



Client Perceptions of Healthcare Professionals (HCP) who have Visible Body Art: A Scoping Review

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Abstract

Background: In healthcare settings, physical appearance plays a significant role in a patient's first impression of a healthcare professional's competence, compassion, performance, and quality of care. Given that nurses are an essential part of the patient care team, it is imperative for them and other healthcare providers to recognize what the client's response might be to their use of personal body art (i.e., tattoos, piercings, and designs using skin as a medium), while still achieving therapeutic relationships with clients.

Purpose: This scoping review aims to answer the following question: What is known from the existing literature about the clients' perceptions of healthcare professionals (HCP) who have visible body art, including its possible effects on the patient's perception of patient care.

Methods: Electronic databases of PubMed, Medline, PsycINFO, Web of Science, CINAHL, and Scopus were searched to identify studies published until 2022. They were assessed for quality using the Appraisal tool for Cross-Sectional Studies (AXIS) tool. The following stages were followed: identifying the research question, identifying relevant studies, study selection, charting the data, and collating, summarizing, and reporting the results. A total of 435 studies published until January 2022 were identified, of which 8 met the inclusion criteria.

Implications: Out of eight studies included in this review, six identified that body art is negatively associated with patient care, and two found there is no impact on body art and patient perceptions of care.

Conclusion: Results show that clients attribute a higher degree of professionalism to HCP without visible body art. Finally, some studies indicate that female HCP with visible tattoos were perceived as being less professional than their male counterparts. It is essential to understand

patient perceptions of healthcare professionals with and without body art and determine if appearances can alter the relationship between patient and provider.

Keywords: body art, tattoo, piercing, healthcare professional, care, perception, understanding.

Background

Tattoos or body art are defined as a mark, figure, or design, fixed or placed on the skin or that uses skin as a medium (Merriam-Webster, n. d.). The world's oldest tattoo dates back in history to circa 3250 B.C. and belongs to the European Tyrolean Iceman, Ötzi (Scallan, 2015). While tattooed individuals used to be perceived as a deviant subpopulation, in today's society, tattoos are more prevalent than ever (Tews & Stafford, 2019).

One thing is for sure, tattooing has become increasingly popular throughout society. According to a Harris Poll in 2016, 29% of Americans had at least one tattoo, compared to 21% in 2012 (Shannon-Missal, L. 2016). Also, most of those with at least one tattoo (92%) are satisfied with it, and forty-six percent of respondents have had at least one tattoo for more than ten years (Shannon-Missal, L. 2016).

Moreover, according to Heywood et al. (2012), men are more likely to have tattoos than women in the age groups of 40-to-49 years old; however, for 20-to-29-year-olds, women were more likely to have tattoos. Men who work in trades are more likely to have tattoos. As education status increases, both men and women are less likely to have tattoos (Heywood et al., 2012). Additionally, a study by Cegolon et al. (2010) shows that females are more likely to have piercings, whereas males are more likely to have tattoos. Another group that has increased their tattoo prevalence is elite athletes, and as the current trend of tattoos has arisen, so has the number of elite athletes with tattoos (Kluger, 2015).

Relevance of Body Art for Healthcare Professionals

In healthcare, appearance plays a significant role in a patient's first impression of a healthcare provider's competence, compassion, performance, and quality of care (Nease et al., 2021). Various professionals such as police, firefighters, paramedics, military professionals, or even chefs can be identified to the public through their uniforms, health care providers are no different.

The development of a professional identity is a process that happens over time and usually starts at nursing school. It is fostered through a process of self-understanding and acquisition of experience in clinical practice and understanding of the nursing role (Fitzgerald, 2020). Personal and professional factors can influence its development, such as attitudes and beliefs in combination with the characteristics and understandings of the nursing profession, and support the development of the nursing identity (Philippa et al., 2021). As individuals transition into the role of a professional nurse, their personal values and beliefs about body expression and

adornment might conflict with the profession's expectations. Maykut (2014) explains that the physical images of RNs shape the general public's opinion of the profession and may influence the opportunity to demonstrate "a caring way of being." Nurses adorn their bodies to embrace a personal viewpoint, enhance subculture identity, establish belonging/ownership, engage in risky behaviour, exercise proprietary rights, rebel against authority, reflect societal popularity, replicate tribunal beauty, and resist societal conformity (Maykut, 2014).

