

University of Arkansas, Fayetteville  
**ScholarWorks@UARK**

---

The Eleanor Mann School of Nursing  
Undergraduate Honors Theses

The Eleanor Mann School of Nursing

---

12-2015

# Visible Tattoos and Professional Nursing Characteristics: A Study on How Appearance Affects the Perception of Essential Qualities of Nurses

Darcy M. Boultinghouse  
*Eleanor Mann School of Nursing - University of Arkansas*

Follow this and additional works at: <http://scholarworks.uark.edu/nursuht>

 Part of the [Nursing Commons](#)

---

## Recommended Citation

Boultinghouse, Darcy M., "Visible Tattoos and Professional Nursing Characteristics: A Study on How Appearance Affects the Perception of Essential Qualities of Nurses" (2015). *The Eleanor Mann School of Nursing Undergraduate Honors Theses*. 40.  
<http://scholarworks.uark.edu/nursuht/40>

This Thesis is brought to you for free and open access by the The Eleanor Mann School of Nursing at ScholarWorks@UARK. It has been accepted for inclusion in The Eleanor Mann School of Nursing Undergraduate Honors Theses by an authorized administrator of ScholarWorks@UARK. For more information, please contact [scholar@uark.edu](mailto:scholar@uark.edu).

VISIBLE TATTOOS AND PROFESSIONAL NURSING CHARACTERISTICS: A STUDY  
ON HOW APPEARANCE AFFECTS THE PERCEPTION OF ESSENTIAL QUALITIES OF  
NURSES

An undergraduate honors thesis submitted  
in partial fulfillment of the requirements for the degree of  
Bachelor of Science in Nursing

by

Darcy Boultinghouse

December 2015  
University of Arkansas

Dr. Nan Smith-Blair  
Thesis Director

Prof. Jaye Henderson  
Committee Member

Prof. Ann Lofton  
Committee Member

### **Abstract**

Previous studies have indicated that nurses with tattoos are viewed less favorably than nurses without tattoos, regardless of gender. Additionally, older adults are more likely to negatively evaluate nurses with tattoos than young adults. Images of male and female nurses with and without tattoos were shown to 128 participants between the ages of 18-80 years on an iPad. Participants selected according to gender which nurse possessed more of the following professional characteristics based on their initial impression of their physical traits, or selected no difference: respectfulness, kindness, trustworthiness, intelligence and competence. The study showed that male nurses with tattoos were perceived the same as male nurses without tattoos across all ages of participants, but female nurses with tattoos were perceived to be less kind and less trustworthy than female nurses without tattoos across all ages of participants. Participants' genders did not affect their responses. The results were discussed with respect to the overall decreasing stigma of visible tattoos on nurses as well as the implications of the results for male and female nurses with tattoos.

### **Introduction**

Getting a tattoo is now considered to be a mainstream activity in the United States of America. Research indicates that a growing number of males and females of all age groups, especially young adults, are making the decisions to obtain tattoos. However, evidence shows that some individuals still associate tattoos with negativity and, therefore, associate tattooed men and women with more negative traits than non-tattooed men and women.

### **Literature Review**

Humans have long used their bodies as mediums for artistic expression and decoration. One form in particular, the tattoo, dates back to 3000 BC, discovered on a mummy recovered from

the Italian-Austrian border in 1991. A tattoo is a permanent pigmentation introduced by multiple punctures of exogenous substances to produce a decorative design. It is derived from the Polynesian word “ta,” meaning “striking something,” and “tatau,” a Tahitian word meaning “to mark something.”<sup>1</sup> The body of the mummy (which was nicknamed “Ötzi”) was preserved in ice, allowing for precise radiocarbon dating and examination of its features. Ötzi’s body was covered with more than 50 tattoos. The tattoos were in the form of crosses and lines, created through small incisions into which charcoal was rubbed. After studying Ötzi’s bones, radiation showed orthopedic disease in areas where tattoos were present, suggesting that these tattoos may have been related to a form of pain relief, similar to acupuncture.<sup>2</sup>

