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A Study To Assess The Effectiveness of Planned Teaching on Knowledge Regarding Adverse Effects of Tattoo Among Junior Colleges Students in Selected Areas

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Abstract: **A tattoo is a permanent mark or design made on your skin with pigments inserted through pricks into the skin's top layer. Typically, the tattoo artist uses a hand-held machine that acts much like a sewing machine, with one or more needles piercing the skin repeatedly with every puncture, the needles insert tiny ink droplets. The process which is done without anaesthetics causes a small amount of bleeding and slight to potentially significant pain. Objectives: To assess the effectiveness of planned teaching on knowledge regarding adverse effects of tattoo among junior colleges students in selected areas, to assess the existing knowledge regarding adverse effects of tattoo among junior colleges students in selected areas, to assess effectiveness of planned teaching on knowledge adverse effects of tattoo among junior colleges students in selected areas, to associate the post-test knowledge score with selected demographic variables. Materials and Methods: Quantitative research approach with pre-experimental research design was used. 80 subjects were selected by using sample calculation formula with the help of population Proportion. Students' population who belonged to 18 to 25 years in selected junior college. Non-Probability Convenient sampling technique was used to select the sample. The data were collected from selected junior college, using socio demographic and structured knowledge Questionnaire. Results :The present study shows, out of the 80 subjects 15% of Junior College students were in the age group of 16-17 years, 62.50% in 18-19 years and 16.30% in 20-21 years, 26.30% of Junior college students were males and 73.80% of them were females, Parents of 26.30% of junior college students were government servant, 35% of them were private servant and 38.80% of them were doing other occupation, 61.30% of young adults were from nuclear families, 36.30% were from joint and 2.50% of junior college students were from extended families, 42.50% of junior college students had Socio economic status of Rs 10000-15000, 37.50% had between Rs 15001-20000, 18.80% had between Rs 20001-30000 and only 1.30% junior college students had Socio economic status of more than 30000 Rs, 41.30% of junior college students were yes, 16.30% of them were No and 42.50% of junior college students were not known, In pre-test 42.5% of junior college students had average level of knowledge score and 57.5% of them had good level of knowledge score. Minimum knowledge score in pretest was 7 and maximum knowledge score in pretest was 18. Mean knowledge score in pretest was 12.97 ± 2.63 and mean percentage of knowledge score in pretest was 43.25 ± 8.79, In the post-test,32.5% of junior college students had good level of knowledge score, 42.5% had very good and 25% of junior college students had excellent level of knowledge score. 0% 10% 20% 30% 40% 50% 60% 70% Poor, Average, Good, Very Good, Excellent 0% 42.50% 57.50% 0% 0% % of junior college students Level of Pretest knowledge score Minimum knowledge score in posttest was 14 and maximum knowledge score in post-test was 28. Mean knowledge score in posttest was 21.20 ± 3.77 and mean percentage of knowledge score in post-test was 70.66 ± 12.58, This table shows the association of knowledge score with age in years of Junior college students from selected areas. The tabulated 'F' values were 2.72 (df=3,76) which is less than the calculated 'F' i.e. 6.39 at 5% level of significance. Also, the calculated 'p'=0.001 which was less than the acceptable level of significance i.e. 'p'=0.05. Hence it is interpreted that age in years of junior college students is statistically associated with their post-test knowledge score.**

Keywords: **Assess, knowledge, adverse effects of Tattoo, Students, Junior College.**

I. INTRODUCTION

A tattoo is a permanent mark or design made on your skin with pigments inserted through pricks into the skin's top layer. Typically, the tattoo artist uses a hand-held machine that acts much like a sewing machine, with one or more needles piercing the skin repeatedly with every puncture, the needles insert tiny ink droplets. The process which is done without anaesthetics causes a small amount of bleeding and slight to potentially significant pain.[1]

A tattoo is created when an artist inserts ink, with the help of a needle, into the layer of skin known as the dermis. This changes the skin's pigment and can be used to create almost any image imaginable.[2]

If you get ink done, you want to show it off to everyone. Tattoos have become a part of our culture and a symbol of self-expression. While everyone knows there are risks involved when getting a tattoo, no one talks about the long-term effects of tattooing.[3]

The number of tattooed people has substantially increased worldwide in recent years. The incidence of tattooed individuals with at least one tattoo is estimated to be between approximately 12% and 29%. When getting the first tattoo, the age of people is mostly less than 30 years, whereas only 10% of people are older than 50 years. Global interest in tattoos was investigated using Google Trends, which showed that there is significant interest in tattoos, particularly in Latin American countries. Considering the high percentage of tattooed people, tattoo colourants should provide a high level of safety. Unfortunately, many countries around the world lack stringent regulations for tattooing products. In the USA, the Food and Drug Administration has the regulatory authority over ingredients in tattoo colourants, but no specific legal requirements apply. The Council of Europe has presented its first resolution in 2003, which refers to the composition and regulation of marking and labelling of products used for tattoos and permanent makeup. In the EU, a restriction on substances in colourants used for permanent body modification entered into force in 2021.[4]