Patients judge a nurse's abilities within the first few moments of an encounter, meaning physical appearance could influence the therapeutic relationship (Thomas et al., 2010). However, perceptions of tattoos on healthcare professionals may risk patient relationships with nurses.

Since healthcare providers use evidence-based approaches to care, it is crucial to consider dress code policies and patient preferences regarding the physical presentation of providers (Nease et al., 2021). Given that nurses are an essential part of the patient care team, it is imperative for nurses and other healthcare providers to recognize the use of personal expressions, such as tattoos, while still achieving therapeutic relationships with clients.

An integrative review on body art in nursing professionals investigating current literature regarding body art (tattoos and piercings) in nursing found that levels of acceptability, professional image and infection concerns were the main themes present in the articles included (Pittman et al., 2022). This study was published after the cut-off date for this search, and its main results will be highlighted in this study. Our review builds on and expands this work as it is specific and provides further details about the effect of patient perception among healthcare providers (HCPs) with body art. Therefore, the purpose of this review was to determine what is known from the existing literature about the effect of patient perception among healthcare providers (HCPs) with body modifications, including tattoos, body art, and piercings.

Methods

Scoping reviews provide a broad and comprehensive overview of the body of the literature in a certain research area (Brien et al., 2010) and are frequently used to map and identify gaps existing in the current literature (Arksey & O'Malley, 2005). The selection of the scoping review as the preferred method for this study lies in the fact that no literature review could be found that clearly specifies how body arts and tattoos affect healthcare provision. Arksey and O'Malley (2005) developed a methodological framework to conduct scoping reviews that encompass the following stages: identifying the research question, identifying relevant studies, study selection, charting the data, and collating, summarizing and reporting the results. The above-mentioned stages were followed, and a large volume of peer-reviewed literature was systematically reviewed and categorized.

A. Identifying the Research Question

This review aimed at answering the following question: “What is known from the existing literature about the perceptions of clients about healthcare professionals who have visible body art?”

B. Identifying Relevant Studies

The search for peer-reviewed papers was performed on the databases Pubmed, Medline, PsycINFO, Web of Science, CINAHL, and Scopus; and was conducted in January 2022. More information about the searches and dates is available in Table 1.

Table 1 - Results from the search in the selected databases

Search engine	Number of results	Date
Pubmed	186	Jan 25, 2022,
Medline	37	Jan 25, 2022,
Psycinfo	12	Jan 25, 2022,
Web of Science	45	Jan 25, 2022,
CINAHL	35	Jan 25, 2022,
Scopus	30	Jan 25, 2022,
Total	435	

Keywords for the searches were selected from the Medical Subject Headings Terms (MeSH) and from relevant papers (Table 2). The search was conducted using the boolean operators “AND” and “OR” and combined to retrieve as many papers as possible. Also, filters were used according to the inclusion and exclusion criteria. An example of the search strategy is presented in Table 2.

Table 2 - Keywords and Strategy for bibliographic search sample

Keywords
Terms related to body art: body art, tattoo, piercing, body piercing,

Terms related to Healthcare professionals: healthcare professionals, health, nursing, care providers,
Terms related to understanding: understanding, perception, views,
Sample search strategy (Pubmed): (["body art" or tattoo or piercing or "body piercing"] AND ["healthcare professional*" or nurs*" or "care provider*"]) AND (understanding or perception or views)

The results were imported, deduplicated, and screened in Covidence, a web-based literature review management program. The authors AW and ER screened the papers for the title and abstract and made the decision whether to include or exclude the papers. The conflicts were resolved by consensus between the two authors.