The practice of tattooing spread throughout Europe, Asia and Africa. Egyptian mummies with tattoos from the end of the second millennium BC have been discovered, as well as tattooed mummies from Rome. A group of Mediaeval Celtic humans living in Scotland, called the Picts, used black or dark blue woad, a flowering plant, to create complex war tattoos. The Picts, whose name translates to “the painted people,” were depicted for their tattoos in Julius Caesar’s book *Gallic Wars* from 54 BC. Indigenous cultures from West Africa, North Africa, Japan, New Zealand, Turkey and Taiwan practiced facial tattooing, a traditional expression of belonging.<sup>3</sup>

In 330 AD, Emperor Constantine of Rome banned tattoos because he believed the human image was a representation of God and should not be defiled.<sup>4</sup> This belief was also shared by the monotheistic religions Christianity, Judaism, and Islam. In 787 AD, Pope Hadrian I forbade tattoos among Christians.

Tattoos began to reappear in the 18<sup>th</sup> and 19<sup>th</sup> centuries, but for solely decorative purposes. Individuals of high social class in Europe elected to obtain tattoos, including Winston Churchill and Tsar Nicholas II. As the practice grew in popularity, tattoos spread across the Western world,

where tattoos became a distinctly popular phenomenon as more individuals of all social classes engaged in the practice.<sup>1</sup>

Contemporary society has seen a dramatic increase of individuals electing to obtain tattoos. In the United States of America, tattooing has experienced a major resurgence in popularity, especially with younger generations.<sup>5</sup> Once associated with groups of negative connotations, such as prison populations, bikers and gangs, tattooing is now widely considered to be a mainstream activity for individuals belonging to a variety of social groups.

Today, there are many reasons why a person might elect to obtain a tattoo. Individuals who choose to have tattoos cite their motivations to obtain tattoos are to promote individual expression and art, to fulfill a perception of sexiness or beauty, to celebrate life events<sup>6,7</sup> or to simply get attention.<sup>8</sup> Additionally, an individual's primary persuading factor in choosing to have a tattoo is the symbolic meaning of the tattoo, or the significance.<sup>9</sup>

Research suggests the stigma associated with tattoos has decreased greatly in today's younger generations, as more American adolescents elect to have tattoos. One theory is due to the visibility of tattoos on famous people, such as celebrities, athletes and other public figures. Another theory suggests the impact of the role of family or friends; adolescents with relatives or peers who have tattoos demonstrate a higher likelihood of obtaining a tattoo themselves.<sup>10</sup> A survey of 579 American young adults between the age of 18-25 reported that 36% had tattoos. In comparison, these percentages are higher than those of adolescents in other countries.<sup>11</sup>

This raises contradictory evidence about tattoos: while an increasing number of adults are getting tattoos, research suggests a stigma still exists in American society that associates tattoos with negative qualities. These qualities are not entirely fictional with evidence showing that tattooed individuals demonstrate a decreased likelihood of employment<sup>12</sup> and an increase in

adverse health risks.<sup>13</sup> Individuals with tattoos have also been associated as being risk-takers, with results supporting that the action of obtaining a tattoo is grouped in the same category of high-risk behaviors with tobacco and alcohol use, illegal drug use and unprotected sexual activity.<sup>14</sup> While there has been a dramatic shift in the attitudes concerning tattoos, by no means are negative attitudes disappearing.<sup>5</sup>

As a result, nurses with visible tattoos may be at risk of appearing unprofessional, especially in work environments banning the visibility of tattoos on the job. Given the negative connotation of adverse health effects being associated with tattoos, nurses are still electing to obtain tattoos themselves.<sup>15-17</sup> However, research has yielded results showing that the presence of body art (for the purposes of this study, body art is defined as visible tattoos) does, in fact, promote negative perceptions of nurses in the workforce.<sup>18,19</sup>

