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RESEARCH ARTICLE

TRENDS, PREVALENCE AND COMPLICATIONS OF EAR AND NOSE PIERCING PRACTICES AMONG UNDERGRADUATE STUDENTS OF AFE BABALOLA UNIVERSITY

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ABSTRACT

Background: The practice of ear and nose piercing is an age long cultural practice mainly for cosmetic and religious reasons and female gender are mostly involved. Culturally, parents especially mothers do it for their children until about few decades ago when the trend seems to be changing from what was a mere cultural practice among the primitives now becoming a vogue among young people and unusually males and celebrities getting more involved as well. The attendant complications associated with this practice may be very devastating if dire caution is not put into place hence the reason for this study seeking to assess the trends, prevalence, and complications of ear and nose piercing among undergraduate students of AfeBabalola University, a University in the South-West Nigeria. **Methodology:** The study employed a descriptive cross sectional design, using multistage sampling technique. A self-administered structured questionnaire was used to collect data from 391 undergraduate students of AfeBabalola University based on the required sample size. Data was analyzed using descriptive and inferential statistics with significance set at $P < 0.05$. **Result:** Results revealed majority of the respondents were between 20-25 years. The prevalence of Ear and Nose piercing was 58%. Majority of respondents pierced their earlobe, with 91.3% having 3 or more piercings. Respondents reported complications such as bleeding (57.2%), infections (66.4%) and severe pain (66.4%) on the pierced site. Only few had piercing done by a professional, as most of the respondents did the piercing themselves in unsterile environment. The prevalence of Ear and Nose piercing is high among undergraduate students of Abuad. **Conclusion:** The prevalence of ear and nose piercing among undergraduates is very high and by inference among young people with imminent risks. There is therefore urgent need to embark on aggressive health education campaign in schools from nursery to university level and the general populace to grave complications of this new trend in this practice. All the stake holders most especially the individual, parents, professional body piercers and the government to work together to ensure safety standard in the shops where these practices are done. The government through the health sector must all be readily available to handle complications of this practice whenever they arise.

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INTRODUCTION

Body modifications come in different fashions and are becoming popular, one of these is body piercing, of which, Nose and Ear piercing forms the major component, other parts include the mouth, the tongue, eyebrows, nipples, navel, and genitals.

It is the practice of puncturing or cutting a part of the human body, creating an opening in which jewelry or ornament, or an implant could be worn or inserted (Smith, 2016). The motivation for body piercing most especially the ear and nose has been of cosmetic, aesthetic or self-expression mainly. Nose piercing is documented as far back as 1500 BC and its modern practice is believed to have originated from the Middle Eastern nomadic tribes by route of the Mughal emperors in the 16th century and spread to India (DeMello, 2007).

In India ancient culture, the nostril is associated with the female reproductive organs in the Ayurvedic medicine and traditional marriage is preceded by a night of nose piercing. This is also the case with the Hindu women of child bearing age (<http://www.jewellerypassion.net/the-history-of-earrings/>). Some religions practice nose piercing such as the Vedas referring to Lakshmi's nose piercings and in the bible, in Genesis 24:22, Abraham's servant gave Rebecca a nose ring (Angel, 2009; Hastings, 2003). Nose piercing of different styles has been practiced by many tribes such as the Bedouin tribes of the Middle East, the Berber and Beja people of Africa, the Australian Aborigines, the natives of American and Alaska (DeMello, 2007; Hastings, 2003). Septum piercing was particularly popular among the Aztecs, the Mayans and the tribes of New Guinea, Khoid women, Pakistan, Bangladesh, the Aztecs, Mayans and Kuma people of Panama who wore gold septum rings for adornment and, bones and feathers to symbolize wealth and virility (DeMello, 2007; Hesse, 2007). Egyptians (1550–1292 BCE), would once wear earrings to signify the fact they were wealthy or of a higher class. However, in ancient Rome, earrings were worn only by slaves, and in ancient Greece by prostitutes. Those in Rome and Greece that were wealthy would also wear earrings set with pearls and other expensive stones to display their social status (<http://www.jewellerypassion.net/the-history-of-earrings/>) The middle ages in Europe saw male earrings alternate between being popular and out of fashion. However, in the 13th Century, the Catholic Church banned the piercing of ears in accordance with the dogma; stating that people cannot alter their bodies created in the image of God. It was then that earrings became popular amongst thieves, pirates and the lower class. It was not long after the renaissance that people deterred from the rules of the Church. Pierced ears would be present on young boys of single mothers whose husband has been killed, and on the right ear of the only boy in the family. A man who wore earrings on both ears was the last of his family line and would therefore not be allowed to participate in times of war, for fear that his family name would disappear forever [<http://www.jewellerypassion.net/the-history-of-earrings/>] Other reasons are spiritual, to conform to their culture or to rebel against it, for bravery and for acceptance, to commemorate landmark events or to overcome traumatic experience, to express individuality and some people pierce permanently or temporarily to enhance sexual pleasure.