In addition, a secondary search was carried out by reviewing the bibliographic references cited in the included studies. No new papers were included after the secondary search.

C. Study Selection

During the screening, papers were included if they met the following criteria: discussed patients' perceptions about healthcare professionals with visible body art; peer-reviewed papers that presented primary and secondary data. Articles published in English, Spanish and Portuguese were considered. No geographical barriers were established.

Articles were excluded if they focused on healthcare professionals' perceptions about clients with visible body art, body art effects on health, specific care needs of clients with body art, editorials, letters to the editor, thesis/dissertations, and comments.

The inclusion and exclusion criteria were revised and updated after the first 50 papers were screened for title and abstract (Arksey & O'Malley, 2005).

D. Charting the Data

Charting data is an important step of the scoping review method. It allows for synthesizing and interpreting information by sifting and sorting material according to predefined categories (Arksey & O'Malley, 2005). Also, it is a multi-staged process that culminates with extracting data from relevant individual articles (Brien et al., 2010). In this research study, a detailed spreadsheet was created to organize and collect data regarding the author and

publication year, location, data collection period, goal & focus, methodology, source of data/population, perceptions about body art, impacts on care, and recommendations.

E. Collating, Summarizing, and Reporting the Results

The quality of the included studies was assessed by the Appraisal tool for Cross-Sectional Studies (AXIS) tool (Downes et al., 2016). The AXIS tool has 20 items, of which seven assess reporting quality (items: 1, 4, 10, 11, 12, 16 and 18), and seven relate to study design (items: 2, 3, 5, 8, 17, 19 and 20), and six to possible biases (items: 6, 7, 9, 13, 14 and 15). Two authors (AW and ER) independently rated the studies. Following previous research on the topic (Dean et al., 2022; Lannoy et al., 2021), the studies were classified as poor quality (<50%), fair quality (50 to 69%), good quality (70% to 79%), strong quality (80% and higher).

Results

The search in the databases encountered 435 papers related to the keywords. A total of 206 papers were eliminated as duplicates (Figure 1). An exclusion process was then carried out by screening titles and abstracts, resulting in the elimination of a further 197 papers. A search for the full-text files of 32 papers was then conducted, and after in-depth reading and analysis, 17 articles were selected for data extraction. Finally, eight papers were included in the review.