Tattoos are more popular than ever. About 30% of all Americans, and 40% of those aged 18-34 years old, have at least one tattoo, according to polling by the firm Ipsos. While state and local authorities oversee the practice of tattooing, inks and pigments used in tattoos are subject to U.S. Food and Drug Administration oversight as cosmetics. The FDA takes action to protect consumers when safety issues arise related to the inks. Over the years, the FDA has received reports of people developing infections from contaminated tattoo inks, as well as allergic reactions to the inks themselves. In 2019, the FDA issued a safety alert about certain tattoo inks contaminated with microorganisms. In June 2023, the FDA issued a draft guidance to help tattoo ink manufacturers and distributors recognize situations in which tattoo ink may become contaminated with microorganisms, such as bacteria or mold. The draft guidance also recommends certain steps manufacturers and distributors can take to help prevent it.[5]

BACKGROUND OF STUDY

A tattoo is a form of art where people get themselves engraved with ink on their bodies using a needle. Psychologically, there are various reasons for tattoos in Indian culture. Few reasons are fashion and trend; few get tattooed to save the memory or have proof of someone or something, also known as indigenous tattoos. Others call themselves inked under cultural influence. Tattoos can either be temporary or permanent but are painful most of the time.[6]

Tattoos are used often to make style statement. They are increasingly being used by today's 'Millennials' as a statement of their independence. The celebrities have popularized it over the last few decades. The members from the 'Metal' band were the first to flaunt their tattoos on the stage in sixty's. What is to blame for their increase in recent times is hard to gauge, it is estimated that almost one in five Americans have a tattoo. If you want to have a tattoo done do remember that these permanent marks on your body might not end up looking as artistic as one would hope. They are known to cause some serious health risks if not done using a sterile environment and instruments, besides the short- and long-term risks of allergies to the ink.[7]

NEED OF STUDY

Tattoos appear to be more popular than ever, with a Pew Research Center survey reporting that 40 percent of young adults have at least one. They are appealing for their customized art, which can reflect your personality or even honor people important in your life. Still, getting a quality tattoo is not always easy, though they are much safer than decades past. The actual process itself consists of a tattoo needle literally injuring your skin to design the art. The needle also inserts small amounts of color pigments. If your skin heals correctly, you are left with beautiful, permanent skin art.[8]

According to WHO Tattooing has become a global trend. The highest prevalence rates (up to 30–40%) are seen in Europe and the USA in adults younger than 40 years, but also increasing numbers of people in low- and middle-income countries are getting tattoos. Exact numbers are sparse, but in Brazil and South Africa the prevalence is estimated to be about 20% in the younger age groups, and rates are growing. Proportionally to this rising prevalence, the relevance of tattoo safety for public health is increasing. This, at least in Europe, is mirrored by the recent inclusion of tattoo and permanent make-up ink ingredients in the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) framework, which defines regulatory limits of chemicals in daily use; these are binding for all European Union (EU) Member States. It remains unclear whether the new inks currently being introduced to the European market do meet all REACH requirements and whether the imposed requirements are sufficient to impede the use of potentially hazardous substances in inks.[9]

The number of tattooed people has substantially increased in the past years. Surveys in different countries reveal this to be up to 24% of the population. The number of reported adverse reactions after tattooing has also increased including infections, granulomatous and allergic reactions and tumors. However, the case reports do not reflect the frequency of adverse reactions.[10]

OBJECTIVES OF THE STUDY

Primary/general objective

- To assess the effectiveness of planned teaching on knowledge regarding adverse effects of tattoo among junior colleges students in selected areas.

Secondary Objectives

- To assess the existing knowledge regarding adverse effects of tattoo among junior colleges students in selected areas.
- To assess effectiveness of planned teaching on knowledge adverse effects of tattoo among junior colleges students in selected areas.
- To associate the post-test knowledge score with selected demographic variables

METHOD OF SELECTION OF STUDY SUBJECT (ELIGIBILITY CRITERIA)

INCLUSION CRITERIA

- Those who are in age group from 18 to 25 years.
- Students who are studying in junior College.

EXCLUSION CRITERIA

- Young adults who are not present at time of data collection.
- Students below 17 years and above 25 years only.

ETHICAL ASPECTS

- Permission has been obtained from Institutional Ethical Committee.
- Permission will be obtained from selected colleges of the city.
- Written informed consents will be taken from study subjects.

