

## Research Article

### Implicit Bias in Health Care Providers During Providing Health Care Services to Patients in A Tertiary Care Hospital South Punjab Pakistan

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#### ABSTRACT

**Introduction:** Bias means an unreasoned and unfair distortion of judgment in favour of or against a person or thing. It is the evaluation of something or someone that can be positive or negative, and implicit or unconscious bias is when the person is unaware of their evaluation. Unconscious or implicit bias describes associations or attitudes that reflexively alter our perceptions, there by affecting behaviour, interaction, and decision-making **Methods:** This study qualitative cross-sectional study design is used. Implicit Assessment Tool (IAT) used to assess the age Implicit, Religion Implicit and Skin tone Implicit among nurses. The data was analysed by SPSS version-18 & Microsoft Excel. Out of 100 respondent 23% showed a strong automatic preference for light skin compared to dark skin people in Skin-tone IAT. **Results:** Out Of 100 just 2% showed strong automatic preference for dark skin as compared to light skin people. During the Religion IAT out of 100 respondents just 1% nurses showed a strong preference for Judaism compared to Islam. 96.0% showed strong automatic preferences for Islam compared to Judaism. 29 % respondents showed a strong automatic preference for Islam compared to Christianity. While 2% participants showed a strong preference for Christianity compared to Islam. In Age implicit assessment test 30% nurses showed strong automatic preference for young people to old people. Just 1 % nurses showed strong automatic preference for old people compared to young people. 30 % nurses showed moderate level of automatic preferences for young people as compared to old people, while just 2 % have moderate automatic preference for old people as compared to young people. **Conclusion:** This study concluded that Nurses have a strong automatic preference towards their own religion so that they prefer Muslim patients unconsciously rather than the other religion. This study also reveal that during giving care nurses have strong automatic preference to young people and light skinned people as compared to dark skinned and old people.

**Keywords:** Attitude, Bias, Implicit, Nurses

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## Introduction

A judgement that has been improperly and unreasonably skewed in favour of or against an individual or entity is an example of bias. Implicit or unconscious bias occurs when a person is unaware of their own evaluation of a commodity or another person [1,2]. The evaluation of a commodity or another person can be either positive or negative. A case shouldn't anticipate being admitted to a lower standard of care because of her race, age, or any other irrelevant characteristic. Nevertheless, implicit associations (unconscious, will-full, or illogical processes) may impact our judgements, resulting in bias. This isn't fair to the patient.

According to Holroyed and Sweetman [3], implicit impulses do exist between a group or order trait, which is comparable to being violent (implicit conception). In the field of healthcare, the term "bias" is typically used to refer to both implicit conceptions and prejudices, as well as to raises serious business concerns. Psychologists frequently use astronomically to define bias; similarly, it can be understood as the negative evaluation of one group and its members in comparison to another [2,4].

According to previous study [5], the term "unconscious or implicit bias" refers to associations or stations that unconsciously alter our comprehensions and, as a result, have an effect on our behaviour, business dealings, and decision-making. Conceptions, negative stations, prejudices, and impulses develop over time and operate in varying contexts both intentionally (unequivocally) and unconsciously (implicitly) [6-9].

Research has also linked ways in which implicit bias can negatively affect the patient-provider relationship [10-12]. Studies that used a tool called the Implicit Association Test to measure unconscious bias found that health care bias was associated with lower instances of patient adherence to treatment plans and lower levels of trust in health care providers [5].

According to Blair et al. [2], implicit or unconscious bias occurs when a person is unaware that they have an evaluation of a commodity or someone that can be either positive or negative. Bias, therefore, is the evaluation of

a commodity or someone that can be either positive or negative. Negative implicit bias that is of particular concern within the healthcare industry, whereas unequivocal bias, on the other hand, implies that there is mindfulness that an evaluation is taking place. According to Lovallo D. [13], clinicians' decisions regarding patients' cases can be significantly influenced by bias [6].

The purpose of this research was to investigate the extent to which those providing medical care in tertiary care hospitals are affected by implicit bias at Dear ghazi khan. The investigator of the experiment has high hopes that exploring implicit bias among medical professionals at the sanatorium will yield useful results. This will guide the unborn unconscious bias assessment programmes, as well as mindfulness about implicit bias during the provision of care to cases and will work to perfect health care services provided to cases and their well-being.

## Materials and Methods

The design of this study was a descriptive study using a cross-sectional approach. Out of a total of 167 nurses, a stratified random sample chose 100 registered nurses to participate in the selection process.