Some forms of piercing remain controversial, particularly when applied to youth. Some people have practiced extreme forms of body piercing, gaining Guinness World Records, and documenting individuals with hundreds and even thousands of permanent and temporary piercings (World's Most Pierced Woman Adds to her Collection, 2001). The Frankfurt University Teaching Hospital for Psychosomatic Medicine and Psychotherapy, states that some sexual abuse survivors choose body piercing as a means of "reclaiming body parts from memories of abuse" (Currie-McGhee, 2006) However, some may pierce because of low self-esteem. A study of "at-risk" (school absenteeism and truancy) adolescent girls showed a positive relationship between body-modification and negative feelings towards the body and self-esteem; a study by Carroll et al., 2006 showed that a strong motive for body-modification was the search for "self and attempts to attain mastery and control over the body in an age of increasing alienation" (Carroll, 2002). These earrings took different forms such as dangling, gold hoop, gem-studded, golden earrings shaped like asps (reserved for nobility) for the Egyptians.

The ancient Greeks wore paste pendant earrings shaped like sacred birds or demigod, while the women of ancient Rome wore precious gemstones in their ears and Karen women in Burma wore earplugs (Wilkinson, 2013). In body piercing the skin is breached thereby allowing the risk of introducing pathogens which may be normal flora colonizing the surface of the skin into deep layers of the skin including the fascia, subcutaneous tissue, muscles and bones in severe cases. Also, the use of contaminated instruments, jewelry and lotions are sources of bacteria inoculation such as *Pseudomonas aeruginosa* and mycobacteria (Sandhu, 2007). Other documented complications includes blood-borne infections such as Hepatitis B, Hepatitis C, and HIV, others are allergic reaction, excessive scarring and keloid formation (Yang, 2013; Philips, 2014). The practice of piercings though have been restricted by schools, employers and religious groups but, some people have gone ahead to practice extreme forms of body piercing. Contemporary body piercing practices emphasize the use of safe body piercing materials, frequently utilizing specialized tools developed for the purpose.

MATERIAL AND METHODS

A descriptive cross-sectional design was used for the study. The population consists of all 200-500 level undergraduates students (over 8,000 students) of Afe Babalola University, Ado Ekiti. Multi-Stage sampling procedure was used to select respondents from the four colleges (Law, Social Management & Sciences, and Medicine & Health Sciences) and five departments from each college were selected by simple random sampling. A total sample size of 391 students (based on requisite sample size) were selected using proportionate stratified random sampling with level and department as strata. A self-administered semi-structured pretested questionnaire consisting of 37 items eliciting relevant information regarding the study was used to collect data from respondents. Ethical approval was obtained from Research and Ethics Committee of Afe Babalola University, Ado-Ekiti before the commencement of the research. Informed consent was obtained from the respondents. The data collected was analyzed using SPSS version 25 and results were presented in descriptive statistics (frequency counts, percentages, mean, standard deviations) and inferential statistics (Chi-square) was used to test hypothesis with level of significance set at $p < 0.05$.

RESULTS

A total of 391 respondents were recruited and all the 391 responded, completed the questionnaires and had adequate data for analysis. This translates to a response rate of 100%. **Table 1** revealed the distribution of respondents according to socio-demographic characteristics, most of the respondents (41.4%) are between 20-25 years of age, majority (65.5%) are female, most (47.3%) are in college of MHS, 33.2% are 400 level students, most (44.5%) are Yoruba by tribe, and majority (69.1%) are Christians by religion. Respondents' awareness of ear and nose piercing are shown in Figures 1 and 2 Majority (62%) of the respondents have good knowledge and awareness of ear and nose piercing. The results of the prevalence of ear and nose piercing among respondents is presented in Table 2, where majority (72.4%) have ever pierced any part of their body, most of them (47.3%) have currently or previously

Table 1. Socio-demographic Characteristics of Respondents

Variables	Categories	Frequency (n=391)	Percentage (%)
Age	Below 20 years	135	34.5
	20-25 years	162	41.4
	26 years and above	94	24.0
Gender	Male	135	34.5
	Female	256	65.5
College	MHS	185	47.3
	SMS	27	6.9
	SCIENCES	89	22.8
	LAW	41	10.5
Level/year of study:	MBBS	49	12.5
	100 level	48	12.3
	200 level	65	16.6
	300 level	65	16.6
	400 level	130	33.2
Ethnicity	500 level	83	21.2
	Igbo	28	7.2
	Hausa	54	13.8
Religion	Yoruba	174	44.5
	Others	135	34.5
	Christianity	270	69.1
	Islam	121	30.9
	Total	391	100.0

Table 2. Knowledge and Awareness of ear and nose piercing among respondents

Variables	Categories	Frequency (n=391)	Percentage (%)
Do you know what Ear piercing is	Yes	310	79.3
	No	81	20.7
Do you know what Nose piercing is	Yes	282	72.1
	No	109	27.9
In your own words what do you understand by the term "Ear piercing"	The practice of using a needle or needle gun to make holes through ear lobe and other parts of the ear	364	93.1
	Cutting of ear with gun	27	6.9
In your own words what do you understand by the term "Nose piercing"	Is the piercing of the skin or cartilage which forms any part of the nose	350	89.5
	Is the cutting of the nose	41	10.5
What part(s) of the body is normally pierced by females other than the earlobes	Nose	95	24.3
	Nipple	40	10.2
	Tongue	175	44.8
	Teeth	14	3.6
	Genital	67	17.1
What part(s) of the body is normally pierced by Male	Earlobe	202	51.7
	Tongue	121	30.9
	Nose	68	17.4
How did you know about Ear and Nose piercing	Internet	41	10.5
	Television	107	27.4
	Radio	54	13.8
	Friends	135	34.5
know where Ear body piercing is being acquired/	Newspaper/magazines	54	13.8
	Yes	323	82.6
Where Nose piercing is being acquired/done	No	68	17.4
	Yes	216	55.2
Who carries out Ear piercing	No	175	44.8
	Self	54	13.8
	Friends	27	6.9
	Parents	189	48.3
	Certified professional	80	20.5
Who carries of nose piercing	Others	41	10.5
	Self	148	37.9
	Friends	54	13.8
	Parents	27	6.9
	Certified professional	162	41.4
	Total	391	100.0