In a study of participants 46 years and older, the respondents viewed color images of male and female nurses, gowned in solid blue scrubs, and were asked to rate the health care workers based on their professional qualities. The research findings showed that male nurses with visible tattoos were rarely perceived with more positive characteristics than their non-tattooed counterparts, and women with visible tattoos were viewed even less favorably than both men with tattoos, men without tattoos and women without tattoos. Participants' sexes did not affect the results, and 22% of the respondents had tattoos themselves. Moreover, respondents felt that tattooed nurses were associated with significantly more impulsive and sensation-seeking behaviors than the non-tattooed health care population.<sup>20</sup> A study examining how tattooing affects patients' perceptions of professional nursing characteristics described nurses' qualities, including confidence, caring, reliability, attentiveness, cooperation, professionalism, efficiency and approachability, were deemed to be affected by judgment.<sup>21,22</sup>

Impressions of nurses take place in the first encounter with a patient. As such, body art may play an important role in how a patient perceives a health care worker.<sup>23</sup> Given the importance of the nurse-patient relationship, the factors affecting how a nurse is perceived deserve to be studied to help identify how therapeutic relationships are affected by judgment. In this light, this study was conducted to determine whether or not tattoos on health care workers alter the public's perception of their professional nursing characteristics within Northwest Arkansas.

Previous studies have tested whether patients perceived their care differently as a result of being treated by a nurse with visible tattoos. Therefore, this study is unique in that it observes the public's opinion, divided into three different age groups. In this study, the characteristics that were observed are as follows: trustworthiness (displaying characteristics that indicate one is reliable and strong), kindness (expressing a gentle, positive demeanor and caring towards others), intelligence (possessing essential skills that come with knowledge and experience), competence (recognition of the importance of work and ability to safely complete tasks) and respectfulness (acting with high moral principles).<sup>24</sup>

### *Study Hypotheses*

The following study hypotheses were tested:

1. There is no statistically significant difference between the three surveyed age groups in terms of their perception of trustworthiness, professionalism, kindness, intelligence trustworthiness, competence or respectfulness between non-tattooed and tattooed female nurses.
2. There is no statistically significant difference between the three surveyed age groups in terms of their perception of trustworthiness, professionalism, kindness, intelligence

trustworthiness, competence or respectfulness between non-tattooed and tattooed male nurses.

### **Methodology**

This study was conducted following approval of the University of Arkansas's Institutional Review Board.

#### *Participants*

The sample for the study consisted of 128 subjects surveyed according to de-identifiable sampling measures. The subjects in the study ranged from ages 18-80 and were divided into three groups: young adults, ages 18-35, middle-aged adults, ages 36-59, and older adults, ages 60-80. The subjects' ages, races, and genders were recorded for trends in relation to how the subjects perceived images of nurses. Study subjects were sampled at random from the Northwest Arkansas shopping mall in Fayetteville, AR. Subjects were approached and received an introduction and explanation of the survey. They were then asked if they would like to participate in the survey. Individuals willing to participate in the study gave their implied consent by filling out the questionnaire. If an individual declined to take the survey, they were thanked for their time and no further interaction with them took place. All data is reported in the aggregate.

