

Tattoo: Attitudes and Perception of Health-related Risks

الوشم: الاتجاهات والمخاطر الصحية المرافقة

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الخلاصة:

خلفية الدراسة: منذ آلاف السنين، وفي العديد من الأماكن حول العالم تم استخدام الوشم، في حين انه يمارس تلقائياً، وكذلك في مختلف الظروف الثقافية والجغرافية والمناخية تماماً.

الهدف: تهدف الدراسة الى تقييم المخاطر الصحية المرافقة للممارسة وكذلك الاتجاهات لعينة نسوية من طالبات ومدرسات المعهد التقني في الموصل.

المنهجية : اعتمدت الدراسة الجانب الوصفي والتحليلي للفترة (4 آذار - 30 نيسان / 2018) على عينة نسوية عشوائية تكونت من (283) طالبة ومدرسة في المعهد التقني في الموصل. قام الباحث بجمع المعلومات المطلوبة المتعلقة بموضوع الدراسة من خلال مقابلة شخصية مع كل مشاركة في الدراسة من خلال استمارة استبائية منظمة تكونت من ثلاث مجالات؛ المعلومات الديموغرافية للعينة، ادراك المخاطر الصحية المرافقة لممارسة الوشم والاتجاه نحوها، وتم التأكد من صدق الاداة من خلال جمع آراء (5) خبراء من حقل التمريض، في حين تم التأكد من ثباتها من خلال تطبيقها على عينة مكونة من (15) طالبة جامعية بطريقة الاختبار وإعادة الاختبار وكانت نتيجتها ($r=0.83$). وتم تحليل وعرض المعلومات بطريقة الإحصاء الوصفي والتحليلي.

النتائج: تبين أن العينة تمتلك مستوى ضعيفاً من المعلومات بما يتعلق بالمخاطر الصحية المرافقة للممارسة، من جانب آخر تبين أن الالتزامات الدينية كانت أهم المحددات للابتعاد عن الممارسة.

الاستنتاج: استنتجت الدراسة انتشار جهلاً واضحاً حول الأمراض المعدية التي يمكن أن تنتقل من خلال هذه الممارسات، كذلك استنتجت الدراسة بأن دوافع الممارسة كانت ضعيفة جداً.

التوصيات: توصي الدراسة بضرورة تعزيز مستوى الإدراك لدى المجتمع حول المخاطر الصحية المرافقة للممارسة من خلال وسائل الإعلام، وفي حال ممارستها يجب احترام الالتزامات والتعهدات تجاه القيم، التقاليد وكذلك المعتقدات الدينية، كما توصي الدراسة بتضمين مخاطر مثل هكذا ممارسات ضمن المناهج التعليمية الصحية.

Abstract

Background: For thousands of years, and in many places around the world tattoos have been practiced, while it comes into existence spontaneously and practiced in cultural, geographic and climatic conditions completely^(1,2).

Aim of the study: The study objected to assess perception of health-related risks and attitudes toward tattooing among institute students and faculty members in Mosul.

Methodology: Descriptive-Analytical study design was depended throughout the period "4th of March till 30th of April / 2018" among a female convenience sample of (283) students and faculty members from Technical Institute of Mosul. The researcher collected the intended information related to the topic of the study via an interview with each subject of the study by using structured anonymous questionnaire composed of three parts; demographic characteristics of the subjects, perception of health-related problems associated with tattoo and the attitudes toward it. The instrument was validated through opinions of (5) experts from the nursing field, while its reliability was measured through test-retest on (15) university female students, its result was ($r=0.83$). Data were presented through descriptive-analytical statistic.

Results: The sample had a weak level of perception with respect to health-related risks associated with the practices, from another side; religious obligations were the main limitation of being away from tattooing.

Conclusions: The study concluded that there was a clear ignorance of infectious diseases that could be transmitted through this practice. The study also concluded that the motives for the practice were very weak.

