

## ORIGINAL

## An obscured obstacle—Prevalence and nature of micro aggressions amongst healthcare professionals



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### Abstract

**Introduction:** Microaggressions create negative consequences on the mental health of individuals who experience them, such as feelings of alienation, frustration and low self-esteem. Physicians worldwide are negatively impacted by the detrimental effects of microaggressions and implicit bias. It is imperative to establish the prevalence specificity of the problem hence the aim of this study is to determine the prevalence, nature and determinants of microaggressions amongst healthcare professionals.

**Method:** The study used an online anonymous survey to collect data including demographics, awareness of the term, experience of microaggression, acts and response. The research findings were analyzed using univariate and multivariate analyses using Chi-square test and binary logistic regression respectively.

**Result:** A total of 443 participants (40.9% males, 59.1% females) included 403 physicians (91%), 21 dentists (4.7%), 15 nurses (3.4%) and 4 pharmacists (0.9%). More than half of the participants (59.8%) were aware of the term micro-aggression. The percentage was significantly higher among respondents from the western region of Saudi Arabia than the Gulf/Middle Eastern countries. Approximately 38.1% of the participants experienced microaggression and more than half (55.62%) did not report experiencing microaggression. The most common form of microaggression was passive-aggressive behavior (80.5%) followed by invalidation of an opinion (73.4%). Among those who experienced microaggression, (12.9%) reported anger as the most predominant emotional response.

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**Conclusion:** Microaggression is a universal phenomenon. Further research is necessary to determine its prevalence in other countries to establish a comprehensive understanding of its cultural context.

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## PALABRAS CLAVE

Microagresión;  
Profesionales de la  
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Prevalencia;  
Concienciación;  
Medicina;  
Arabia Saudita

## Un obstáculo oscurecido. Prevalencia y naturaleza de las microagresiones entre los profesionales de la salud

### Resumen

**Introducción:** Las microagresiones crean consecuencias negativas en la salud mental de las personas que las experimentan, como sentimientos de alienación, frustración y baja autoestima. Los médicos de todo el mundo se ven afectados negativamente por los efectos perjudiciales de las microagresiones y el sesgo implícito. Es imperativo establecer la especificidad de prevalencia del problema, por lo que el objetivo de este estudio es determinar la prevalencia, la naturaleza y los determinantes de las microagresiones entre los profesionales de la salud.

**Método:** El estudio utilizó una encuesta anónima en línea para recopilar datos demográficos, conocimiento del término, experiencia de microagresión, actos y respuesta. Los resultados de la investigación se analizaron mediante análisis univariados y multivariados mediante la prueba de Chi-cuadrado y la regresión logística binaria, respectivamente.

**Resultado:** Un total de 443 participantes (40,9% hombres, 59,1% mujeres) incluyeron 403 médicos (91%), 21 dentistas (4,7%), 15 enfermeras (3,4%) y 4 farmacéuticos (0,9%). Más de la mitad de los participantes (59,8%) conocían el término microagresión. El porcentaje fue significativamente mayor entre los encuestados de la región occidental de Arabia Saudita que entre los países del Golfo/Medio Oriente. Aproximadamente el 38,1% de los participantes experimentaron microagresión y más de la mitad (55,62%) informaron no haber experimentado microagresión. La forma más común de microagresión fue el comportamiento pasivo-agresivo (80,5%), seguido de la invalidación de una opinión (73,4%). Entre quienes experimentaron microagresión, 12,9% reportaron ira como la respuesta emocional predominante.

**Conclusión:** La microagresión es un fenómeno universal. Se necesita más investigación para determinar su prevalencia en otros países a fin de establecer una comprensión integral de su contexto cultural.