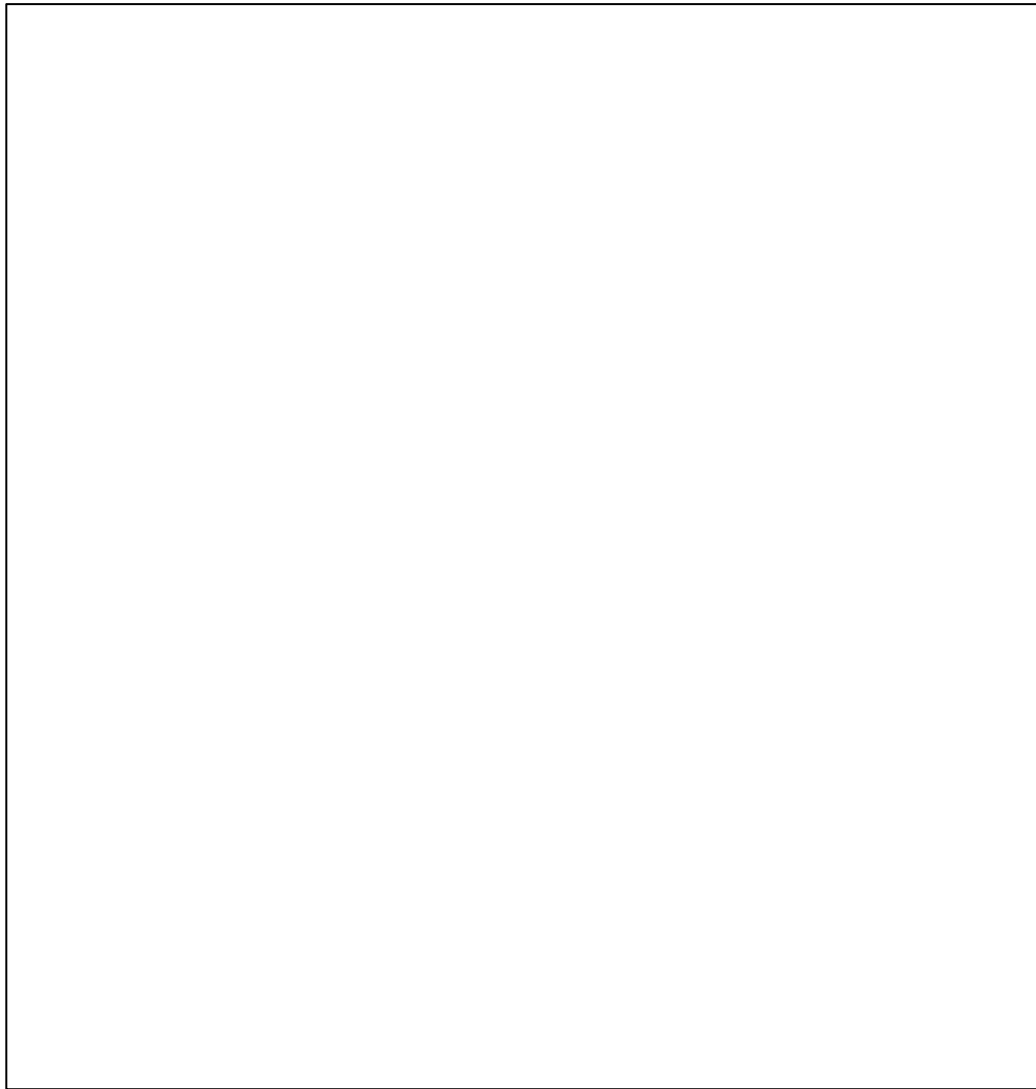
#### *Design*

The study design used a summated rating scale using a 5-point bipolar response. Surveys included side-by-side photos of a male and female nurse in plain blue scrubs, both with and without tattoos (Figure 1).



**Figure 1.**

*Tattooed and non-tattooed male and female images presented to study participants.*



Study participants were then prompted to select which male and which female nurse possessed more of the target characteristic in question than the other nurse, or if there was no difference between the two. The participants identified whether they associated the pictured nurse with characteristics of the following qualities: kindness, intelligence, trustworthiness, competence, and respectfulness. The subjects then decided which nurse possessed more of the target characteristic than the nurse in comparison.

*Materials*

The survey was developed using Qualtrics<sup>®</sup>, a secured research software program at the University of Arkansas and structured in a manner that all information was de-identified at the collection point. The researcher used an iPad to provide the study participant with access to the Qualtrics<sup>®</sup> survey. All survey data was stored in Qualtrics<sup>®</sup>, a password-protected software program for management and analysis. Data collection occurred between February 1-September 31, 2015.

