

Attitudes toward the use of gender-inclusive language among residency trainees

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Abstract

Objective: To explore postgraduate medical trainees' attitudes toward the use of gender-inclusive language.

Design: Self-administered questionnaire.

Setting: Seven residency training programs at McMaster University, Hamilton, Ont., from July 1993 to June 1994.

Participants: Of 225 residents in the programs, 186 responded to the survey, for a response rate of 82.7%. Men and women were equally represented among the respondents.

Outcome measures: Categorization of attitudes about the use of language as gender-inclusive or gender-exclusive; characteristics predicting a gender-inclusive attitude.

Results: Factor analysis and Cronbach's α (0.90) supported the existence of a construct related to attitudes about language use, the poles of which were categorized as gender-inclusive and gender-exclusive. The authors classified residents with respect to their attitudes to language use from their responses to the questionnaire. In univariate analyses, sex, residency program and country of graduation significantly predicted a gender-inclusive attitude ($p < 0.01$). Only the first 2 variables were significant in a multivariate model; residency program explained 18% of the variance and sex 3%. Residents in obstetrics and gynecology and psychiatry had the most gender-inclusive attitudes, whereas residents in surgery and anesthesia had the most gender-exclusive attitudes.

Conclusions: Residents' values are reflected in the language they choose to use. Language use may provide an index of underlying attitudes that may create hostile environments for female trainees.

Résumé

Objectif : Explorer les attitudes des stagiaires en médecine au niveau postdoctoral à l'égard de l'utilisation d'une langue non sexiste.

Conception : Questionnaire à remplir soi-même.

Contexte : Sept programmes de résidence à l'Université McMaster, à Hamilton (Ont.), de juillet 1993 à juin 1994.

Participants : Sur 225 résidents des programmes, 186 ont répondu à l'enquête, ce qui donne un taux de réponse de 82,7 %. Les hommes et les femmes étaient représentés également chez les répondants.

Mesures des résultats : Établissement de catégories d'attitudes au sujet de l'utilisation d'une langue non sexiste ou sexiste; caractéristiques permettant de prédire une attitude non sexiste.

Résultats : L'analyse des facteurs et le coefficient α de Cronbach (0,90) ont appuyé l'existence d'une hypothèse liée aux attitudes en ce qui concerne l'utilisation de la langue, dont les pôles étaient la langue non sexiste et la langue sexiste. Les auteurs ont classé les résidents en fonction de leurs attitudes face à l'utilisation



Evidence

Études

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de la langue à partir de leurs réponses au questionnaire. Dans des analyses univariées, le sexe, le programme de résidence et le pays d'origine du diplômé étaient des prédicteurs importants d'une attitude non sexiste ($p < 0,01$). Seules les 2 premières variables étaient significatives dans un modèle multivarié; le programme de résidence a expliqué 18 % de la variance et le sexe, 3 %. Les résidents en obstétrique-gynécologie et en psychiatrie étaient les moins sexistes, tandis que les résidents en chirurgie et en anesthésie étaient les plus sexistes.

Conclusions : Les valeurs des résidents se reflètent dans la langue qu'ils décident d'utiliser. L'utilisation de la langue peut fournir un indice des attitudes sous-jacentes qui peuvent créer des environnements hostiles pour les stagiaires de sexe féminin.

The choice of language has an impact on the connotations of any message. In the use of language referring to sex, one can distinguish between "generic" or "unmarked" terms, which can refer either to women or men, and "marked" words, which are used exclusively for 1 sex. "She" is marked for the female sex whereas, traditionally, "he" can be unmarked, in that "he" can refer to groups of men and women.^{1,2} For instance, in referring to an undefined or typical physician, one may comment that "he will examine the patient." The physician, in this traditional usage, may be either a woman or a man. However, when masculine words are used as generic terms they evoke predominantly male images.³⁻⁹ The goal of using generic words is to make listeners or readers think equally of women and men; in this aim, masculine words sometimes fail.

Choices of generic terms are changing. Some societies have acknowledged the oppression of women and taken measures to curtail discrimination. Feminists have argued, with considerable success, that the generic use of male terms reflects and promotes the view of women as peripheral and their relative exclusion from positions of power.¹⁰ As a consequence, "humanity" or "humankind" has tended to replace "man" or "mankind" as a generic word; "chair" or "chairperson" has sometimes replaced "chairman."¹¹

Not everyone agrees with the desirability of substituting sexually neutral, inclusive terms for the traditional unmarked words. The historical preponderance of men entering medicine has changed, but some specialties still attract mainly men (although others attract equal numbers of men and women, and some have a majority of women), and men continue to hold most leadership positions in academic and professional medical organizations.^{12,13} In this environment of changing beliefs and behaviour, we were interested in how postgraduate medical trainees view the use of language that bears on gender issues. In particular, we wished to explore the relation between general underlying attitudes and specific issues in the use of language, and whether residents' views differed according to their sex and residency program.