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## Introduction

Micro-aggressions are frequent, subtle insults directed at marginalized groups, often manifesting verbally or non-verbally without the intent to harm, typically occurring unconsciously. According to Sue et al., micro-aggressions are subtle forms of insult hidden in interpersonal communication or the environment. They reinforce negative stereotypes and undermine racial, gender, or historical backgrounds, arising from unconscious biases.<sup>1</sup> Sue et al. classified them into four types: micro-assault (intentional discriminatory actions or remarks), micro-insult (unconscious subtle rudeness), micro-invalidating (acts nullifying experiences) and environmental micro-aggressions (systemic regulations or settings promoting inequality).<sup>1,2</sup>

Data from previous studies have shown that the prevalence of micro-aggressions hasn't been uncommon as it has been immensely reported in various academic and health-care settings, affecting professionals like nurses, surgeons,

physicians, residents, and medical students.<sup>3,4</sup> According to a survey conducted amongst multiple marginalized identities in medical students have reported experiencing a higher degree of mistreatment and burnout.<sup>5</sup> A primary concern of microaggressions is that they're subtle offenses closely tied to the tendency to harbor preconceived notions and attitudes that influence our actions and decisions, without us realizing it yet it can take a real psychological toll on the well-being and mental health of the recipient which can lead to anger, depression, feeling invalidated and even confused.<sup>6</sup> As well as it can negatively impact the workplace environment making it more hostile and persist stereotype threats in different regions of the world.<sup>7</sup>

In the recent years, there has been a growing number of publications focusing on the prevalence and experience of microaggression occurring in different workplaces including STEM fields where sexual objectification amongst women was a concern.<sup>8</sup> According to a study conducted in 2021, surgeons and anesthesiologists revealed that they

were often subjected to sexist microaggressions at work. The most frequent forms of such microaggressions included hearing derogatory terminology and witnessing degrading images of women – and associated with physician burnout.<sup>9</sup> Another study in February 2023, highlighted the growing body of research demonstrating the prevalence of implicit bias and microaggressions in surgical subspecialties, which can have serious consequences for patients.<sup>10</sup> Another study by Alimi Y et al. (2022) described how microaggressions and implicit bias occur in patient–surgeon, surgeon–peer, surgeon–staff, and training environment interactions within surgical department where the biases can be based on age, socioeconomic background, hierarchical rank, as well as racial and gender biases.<sup>11</sup> Another study has reported that racial micro-aggressions harm medical students and minority resident physicians, negatively impacting academic and psychological well-being.<sup>12,13</sup> McKinley SK et al. (2019) looked at gender-based discrimination in medical training and found that it still exists, often in subtle behavior and microaggressions.<sup>14</sup> A recent study by Barnes et al. (2020) explored the experiences of gender bias among female surgeons. The participants reported experiencing bias from both patients and colleagues, with gendered assumptions and stereotypes often having negative impacts on their professional development and opportunities.<sup>15</sup>

In Kuwait, residents and fellows often face microaggressions, while nationwide research in 2006–2007 shows non-majority physicians are more likely to leave jobs due to workplace discrimination.<sup>16,17</sup> In Saudi Arabia, medical residents encounter harassment and discrimination, with verbal abuse, racial, and gender discrimination prevalent.<sup>18</sup> Family medicine residents, especially females and minorities, experience mistreatment during training.<sup>19</sup>

Unfortunately, there has been no research conducted to address the prevalence and nature of microaggressions amongst healthcare professionals working in different sectors in Saudi Arabia and the Middle East. Therefore, the objective of this study is to assess the awareness, prevalence and nature of microaggressions encountered by healthcare professionals in the Western Region of Saudi Arabia and evaluate their determinants.

