

Original Research Article1
23 **ATTITUDE AND PERCEPTION TO TATTOOS AND SCARIFIED SKIN MARKS IN**
4 **MAKURDI, NORTH CENTRAL NIGERIA**5 **Abstract**6 **Background:** Tattoo art which has been practiced all over the world for centuries is
7 undergoing a revolution. Some people like it, others don't.8 **Method:** Views of 172 residents and students in Makurdi,north central Nigeria, were
9 collated via a pre-tested structured questionnaire and analyzed on the basis of sex, age,
10 like/dislike of tattoos, symbolism, consent given, whether one would tattoo himself if given a
11 chance and what to do when one got tired of tattoos.12 **Results:** 210 questionnaires were administered and 172 were returned giving attrition rate of
13 18.1%. All returned questionnaires were completely filled. 172 respondents participated in
14 the study comprising 123 males and 49 females giving a male to female ratio of 2.5:1. 21
15 respondents had tattoos giving a tattoo prevalence of 12.2%.16 138 (80.2%) did not like tattoos and 42 (24.4%) indicated that there was no significance to
17 symbolism of tattoos and indeed 30 (17.4%) felt tattoos are a body mutilation.18 151(87.8%) indicated they will not have tattoos when given a chance to do so. 97(56.4%)
19 believed the best person to go to for tattoo removal is a Plastic Surgeon.20 **Conclusion:** The study showed that majority of students and residents of Makurdi metropolis
21 in Nigeria do not like tattoos and would not like to have one when given a chance to do so.22 A large scale study involving other parts of Nigeria needs to be done to assess a true
23 like/dislike of tattoos in this environment.

24 Key words: Attitude,perception,tattoos.

25 **Introduction**26 Tattoo art dates back to centuries ^{1,2,3,4} and has been practiced all over the world ^{1,4,5,6, 7}.
27 Whereas tattoos are designs permanently carved in the skin using needles and inks, scarified

28 skin are cuts made in the surface of the skin, with or without pigment or ink imbedded in
29 them and healing leaves a permanent mark on the skin.^{6,8,9}

30 In Nigeria, Makurdi inclusive, tattoos and scarified skin are used interchangeably, but most
31 people here call scarified skin “Tribal marks” or “African tattoos.”³ Some are vehement that
32 the two are different.³ For this study, tattoos and scarified skin are taken to mean the same
33 thing.

34 In Africa, tattooing is a heritage.³ Egypt has a well, documented and preserved history of
35 tattooing dating back to 4,000 BC.^{1, 3, 6} There was a gender predilection and so more
36 Egyptian women compared to men were having tattoos. It was believed to depict fertility.

37 In Makurdi, tattoo art has been practiced and handed down from generation to generation. In
38 the village set-up, one tattooist was always identified as the best, whose procedure did not
39 carry mishap like disorganized or delayed healing. The tattooist procedure was carried out
40 using razor blades or sharp pen knives. Soot especially from lantern or ‘Zaar’ (African
41 chimney) was usually embedded into the wound and the patient not allowed washing the face
42 or the body area tattooed until the dry scab heals leaving the permanent pattern.

43 If pigment was not used, the same procedure of keeping the wound dry by not bathing the
44 area was adopted until healing occurred leaving the permanent pattern. Some tattooists use
45 certain plant extracts like burnt hot shell of cashew nut which is applied hot in the pattern
46 being designed. Most likely combined chemical and thermal burns of the skin in the marked
47 pattern caused permanent tattoo upon healing of the burn. Nowadays most people do not
48 want these crude methods and so are adopting the tattooing with ink using needles.

