

Adolescents' knowledge on the effects of tattooing and body piercing: A descriptive study

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ABSTRACT

Body art is the latest buzz in fashion world. It is a visual language that communicates a person's status in the society, displays accomplishments, and encodes memories, desires, and life histories. In the last 2 decades, tattoos and piercing have gained more and more acceptance in India due to westernization and influence from widely known icons from sports and media. Adolescents are more fancied by people from the media and sports and try to imitate them without the knowledge of its associated complications. The most common health problems from body piercing reported by participants based on others' experiences were infection (74%), bleeding (30%), allergic reaction (26%), bruising (19%), and keloids (19%). Tattoos cause more problems, including swelling and erythema; there are reports of patients receiving second-degree burns on decorative tattoos that used a ferromagnetic pigment. The aim of this study was to assess the knowledge about the tattooing and body piercing among adolescents. A descriptive study was conducted among 60 adolescents from a nursing college. A semi structured interview schedule was used to collect the data and was analysed by using SPSS. The findings revealed that 12 (20%) adolescents had a good knowledge regarding body piercing and tattooing whereas around 42 (70%) adolescents had average knowledge and 6 (10%) adolescents had poor knowledge. The study concludes that there is less awareness about complications involved in tattooing and body piercing. So, there is a need to create awareness among society, which may further reduce the burden of illness.

Keywords: Adolescents, Tattooing, Body piercing, Scarification

Introduction

Body art is the latest buzz in fashion world. It is a visual language that communicates a person's status in the society, displays accomplishments, and encodes memories, desires, and life histories. Body piercing and tattooing area are amongst the ancient and widest types of body art. Tattooing is an artificial design which is done by injecting ink or dyes into the dermis layer of the skin. It is either permanent or temporary.¹ it breaks the skin barrier and may cause skin infection, allergic reaction, and some other complications. Reactions like itching, rashes and swelling may occur at the site of the tattoo.² Tattooing may also cause serious diseases like HIV, Hepatitis, Skin cancer and Blood cancer.³

Ear piercing and nose piercing have been particularly widespread and are well represented in historical records. Nose piercing is documented as far as 1500BC. Piercings of these types have been documented globally, while lip and tongue piercings were historically found in African and American tribal cultures. Nipple and genital piercing have also been practiced by various cultures. In the past body art was seen as an indication of membership in a unique section of the society. Now piercing and tattoos are common in all lifestyles and all strata of the society.¹

In approximately the last twenty years, there has been a new trend of people getting tattoos. Adolescents are experimenting with their identities and they may be drawn to piercings or tattoos as a form of expression or rebellion. Tattoos and piercings can have harmful side effects that teens may not be aware of.²

Since there is little regulation of tattoo artists, however, it is important to recognize that, as in any field, there may be unscrupulous or incompetent practitioners. Tattooing opens the body to potential infection, disease, and scarring. "Tattoo parlours and piercing venues are not held to the same sterility standards as doctors' clinics and hospitals. Few countries have hygienic regulations to ensure safe tattooing practices in commercial tattoo parlours, and even fewer monitor and enforce standards."³ Unfortunately, in many countries including India, anyone can begin to tattoo or create an artificial opening for a jewellery after purchasing the necessary equipment. No knowledge of anatomy, sanitation, sterilization, infection control, or skin preparation or care are required. Though tattooing is legal, there is little or no government regulation to ensure and monitor safe tattooing practices.³

In the last 2 decades, tattoos and piercing have gained more and more acceptance in India due to westernization and influence from widely known icons from sports and media. Adolescents are more fancied by people from the media and sports and try to imitate them without the knowledge of its associated complications. It is possible to transmit viral infections such as hepatitis B, hepatitis C, Human Immunodeficiency Virus (HIV)/acquired immunodeficiency syndrome (AIDS) and herpes, as well as bacterial skin infections such as Streptococcus and Staphylococcus.⁴ The most common health problems from body piercing reported by participants from their personal experience were infection (10%). The most common health problems from body piercing reported by participants based on others' experiences were infection (74%), bleeding (30%), allergic reaction (26%), bruising (19%), and keloids (19%). Tattoos cause more problems, including swelling and erythema; there are reports of patients receiving second-degree burns on decorative tattoos that used a ferromagnetic pigment.⁵

Materials and Methods

A descriptive survey was conducted in a nursing college in North Karnataka, India, to investigate the awareness level of adolescents about body piercing and tattooing. The study is comprised of 60 adolescents studying in a selected nursing college. Participants were enrolled in a study using simple random technique. The study's inclusion criteria encompassed: Adolescents who were present during the study, and demonstrated willingness to participate in the study. Once eligibility was determined, an informed consent was taken. The participants then completed a survey that captured their socio-demographic information and knowledge levels. Total scores were obtained by summing the score where higher scores signified enhanced awareness about tattooing and body piercing. The total scores underwent conversion into percentages, where $\leq 50\%$ denoted poor knowledge, 51-75% represented average knowledge and $\geq 76\%$ signified good knowledge. Participants were subsequently classified based on their scores, categorising them into groups with good, average, poor knowledge levels.