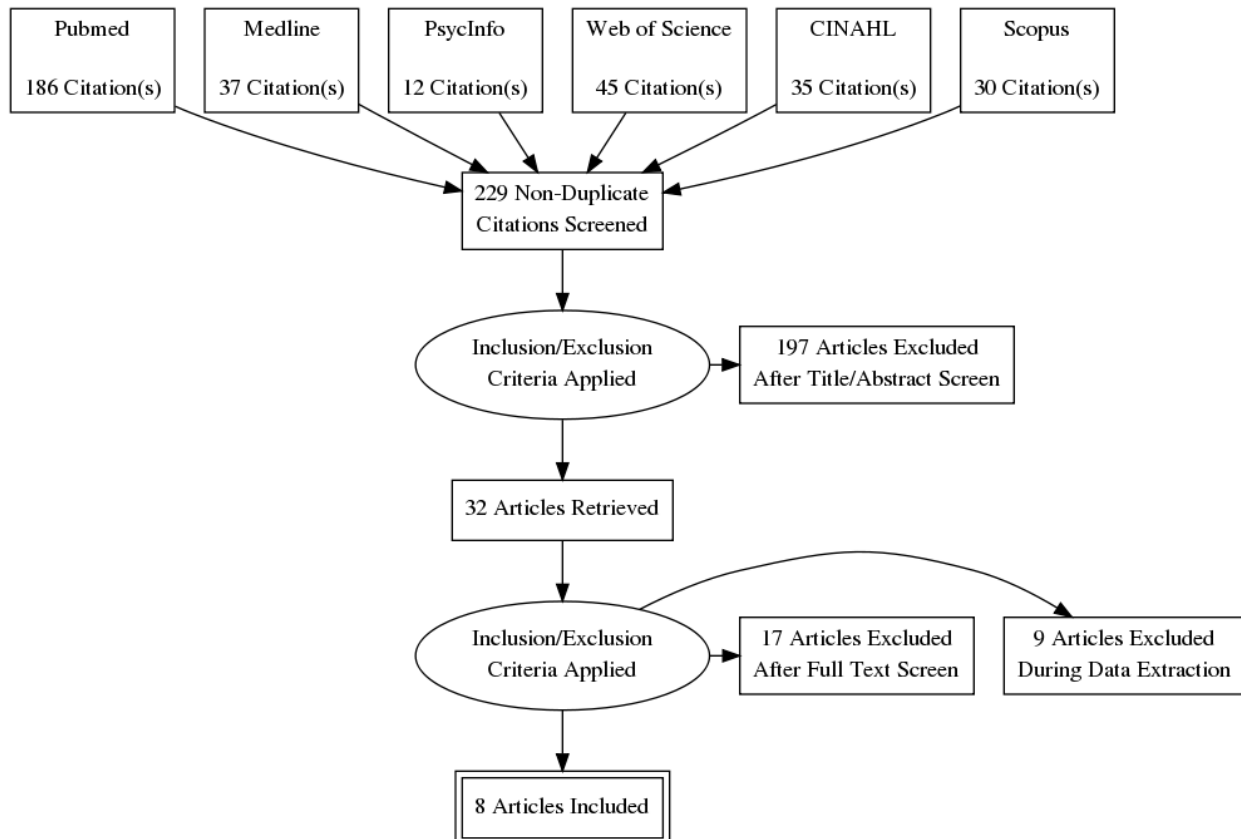


Figure 1. Flowchart of the results of the search according to the PRISMA standard.

Studies included in the review were mainly conducted in the United States (Cohen et al., 2018; Gildon et al., 2020; Johnson et al., 2016; Nease et al., 2021; Newman et al. 2005; Thomas et al., 2010; Westerfield et al., 2012), with one study being conducted in Colombia (Molina-Abad et al., 2021). All studies utilized a quantitative, cross-sectional approach to data collection and analysis. Six studies were conducted in hospital settings (Cohen et al., 2018; Gildon et al., 2020; Nease et al., 2021; Newman et al., 2005; Thomas et al., 2010; Westerfield et al., 2012), one in a university hospital (Molina-Abad et al., 2021), and one in the community (Johnson et al., 2016). Further details about the studies are listed on Table 3.

The results of the quality appraisal of the studies indicated that three studies were rated either strong or good quality, and the remaining five studies were rated as fair quality. Overall, most of the studies failed to mention measures undertaken to address and describe information about non-respondents and possible bias related to non-response.

The final goal of a scoping review is to produce an organized overview of the uncovered literature. To achieve this goal, two researchers independently analyzed the articles and conducted iterative team discussions to uncover patterns and main results from the included papers. After this process, the findings were organized into the following five categories: Acuity of the Environment, Placement or Context of Body Art, Gender, Client Age, and Personal Use of Body Art.

Table 3 – Study Characteristics

Author /Year	Location	Goal & Focus	Study Design	Population (sample size)	Quality Appraisal
Westerfield et al., 2012	Mid-Atlantic rural region of the US.	Evaluate patient perceptions of care providers with visible tattoos and/or body piercings.	A cross-sectional computerized survey research study using computerized assisted self-interviewing of hospitalized patients.	150 hospitalized, adult patients	13
Thomas, et al., 2010	5 local hospitals in Southeastern Pennsylvania, USA	Assess differences among perceptions of patients, nurses, faculty, and students regarding nurse caring, skill, knowledge based on attire and level of visible body art	A descriptive comparative design using a questionnaire and convenience sampling.	240 patients, nurses, students and faculty.	15
Cohen et al., 2018	Pennsylvania, USA	To determine whether emergency department (ED) patients perceived a difference in physician competence, professionalism, caring, approachability, trustworthiness and reliability in the setting of exposed body art.	Standardized surveys about physician competence, professionalism, caring, approachability, trustworthiness and reliability rating providers were administered to patients in an ED after an encounter with a physician provider who demonstrated no body art	924 patients were surveyed, with five physicians completing their goal enrolment.	14