49 With modernization, gender equality and self assertion of rights by individuals, “Rights
50 NGOs” and governments, many Nigerians frown at tattoos and especially when they were
51 given at a young age without the persons consent.³ The parents or relatives claimed the
52 symbolism of tattoos given were to wade away evil spirits, stop febrile convulsions, add
53 beauty to the child or as a mark of tribal identification. During the Nigerian civil war, many
54 children from the middle belt, western and northern parts of Nigeria were tattooed to
55 differentiate them from the Igbo children who never wore tattoos and their part of the country
56 was demanding secession. The symbolism was to avoid being caught a prisoner of war.
57 Suffice it to say that even before this, the different tribes had their peculiar tattoo marks that
58 identified them. For example the “*abaji*” and “*kwav dyar*” fish tattoos of Tiv people, Egba

59 and Owu marks in Yoruba land, Kanuri marks and so on. On the other hand, some Nigerians
60 believe that tattoo is a form of art signifying ones feelings at a particular time or
61 remembrance of an important event or loved one like husband, parent, or friend and some
62 signified bravery.¹

63 Many Nigerian celebrities like their counterpart the world over nowadays adorn their bodies
64 with tattoos, and show them off proudly in photos and their shows,⁵ some just have tattoos for
65 fun.²

66 This mixed feeling whether to love or hate tattoos cuts across the world. Rio, described by
67 some as “Brazils tattoo mecca” has many people tattooing in exotic tattoo parlors now but
68 decades back, it was not much accepted and mainly sailors, musicians and commercial sex
69 workers were having them.¹⁰ The kayabi tribe in the Brazilian Amazon of South America,
70 one of the most tattooed tribes in the whole world have retained this culture and their
71 government and some individuals are trying to preserve these cultures by all means.⁴

72 This study was therefore conducted to assess the attitudes and perceptions to tattoos in
73 Makurdi via a pre-tested structured questionnaire and whether the public would like this art
74 maintained or discarded.

75 **Methodology**

76 A pre-tested structured questionnaire was administered by random sampling to students of
77 Benue State University in various faculties and residents of Makurdi metropolis who included
78 transporters, long distance drivers, food sellers, civil servants, and so on.

79 The questionnaire contained items which covered socio-demographic data, what the
80 individual considered as a symbolism of tattoos, whether he/she had a tattoo, whether he
81 liked it and who gave consent for him/her to have the tattoo. Other parameters were, in the
82 21st millennium, whether the respondent felt people should tattoo themselves, whether the
83 respondent liked tattoos generally or whether if he had a chance he will allow his body to be
84 tattooed. Lastly the respondent was assessed what he would do if he got tired of his tattoo or
85 advise someone he knows what to do if the person got tired and wanted the tattoo removed.

86 The questionnaires were administered personally and collected immediately from all
87 respondents over a period of one month in January 2017.

88 The data was coded and entered into a computer. SPSS version 23.0 software was used for
 89 analysis. Means and percentages were determined with standard deviation. Data analysis
 90 focused on univariate frequency.

91 The relationships between the means, age, opinions were determined by T-test. P value <
 92 0.05 was considered statistically significant.

93 **Results**

94 172 students and members of the public participated in the research at Makurdi. The age
 95 range of the respondents was 18 – 53 years with mean age of 26.9 ± 5.4 years. There were
 96 123 (71.5%) males and 49 (28.5%) females giving a male to female ratio of 2.5:1. Table 1. 21
 97 respondents carried tattoos, giving a tattoo prevalence of 12.2%. Out of these, 12 (57.1%)
 98 indicated they liked their tattoo. 8 (38.0%) gave consent for the tattoo while for 13 (62.0%),
 99 consent was given by various family relatives. Table 2.

100 42 (24.4%) respondents indicated that there was no significance to the symbolism of tattoos.
 101 This was followed by 30 (17.4%) who felt that tattoos were a body mutilation. Table 3.

102 Of the 21 respondents that had tattoos, 7 (24.1%) of them felt cultural/tribal identification
 103 was the symbolism of their tattoo. This was followed by 5 (20.8%) who felt the tattoo
 104 enhanced their beauty while 2 (6.7%) felt their tattoo was a body mutilation, table 4.

105 On general likeness of tattoos, 138 (80.2%) indicated they did not like tattoos. Table 5. 149
 106 (86.6%) felt tattoos should not be worn in the 21st millennium. 151 (87.8%) indicated they
 107 will not have tattoos when offered a chance to do so.