*Statistical Analysis*

Descriptive statistics were used to display the survey participants’ demographic characteristics (age, sex and ethnicity) and were presented as frequency (percent) for categorical variables. The Kruskal-Wallis nonparametric test was used to compare the three samples to test the null hypothesis.

**Results**

A total of 128 surveys were conducted between April 1 and September 31, 2015. A total of 128 surveys were analyzed for the concepts of respectfulness, kindness, trustworthiness, and intelligence. A total of 127 surveys were analyzed for the concept of competence. Fifty six percent of respondents were female and 44% male (Table 1.).

**Table 1. (Continued on pg. 10)**

*Demographic study data.*

<u>Sex</u>	<u>Percentage</u>
Males	44% (N=56)
Females	56% (N=72)
<u>Age</u>	
18-35 years	45% (N=58)
36-59 years	30% (N=38)
60-80 years	25% (N=32)

<b>Ethnicity</b>	
African-American	15% (N=19)
Asian	3% (N=4)
Caucasian	65% (N=83)
Hispanic	14% (N=18)
Marshallese	1% (N=1)
Native American	0% (N=0)
Other	2% (N=3)

A Kruskal-Wallis H test was used, as it is a rank-based parametric test that determines if there was a statistically significant difference in each characteristics measured between the three different age groups. The Kruskal-Wallis H test results indicated no statistically significant difference between the age groups and respectfulness, kindness, trustworthiness, intelligence and competence between the tattooed and non-tattooed male nurse and the various age groups surveyed.

There were no statistically significant differences between the three surveyed age groups in terms of their perception of trustworthiness, professionalism, kindness, intelligence trustworthiness, competence or respectfulness between non-tattooed and tattooed male nurses. However, results indicated there was a statistically significant difference in the female study characteristics measured between the three different age groups for trustworthiness [ $H(2) = 3.26, p = .019$ ] (Figure 2), and for kindness [ $H(2) = 4.777, p = .009$ ] (Figure 3).

**Figure 2.**  
*Distribution of participants' responses by age group regarding the trustworthiness of female nurses with and without tattoos.*

**Figure 3.**

*Distribution of participants' responses by age group regarding the kindness of female nurses with and without tattoos.*

There were no statistically significant differences between the three age groups in terms of their response to the female tattooed individual and non-tattooed female in regards to respectfulness, intelligence, and competence.

The number of participants in each age group who selected “no difference” between the characteristics “kindness” and “trustworthiness” of the female nurse evidence the significant differences. The young adult age group (18-35 years) had the highest number of participants who selected no difference between the amount of kindness and trustworthiness between the female nurse images, with the middle-aged adult group (36-59 years) and older adult groups (60-80 years) following, respectively.

Additionally, participants' responses were analyzed via a Chi Square test for association to see if the gender of the participant played a role in the perceptions of male and female nurses with and without tattoos. There were no statistically significant results regarding the participants' ages and their perceptions of nurses. However, the characteristics of significance (kindness,

trustworthiness) were further analyzed by frequencies to see how participants' genders affected the results (Figure 4, Figure 5).

**Figure 4.**

*Distribution of participants' responses by gender regarding the professional characteristics of male nurses with and without tattoos.*

---

**Figure 5.**

*Distribution of participants' responses by gender regarding the professional characteristics of female nurses with and without tattoos.*

---

Observing the frequencies in Figures 4 and 5, the results demonstrate that male nurses with tattoos were rarely perceived more positively than male nurses without tattoos, and female nurses with tattoos were almost never perceived more positively than their female counterparts. Additionally, female participants were less likely than male participants to select nurses with tattoos over nurses without tattoos.