pierced their earlobe, with majority (91.3%) having 3 or more piercing on the site. Most of the respondents (38.2%) pierced with piercing needle with the least 4.9% using piercing gun. Results of the complications and degree of complications of piercing as reported by respondents is revealed in Tables 3 and 4. Most of the respondents (42.8%) have pain as the main complication from piercing. More than half (57.2%) had severe to moderate bleeding, majority (66.4%) have severe pain, majority (61.8%) have redness and tenderness after the

procedure, (47.7% have no swelling after piercing, majority (80.9%) have no trauma of the skin after piercing, most of the respondents (66.4%) have mild to severe infection (discharge of pus, fever) after piercing. Moreover, majority (61.8%) said they wouldn't repeat the procedure in the future. More than half (52.7%) treat complication of body piercing by self-care at home moreover more than half (57.2%) of the respondents said they would recommend Ear and Nose piercing for someone around them.

Table 3. Prevalence of Ear and Nose piercing complications

Variables	Categories	N (n=391)	%
Have you ever pierced any part of your body	Yes	283	72.4
	No	108	27.6
Indicate area currently or previously pierced.	Eyebrow	54	19.1
	Earlobe	134	47.3
	Cheek	41	14.5
	Nose	54	19.1
	Total	283	100.0
What was your age at piercing(s)	below 20 years	149	52.7
	20-25 years	107	37.8
	26 years and above	27	9.5
	Total	283	100.0
What is the number of piercings you have on the pierced site(s)	2	27	9.5
	3	175	61.8
	4	40	14.1
	5	14	4.9
	>5	27	9.5
	Total	283	100.0
What was use in piercing	Piercing needle	108	38.2
	Indwelling cannula	27	9.5
	Piercing gun	14	4.9
	Forceps	67	23.7
	Needle receiving tubes	67	23.7
	Total	283	100.0
If you now have or have ever had a body piercing, list any health complications as a result of the piercing	Injury or tearing of skin	54	19.1
	Pain	121	42.8
	Keloid formation	41	14.5
	Allergic reactions	27	9.5
	Infections	40	14.1
	Total	283	100.0
Total		391	

Table 4. Degree of complications of ear and nose piercing among respondents

Variables	Categories	N (n=391)	%
Did you have annoying bleeding when you had your piercing	Severe	81	28.6
	Mild	81	28.6
	None	121	42.8
	Total	283	100.0
Did you have pain after your piercing	Severe	188	66.4
	Mild	81	28.6
	None	14	4.9
	Total	283	100.0
Did you have redness and tenderness after you had your piercing	Severe	175	61.8
	Mild	81	28.6
	None	27	9.5
	Total	283	100.0
Did you have swelling after you had your piercing	Severe	67	23.7
	Mild	81	28.6
	None	135	47.7
	Total	283	100.0
Did you have trauma of the skin after your piercing	Severe	27	9.5
	Mild	27	9.5
	None	229	80.9
	Total	283	100.0
Did you have infection (discharge of pus, fever) after piercing	Severe	54	19.1
	Mild	134	47.3
	None	95	33.6
	Total	283	100.0
Would you repeat the procedure of a body piercing in the future	Yes	108	38.2
	No	175	61.8
	Total	283	100.0
Where was body piercing complications treated	Self-care at home	149	52.7
	Emergency Room	27	9.5
	Medical office	107	37.8
	Total	283	100.0
Would you recommend Ear and Nose piercing for someone around you	Yes	162	57.2
	No	121	42.8
	Total	283	100.0
Total		391	

Table 5 revealed the hygiene practices of ear and nose practices among respondents. More than one-third 162 (41.4%) of the respondents have body piercing done by a professional, less than half 176 (45.0%) have the area to be

pierced swabbed with disinfectant and majority 309 (79.0%) said piercing artist washed and wore gloves before starting the procedure. Few 109 (27.9%) clean the piercing site daily, few 121 (30.9%) wash their hands before touching the pierced part,

Table 5. Assessment of Hygiene Practices of ear and nose practices among respondents

Variables	Categories	
	Yes n (%)	No n (%)
Was the piercing done by a professional	162 (41.4%)	229 (58.6%)
Was the area to be pierced swabbed with disinfectant	176 (45.0%)	215 (55%)
Did the piercing artist washed and wore gloves before starting the procedure	309 (79.0%)	82 (21.0%)
clean the piercing site daily	109 (27.9%)	282 (72.1%)
Do you wash your piercings before touching the pierced part	121 (30.9%)	270 (69.1%)
Were the jewellery sterilized before being inserted in the body	67 (17.1%)	324 (82.9%)

Table 6. Bivariate Analysis of association between year of study of respondents and practice of ear and nose piercing