Statistical analysis

Data gathered were entered into MS Office Excel 2019 and imported into SPSS software version 20.0 for thorough analysis. Descriptive statistics was then employed to characterize participant traits. A chi-square test was carried out to find out the association between socio-demographic variables and body piercing and tattooing. A significance level of $p < 0.05$ was employed to ascertain statistical significance.

Results

Table 1 depicts the distribution of participants based on their sociodemographic information. Overall, most of the participants were in the group of 18-19 years ($n=28$, 47%), most of them were girls ($n=41$, 68%), belonged to Hindu religion ($n=34$, 57%), and belonged to middle class ($n=56$, 93%), most of the participant's father had qualification till PUC ($n=24$, 40%), mother had qualification Graduation and above ($n=20$, 33%), most of participants had no one in the family who had tattoo and body piercing ($n=37$, 62%), and majority of the participants opts watching mobile as a leisure time activity.

Table I: Socio demographic characteristics of the participants

Sl.no	Demographic variable	Category	Respondents	
			Frequency	Percentage
1	Age	16-17	26	43
		18-19	28	47
		20-21	6	10
2	Gender	Male	19	32
		Female	41	68
3	Religion	Hindu	34	57
		Christian	23	38
		Muslim	2	3

		Other	1	2
4	Economic status	Upper class	1	2
		Middle class	56	93
		Lower class	3	5
5	Educational status of the father	Non formal education	2	3
		Schooling	15	25
		PUC	24	40
		Graduation & above	19	32
6	Educational status of the mother	Non formal education	2	3
		Schooling	19	32
		PUC	19	32
		Graduation & above	20	33
7	Family members or friends with tattoo & body piercing	Yes	23	38
		No	37	62
8	Leisure time activities	Watching mobile or web series	34	57
		Internet browsing	1	2
		Playing Games	18	30
		Other	7	12

Table 2 shows that 12(20%) adolescents had a good knowledge regarding tattooing and body piercing whereas around 42(70%) adolescents had average knowledge and 6(10%) of adolescents had poor knowledge.

Knowledge Level	Respondent	
	Numbers	Percentage
Good	12	20%
Average	42	70.00%
Poor	6	10.00%

Table II: Knowledge level of the participants

With a significance level set at $p < 0.05$, the findings presented in table 3 revealed that the calculated chi square values for the demographic variables such as age, gender, religion, economic status, educational status of the mother and father, family members or friends with tattoo & body piercing and leisure time activities were less than the tabulated chi square value. So, it indicates that there is no association between knowledge scores and selected demographic variables.

Table III: Association between knowledge levels and demographic variables

Sl.no	Demographic variables		X ² value	Degrees of freedom	P Value	Significance
1.	Age	16-17	1.979	4	9.488	NS
		18-19				
		20-21				
2.	Gender	Male	9.107	2	5.991	NS
		Female				
3.	Religion	Hindu	13.290	6	12.592	NS
		Christian				
		Muslim				
		Others				
4.	Economic status	Upper class	2.926	4	9.488	NS
		Middle class				
		Lower class				
5.	Educational status of the father	Nonformal education	2.541	6	12.592	NS
		Schooling				
		PUC				
		Graduation and above				
6.	Educational status of the mother	Nonformal education	3.968	6	12.592	NS
		Schooling				
		PUC				
		Graduation and above				

7.	Family members or friends with tattoo and body piercing	Yes	5.476	4	9.488	NS
		No				
8.	Leisure time activities	Watching movies or web series	14.742	6	12.592	NS
		Internet browsing				
		Playing games				
		Other				

*p< 0.05

Discussion

The results showed that among 60 students, 12(20%) of the PU students had a good knowledge regarding body piercing and tattooing whereas around 42(70%) students had average knowledge and 6(10%) students had poor knowledge. There was no significant association between the demographic variables and tattooing and body piercing. A similar study by Meethu Raju et.al (2021) revealed that majority of the adolescents have a general lack of knowledge about body piercing and its adverse effects.

Similar findings have been reported in a survey conducted among college freshman from Italy found that many students undergoing tattooing or body piercing were unaware of the associated health risks. 60% students knew about HIV related risks, less than half knew about possible infection with hepatitis c, hepatitis B, tetanus, or about non-infectious complications. (Quaranta A et.al 2011).

A systematic review was done with the aim to analyse the available literature about complications from body piercing for contributing to raise the awareness towards this issue and to plan and perform appropriate prevention interventions. (A. Sindoni et.al)

Recommendations of the study include

- A descriptive survey can be done to determine the reasons why people pierce and tattoo their bodies.
- A study can be done to determine the knowledge and practice of tattoo artists and the people who do body piercing regarding the human anatomy and physiology and very importantly infections which may arise post tattooing and body piercing.
- A qualitative study also can be done to illuminate the perception of individuals regarding body piercing and tattooing.