Recommendations: The study recommended on the need to raise the level of perception among the society about the health risks associated with the practice through the mass media. Also, in the event of its occurrence, obligations and commitments towards values, traditions, and religious beliefs must be respected.

Key Words: Tattoo, Attitude, Perception, Health related Risks

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INTRODUCTION

For thousands of years, and in many places around the world, tattoos have been practiced, while it comes into existence spontaneously and practiced in cultural, geographic and climatic conditions completely. The nature of this phenomenon has changed dramatically and has entered the realm of normality, and has become generally accepted^(1,2).

Piercing and tattooing have been increasingly popular worldwide. Results of many pieces of literatures differ, in respect to areas and populations; they indicate that body art has been more accepted by all ages and social classes, but especially by youths⁽³⁾. The number of

young adults acquiring body piercing has increased in recent years⁽⁴⁻⁶⁾. In fact, body piercing may now be considered a mainstream activity among older adolescents and young adults (age range, 17 to 25 years) in western society, also, amongst children and teenagers, and is nowadays more socially acceptable despite media reports citing tissue destruction and death⁽⁴⁾.

Related adverse health risks have been documented. The use of needles and other penetration tools allows the transmission of mucosal infections. These can range from local to systemic infections, for example, osteomyelitis, toxic shock syndrome, and bacteremia), as well as those that are life-threatening (e.g., septic arthritis, acute kidney glomerulonephritis, hepatitis). In addition, the introduction of materials such as dyes and subcutaneous metals involve non-infective risks, such as allergic reactions. Subsequent contagious complications caused by the lack of proper care of tattooed/pierced sites are also possible^(4, 7, and 8).

In Iraq, tattoo is an earlier custom especially among villagers which already shows signs of disappearing, especially in the cities and in the total community, but, in the preceding years followed the occupancy of Iraq from the Coalition Forces at 2003, tattoo practices were known in the community as imitation of foreign soldiers among very low percentage of adolescents and young youths. On the other hand, the subordination of Nineveh Governorate / Iraq under the control of the so-called Islamic State in Iraq and Syria (ISIS) for three years ago- which imposed on the community some religious obligations- produced undesirable and unwanted phenomena such as tattoos and skin piercing which prevails nowadays especially among adolescents, and young youth.

The perception of health risks from piercing and tattoo hasn't been investigated⁽³⁾, while the researcher didn't find any related studies regarding this phenomenon in Iraq.

AIMS OF THE STUDY

The study objected to assess the perception of health-related risks and attitudes toward tattooing among institute female students and faculty members.

METHODOLOGY

A descriptive-analytical study design was depended to carry out the objectives of the study throughout the period "4th" of March till "30th" of April / 2018 among female convenience sample of (283) students and faculty members - for body art modifications were shameful and ostracized among males in Iraqi community due to prevailing customs and traditions -, their ages were ranged between (19-51) years with mean age and standard deviation of (21.73 ± 2.01) years.

To collect data, the researcher used a structured anonymous questionnaire. The researcher collected the intended information related to the topic of the study via an interview with each subject of the study; each interview took approximately '30' minutes. The instrument was validated through opinions of (5) experts from the nursing field, while its reliability was measured through test-retest on (15) institute female students. The instrument composed of three parts; Demographic data (Age, Type of study and Educational qualifications), Knowledge regarding health risks of tattooing; Communicable diseases that can be transmitted, Non infective risks that can be involved, Complications that can be occurred through and after the practice, and Method of removal tattoo from the skin, these were of three options (Yes=3, Don't assure= 2, No=1). Attitudes toward tattooing in regard to; Motives of practice and Causes of refusal the practice, these were of three options (Agree=3, No opinion=2, Disagree=1). Data

were analyzed and demonstrated by using SPSS (Version- 11.5) through Descriptive statistic (Mean, Standard deviation, Mean of scores, Minimum and Maximum score), and Inferential statistic (Mann-Whitney and Kruskal-Wallis procedures, for, data were abnormally distributed according to "Kolmogorov-Smirnov results" that means the results of the study can't be generalized to the community by using t-test and ANOVA test) as in (table-3). Extreme difficulties were faced to convince participants to share in the study despite the emphasis on confidentiality of information gained from respondents.