II. METHODOLOGY

Quantitative research approach with A Pre- experimental research design was used. 80 subjects were selected by using sample calculation formula with the help of population Prevalence. Students' population who belonged to 18 to 25 years in selected Junior College. Non-Probability Convenient sampling technique was used to select the sample. The data were collected from selected Junior College, using socio demographic and structured knowledge Questionnaire.

TOOLS:

Socio demographic data: It contains data regarding age, gender, occupation of parents, religion, type of family, family history of tattoo.

Knowledge questions: This section contains 30 questions to assess the knowledge regarding adverse effects of tattoo among Junior College Students in selected colleges.

Statistical analysis: The data was analysed, by using descriptive and inferential statistics on the basis of objectives and hypothesis of the study. Association of knowledge scores and demographic variables were analysed by chi-square test.

Scoring Technique

TABLE I: grading of knowledge score among subject

Level of knowledge score	Percentage of marks	Marks
Poor	0-20%	01-06
Average	21-40%	07-12
Good	41-60%	13-18
Very good	61-80%	19-24
Excellent	81-100%	25-30

III. ANALYSIS AND INTERPRETATION

SECTION A: DISTRIBUTION OF SUBJECTS IN RELATION TO THEIR DEMOGRAPHIC VARIABLES.

In this study frequency and percentage wise distribution of subject in relation to their Demographic variables of the present study shows, out of the 80 subjects 15% of Junior College students were in the age group of 16-17 years, 62.50% in 18-19 years and 16.30% in 20-21 years, 26.30% of Junior college students were males and 73.80% of them were females, Parents of 26.30% of junior college students were government servant, 35% of them were private servant and 38.80% of them were doing other occupation, 61.30% of young adults were from nuclear families, 36.30% were from joint and 2.50% of junior college students were from extended families, 42.50% of junior college students had Socio economic status of Rs 10000-15000, 37.50% had between Rs 15001-20000, 18.80% had between Rs 20001-30000 and only 1.30% junior college students had Socio economic status of more than 30000 Rs, 41.30% of junior college students were yes, 16.30% of them were No and 42.50% of junior college students were not known.

SECTION B: ASSESSMENT LEVEL OF KNOWLEDGE REGARDING NIGHT EATING SYNDROME AMONG YOUNGADULTS IN SELECTED COLLEGES

This section has dealt with the assessment of knowledge regarding the knowledge regarding adverse effects of tattoo among Junior College Students in selected colleges. The levels of knowledge score were categorized under categories: poor, average, good, very good and excellent.

In pre-test 42.5% of junior college students had average level of knowledge score and 57.5% of them had good level of knowledge score. Minimum knowledge score in pretest was 7 and maximum knowledge score in pretest was 18. Mean knowledge score in pretest was 12.97 ± 2.63 and mean percentage of knowledge score in pretest was 43.25 ± 8.79.

In the post-test,32.5% of junior college students had good level of knowledge score, 42.5% had very good and 25% of junior college students had excellent level of knowledge score. 0% 10% 20% 30% 40% 50% 60% 70% Poor, Average, Good, Very Good, Excellent 0% 42.50% 57.50% 0% 0% % of junior college students Level of Pretest knowledge score Minimum knowledge score in posttest was 14 and maximum knowledge score in post-test was 28. Mean knowledge score in posttest was 21.20 ± 3.77 and mean percentage of knowledge score in post-test was 70.66 ± 12.58

SECTION C: ASSOCIATION OF KNOWLEDGE SCORE REGARDING SELECTED VECTOR BORNE DISEASES AND ITS PREVENTION AMONG ADULTS IN RURAL AREA WITH SELECTED DEMOGRAPHIC VARIABLES.

This table shows the association of knowledge score with age in years of Junior college students from selected areas. The tabulated 'F' values were 2.72 (df=3,76) which is less than the calculated 'F' i.e. 6.39 at 5% level of significance. Also, the calculated 'p'=0.001 which was less than the acceptable level of significance i.e. 'p'=0.05. Hence it is interpreted that age in years of junior college students is statistically associated with their post-test knowledge score.

IV. CONCLUSION

After the detailed analysis, this study leads to the following conclusion Planned teaching on adverse effects of night eating syndrome was found to be effectiveness in improving the knowledge of junior college students. Students had a significant gain in knowledge regarding adverse effects of tattoo.

An association was found between age & type of family adverse effects of tattoo among junior college students in selected areas

Hence, based on the above findings, it was concluded undoubtedly that the written prepared material by the investigator in the form of planned teaching helped the junior college students to improve their knowledge regarding adverse effects of tattoo among junior college students in selected areas.

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