Variables	Categories	practice of Ear and Nose piercing		Total	X ²	df	p-value
		Good practice	Poor practice				
Level/year of study:	100level	37	11	48	4.957 ^a	4	0.292
	200 level	43	22	65			
	300 level	53	12	65			
	400 level	91	39	130			
	500 level	59	24	83			
Total		283	108	391			

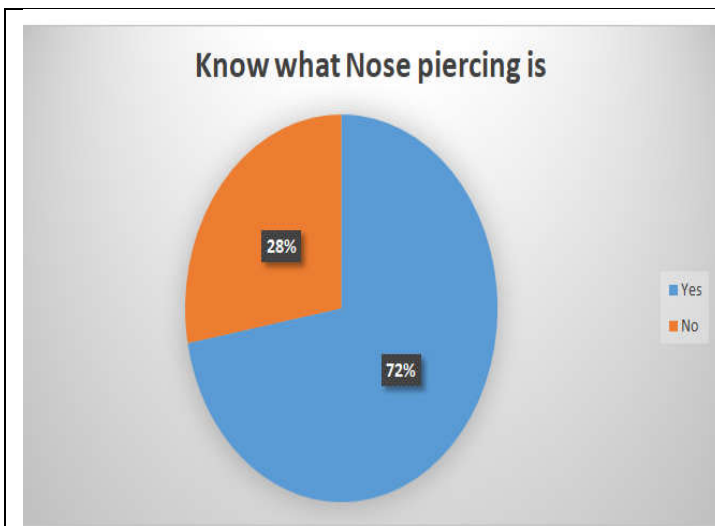


Fig 1. Pie chart showing respondents awareness of nose piercing,

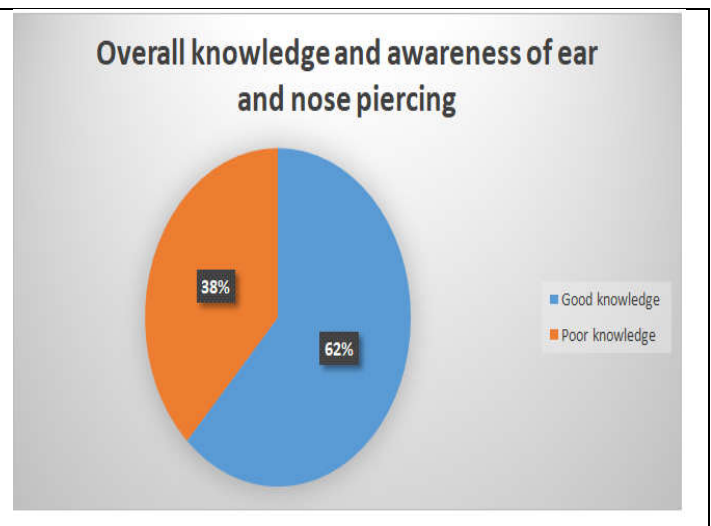


Fig. 2. Pie chart showing the overall level of knowledge and awareness of ear and nose

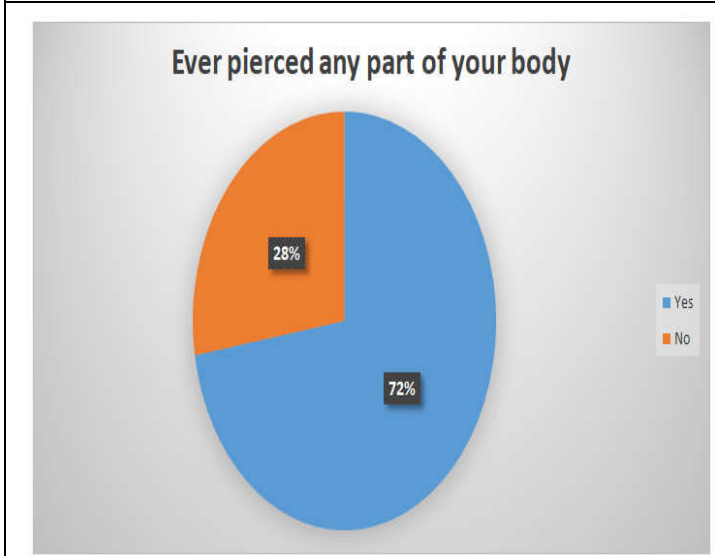


Fig. 3. Pie chart showing if the respondents ever pierced any part of your body

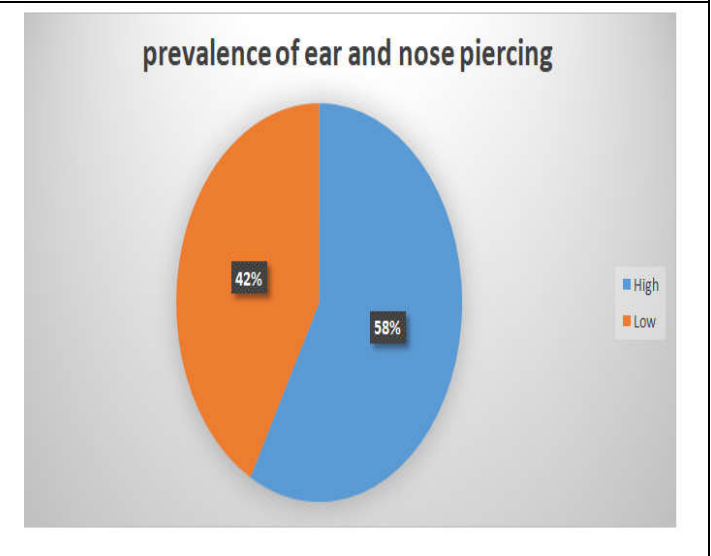


Fig. 4. Pie chart showing the Prevalence of ear and nose piercing among respondents