			modification, non-traditional piercings, tattoos, or both piercings and tattoos.		
Gildon et al., 2020	USA	To determine the perceptions among radiographers of visible tattoos and nontraditional body piercings in the clinical setting.	Survey Discussion board forum posts about the survey were created and responses were collected for 4 weeks and compared quantitatively	943 radiographers	12
Molina Abad et al., 2021	Cordoba, Colombia	This study evaluated the level of nursing professionalism perceived by nursing students and faculty based on the uniform and visible body art to determine the possible relationship between the sociodemographic characteristics of those students and teachers and the level of	An observational, descriptive, cross-sectional study was carried out. Images of a nurse wearing a white uniform without tattoos and the same nurse wearing a blue uniform with and without visible tattoos were compared through an ad-hoc questionnaire	248 participants	12

		nursing professionalism perceived.			
Johnson et al., 2016	Hawaii, USA	Investigate if visible tattoos or piercings on a medical provider affect patient perception of their capabilities and trustworthiness in urban (big city) and rural (small city) Hawaii.	Convenience survey which posed a hypothetical situation of a child in need of medical attention and a scale for the person providing care. Images were shown of providers with or without visible body art.	314 participants	13
Nease et al., 2021	Virginia, USA	Determine patient perception of nurses with visible tattoos in adult acute care inpatient settings and emergency department settings.	Convenience survey involving inpatient or emergency department patients at 4 community hospitals in Virginia. Data was collected anonymously using a 15-item electronic survey.	391 participants	17

Newman, 2005	USA	Assess attitudes of patrons and medical school faculty in the emergency department regarding physicians with nontraditional facial piercings. This study also sought to investigate the perceived competence and trustworthiness of physicians with facial piercings.	3 phase study: (1) attitudes survey of ED patrons towards physicians with visible body piercing; (2) competency survey of ED patrons towards physicians with visible body piercings. Photographs were shown to the patrons of models with nontraditional piercings.; (3) faculty survey of physicians' opinions and attitudes regarding medical students and physicians with facial piercings.	(1) Attitudes survey n=319 ED clients. (2) Competency Survey n= 301 ED clients (3) Physician Survey n=432 professionals	14
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Theme 1: Acuity of Environment

Of the eight studies selected for this review, five addressed the acceptability of body art and non-traditional piercings based on the acuity of the environment (Cohen et al., 2018; Gildon et al., 2020; Johnson et al., 2016; Nease et al., 2021; Thomas et al., 2010). A study by Gildon et al. (2020) showed that respondents were more comfortable with the public having body art than when radiographers displayed body art. This could be due to the environment in which radiographers work, which has not been widely studied (Gildon et al., 2020). Thomas et al. (2010) have similar findings that in suburban hospital settings, those surveyed found nurses with visible body art and piercings to be less caring, skilled and knowledgeable than their counterparts with no visible body art or piercings.

Cohen et al. (2018) found that high-acuity settings such as the emergency room have different expectations of providers than those in outpatient settings. Patients in these high-acuity settings may not consider body art as an issue for their overall satisfaction when being cared for (Cohen et al., 2018). Nease et al. (2021) found similar findings in patient perceptions of HCPs with visible body art in emergent and adult acute care settings. Patients across demographics were comfortable with providers having visible body art, with the content of that body art being the most impactful (Nease et al., 2021).

On the other hand, different results were found in lower acuity settings where the patient and the HCP have time to form a therapeutic relationship, such as oncology, long-term care, primary care, or chronic infectious disease settings. In these environments, visible body art is likely not as influential to patient confidence in their provider (Johnson et al., 2016).