RESULTS:

Table (1): Demographic Characteristics of Respondents.

Variable	No.	%
Type of Study:		
• Medical	103	36.4
• Non-Medical	180	63.6
Educational Qualification:		
• Diploma Student	128	45.7
• Baccalaureate	127	44.9
• Post-graduate	28	9.9

Table 1 demonstrates that nearly two-thirds of participants (63.6%) were from non-medical certificates (Scientific and Humanistic), while the others (36.4%) were from medical certificates. Almost respondents were students Diploma and Baccalaureate while less than 10% of them were post-graduated (as Master or Doctorate).

Table (2): Descriptive Statistics of Perception and Attitude of Respondents in regard to Type of Study and Educational Qualifications:

variable	Aspect	Mean	Std. deviation	Mean of Scores	Minimum	Maximum
Type of Study	Perception					
	- Medical study	31.62	3.22	32	24	39
	- Non- Medical study	31.44	2.71	32	26	41
	Attitude					
	- Medical study	36.72	3.05	30	27	44
	- Non- Medical study	36.43	3.09	30	28	44
Educational qualification	Perception					
	- Diploma student	31.50	3.12	32	24	41
	- Baccalaureate	31.31	2.72	32	26	39
	- Post-Graduate	32.46	2.53	32	28	37
	Attitude					
	- Diploma student	36.48	2.96	30	28	43
	- Baccalaureate	36.50	3.19	30	27	44
	- Post-Graduate	36.96	3.14	30	31	43

It is obvious from the table (2) that the means of the perceptions in respect to the two variables undertaken (Type of Study and Educational qualification) had a high similarity against mean of scores, while the means of the attitude in respect to the two variables undertaken differed against mean of scores.

Table (3): Kolmogorov-Smirnov analysis of data:

Variable		Kolmogorov-Smirnov		
		Statistic	DF	Sig.
Perception	Type of study			
	- Medical study	.133	103	.002
	- Non- Medical study	.093	180	.001
	Educational Qualification			
	- Diploma student	.87	128	.018
	- Baccalaureate	.108	127	.001
	- Post-Graduate	.157	28	.077
Attitude	Type of study			
	- Medical study	.097	103	.019
	- Non- Medical study	.092	180	.001
	Educational Qualification			
	- Diploma student	.084	128	.026
	- Baccalaureate	.102	127	.002
	- Post-Graduate	.0104	28	.2

Table (3) depicts that almost statistical results are significant at different levels except that of perceptions and attitudes of post-graduates.

Table (4): Perception of Respondents regarding Tattooing

Variable	Perception			Type of Study Field		Educational Qualification	
	Yes	Don't assure	No	Mann-Whitney Value	Sig.	Kruskal Wallis Value	Sig.
Communicable Diseases:							
Hepatitis-A	24	<u>166</u>	93	8818.5	Non-sig.	1.34	Non-sig.
Hepatitis-B	47	115	<u>121</u>				
Hepatitis-C	37	<u>171</u>	75				
Tetanus	54	<u>116</u>	113				
AIDs	<u>160</u>	46	77				
Non-Communicable Diseases:							
Lymph- adinopathy	30	70	<u>183</u>	9157	Non-sig.	1.29	Non-sig.
Tumors	92	93	<u>98</u>				
Complications:							
Local Infections	<u>121</u>	91	71	9610	Non-sig.	3.31	Non-sig.
Bleeding	63	57	<u>163</u>				
Allergic Reactions	58	66	<u>159</u>				
Abscess	<u>147</u>	45	91				
Pain	<u>151</u>	33	99				
Hematoma	60	92	<u>131</u>				
Kelloids	19	109	<u>155</u>				
Means of Removal:							
Surgery	30	70	<u>183</u>	9095.5	Non-sig.	7.27	Sig.
Picking Pigment or Ink	92	93	<u>98</u>				
Total Knowledge				8977.5	Non-sig.	4.65	Non-Sig.