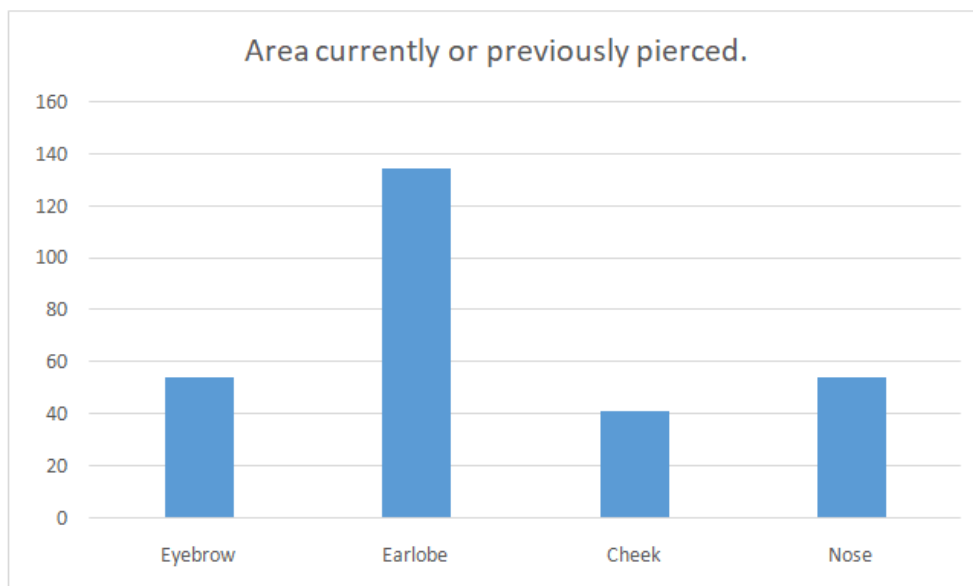


Fig. 5. Bar chart showing the area currently or previously pierced by respondents

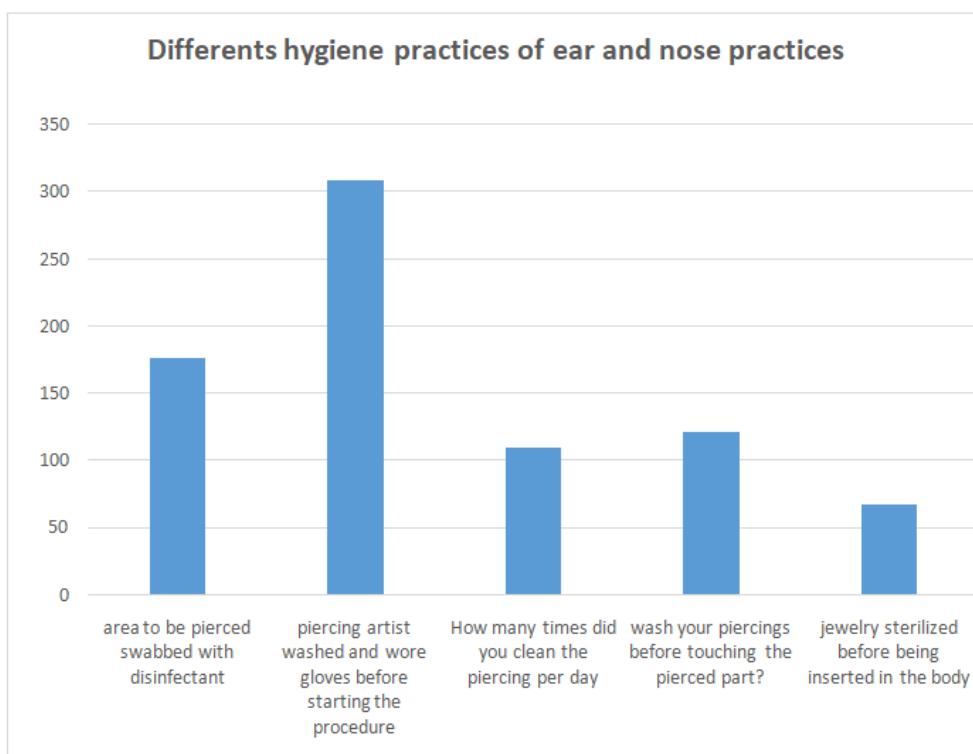


Fig. 6. Bar chart showing the different hygiene practices of ear and nose practices among respondents

and few 67 (17.1%) have jewellery sterilized before being inserted in the body. Fig 3 showed the Prevalence of ear and nose piercing, among respondents. The prevalence of ear and nose piercing among respondents is high.

DISCUSSION

Socio-demographic distribution of this study revealed most of the respondents (41.4%) are between 20-25 years of age, this is in contrast with the study by Olajide et al (15). as, majority of his sample were between 31-40 years, the reason for this may be because his studies mostly involved parents who were practicing the art on their children but this study actually dealt with the young people who were involved personally in the art.