Theme 2: Placement or Context of Body Art

Placement on the individual or context of body art, such as a medical alert tattoo, recreational tattoo, or piercings, could be influential to patient satisfaction of HCPs. Gildon et al. (2020) report that the context of the body art may matter more than placement. If the provider, in this study being radiographers, has a tattoo for medical purposes, acceptance rose significantly among those surveyed (Gildon et al., 2020). Nease et al. (2021) had the same finding showing that 32.9% of those surveyed responded with the context of body art impacting the providers' perceptions and comfort level. Piercing placement also influenced patient perceptions of providers, with ear piercings being the most widely accepted and nose and lip piercing being deemed inappropriate (Newman et al. 2005). Non-traditional piercings such as nose, lip, eyebrow, and ear piercings in males were associated with decreased perceived competence and trustworthiness (Newman et al., 2005).

Theme 3: Gender

A study conducted by Westerfield and colleagues in 2012 found that patient care providers with visible tattoos and/or body piercings were not perceived by patients as more

caring, confident, reliable, attentive, cooperative, professional, efficient, or approachable than non-tattooed or non-pierced providers. Alternatively, female tattooed providers were perceived as less professional than male providers with similar tattoos. Female providers with piercings were perceived as less confident, professional, efficient, and approachable than non-pierced female providers (Westerfield et al., 2012).

Theme 4 - Age

Client age can also impact their perception of body art use by healthcare professionals. Three studies indicated that the age of participants impacted how they felt about HCPs having visible body art or non-traditional piercings (Gildon et al., 2020; Johnson et al., 2016; Thomas et al., 2010). Thomas et al. (2010) found that individuals who were university students with a mean age of 21 years, perceived nurses with body art to be more caring and skilled than patients and faculty surveyed. Whereas faculty and patients, with mean ages of 52 years and 59 years, respectively, rated nurses with visible body art and piercing to have the least amount of care, skills and intelligence (Thomas et al., 2010). This finding is consistent with Newman et al. (2005), who found that individuals over 50 years of age perceive HCPs with non-traditional piercings to be less competent. Similarly, body art acceptance decreases with each year of age by participants when surveyed about HCPs use of visible tattoos or piercings (Gildon et al., 2020). Participants also preferred HCPs to be body art and piercing-free when caring for children, which was consistent amongst all age groups (Johnson et al., 2016).

Theme 5 - Personal Use of Body Art

Another important factor to consider is if patients have body art or non-traditional piercings themselves. Newman et al. (2005) found that individuals surveyed with one or more body modifications were less likely to find provider body modifications inappropriate. This is consistent with Gildon et al. (2020), finding that body modification acceptance was significantly lower among individuals with no body art or piercings or who have never considered obtaining one. Those who had visible body modifications were more likely to accept HCPs with visible body modifications as well (Gildon et al., 2020).

Discussion

The results of this study are consistent with the results yielded from previous studies. Out of the eight studies included in this review, six indicate that body art is negatively associated with patient care, and two found that there is no impact. Results from this review indicate that body art and piercing placement and design may have a negative impact on patient perceptions of healthcare providers' competency and skills. This is across various domains and settings in healthcare, and different areas, including nursing, medicine, radiography, and students.

One of the findings of this study is related to the acuity of the environment. The area where the healthcare professional works can have either positive or negative opinions on body

art in HCPs. Low acuity areas tend to give patients a chance to get to know HCPs personally, giving more leeway to body modification due to building a therapeutic relationship over time. On the other hand, patients in high acuity areas tend to have different expectations from HCPs and body art is seen as an issue affecting the quality of care provided.