## Method

### Study design, setting, and participants

An observational cross-sectional study was conducted where data was collected through an online survey using Google forms and the participants were anonymously consented before responding to the questionnaire.<sup>20</sup> The data were collected between 1 January 2023 and 1 April 2023. The research team shared the link with their contacts via email and also promoted it on various social media platforms such as Facebook, LinkedIn, WhatsApp, and Twitter.<sup>21</sup> The inclusion criteria were determined as any healthcare professional working in any specialty from both private and governmental sectors of any gender of any nationality who spent at least 1 year working in Saudi Arabia, the Arabian Gulf Region, Kingdom of Bahrain, Qatar, Sultanate of Oman, United Arab Emirates), and the Middle East region (Yemen, Iraq, Palestine, Jordan, Lebanon, Syria). Participants who

refused to participate, non-healthcare workers and who worked in other countries were excluded.<sup>22</sup> The study was conducted under the title “An Obscured obstacle: Prevalence and Nature of Micro aggressions amongst healthcare professionals” and was approved by Ibn Sina National College Research Review Board Institutional Human Ethics Committee with ethical approval IRRB-02-26022023 along with the protocol identification number 009MP27012023.

The survey was constructed with reference to previous literature on different acts of micro aggressions in multiple work settings. Internal piloting was conducted as the questionnaire was reviewed after pre-testing on ten healthcare workers working at the hospital. The final survey was composed of six sections.<sup>23</sup> The first section was a demographics section and included age, gender, type of healthcare working, department and work sector.<sup>24</sup> The second section composed of questions on awareness of the term, experience of microaggression, perceived emotions and response. Six questions on gender-based discrimination or bias were also included.<sup>25</sup>

### Sample size

The online Raosoft sample size calculator was used to calculate sample size.<sup>26</sup> To achieve a 95% confidence level that the true value is within  $\pm 5\%$  of the measured value, a sample size of 385 was required. However, in the study, the questionnaire was completed by 464 participants which exceeded the recommended sample size.<sup>27</sup>

### Statistical analysis

SPSS software was used to analyze the data, different statistical methods was used to study the different associations between the variables Initially, the data was entered into a Microsoft Excel file and subsequently imported into SPSS for additional analysis.<sup>26</sup> The continuous variables such as age, were presented as the mean  $\pm$  standard deviation (SD). Meanwhile, categorical variables including gender were described using frequencies and percentages. Suitable test (Chi square test, Students’ T-test, or non-parametric test) was used to compare between those who suffered and those who did not suffer from micro aggression. The  $p$ -value  $< 0.05$  was deemed significant.<sup>27</sup>

## Results

### Demographic data

This study included 443 participants after exclusion of 21 participants who worked in different countries outside Saudi Arabia and Gulf/Middle East countries. The participants’ gender were 40.9% males and 59.1% females. Physicians (91%), dentists (4.7%), pharmacists (0.9%) and nurses (0.9%). Participants were from different specialties, including anesthesiology (2.7%), dermatology (2.0%), diagnostic radiology (1.6%), emergency department (4.7%), family medicine (18.5%), internal medicine and its subspecialties (27.1%), obstetrics and gynecology (4.7%), ophthalmology (5.9%), pediatric and its subspecialties (7.9%), psychiatry (1.1%),