Scores about all dimensions of perception investigated had fluctuated among the three options (Yes, Don't assure, No). Ignorance (As 'No' option) was obvious against all non-communicable diseases, against more than half of complications that can be happened and against all means of removal. High perception (as 'Yes' option) was demonstrated against AIDs as a communicable disease, against half of the complications that can be happened. Three

dimensions of perception (Communicable diseases, Non-communicable diseases, and Complications) in addition to the mean of total perception hadn't presented any level of significance in relation to the variables undertaken, while only means of removal had significant relation according to educational qualification of the respondent.

Table (5): Attitudes of Respondents toward Tattooing.

Variable	Attitude			Type of Study Field		Educational Qualification	
	Agree	No Opinion	Don't Agree	Mann-Whitney Value	Sig.	Kruskal Wallis Value	Sig.
Motives of Practice:							
Fashion	57	82	<u>144</u>	4049	Non-sig.	0.114	Non-sig.
Curiosity	60	82	<u>141</u>				
Imitation	21	47	<u>215</u>				
Shape Enhancement	41	73	<u>169</u>				
Attention	15	75	<u>193</u>				
Distinction	13	71	<u>199</u>				
Customs and Traditions	57	86	<u>140</u>				
Causes of Refusal Practice:							
Parental Consent	<u>164</u>	66	53	9163	Non-sig.	0.27	Non-sig.
Fear of Practice	<u>131</u>	91	61				
Pain Endurance	<u>150</u>	74	59				
Advice from Others	<u>109</u>	107	57				
Religious Commitment	<u>189</u>	45	49				
Un-Attractiveness	<u>101</u>	153	29				
Removal Difficulty	<u>156</u>	82	45				
Infections	<u>142</u>	109	32				
Total Attitude				8683	Non-sig.	0.953	Non-sig.

Table (5) reflects that there was opposition attitude toward all motives of practice, while there was agreement toward all causes of the refusal of practice. The two dimensions of attitude in addition to the mean of total attitude haven't presented any level of significance in relation to the variables undertaken.

DISCUSSION

Iraq especially, Nineveh, as an Islamic society considers drawing signs on the body and permanent tattoos a sin and are prohibited, for one can't change or destroy Allah's creature, based on the following Hadith narrated by Abu-Jahayfa (Allah blesses him) recorded by AL-Bukhari that the Prophet Mohammad "Peace and Blessing of Allah be upon him and his Family" that [Allah cursed one who does tattoo, and the one who has a tattoo done for him/her] ⁽⁹⁾. From this truth anyone can't study such phenomenon easily, for it collides with the religious beliefs of the population, therefore, the researcher endeavored cautiously to assess the community perception about the health risks resulted from tattooing practices, also to investigate the attitudes toward it.

From another aspect, Iraqi society today because of its openness toward the world such social phenomena as tattoo must examine "fear from its spread in" to identify the level of perception of society towards it, especially among the susceptible communities that can spread through, so two important aspects were addressed; perception about health risks of tattoos, and attitudes toward it. As a truth, health workers and medical students must be familiar, with any complication that can be happen, in case of: any possible interference with the human body, any