Body art and piercing placement play a role in patient perceptions based on societal and cultural norms. Body art content plays a factor, with medical alerts being more accepted than recreational body modification. This finding is congruent with the literature, as visible body art results in individuals experiencing discrimination or being viewed as irresponsible, less qualified, or unprofessional in the workplace (Ellis, 2015). While tattoos might not have any effect on a person's ability to do their job, they do capture a glimpse of the individual, while the context of the tattoo may start conversations among individuals (Ellis, 2015). The acceptance of tattoos is becoming more prevalent in other industries as well, for example, non-offensive tattoos are becoming more widely accepted in the hotel industry, rather than resulting in employees being asked to cover them or not being hired at all (Efthymiou, 2018). When a tattoo is placed in a visible location, it allows non-verbal communication within the surroundings of tattooed individuals and allows others to ask for the story behind the tattoo and form connections (Kosut, 2000).

Another important finding of this study is related to the gender of the healthcare professional. Females with visible body art and piercings tend to be viewed more negatively than their male counterparts. Gender also seems to play a role in patient perceptions, which may be due to historical and societal norms of body art and piercings as well. This is important to consider depending on the healthcare field, such as those with more female-dominated professions (i.e., nurses). This is consistent with previous research that women are seen more negatively with body art adornments than those without body art (Hawkes et al., 2004; Swami & Furnham., 2007). Gender also plays a role in the self-perception of body art. A study conducted by Baumann et al. (2016), found that while participants preferred a female surgeon over a male, they preferred non-tattooed individuals over tattooed, regardless of gender. This is consistent with findings by Broussard and Harton (2016), finding men and women with body art were viewed more negatively than those without. However, Broussard and Harton (2016) found that individuals, especially women, with visible tattoos were rated more independent and stronger than those without, which could be further explored in healthcare settings. Furthermore, women tend to rate themselves as less attractive when they have body art, while men with body art rate themselves as equally attractive as men with no body art (Molloy & Wagstaff, 2021). This could be further examined to understand if women view other women negatively due to body art.

As these norms change with time, age plays a factor in patient perception and acceptance of body modification on HCPs, with younger generations being more accepting than older. It can be observed that body art prevalence is growing within younger generations, with females aged 20-to-29 years old being most likely to have body art, followed by men and women ages 20-to-

39 years old (Heywood et al., 2012). However, even though more young people have body art, they still may view service providers with tattoos with less confidence than those without, even after a successful outcome for the service (Dean, 2011).

Individuals who have body modifications themselves are more likely to accept HCPs with them too. However, the current study differed from the study conducted by Martinez & Campo (2019), as it was found that regardless of individuals having body art, healthcare professionals may still be viewed through a negative lens. This finding might reflect a propensity to align with generally accepted societal norms despite possessing a tattoo.

Limitations

Limitations of this study include the small sample size, as few studies have been published on the topic of clients' perceptions of healthcare professionals who have visible body art. Studies were performed in emergency department acute care, or unknown departments (i.e., hospitalized patients). Also, the lack of cultural diversity found in the participants of the studies can limit the generalizability of the findings as many healthcare professionals might face intersecting discrimination factors, body art being one of them. On top of that, most studies were scored as having fair quality, a finding that might affect the results.

Conclusion/Recommendations

This scoping literature review reported that body art could negatively affect patient care. Female HCPs with body art were seen as less professional than their male counterparts, and younger clients accepted body art more readily than older ones. The content of body art also had an impact on patient perceptions of HCPs. It was also noted that clients in low acuity areas who have visible body art have a better acceptance of body art. More studies should be completed in more diverse departments of healthcare (i.e., maternity, psychiatric, day surgery, etc.).

After carefully considering the included studies, it is noticeable that more studies should be conducted to better understand the acceptability of visible body art. People of different cultures may perceive body art differently, and more studies could be done in this area to better grasp this idea. Also, further studies could explore how younger generations and children feel about HCPs and body art. More studies should be done with different placements and designs of body art and piercings in the healthcare field, such as the impact of black and white vs. coloured body art. Finally, further studies should be conducted in different geographical areas and clinical settings to determine patient perceptions of providers with body art and piercings.

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