Our finding is however in consonant with that of Atmstrong et al, those in his research were in the age of 18-25 years old and concluded that this age group are more consistency in performing body piercings (Armstrong et al., (16). Multiple studies have demonstrated that the prevalence of body piercing is increasing among young adults. (15, 17) 256 (65.5%) are female, this is also agrees with most studies as this practice is traditionally much associated with the female gender. It is however a new trend that as high a percentage of 35% (135) are young males, this is particularly noteworthy in a practice that used to be exclusively for females (18).(47.3%) are in college of MHS, (33.2%) are 400 level students, (44.5%) are Yoruba by tribe, though all major ethnic groups in Nigeria are involved and majority of the respondents (69.1%) are

Christians by religion. This is also the finding globally that this practice cuts across tribes, tongues and creeds (<http://www.jewellerypassion.net/the-history-of-earrings>; Gabriel, 2017). In this study, the prevalence of ear and nose piercings showed a high prevalence of 66.4%. This finding is in consonant with global findings (Mayers, 2008). Ear and nose piercing as a form of body piercing art that has been increasing in popularity and demand among people around the world, irrespective of sex, age, ethnic background, religion or socioeconomic status (Philips, 2014). In the last 25 years, body piercing has become so widespread that it is no longer considered a sign of a rebellious group, and therefore it has been classified as body art (Goicochea). By the year 2011, studies have given the information that up to 51% of the population has had a body piercing (Goicochea; Fijałkowska *et al.*, 2011).

Multiple studies have demonstrated that the prevalence of body piercing is increasing among young adults (Lipscomb, 2008). Majority have pierced any other part of their body other than the nose and ear, this is in line with our study and that of Olajide *et al.* (2017), where most of them have currently or previously pierced their earlobe, with 256(90.3%) having pierced their ear for at least three times, some more than five times. This is significant because the frequency of piercing increases the chances of excessive scarring or keloid formation, this is also the finding in...research (Bayat, 2005; Meltzer, 2005). Multiple ear piercings have gained popularity, especially "high" piercing through the cartilage of the pinna. These piercings are associated with poor healing and more serious infection because of the avascular nature of auricular cartilage (Meltzer, 2005; Bone, 2018). Most of the respondents pierced with piercing needle, this also is in consonant with several other studies and the ear lobe is the commonest site of piercing which agrees with several other studies (Gabriel, 2017; More, 1999; Vedamurthy, 2020; Landeck, 1998). Our study showed that all had some form of complications or the other in varying degrees ranging from skin tearing, pain, bleeding, allergy and infection. It is worrisome that 81 persons suffered from severe bleeding, 54 from severe infection and this development warranted 27 persons requiring emergency care while 107 were seen in a medical facility these complications could have translated into high mortality if prompt medical attention was not instituted, however the long term effects of these complications are yet to be determined. These individuals will need further medical investigations to ascertain the cause of these medical complications and a long time hospital follow up. The economic burden of these treatment and management is also huge especially in the developing nations as the case is in this study, these findings also agree with that of Laumann (2006), who reported a study conducted via telephone with 253 women and 247 men related to body piercing. (30) Results revealed body piercing is associated with risk-taking activities and high incidence of medical complications. Many of the participants revealed having post piercing medical complications which include broken teeth and increased jewelry allergies as the number of piercings were done to the same person 14, 30 31). Mayers *et al.* (2002) revealed in a study that was conducted among undergraduate university students, that of a total of 229 pierced students, 17% had health complications such as local trauma, bleeding and bacterial infection. Potential complications of ear piercing include allergic reaction, auricular perichondritis, embedded earrings, infection, keloid formation, perichondral abscess, traumatic tear. Body piercing has been reported to have bleeding which may be life threatening in some cases of

persons with blood dyscrasias, infections which may be mere inflammations becoming severe septicemia with very high mortality. There is potential danger of blood borne infections like HIV, Hepatitis, Tetanus and other long term complications like tuberculosis, Keloids, skin allergies, tumours lichenoid diseases (Goicochea; Lipscomb *et al.*, 2008; Bayat, 2005; Meltzer, 2005; Vanston, 2008). The risk of keloid formation is also very high here because all the people involved in this study are over 20 years. It is usually recommended for any body piercing especially ear to be done between birth and 6 months (Gabriel, 2017; Lane, 2005). This risks are heightened where any piercers may not have the correct professional training and sterilization procedures, as also documented in this study where many only 4.2% use piercing gun which is the most sterile of them all. Only few, 67 (17.1%) have jewelry sterilized before being inserted in the body. It is also documented that, health care providers have little understanding and limited communications with patients concerning body piercing. (Young, 2008) In the last 20 years, body piercing has been gaining popularity among young people but while there is a high demand for this body art, the number of body non-professional piercers without adequate knowledge of health and hygiene standards have also increased, creating post-piercing complications (Quaranta, 2011; Brotherton, 2012) The state of Texas, Puerto Rico and some other nations, in response to these challenges have put regulatory laws into place which is not available in many countries in the world (Stein, 2012). The AABB (American Association of Blood Banks) have established a regulation where an individual who has had a body piercing in a licensed establishment does not require to donate, until a 12-month deferral (O'Brien, 2014). In the present study, more than half have body piercing done by a professional, less than half have the area to be pierced swabbed with disinfectant, this is in line with the study by Hemdani *et al.* (2019), where majority said piercing artist washed and wore gloves before starting the procedure, few clean the piercing site daily, few wash your piercings before touching the pierced part, and few have jewelry sterilized before being inserted in the body (?). To avoid complications, ear piercing should be practiced in strict aseptic conditions using sterile instruments. Jewelry should be hypoallergenic (Meltzer, 2005; Kumar, 2014; Adigun, 2010).