**Table 1** Displays descriptive statistics of demographic data.

Are you aware of the term micro aggression?	Yes	No	Frequency	p value
<i>Gender</i>				
Male	119 (26.9%)	62 (14%)	181 (40.9%)	0.034
Female	146 (33%)	116 (26.2%)	262 (59.1%)	
<i>Age</i>				
25–29	156 (35.2%)	132 (29.8%)	288 (65%)	0.003
30–39	66 (14.9%)	30 (26.8%)	96 (21.7%)	
40–49	32 (7.2%)	9 (2%)	41 (9.3%)	
50–59	11 (2.5%)	5 (1.1%)	16 (3.6%)	
60 and above	0 (0%)	2 (0.5%)	2 (0.5%)	
<i>Location</i>				
Western region of Saudi Arabia	193 (43.6%)	145 (32.7%)	338 (76.3%)	0.036
Middle east/Gulf	72 (16.3%)	33 (7.4%)	105 (23.7%)	
<i>Type of healthcare working</i>				
Physician	247 (55.8%)	156 (35.2%)	403 (91%)	0.003
Dentist	13 (2.9%)	8 (1.8%)	21 (4.7%)	
Pharmacist	3 (0.7%)	1 (0.2%)	15 (3.4%)	
Nurse	2 (0.5%)	13 (2.9%)	4 (0.9%)	
<i>Specialty</i>				
Anesthesiology	9 (2%)	3 (0.7%)	12 (2.7%)	0.194
Dermatology	5 (1.1%)	4 (0.9%)	9 (2%)	
Diagnostic radiology	2 (0.5%)	5 (1.1%)	7 (1.6%)	
Emergency medicine	15 (3.4%)	6 (1.4%)	21 (4.7%)	
Family medicine	47 (10.6%)	35 (7.9%)	82 (18.5%)	
Internal medicine and it subspecialties	70 (15.8%)	50 (11.3%)	120 (27.1%)	
Obstetrics and gynecology	9 (2%)	12 (2.7%)	21 (4.7%)	
Ophthalmology	20 (4.5%)	6 (1.4%)	26 (5.9%)	
Pediatrics and its subspecialties	20 (4.5%)	15 (3.4%)	35 (7.9%)	
Psychiatry	5 (1.1%)	0 (0%)	5 (1.1%)	
Surgery and its subspecialties	50 (11.3%)	84 (7.7%)	84 (19%)	
Dentistry	13 (2.9%)	8 (1.8%)	21 (4.7%)	
<i>Work organization</i>				
Governmental	248 (56%)	166 (37.5%)	414 (93.5%)	0.892
Private	17 (3.8%)	12 (2.7%)	29 (6.5%)	
<i>Have you experienced a microaggression?</i>				
Experienced a microaggression	105 (30.0%)	63 (35.4%)	169 (38.1%)	0.053
Never experienced but witnessed	104 (39.2%)	60 (33.7%)	164 (37%)	
Never experienced nor witnessed a microaggression	55 (20.8%)	55 (30.9%)	110 (24.8%)	
<i>Total = 443</i>				

surgery and its subspecialties (19%) and dentistry (4.7%). [Table 1](#) displays descriptive statistics of demographic data.

### Awareness of the term

It can be seen from the data in [Table 1](#), over half of the respondents were aware of the term (59.8%) and the percentage higher in age group 25–29 (35.7%) with significance of  $p$  value = 0.03. Also, there is a significant relation between type of healthcare working and awareness for physician (55.6%)  $p$  value = 0.02. In addition, of participants from western region of Saudi Arabia  $n=193$  and  $n=72$  from middle east/gulf were aware of term micro aggression. This result is significant at the level of  $p$  value = 0.036.

### Prevalence and experience of microaggressions

Approximately, around 38.1% ( $n=169$ ) of participants experienced microaggressions in their work life. 37% of the participants never experienced but have witnessed and approximately 24.8% of the participants never experienced nor witnessed a micro aggression. Interestingly, further analysis of the data revealed no significant differences between experience of micro aggression and demographics such as age and gender and specialty ( $p$  value > 0.05). Results from the multivariate analysis are presented in [Table 2](#). The table provides the outcomes of a binary logistic regression analysis aimed at investigating the factors linked to the occurrence of micro-aggressions. It offers insights into odds ratios,

**Table 2** Multivariate analysis of factors associated with experience of micro aggression.

Binary logistic regression analysis was performed			
Predictor	Overall		
	Odds ratios	CI	p value
Gender: females vs males	0.903	0.615–1.325	0.601
Age: 25–29, 30–39, 40–49, 50–59, 60 and above	1.208	0.948–1.540	0.127
Type of health care working	1.194	0.840–1.697	0.323
Specialty	0.952	0.903–1.002	0.062
Work sector	1.097	0.495–2.430	0.819
Location	0.979	0.621–1.544	0.927