108 97 (56.4%) respondents felt a Plastic Surgeon should be consulted for removal whenever one
 109 got tired of a tattoo. Table 6. Five people (2.9%) indicated that tattoos could be removed
 110 using chemicals like acid, herbs or hot iron.

111 **Table 1: Age and sex distribution of respondents**

Variable	Frequency	Percent
Age (years)		
18-22	20	11.6
23-27	97	56.4
28-32	35	20.3
33-37	9	5.2
38-42	8	4.7
43-47	1	0.6

≥48	2	1.2
Sex		
Male	123	71.5
Female	49	28.5

112 Age ranges from 18-53 years with mean age of 26.9 (±5.4) years. Male to female ratio was
 113 2.5:1

114 **Table 2: Summary of tattoo and consent for tattoo (Question 1a-1c)**
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Carry tattoo	Frequency	Percent
Yes	21	12.2
No	151	87.8
like the tattoo had (n=19)		
Yes	12	57.1
No	9	42.9
Who gave consent for tattoo (n=21)		
Self	8	38.0
Father	5	23.8
Mother	4	19.0
Grandmother	1	4.8
Aunt	1	4.8
Both Parents	1	4.8
Uncle	1	4.8

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118 **Table 3: symbolism of tattoo among respondents**
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Symbolism of tattoo	Frequency	Percent
Enhancement of Beauty	24	14.0
Celebrity	27	15.7
cultural/tribal identification	29	16.9
Barbarism	16	9.3
body mutilation	30	17.4
no significance	42	24.4
Other	4	2.3
Total	172	100.0

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125 **Table 4: Opinion of symbolism of tattoo by tattoo status among respondents**

Symbolism of Tattoo	Tattoo Status		
	Carry Tattoo Frequency (%)	Don't carry Tattoo Frequency (%)	Total Frequency (%)
Enhancement of Beauty	5(20.8)	19(79.2)	24(100.0)
Celebrity	2(7.4)	25(92.6)	27(100.0)
cultural/tribal identification	7(24.1)	22(75.9)	29(100.0)
Barbarism	2(12.5)	14(87.5)	16(100.0)
body mutilation	2(6.7)	28(93.3)	30(100.0)
no significance	3(7.1)	39(92.9)	42(100.0)
Others	0(0.0)	4(100.0)	4(100.0)
Total	21(12.2)	151(87.8)	172(100.0)

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127 **Table 5: Summary of respondents opinion on current and future practice of tattoo**

128 **(Question 4-5)**

Still to be worn	Frequency	Percent
Yes	23	13.4
No	149	86.6
Total	172	100.0
General likeness for tattoo		
Yes	34	19.8
No	138	80.2
To wear tattoo if given the chance		
Yes	21	12.2
No	151	87.8