Knowledge and awareness of ear and nose piercing practice is quite high in this study which also correlate with that of Olajide *et al.*, 2017 (15) who found overall high knowledge as well but this knowledge does not translate to awareness of the grave health risks that may be attendant to the practices. On the other hand, this understanding is still very low despite the fact that this practice is gaining increment globally. In our study only 80(20.5%) are aware that professionals are involved in ear piercing while 148 (37.9%) still practice self-piercing and nose piercing. It is found in this study that many are still very much ignorant about the dire consequences especially the long-term complications such as, blood borne infections, allergies, keloid formation, cancers etc of the practice which many of them suffered from. A very high percentage, 59.8% did not conform to basic hygienic requirement of ear or nose piercing, this was the same finding in the study of Vanston and Scott (2008) where he found that information related to potential risk of body piercing in young people has been limited and far from the reality of daily experience (Vanston, 2008). John (2013) performed a study with the purpose of assessing knowledge on body piercing complications among college students and found that 80 students that participated revealed not having sufficient

knowledge of health complications of the procedure (John, 2013) This study also confirmed this with a high percentage still wishing to repeat the procedure if necessary and many still agreed to recommend the practice to those around them this call for urgent legislature on the practice in all countries where there is none yet.

Limitation

There were difficulty of collection of data from some students due to their class schedule. This study is also limited to one University which may not completely reflect the exact prevalence among young people or populace in Nigeria generally.

Conclusion

At AfeBabalola University, at all levels of students are involved in this practice that has become a vogue and this is a pointer to the fact that most young people irrespective of educational status or level are getting involved in this practice. Many are also only thinking about the cosmetics or self enhancement they want to enjoy but ignorant of the debilitating consequences that may arise either immediate or long-term. Therefore there is need for adequate awareness of the risks associated with nose and ear piercing not just among young people but in the entire populace. There is need for a regulation body to be established where there is none and legislation concerning all shops/centres where such practices are carried out with stiff penalty for offenders.

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REFERENCES

Smith FD. Caring for surgical patients with piercings. *AORN journal*. 2016 Jun 1;103(6):583-96.

DeMello, M. 2007. *Encyclopedia of Body Adornment*. Greenwood Publishing Group. 56:239-240.

The History of Earrings. [Last accessed on 2016 Mar 22]. Available from: <http://www.jewellerypassion.net/the-history-of-earrings/>

Angel, E. 2009. *The Piercing Bible: The Definitive Guide to Safe Body Piercing*. The Crossing Press

King James. *The Holy Bible. Vs 1-4, Chap 32*. KJV. Brazil. Bible Society of Brazil; 2004. The book of Exodus; pp. 67–121. [Google Scholar]

Hastings, J. 2003. "Nose-ornaments". In Selbie, John A(ed). *Kessinger Publishing Encyclopedia of Religion and Ethics*, 17:397

Hesse, R.W. 2007. *Jewelry making through History: an Encyclopedia. Handicrafts Through World History*. Greenwood Publishing Group.

World's Most Pierced Woman Adds to her Collection. [Last accessed: 2021 August 24, 202122]. Available from: <https://www.telegraph.co.uk/news/newstoppers/howabouttha/t4786930/Worlds-most-pierced-woman-adds-to-her-collection.html>

Currie-McGhee, Leanne, K. (2006). *Tattoos and Body Piercing. Lucent Overview Series. Lucent Books. p. 11. ISBN 1-59018-749-0*

Carroll L, Anderson R. Body piercing, tattooing, self-esteem, and body investment in adolescent girls. *Adolescence*. 2002 Fall;37(147):627-37. PMID: 12458698.

Wilkinson JG. CHAP. X. Manners and Customs of the Ancient Egyptians: Including their Private Life, Government, Laws, Art, Manufactures, Religion, and Early History. Cambridge: Cambridge University Press; 2013. p. 370–1.

Sandhu A, Gross M, Wylie J, Van Caesele P, Plourde P. *Pseudomonas aeruginosa* necrotizing chondritis complicating high helical ear piercing case report: Clinical and public health perspectives. *Can J Public Health*. 2007; 98:74–7.

Yang S, Wang D, Zhang Y, Yu C, Ren J, Xu K, Deng M, Tian G, Ding C, Cao Q, Li Y. Transmission of hepatitis B and C virus infection through body piercing: a systematic review and meta-analysis. *Medicine*. 2015 Nov; 94(47).