### **Discussion**

The results of this study are consistent with the results yielded from previous studies. The information suggests that the association of tattoos with negative qualities tends to decline as the 21<sup>st</sup> century progresses. However, what little stigma that remains tends to affect women with tattoos more strongly than men with tattoos. Perhaps this is because women may be held to higher standards of beauty in contemporary society, and as a result, tattoos may affect some individuals' perceptions of their qualities. Stigma and bias may be lessening about tattooed women. More study subjects selected the "no difference" in terms of the qualities of kindness and trustworthiness. Limited research is available which investigates attitudes present toward women with tattoos. The large response of "no difference" may indicate a shift in the cultural view of the acceptability of tattoos is shifting. The historic gender rules created to maintain a sense of societal order to guide men and women's behavior appear to be shifting in terms of view on body tattoos.

#### *Limitations*

The study, like others, had limitations surrounding the participants and data collection procedure. Data was collected at the Northwest Arkansas shopping mall in Fayetteville, AR. Therefore, the study yielded participants who were predominantly Caucasian, middle-aged females. This large demographic may have skewed the data to favor certain responses more so

than others. A suggestion that could improve the study would be to collect more data from minority populations, such as Asian, Hispanic, Marshallese, and Native American participants.

Additionally, the design of the tattoos in the images must be considered when analyzing the data. The images showed nurses with full-arm tattoo sleeves with a variety of patterns, colors and sizes of shapes. Consequently, the use of full-arm tattoo sleeves may have exaggerated participants' responses as compared to if the nurses pictured had fewer visible tattoos.

Another limitation to the study was the use of the "No Difference" option choice. This option offered a way for participants to avoid committing to decide which nurse possessed more of a certain characteristic than the other. Perhaps if the study forced the participant to select which nurse possessed more of the characteristics in study than the other then the results would have shown more significant differences between the responses of the participants.

### **Conclusion**

This study found that the stigma of tattoos still persists in Northwest Arkansas, although it is minimal. Furthermore, female nurses with tattoos were regarded with less favorable professional characteristics than females without tattoos. Specifically, female nurses with tattoos were viewed as less kind and less trustworthy than female nurses without tattoos. The characteristics of male nurses with tattoos were viewed just as favorable as male nurses without tattoos. As a result, the study participants viewed male nurses with and without tattoos as well as female nurses without tattoos more favorably than female nurses with tattoos.

There were no differences between age groups of the survey participants regarding their attitudes towards male and female nurses with and without tattoos. All three age groups viewed male nurses with and without tattoos as well as female nurses without tattoos more favorably than female nurses with tattoos. These findings came as a surprise; the young adult age group

was expected to rate each category of nurses with the same amount of professional characteristics. Additionally, the older adult age group was expected to rate male and female nurses without tattoos more favorably than male and female nurses with tattoos.

No statistical significant differences were identified between the genders of participants and their perceptions of tattooed vs. non-tattooed male and female nurses. Although male and female participants were likely to select nurses without tattoos as possessing more of the professional nursing characteristics than the nurses with tattoos, many participants also found there to be no difference in the amounts of the qualities between the nurses. Therefore, the no difference option softened the polarizing difference between the participants' responses.

Attitudes toward women with tattoos are becoming important as more young women acquire tattoos. One question for further research is to determine whether these changing attitudes interfere with women's achievement in the workplace.

This study may help administrators decide on how to address tattoos in dress code policies in their health care facilities. A policy that allows for consideration of employees' creativity to be expressed, along with the consideration of what patients in the hospital may expect may be beneficial to implement. However, as time passes, more research is needed in order to develop a current understanding of the perceptions of nurses' tattoos among the residents of Northwest Arkansas.