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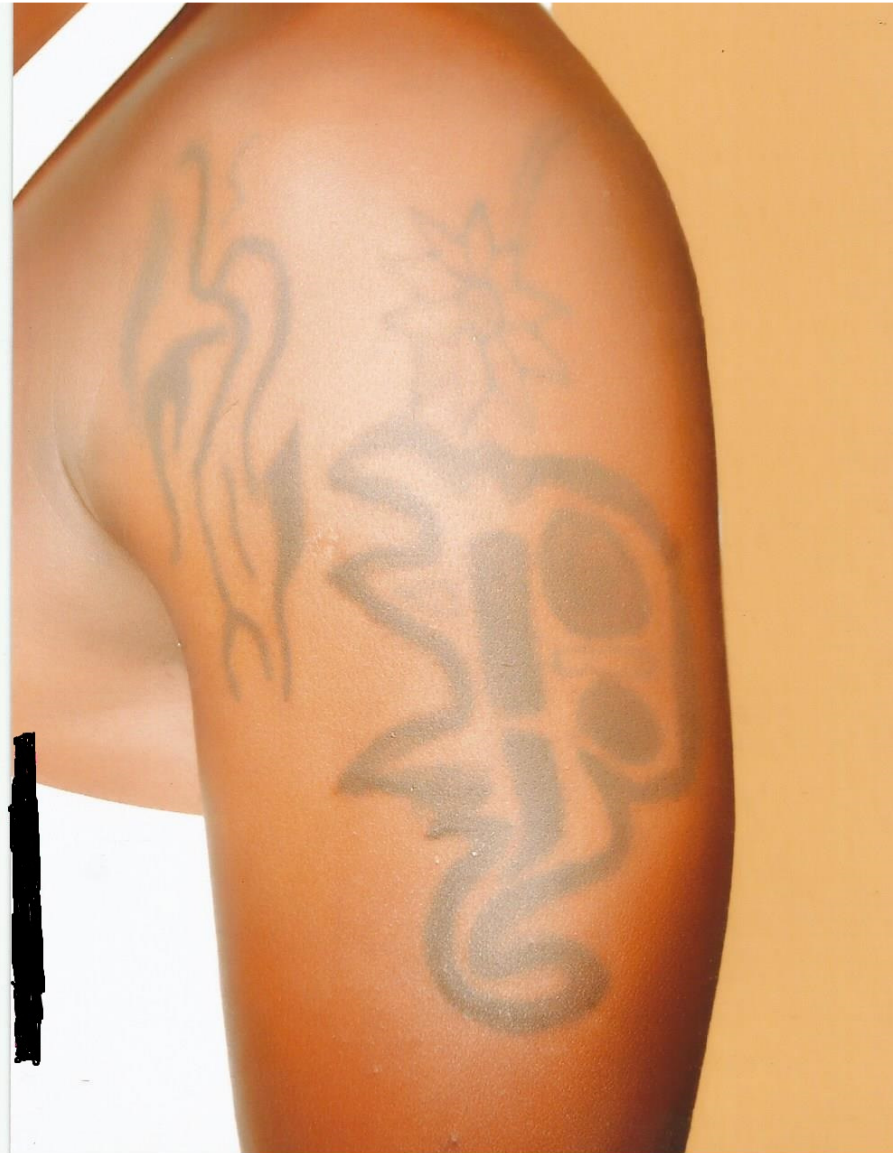
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133 **Table 6: What to do or advice to be given to one tired of tattoo worn (Question 6)**

Variables	Frequency	Percent
See a plastic surgeon for removal	97	56.4
See any doctor(physician) for removal	32	18.6
Indecisive	27	15.7
Go to the tattoo man/woman that put in the first place to remove it	11	6.4
Use chemical like acid to remove it	3	1.7
Use hot iron to remove it	1	0.6
Use herbs to remove it	1	0.6
Total	172	100.0

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135 **Picture 1 tattoo of the left arm using needles and ink**



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138 **Picture 2 “*Kwav dyar*” African tattoo using pigment**



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140 **Picture 3 facial tribal marks with pigment**



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142 **Discussion**

143 This study shows a low prevalence of tattoos 12.2% and their general dislike 80.2% at
144 Makurdi, Nigeria. Nigerians on the average do not like tattoos as they think it is indecent,
145 could prevent a woman from marrying and depicts low intelligence quotient (IQ).¹ This study
146 has collaborated this because majority felt tattoos have no significance and are actually a
147 body mutilation. Cesare Lombroso was the first to statistically document a tattoo prevalence
148 of 10% among 5, 343 criminals in Italy.⁷ Our study population is a normal population, but
149 shows a slight increase of 2.2% in the prevalence of tattoos as compared to Cesare's study.
150 The negative image and dislike of tattoos cuts across the world as seen in Brazil,^{10, 11, 12}
151 France^{7, 11, 13, 14} United States⁷ and more recently in China¹⁵ during the "Cultural Revolution"
152 of 1966 – 1976. Maozedong of China banned tattoos during the "Cultural Revolution" years
153 calling them "manifestation of impurity and roguery."^{11, 15} Some countries prohibit

154 employment for people with tattoos in their Armed Forces and the Police.^{3, 15} Corporate
155 organizations are not left out in this prohibition of employment of staff in their firms on the
156 grounds that their customers may be uncomfortable and not patronize their products.^{11, 15} The
157 Le Chapelier law of 1791 in France banned the craftsman identification through the tattoo on
158 their arms.⁷ Hither to, a butcher for instance tattooed a bull's head on crossed knives on their
159 arm and a gunsmith a pistol. In Nigeria, Osun State House of Assembly passed a law
160 abolishing tattooing of children.³ Tattoos are also negatively perceived in certain professions
161 like medicine, law and accounting.^{7, 11, 16} .The medical doctors actually feel infections like
162 HIV, hepatitis, syphilis etc. could be transmitted during the tattoo art especially if aseptic
163 procedure is not followed.

