statistically higher in tattooed people. Meanwhile, torso, arms, legs, and neck were significantly higher in men ($P = 0.032, P < 0.000, P = 0.025$, and $P = 0.049$, respectively). Wrists and ankles were statistically significantly higher in women ($P = 0.019, P < 0.000$, respectively), whereas hands were statistically significantly higher in primary education graduates ($P = 0.026$) [Table 2].

**Table 2: The differences between the tattooed and nontattooed individuals; the attitude for a loved one getting tattoo and the favorite part of the body for getting tattoos**

| Number of people, n (%) | $P$ |
|-------------------------|-----|
| **Tattooed individuals** |     |
| It’s their decision and none of my business | 78 (54.17) | 40 (35.09) | 0.003 |
| I would prevent them if they are minor | 45 (31.25) | 37 (32.46) | 0.893 |
| I would warn them | 10 (6.94) | 40 (35.09) | <0.000 |
| I would forbid it | 1 (0.69) | 10 (8.77) | 0.003 |
| I would encourage them | 22 (15.28) | 3 (2.63) | 0.001 |
| I would warn them, if they still want it I would support it | 12 (10.53) | 7 (4.86) | 0.096 |
| **Nontattooed individuals** |     |
| What would your reaction be if one of your loved ones got a tattoo? |     |
| About a loved one | 50 (34.72) | 38 (33.33) | 0.895 |
| A tattoo of an animal I love | 33 (22.92) | 7 (6.14) | <0.000 |
| A beautiful word or text | 30 (20.83) | 19 (16.67) | 0.428 |
| A tattoo that would describe me | 53 (36.81) | 34 (29.82) | 0.289 |
| About my profession | 13 (9.03) | 11 (9.65) | 1 |
| Meaningful text | 54 (37.5) | 42 (36.84) | 1 |
| Pastoral drawing | 21 (14.58) | 14 (12.28) | 0.715 |
| The team I support | 9 (6.25) | 9 (7.89) | 0.630 |

Among responses to questioning their reaction if a loved one got a tattoo, the option “I would prevent them if they are minor” was significantly higher in higher education graduates compared to primary education graduates $P=0.008$. There was no significant difference in other options. Among responses to “What kind of a tattoo did/would you get,” tattoo of a beautiful word and a tattoo about their profession or their team were significantly higher in men ($P=0.024, P=0.004, P=0.002$, respectively), while getting a pastoral tattoo was significantly higher in women ($P=0.016$).
We have determined that the mean age to get a tattoo was 27.6. This was nearly similar to other studies. Mean age was found to be 30 in a study performed on 3411 tattooed people. It was determined that 73% of those had 1–3 tattoos on average, whereas 63% got a single color, generally black, tattoo (59%). It was found in our study that single-color, particularly black tattoos were preferred, but the number of tattoos was lower.

It was seen that 54% of women mostly got a tattoo on their torso, while 48% of men mostly got their tattoo on their arms in a study. While men preferred similar areas, women in our country were different in selecting tattoos on visible areas such as the wrists and ankles.

There is a wide variety of reasons for getting tattoos. While there may be religious or traditional reasons, it may be due to social status or fashion, or an indicator of power. In this study, individuals generally got tattoos to remember nice memories, carry something they liked on their body, and for wanting to be different.

A lower rate of tattooed individuals (9.7%) in our study regretted their tattoos compared to other studies, while 4.2% stated that they regretted it even while getting it done. The rate of regret was higher in men. 11.4%–14% of tattooed people regretted getting a tattoo in previous studies. Tattooed individuals have stated that they had difficulty in getting a job due to visible tattoos in a study. In our results, the rate of individuals who faced or thought they would face difficulties in finding a job was also quite high.

It was reported in recent years that a higher rate of women applied for tattoo removal in particular. In this study, 12.5% of tattooed people considered tattoo removal and a higher rate of men (78.5% of those who regret their tattoos) regretted getting tattoos. 58% of participants stated that they removed their tattoos only for the fact that they wanted them removed, 57% stated that they were embarrassed, 38% said that their perception of their body changed, 37% said that they had difficulty in selecting clothes, and 32% said that they received a negative opinion from another person. These last two reasons were striking particularly in women. Differently, men regretted getting tattoos at a higher rate in our study. The majority of these people had tattoos on visible areas and they had shorter time before applying to a doctor for tattoo removal, compared to other studies.

Nontattooed individuals in our study stated that their feelings against tattooed individuals would depend on the fact that whether or not they liked the tattoo. About 50% of nontattooed individuals stated that they found tattooed individuals more rebellious, 45% less attractive, 27% less healthy and 25% said that they found tattooed individuals less spiritual. The view on nontattooed individuals was negative, particularly for women with tattoos in visible areas, and they were viewed as less attractive. Indeed, with the increasing trend, it may be argued that young people’s view on tattooed individuals will be more neutral; however, new studies performed with young people show their view on tattooed individuals are still negative. The interesting difference here is that while young people thought that tattooed women were stronger and freer, this view did not apply to tattooed men.

**Conclusion**

Our study has shown that the rate of getting tattoos in minors was higher in our country compared to other countries, and the majority of people who want their tattoos removed got their tattoo at this age interval. For this reason, parents in our country should be warned about the fact that individuals below the age of 18 need their parents’ permission to get tattoos. Differently from other countries, women rather had their tattoos on visible areas. While women preferred a tattoo about a loved one, men rather got tattoos to look cool. Nevertheless, regretting their tattoo and applying to a doctor for tattoo removal were more common in men. Therefore, it is necessary to raise awareness about tattoos and possible health problems they might induce. There is a need for further studies with a higher number of individuals and centers in order to attract attention to these problems in our country.

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**Conflicts of interest**

There are no conflicts of interest.

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