## References

1. Pesapane, F., Nazzaro, G., Gianotti, R., & Coggi, A. (2014). A short history of tattoo. *JAMA Dermatology*, 150(2), 145. doi:10.1001/jamadermatol.2013.8860
2. Lobell, J. A., & Powell, E. A. (2013). ANCIENT TATOOS. *Archaeology*, 66(6), 41.
3. Isaacs, D. (2012), Tattoos. *Journal of Paediatrics and Child Health*, 48: 1051–1052. doi: 10.1111/jpc.12007
4. Mayor, A. (1999). People illustrated: in antiquity tattoos could beautify, shock, or humiliate. *Archaeology*, 52(2), 54-57.
5. John Roberts, D. (2012). Secret Ink: Tattoo's Place in Contemporary American Culture. *Journal Of American Culture*, 35(2), 153-165. doi:10.1111/j.1542-734X.2012.00804.x
6. Millner VS and Eichold,BH,,II. 2001. Body piercing and tattooing perspectives. *Clin Nurs Res* 10(4):424-41.
7. Swami V and Furnham A. 2007. Unattractive, promiscuous and heavy drinkers: Perceptions of women with tattoos. *Body Image* 4(4):343-52.
8. Selekman, J. (2003). Updates & kidbits. A new era of body decoration: what are kids doing to their bodies?. *Pediatric Nursing*, 29(1), 77-79.
9. Firmin MW, Tse LM, Foster J, Angelini T. 2008. Christian student perceptions of body tattoos: A qualitative analysis. *Journal of Psychology and Christianity* 27(3):195-204.
10. Roberts AE, Koch JR, Armstrong ML, Owen DC. 2006. Correlates of tattoos and reference groups. *Psychol Rep* 99(3):933-4.
11. Betz C. 2009. To tattoo or not: That is the question. *J Pediatr Nurs* 24(4):241-3.
12. Dean DH. 2011. Young adult perception of visible tattoos on a white-collar service provider. *Young Consumers* 12(3):254-64.
13. Carroll ST, Riffenburgh RH, Roberts TA, Myhre EB. 2002. Tattoos and body piercings as indicators of adolescent risk-taking behaviors. *Pediatrics* 109(6):1021-7.
14. Owen D, C., Armstrong M, L., Koch J, R., Roberts A, E. 2013. College students with body art. *J Psychosoc Nurs Ment Health Serv* 51(10):20-8.
15. Wittmann-Price, R. A., Gittings, K. K., & McDowell Collins, K. (2012). Nurses and body art: What's your perception?. *Nursing*, 42(6). 62-64. doi:10.1097/01.NURSE.0000414627.23131.0b
16. Armstrong, M. (1991). Career-oriented women with tattoos. *Image: Journal Of Nursing Scholarship*, 23(4), 215-220.
17. Keith, R. Are tattoos and body piercings acceptable in the workplace? *ARST Scanner*. 2009;41(5):56-57.
18. Westerfield, HV, Stafford AB, Speroni KG, et al. Patients' perceptions of patient care providers with tattoos and/or body piercings. *J Nurs Admin*. 2012;42(3):160-164.
19. Wiseman DB. 2010. Perceptions of a tattooed college instructor. *Psychol Rep* 106(3):845-50.
20. Pfeifer, GM. Attitudes toward piercings and tattoos: Does body modification suggest a lack of professionalism, or is it simply freedom of expression? *Am J Nurs*. 2012;112(5):15.
21. Thomas, CM, Ehret, A, Ellis, B, Colon-Shoop, S, et al. Perception of nurse caring, skills, and knowledge based on appearance. *J Nurs Admin*. 2010;40(11):489-497.
22. Ruetzler T, Taylor J, Reynolds D, Baker W, Killen C. 2012. What is professional attire today? A conjoint analysis of personal presentation attributes. *International Journal of Hospitality Management* 31(3):937-43.

23. Resenhoft A, Villa J, Wiseman D. 2008. Tattoos can harm perceptions: A study and suggestions. *J Am Coll Health* 56(5):593-6
24. Anonson, J. Qualities of exemplary nurse leaders: Perspectives of frontline nurses. *J Nurs Mang.* 2014;22(1):127-136.