### Data collection

The data was collected from registered nurses (RN) from A Tertiary Care Hospital South Punjab Pakistan. The respondent fulfilled the Implicit Association Tool (IAT) through the web-based questionnaire IAT [14]. The IAT holds significant promise for nurse researchers who seek to investigate the impact of attitudes on health-related behaviours [15]. The potential efficacy of the IAT in mitigating the impact of social desirability bias may enhance the dependability of nursing research. The examination of implicit attitudes through empirical research has the potential to stimulate a reassessment or adaptation of existing theories pertaining to health-related behaviours and caregiving. Furthermore, implicit attitudes may enhance the explanatory capacity of pre-existing theories.

The IAT evaluates how strongly you associate a set of concepts (like black people or gay

people) with a set of judgements (like good or bad) or stereotypes (like athletic or clumsy). The central idea is that it is more convenient to respond if different but related items use the same response key.

In an IAT, you'll be asked to quickly categorise words into two columns: left and right. If a word fits into the left column, you'll press the "e" key; if it fits into the right column, you'll press the "i" key. The IAT is divided into five sections.

Words associated with the concepts (such as "fat" and "thin") are first sorted into categories. For example, if the "Fat People" section was on the left and a picture of a plump individual appeared on the screen, the "e" key would be pressed.

The second section of the IAT asks you to categorise evaluation-related words (such as "good" and "bad"). The "e" key would be pressed if the "good" category was on the left and a positive word appeared on the screen.

The third section of the IAT combines the categories and asks you to sort evaluation words alongside concept words. That's why we'd put "Fat People are Good" on the left and "Thin People are Bad" on the right. It's worth noting that each participant sees the blocks in a different order, so some will complete the Fat People/Good, Thin People/Bad section first while others will complete the Fat People/Bad, Thin People/Good section first.

The IAT's fourth section features a reordering of concepts. The group formerly known as "Fat People" would now be located on the right. In this section of the IAT, the number of trials is significantly increased to reduce the impact of practise.

The IAT's final section involves a reversal of the earlier category pairings. What used to be Fat People/Good is now Fat People/Bad in the left-hand column.

Time spent sorting words in the third section of the IAT is weighted more heavily than time spent sorting words in the fifth section when determining an individual's IAT score. If one is quicker to categorise words when Thin People and Good share a response key and Fat

People and Bad share a response key, then when the roles are reversed, we would say that person has an implicit preference for thin people over fat people.

In this study used the IAT consist of three categories, including Age, Religion and Skin-tone IAT.

### **Data Analysis**

SPSS-18 and Microsoft Excel were used to perform the analysis on the data. It was decided to use the descriptive statistic.

### **Ethical consideration**

The distribution of the questionnaire by the researcher is contingent upon obtaining authorization from both the Office of Research Innovation and Commercialization (ORIC) department of Nishter Medical University Multan and the hospital. The participant was afforded the opportunity to decline or terminate their involvement at any point throughout the course of data gathering. The test instructions were presented to the participant on the initial webpage of the website prior to commencing the assessment. Furthermore, there is a comprehensive discourse on safeguarding personal data.

### **Result and Discussion**

In this investigation, implicit bias was evaluated using three distinct types of assessment tools: those pertaining to age, skin tone, and religious affiliation. These assessment tools were used to determine whether or not people have implicit bias based on these factors. One hundred individuals participated in this study and took each of these three implicit examinations. During the Skin-tone IAT, 23 out of 100 respondents, or 23%, demonstrated a strong automatic preference for people with light skin as opposed to people with dark skin. This preference was for people with light skin. Only two of the one hundred respondents, or 2%, showed a hidden bias in the form of a strong automatic preference for people with dark skin as opposed to people with light skin. This represents a hidden bias.

Table 1. IAT responses in nurses

IAT	IAT Question	Percent
<b>Skin tone</b>	strong automatic preferences for light skin compared to dark skin	23%
	moderate automatic preference for light skin compared to dark skin	28%
	slight automatic preference for light skin compared to dark skin	17%
	little to no automatic preference between skin tones	19%
	slight automatic preference for dark skin compared to light skin	7%
	moderate automatic preference for dark skin compared to light skin	5%
	strong automatic preferences for dark skin compared to light skin	2%
<b>Religion</b>	strong automatic preference for Judaism compared to Islam	1%
	moderate automatic preference for Judaism compared to Islam	0%
	slight automatic preference for Judaism compared to Islam	0%
	little to no automatic preference between Islam and Judaism	1%
	slight automatic preference for Islam compared to Judaism	1%
	moderate automatic preference for Islam compared to Judaism	1%
	strong automatic preference for Islam compared to Judaism	96%
	strong automatic preference for Christianity compared to Islam	2%
	moderate automatic preference for Christianity compared to Islam	4%
	slight automatic preference for Christianity compared to Islam	16%
	little to no automatic preference between Islam and Christianity	16%
	slight automatic preference for Islam compared to Christianity	6%
	moderate automatic preference for Islam compared to Christianity	27%
strong automatic preference for Islam compared to Christianity	29%	
<b>Age</b>	strong automatic preference for young people compared to old people	30%
	moderate automatic preference for young people compared to old people	30%
	slight automatic preference for young people compared to old people	17%
	little to no automatic preference between young and old people	15%
	slight automatic preference for old people compared to young people	4%
	moderate automatic preference for old people compared to young people	2%
	strong automatic preference for old people compared to young people	1%