procedure that produces wound or puncture of the human skin, using any contaminated surgical instruments, and from insertion of any foreign substance inside the body. In another hand, the scientific and educational qualification must have a vital and important role in increasing or enhancing the healthy perception of individuals and community in addition to alteration in their attitudes. In regard to perception aspect, the respondents had similarity scores compared with the of mean of scores in respect to the type of study field and educational qualification, while the respondents had better attitude compared with the mean of scores for the type of study field and educational qualification (Table 2). The majority of participants were unaware of communicable diseases that can be transmitted via this practice except for AIDs, also, respondents deny occurrence of non-communicable diseases as "lymph-adenopathy, such tumors", and such complications that can accompany with the practice as "bleeding, allergic reactions, hematoma, kelloids", while they were aware of occurrence of complications accompanied with the practice as "local infections, abscess or boils and pain". From another side, the type of the study and the educational qualification of the participants didn't refer to any level of significance except means of removal in regard to educational qualification (Table 4). Galle and colleagues (2011) disagree with these results, for approximately 79% of high school students and 87% of undergraduates knew about the possible transmission of infectious diseases, while 15% of them identified hepatitis B and C viruses and HIV among transmitted agents, also, they referred that among adolescents, 46% associated non-infectious with piercing and tattooing; at the university level, the number was 59%, while only 2% of high school students and 3% of university students considered the development of allergies, cysts and bleeding as potentially associated risks ⁽³⁾. Such researchers mentioned that 81.6% think that it is possible to get an infection, but when specific notices were asked about HIV, Viral Hepatitis and skin infections only about 50% of them appeared truly aware of the risk ⁽¹⁰⁻¹¹⁾. Perception about how to remove the tattoo was poor among participants, for they ignore the method or not assure of it (Table 4). In any way, tattoo practices by insertion of chemical substances in such places in the body make an alteration in the underlying tissues and coloration of the skin, so to remove that and repair the skin, surgery must be done. Many previous agreed with this method by using laser surgery as 59% ⁽³⁾ and 59.9% ⁽¹²⁾, while 34.8% by using aspiration of ink, in addition to 5.2% by subcutaneous washing ⁽¹²⁾.

Some aspects of attitudes can be altered throughout life or when facing such situations, but when it involves religious, spiritual, traditional, values, beliefs, and some cultural commitments, then it will be difficult or sometimes impossible to be altered. Muslims look at and believe tattoo is a sin and it must be forbidden depending on Islamic doctrines and guidance of the Prophet Mohamed (Peace and Blessings of Allah be upon him and his Family), so they must oppose it. Therefore, as (Table 5) demonstrates that the disagreement attitude against all motives were the highest percentages among all levels of attitude, form another side, they assert their opposition to practice depending on several reasons that they agreed with them, while motives of practice, causes of refusal practice in addition to total attitude hadn't any level of significance with respect to type of study and educational qualification. Previous studies indicated many motivations of tattoo; individual expressions, art, less common as sexy beautiful and celebration ^(4,13), uniqueness and to be myself ^(4,14), improve aesthetic aspect, distinguish themselves from others, fashion ^(12,15), emulate familiar, better integrate in the society, feel better condition ⁽¹²⁾ image management, sexual expression / sexual enhancement ⁽³⁾, expressing individuality ⁽⁴⁾, communicating rebellion, defining group membership, conveying spiritual meaning or making

milestones such as life or death, transgression, curiosity, belong to their own group ⁽¹⁰⁾, peer pressure, identity and image ⁽¹⁶⁾, a mark of beauty, just wanted one and a sign of femininity / masculinity ⁽¹⁷⁾, while Majori and colleagues (2013) indicated that the main causes for willing not to have the practice were parent prohibition and personal dislike it ⁽¹⁰⁾.

CONCLUSIONS:

- There is no difference in regard to the specialty of study and educational qualification in possessing enough perception about the health-related risks of body art modifications.
- There is an acceptable level of attitudes in regard to the specialty of study and educational qualification in possessing enough perception about the health-related risks of body art modifications.
- There is an obvious ignorance about most of the communicable diseases that can be transmitted through body art modifications, in addition to most of the complications that can be occurred through and after the practices.
- There are strong motives to be far away of practice tattoo.

RECOMMENDATIONS:

The study recommended to;

1. Enforce and enhance the knowledge of the community with respect to the health adverse risks correlated with body art modifications.
2. Do these practices, if willing is present with deep respect for spiritual and religious obligations, individual-related consents, and privileged societal values, beliefs, customs, and traditions.

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