confidence intervals (CI), and *p*-values for various predictor variables. Notably, the results indicate the following: In terms of gender, the data suggests that females may have a slightly lower likelihood of experiencing micro-aggressions compared to males, though this difference is not statistically significant (*p*-value = 0.601). Regarding age, there appears to be a slight increase in the likelihood of experiencing micro-aggressions as age advances, although this trend does not reach statistical significance (*p*-value = 0.127). The type of healthcare work and specialty demonstrate modest associations with micro-aggressions, but these relationships do not attain statistical significance (*p*-values = 0.323 and 0.062, respectively). Work sector and location do not seem to have a substantial impact on the likelihood of encountering micro-aggressions, with *p*-values well above the 0.05 threshold (*p*-values = 0.819 and 0.927, respectively). In summary, the table reveals that while certain variables show some degree of association with micro-aggressions, none of them achieve statistical significance at the conventional 0.05 level. Researchers should consider the practical implications of these findings within the context of their study and explore additional factors or interactions that may influence the experience of micro-aggressions.

Additionally, this paper reported the exposure to microaggressions by specialty, highlighting that surgery and its subspecialties had the highest percentage of reported micro aggressions (10.38%) compared to the percentage of participants who didn't (8.58%) followed by emergency medicine 2.71%, 2.03% respectively. A further remarkable outcome that emerged from this figure is that Internal medicine and its subspecialties reported the lowest experience of micro aggressions (17.6%). It should be noted that the participant numbers of other specialties were insufficient to provide an accurate representation or comparison.

### Nature and acts of micro aggressions

Of the participants who experienced microaggression, survey findings revealed passive-aggressive behavior to be the most frequent act *n* = 136, 80% followed by invalidation of an opinion *n* = 127, 73.4% then acts of discrimination *n* = 104, 61%, loss of learning opportunities *n* = 96, 57.1% lastly sexist humor *n* = 54, 32.1%. The results, as shown in Table 3, indicate a significant relation between the sexist humor and gender (*p* value = 0.02). Table 3 shows the acts of micro aggressions stratified by gender. The most

common perceived emotion during their experience with micro aggression is anger *n* = 57, 33.7% followed by feeling of being minimized = 32, 18.9%, then feeling of injustice, then sadness then vulnerability. Surprisingly very few reported feeling of being objectified and powerless with *n* = 8, 4.7%. However, no statistically significant difference was found between emotions and gender (*p* value > 0.05). Table 4 shows perceived emotions during exposure to microaggression.

### Gender-based bias and discrimination

Gender-based bias and discrimination were also reported by the respondents. The proportion of respondents who experienced gender-based bias always, often, sometimes, rarely or never are displayed in Table 5 *n* = 23 participants reported that they sometimes patients or their families have shown less trust in them based on gender with *n* = 9 females and *n* = 14 males with significant relation with gender (*p* value = 0.00). Being assigned to non-clinical duties compared to opposite gender was also common where *n* = 27 and *n* = 24 of total respondents reported experiencing this often and always respectively. Only 7 of the respondents, however, reported that they always were assigned less tasks by their superiors based on gender and *n* = 105 reported they had never experienced.

### Response to microaggression

Regarding the response to microaggression, the most frequent response reported was I don't usually do anything about it (55.62%). Amongst these respondents the most common reason chosen was nothing will be done (44.33%) followed by fear of consequences (20.62%).

### Discussion

The findings from this study provide an insight into the prevalence and ways in which healthcare providers experience micro aggression. One of the important findings is that the low self-experienced prevalence of micro aggressions among the participants across Kingdom of Saudi Arabia and Middle East from various specialties and work sectors compared to those respondents who haven't experienced nor witnessed a micro aggression. (61.8%) which doesn't seem to be consistent with previous studies.