Conclusion

There is a lack of awareness among the individuals specially the adolescents about the health risk associated with tattooing and body piercing. There is a need to create an awareness among the individuals in the society about tattooing and body piercing. Because it is necessary that we should not get influenced by media and the influencers and harm our health.

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Declarations

Source of support: Nil

Conflict of interest: The authors declare that there is no conflict of interest.

Ethical approval – The study was approved by the Institutional Ethics committee.

Tables

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Table 1 denotes the distribution of participants based on their socio demographic data.

Knowledge Level	Respondent	
	Numbers	Percentage
Good	12	20%
Average	42	70.00%
Poor	6	10.00%

Table II: Knowledge level of the participants

Table 2 gives the insight about the knowledge levels of participants about tattooing and body piercing. 42 participants had average knowledge (70%), 12 participants had good knowledge (20%) and 6 participants had poor knowledge (10%).

Table III: Association between knowledge levels and demographic variables

Sl.no	Demographic variables		X ² value	Degrees of freedom	P Value	Significance
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		Playing games				
		Other				

Table 3 indicates that there was no association between knowledge score and demographic variables.

Figures and Legends

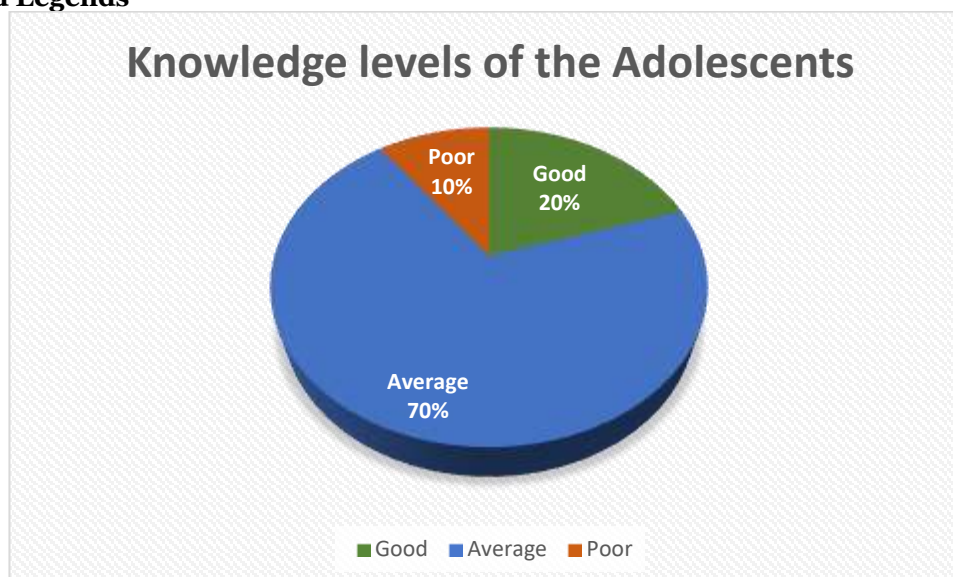


Fig 1: Distribution of respondents based on their knowledge level

References

1. Rahimi I A, Eberhand I, Kasten E. Tattoos: What do people really know about the medical risks of Body Ink. CAD. 2018;11(3):30-35. Available from: <https://www.ncbi.nlm.gov/pmc/articles/PMC5868782/>
2. Vaishnav MP, Ahluwalia S. Inking India Safe. 25 ETHealthWorld.2021
3. Jalindre SG, Nawale A. A study to explore the selected functional health problems among the senior citizens residing in elder homes of Pune city. IJOAR. 6:15-8.
4. Carney K, Dhalla S, Aytaman A, Tenner C, Francois F. Association of tattooing and hepatitis C virus infection: a multicentre case-control study. Hepatology. 2013;57(6):2117-23.
5. Braithwaite R, Robillard A, Woodring T, Stephens T, Arriola KJ. Tattooing and body piercing among adolescent detainees: relationship to alcohol and other drug use. J Subst Abuse [Internet]. 2001;13(1-2):5-16. Available from: [http://dx.doi.org/10.1016/S0899-3289\(01\)00061-X](http://dx.doi.org/10.1016/S0899-3289(01)00061-X)
6. Mayers LB, Chiffriller SH. Body art (body piercing and tattooing) among undergraduate university students: "then and now." J Adolesc Health [Internet]. 2008;42(2):201-3. Available from: <http://dx.doi.org/10.1016/j.jadohealth.2007.09.014>
7. Mercer H, Finlay F, Jordan N. Body piercing in school children: a review of the issues. Community Pract. 2006;79(10):328-30.
8. Parsons M. Mental Health and Mental Disorders-An Encyclopedia of Conditions Treatment and Wellbeing: Hogrefe and. Huber Publishers; 2006.