Philips, A. (2014). Body piercing: A trend and its complications. *Practice Nursing*, 25(1), 29-31. DOI: <http://dx.doi.org/10.12968/pnur.2014.25.1.29.Res.ed>. 1987; 294:1262]

Gabriel OT, Anthony OO, Paul EA, Ayodele SO. Trends and complications of ear piercing among selected Nigerian population. *J Family Med Prim Care*. 2017 Jul-Sep;6(3):517-521. doi: 10.4103/2249-4863.222045. PMID: 29417000; PMCID: PMC5787947

Young, c., & Armstrong, M.L. (2008). What nurses need to know when caring for women with piercings. *Nursing for Women's Health*, 12(2), 130-138. [Onlinelibrary.wiley.com/doi/10.1111/j.1751-486X.2008.00299.x](http://onlinelibrary.wiley.com/doi/10.1111/j.1751-486X.2008.00299.x)

Gold MA, Schorzman CM, Murray PJ, Downs J, Tolentino G. Body piercing practices and attitudes among urban adolescents. *Journal of Adolescent Health*. 2005 Apr 1;36(4):352-e15

Mayers LB, Chiffrieller SH. Body art (body piercing and tattooing) among undergraduate university students: "then and now". *Journal of Adolescent Health*. 2008 Feb 1;42(2):201-3.

Body Piercing. [Last Accessed 2021 August 22] Available From: https://en.wikipedia.org/wiki/Body_piercing 20.

Goicochea E. *Body Piercing and Health Complications among College Students in Puerto Rico* (Doctoral dissertation, Walden University).

Fijałkowska M, Pisera P, Kasielska A, Antoszewski B. Should we say NO to body piercing in children? Complications after ear piercing in children. *International journal of dermatology*. 2011 Apr; 50(4):467-9.

Lipscomb TJ, Jones MA, Totten JW. Body art: Prevalence, search and evaluation among university business students. *Services Marketing Quarterly*. 2008 Aug 20; 29(4):42-65.

Bayat A, Arscott G, Ollier WE, Mc Grouther DA, Ferguson MW. Keloid disease: clinical relevance of single versus multiple site scars. *British journal of plastic surgery*. 2005 Jan 1; 58(1):28-37.

Lane JE, Waller JL, Davis LS. Relationship between age of ear piercing and keloid formation. *Pediatrics*. 2005 May 1; 115(5):1312-4.

Meltzer DI. Complications of body piercing. *American Family Physician*. 2005 Nov; 72(10):2029-2034. PMID: 16342832.]

Bone, Angie; Fortune Ncube; Tom Nichols; Norman D Noah (21 June 2018). "Body Piercing in England: a Survey of Piercing at Sites Other than Earlobe". *British Medical Journal*. 336 (7658): 1426–1428.

- doi:10.1136/bmj.39580.497176.25. PMC 2432173. PMID 18556275. Retrieved 6 January 2010
- More DR, Seidel JS, Bryan PA. Ear-piercing techniques as a cause of auricular chondritis. *Pediatric emergency care*. 1999 Jun 1; 15(3):189-92.
- Vedamurthy M, Priyadarshini J. Ear piercing/nose piercing: Making the technique simple and cost-effective. *Journal of the American Academy of Dermatology*. 2020 Dec 7.
- Landeck A, Newman N, Breadon J, Zahner S. A simple technique for ear piercing. *Journal of the American Academy of Dermatology*. 1998 Nov 1; 39(5):795-6.
- Laumann AE, Derick AJ. Tattoos and body piercings in the United States: a national data set. *Journal of the American Academy of Dermatology*. 2006 Sep 1; 55(3):413-21.
- Stein, T., & Jordan, J.D. (2012). Health considerations for piercing and policies that influence them. *Texas Dental Journal*, 129(70), 687. RETRIEVED FROM <http://www.dentistryiq.com/content/dam/diq/onlinearticles/documents/2012/July/TDA%20Report.pdf>
- Vanston, D.C., & Scott, J.M. (2008). Health risks, medical complications and negative social implications with adolescent body piercing practices. *Vulnerable Children & Youth Studies*, 3(3), 221-233
- Quaranta A, Napoli C, Fasano F, Montagna C, Caggiano G, Montagna MT. Body piercing and tattoos: a survey on young adults' knowledge of the risks and practices in body art. *BMC public health*. 2011 Dec; 11(1):1-8.
- Brotherton, M. (2012). Tattoos, body piercers and blood borne viruses. *Injury Prevention*, 18(Suppl 1), A155-A156. <https://doi.org/10.1136/injuryprev-2012-040590m.4>
- O'Brien SF, Xi G, Fan W, Yi QL, Osmond L, Delage G, Goldman M. Are donors in Canada compliant with deferral for tattoos and piercing? *Blood Transfusion*. 2014 Jan; 12(1):141.
- Kumar P, Mondal A, Lal NR, Gharami RC. Lupus vulgaris in a child: A complication of ear piercing. *Indian J Dermatol Venereol Leprol*. 2014; 80:97. <https://doi.org/10.4103/0378-6323.125526> [6]
- Adigun IA, Aderibigbe AB. Earlobe keloids: Emerging cosmetic complication of ear-piercing. *Nig Q J Hosp Med*. 2010; 20:97-100. [PubMed] [Google Scholar]
- John LJ. A descriptive study to assess the knowledge on health hazards of body piercing among the degree students with a view to provide a self-instructional module (Doctoral dissertation) Retrieved from <http://14.139.159.4:8080/jspui/bitstream/123456789/8997/1/John%20Liya%20John%20CHN%20BM%20Hosp%202013.pdf>