**Table 3** Act of micro aggression.

Acts of micro aggression					
Micro aggression	Gender		Total N=	Percent %	p value
	Male	Female			
<i>Acts of discrimination</i>					
Yes	36	68	104	61%	0.059
No	32	33	65	38.5%	
<i>Passive aggressive behavior</i>					
Yes	55	81	136	80.5%	0.921
No	13	20	33	19.5%	
<i>Invalidation of an opinion</i>					
Yes	54	70	124	73.4%	0.145
No	14	31	45	26.6%	
<i>Loss of learning opportunities</i>					
Yes	39	57	96	57.1%	0.964
No	29	43	72	42.9%	
<i>Sexist humor</i>					
Yes	15	39	54	32.1%	0.021
No	53	61	114	67.9%	

**Table 4** Which emotion do you mostly resonate with during experiencing a micro aggression.

Emotion	Gender		Total N=	Percent%
	Male	Female		
<i>Which emotion do you most frequently resonate with during experiencing a micro aggression</i>				
Anger	23	34	57	33.7%
Feeling of being minimized	13	19	32	18.9%
Feeling of injustice	11	17	28	16.6%
Feeling of being objectified	2	6	8	4.7%
Sadness	11	14	24	14.2%
Vulnerability	5	7	12	7.1%
Powerlessness	4	4	8	4.7%
<i>p value = 0.980</i>	68	101	169	100%

It is worth mentioning that the sample size was small which is insufficient to provide an accurate representation of the whole region. Microaggressions can have a significant impact on individuals and create a hostile environment, even if they seem minor. It's important to continue raising awareness about micro aggressions and addressing them when they occur. Additionally, the most common act of micro aggressions experienced was found to be passive aggressive behavior followed by invalidation of an opinion. Even though sexist humor was the least reported micro aggression, it was the only form with significant relation to gender  $p=0.02$ . Interestingly, a very high proportion of the participants (40.2%) were not aware of the term "micro aggression" at the time they participated in this study. This finding suggests that it's crucial to increase awareness about micro aggression and conduct more research to identify potential interventions and solutions that can minimize the

incidence of micro aggressions in healthcare institutions in Saudi Arabia and the Middle East region.

The most striking finding in this paper is that there has been no significant difference related to demographics for experiencing a micro aggression. These rather unexpected finding could be due to unequal distribution of the survey amongst all types of healthcare providers were most of them were physicians and amongst the younger age group. The study revealed that the incidence of micro aggressions was highest in surgical and surgical subspecialties followed by emergency medicine, which is in line with similar studies<sup>9-11</sup> from other regions outside the Gulf/ME area where they also documented micro aggressions and implicit bias in surgical training, where the majority of respondents reported experiencing micro aggression. This finding could suggest that physicians from other departments and faculties face similar rates of micro aggression.

**Table 5** Gender-based bias stratified by gender.

Gender-based bias	Gender		Total
	Male	Female	
<i>The tasks assigned to me by my superiors were reduced simply because of my gender</i>			
Never	43	62	105
Rarely	8	15	23
Sometimes	7	14	21
Often	6	7	13
Always	4	3	7
<i>p value = 0.783</i>			
<i>Patients or their family members have shown less trust in me because of my gender</i>			
Never	48	53	101
Rarely	4	18	22
Sometimes	14	9	23
Often	2	12	14
Always	0	9	9
<i>p value = 0.000</i>			
<i>Healthcare providers have shown less confidence in my credibility because of my gender</i>			
Never	48	56	104
Rarely	8	19	27
Sometimes	5	12	17
Often	5	7	12
Always	2	7	9
<i>p value = 0.305</i>			
<i>Experienced inappropriate verbal exchange directed to my gender</i>			
Never	41	35	76
Rarely	11	25	36
Sometimes	10	20	30
Often	3	14	17
Always	3	7	10
<i>p value = 0.17</i>			
<i>Being assigned to non-clinical duties compared to opposite gender</i>			
Never	35	40	75
Rarely	6	17	23
Sometimes	10	10	20
Often	9	18	27
Always	8	16	24
<i>p value = 0.286</i>			
Total = 169			

Another key finding in this study is that there was no significant difference between experiences of gender-based bias in relation to gender. These results reflect those of previous researchers<sup>14,15</sup> where it has been acknowledged that there exists a gender disparity in the field of medicine, and both men and women encounter, observe, and are affected by prejudice and discriminatory behavior based on gender in their work environment.