164 A positive image is currently developing across the world in favor of tattooing. Some people
165 like tattoos; they feel they enhance their beauty, fashionable and a celebrity show.^{3, 5, 12, 15, 16,}
166 ¹⁷ King Edward VII was tattooed in 1862 in Jerusalem. His sons, Prince Albert and Prince
167 George were tattooed by Hori Chyo in Japan, an artist known as “the Shakespeare of
168 tattooing.”¹⁶ Jean Baptiste Cabri was the first European to participate in exhibitions at fairs as
169 a tattooed man.⁷ New York City currently hosts two separate exhibitions of tattoo art
170 history.¹⁶ Some celebrities like Betty Broadbent and Nora Hildebrandt made shows of their
171 tattoos at circuses and other side shows.¹⁶ Musicians like the Grateful Dead and Janis Joplin
172 had tattoos.¹⁶ This has led to the springing up of exotic tattoo parlors across the world.^{9, 11, 12,}
173 ¹⁶ examples are the “Caio Tattoo,” “Lucky tattoo” and “Rio tattoo” in Brazil.¹⁸ New York
174 City in USA has several tattoo parlors.¹⁶

175 Top renowned, world tattoo artists also abound and include Daniel Tucci, Marcelo
176 Mordeiti, M.C. Escher, Mildred Hull of New York City and Martin Hildebrandt.^{16, 18} These
177 artists have masterly of the art, practice aseptic techniques to prevent infection and have
178 partnerships to share ideas. Legislations and permits in favor of tattooing by government
179 officers now exist in several countries. A good example is the SGP Police – Force Quvrière
180 whose trade union representatives won a campaign forcing the government to allow the
181 French Police men have tattoos.¹⁹ The union put a restriction that the tattoos “must not be
182 racist, political, religious or xenophobic.” Mayor Rudolph Giuliani in 1997 lifted an earlier
183 ban of tattoos by the New York City health department as a result of an epidemic of hepatitis
184 in 1961.¹⁶

185 It is heartwarming that the majority of the study population believed that the best person to go
186 to for removal of tattoos was the plastic surgeon (56.4%). The plastic surgeon knows the best
187 removal method for each peculiar tattoo after assessment.^{2, 20} Different removal methods are
188 laser surgery (Carbon-dioxide laser or Q-switch ruby laser), excision of tattoo scar which may
189 be in one or serial surgeries depending on the size and complexity of the tattoo,
190 dermabrasion etc.

191 It is however surprising that 2.9% of the respondents believed tattoos could be removed by
192 chemicals like acid, herbs or hot iron with attendant complications of chemical and thermal
193 burns. 15.7% of the respondents opted to just do nothing, but tolerate the tattoo on their body
194 in spite of not liking it anymore.

195 **Conclusion**

196 It is clear from views across the world that tattoo art has a positive and negative image, like
197 or dislike, love or hate depending on the individual, corporate organization and government.
198 Culture is dynamic. For some tattoo art has moved from a previously perceived primitive
199 culture to something to be adored, imbibed and practiced. For others, tattooing has moved
200 from a previously adored cultural art into something that is primitive, retrogressive which
201 should be discarded.

202 This study has thrown a challenge of educating the populace in Makurdi to know that the best
203 place to go to for tattoos removal is the plastic surgeon and not just any physician, going back
204 to the tattoo artist or dangerously using acid, herbs or hot iron to do the job. Prevention of
205 transmission of infections like hepatitis, HIV etc. could be achieved through health education,
206 use of aseptic techniques by the tattoo artists and ensuring the registration and regulations of
207 tattoo parlors by the Federal and State Ministries of Health in Nigeria.

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