According to the results of the Religion IAT, out of a total of one hundred respondents, only one nurse indicated a strong preference for Judaism over Islam. Compared to Judaism, an overwhelming majority of 96 nurses, or 96%, expressed a strong preference for Islam.

29% of respondents indicated a strong preference for Islam over Christianity in comparison to its automatic nature. Despite the fact that only 2% of respondents indicated a significant preference for Christianity over Islam

In the Age implicit assessment test, thirty (30%) of the participants showed a strong automatic preference for young people over elderly people. Only one percent of nurses

demonstrated a strong automatic preference for elderly patients over younger patients. Thirty percent of nurses exhibited a moderate level of automatic preference for young people in comparison to older people, whereas only two percent of nurses exhibited a moderate level of automatic preference for older people in comparison to young people.

**Discussion**

The hidden biases of health care providers (nurses) at a tertiary care hospital in Dera Ghazi Khan were investigated and analysed in this study. The results of this study demonstrated that many nurses have unconscious

biases when providing medical care to patients, particularly regarding patients' ages, religions, and skin tones (both dark and light).

In 2014, thousands of medical students joined the community movement White Coats, and Black Lives and took part in demonstrations all over the United States. Their goal was to ensure the safety of lives and well-being by eradicating racial bias in medical practise. The mission of this organisation is threefold: first, to educate people about racism as a threat to public health; second, to put an end to racial discrimination in medical care; and third, to educate future medical professionals to be advocates for racial justice.

The students recognised that racial bias is a significant problem that needs to be addressed in both the medical profession and medical education [16]. As a result, they demanded that academic medical centres investigate both conscious and unconscious forms of racial bias. In the Skin-tone IAT, 23 percent of the total respondents indicated a strong automatic preference for people with light skin as opposed to people with dark skin. Only two percent of those polled showed a clear automatic preference for people with dark skin when compared to those with light skin.

In the Religion IAT, only one out of every hundred nurses (or 1% of all respondents) indicated a strong preference for Judaism over Islam. Comparatively to Judaism, 96.0% demonstrated a strong automatic preference for Islam. 29% of respondents indicated a strong preference for Islam over Christianity in comparison to its automatic nature. While only 2% of respondents indicated a clear preference for Christianity over Islam, the majority of respondents held both beliefs equally.

Thirty percent of nurses, when given an age implicit preference test, revealed a strong automatic preference for young people over older people. Only one percent of nurses demonstrated a strong automatic preference for elderly patients over younger patients. Thirty percent of nurses exhibited a moderate level of automatic preference for young people in comparison to older people, whereas only two percent of nurses exhibited a moderate level of

automatic preference for older people in comparison to young people.

The results of a study that was carried out in Saudi Arabia showed that the findings of the study highlight enduring biases within the healthcare system in Saudi Arabia, despite changes in the socio-economic and legal frameworks [17]. According to the findings discrimination against women in positions of authority continues to exist despite the passing of new laws and the growing presence of women in the workforce who possess the necessary credentials. This study were able to identify key predictors of bias against women in leadership positions within the healthcare industry in Saudi Arabia by combining implicit and explicit measures. In spite of the fact that we discovered some differences between genders, years of experience, and areas of expertise, our overall findings indicate that both men and women hold implicit and explicit biases against women who hold leadership positions in the healthcare workplace. A number of social and cultural factors in Saudi Arabia have an effect on the gender relationships that exist there. These factors have an effect not only on the relationships between men and women but also on those between the sexes. Although Saudi women hold a variety of perspectives on gender ideology, traditional gender views tend to normalise men's roles as being more vocal and women's roles as being quiet [17]. This, along with the patriarchal culture of the country, contributes to the formation of gender stereotypes in which women are portrayed as primarily performing roles within the home rather than in the workplace [18].

## Conclusion

According to the findings of this study, nurses have a strong unconscious preference towards their own religion, and as a result, they subconsciously give preference to treating Muslim patients over those of other religions. This study also reveals that when it comes to providing care, nurses have a strong and automatic preference for young people and people with light skin as opposed to older people and people with darker skin. Researchers make recommendations for additional research to be

done, such as holding awareness sessions for medical professionals so that they can become aware of their own unconscious biases and treat patients in an equitable manner.

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