Numerous researchers have documented the negative effects of micro aggression.<sup>12,28</sup> This study's results are consistent with these findings, as individuals who have encountered micro aggression reported having gone through emotions of anger, feeling of minimized, feeling of injustice and sadness. However, a further study with more focus on investigating the psychological effect micro aggressions

have on the quality of working environment is essential. Medical organizations must recognize the far-reaching effects of micro aggressions and work to eradicate them through strong preventive measures. The occurrence of micro aggressions could contribute to the additional mental burden that healthcare providers face every day as they carry out their duties in a clinical setting that is both high-stress and high-acuity.

Although most participants experienced micro aggression, very few complained or formally reported about it to a superior or the offender and this finding was similar to that of previous studies<sup>11,14</sup> as very few respondents reported a micro aggression and the commonest reason was that they believed nothing will be done. According to these data we can infer that formal reporting alone cannot solve all

problems for micro aggressions and interventions to empower healthcare workers to confront them is crucial where it is possible that team dynamics and the relationship between patient and doctor could be detrimentally affected.<sup>19</sup> Institutional efforts should be made to address the issue of diversity, equity, and inclusion in healthcare through various initiatives. For example, many medical schools and healthcare organizations are incorporating diversity and inclusion into their curricula. The goal of such an approach is to raise awareness of issues related to implicit biases and equip healthcare providers with valuable skills and strategies to provide care that is culturally responsive and sensitive to the unique needs of individuals from different backgrounds.

## Strengths and limitations

This is the first study to address and highlight the existence of Microaggressions among healthcare professionals in Saudi Arabia and the Middle East. It emphasizes how common this problem is in our healthcare system. The representation of different types of healthcare working across most specialties further strengthens the study. However, this research did not investigate the specific circumstances behind the microaggressions reported, and it's possible that some of the incidents classified as microaggressions could actually be more accurately categorized as macroaggressions, or overt discriminatory acts. In addition, we did not query all potential variables that may inform other types of microaggression experiences. As well as this study was retrospective and the responses are subject to recall bias.

## Conclusion

The pervasiveness of microaggressions among healthcare workers has brought attention to the urgent need for developing effective strategies to manage these occurrences. Firstly, its essential to develop comprehensive training programs and workshops to educate healthcare workers about microaggressions through cultural sensitivity training and implicit bias training as it is important to raise awareness about and provide insight to colleagues who may not be aware of them so we can create a supportive and inclusive learning and working environment for healthcare professionals and patients. Secondly, the findings in this paper calls for the need to establish clear reporting channels and protocols for healthcare workers to report incidents of microaggressions while encouraging a safe and confidential environment where individuals feel comfortable reporting such incidents without fear of retaliation. Besides, more research should be undertaken to explore mechanisms to empower healthcare workers to intervene when they witness microaggressions by providing them with the necessary tools and training. This can help in developing evidence-based interventions and strategies to address this issue more effectively in order to promote a professional and learning environment that is conducive to personal growth and quality patient care. Therefore, it's imperative to conduct further research on this topic in other Arab countries to develop intervention and preventive measures that can effectively curb the impact of microaggression. Discussions surrounding bias can be

challenging, but it's critical to maintain a dialogue. Lastly, we hope this perspective stimulates awareness and provide insight to colleagues who are unaware of them.

## Ethical approval

The study was conducted under the title "An Obscured obstacle: Prevalence and Nature of Micro aggressions amongst healthcare professionals" and was approved by Ibn Sina National College Research Review Board Institutional Human Ethics Committee with ethical approval IRRB-02-26022023 along with the protocol identification number 009MP27012023.

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## Conflict of interest

We have no conflict of interest to declare.

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