Methods

Questionnaire development

We included questions related to language use in a questionnaire dealing with emotional and psychologic abuse and various forms of discrimination in the workplace. The questionnaire was developed in several stages. An investigator focus group generated candidate items, which were augmented through the use of data from a search of MEDLINE from 1966 to 1995 with the use of text words "stress," "career," "medicine" and "women." We also searched with the use of text and key words from relevant articles in our files, which we had previously found to be a useful searching strategy.

We pretested a draft questionnaire with a house-staff member from each training program, and, based on their feedback, modified the questionnaire accordingly. The McMaster residency program directors reviewed and approved the questionnaire. The questions about language use followed a section containing questions about the demographic characteristics of respondents and preceded questions about abuse and discrimination in residency training programs, the results of which have been published in this journal.¹⁴

We asked residents to rank 15 examples of language use on a 4-point scale in which 1 was "very inappropriate," 2 was "somewhat inappropriate," 3 was "slightly inappropriate," and 4 was "appropriate." We postulated that these items represented an underlying construct, the poles of which we called "gender-inclusive" and "gender-exclusive." A person at the gender-exclusive pole would consider the use of "chairman," the default pronoun "he," and the use of "girls" and "ladies" to refer to women as appropriate in all settings, whereas a person at the gender-inclusive pole would find these terms very inappropriate. We created a "language attitude score," which was the mean of the responses to these items. A person with a higher score would have attitudes to language that are more gender-exclusive, whereas a person



with a lower score would have more gender-inclusive attitudes.

We also asked residents to rank explicitly the extent to which they agreed with the statement "Inclusive, gender-neutral language should be mandatory in the workplace" on a 7-point Likert scale in which 1 was "strongly disagree" and 7 was "strongly agree."

Questionnaire administration

We identified all interns and residents enrolled in residency training programs at McMaster University during the academic year from July 1993 to June 1994. We administered the questionnaire at academic half days, then mailed the questionnaire to those not in attendance on those days. Residents who did not return completed questionnaires received up to 3 reminder letters with duplicate questionnaires. Individual responses were confidential, and questionnaire completion was voluntary.

Statistical analysis

We summarized continuous variables with means and standard deviations. We used Student's *t*-test to compare continuous variables and the χ^2 test to compare proportions and, after conversion to binary outcomes, the distributions of responses.

To verify the validity of our language attitude score, we conducted a principal-components factor analysis of the items that we hypothesized would be related. We calculated Cronbach's α for this score, reasoning that high inter-item correlations would support the language attitude score. To further validate the score, we calculated its correlation with the responses to the question about whether the use of gender-neutral language should be mandatory in the workplace.

We conducted univariate linear regression analyses in which the dependent variable was the language attitude score and the independent variables were age, years since graduation, sex, country of graduation, residency program and year of postgraduate training. We used dummy variables to represent the last 4 factors. We entered all of the variables into a stepwise multiple linear regression analysis that included the same dependent and independent variables.

Results

Respondents

Table 1 presents the response rates by specialty and sex as well as other characteristics of the respondents. The mean age of the respondents was 30.5 years (standard de-

viation 5.0), and the median age was 30 (interquartile range 27 to 33). Half of the respondents were women.

Questionnaire responses

In the principal-components factor analysis of the items related to the language attitude score, the unrotated solution showed that the first factor explained 43% of the variation, the second factor explained 15%, and all other factors explained less than 14%. Eight items (items 6 to 9 and 12 to 15 in Table 2) showed loadings of 0.7 to 1.0 on this first factor, and the other 7 items (items 1 to 5 and 10 and 11 in Table 2) showed loadings of 0.4 to 0.7. Only 4 items (8, 9, 14 and 15) showed loadings of greater than 0.5 on the second factor, and those 4 loadings were between 0.5 and 0.6.

Cronbach's α was 0.90. The correlation between the cumulative score of the 15 items and the response to the question about whether the use of gender-neutral language should be mandatory in the workplace (with which 47% of the residents agreed) was -0.56 .

The language attitude score was normally distributed, with a mean of 2.47 and a standard deviation of 0.65.

Table 1: Characteristics of respondents to questionnaire about use of gender-inclusive language

Characteristic	No. (and %) of respondents
Response rate	
<i>Program</i>	
Anesthesia	16/16 (100)
Family medicine	58/84 (69.0)
Internal medicine	39/39 (100)
Obstetrics and gynecology	15/17 (88.2)
Pediatrics	22/25 (88.0)
Psychiatry	21/26 (80.8)
Surgery	15/18 (83.3)
Total	186/225 (82.7)
<i>Sex</i>	
Female	93/114 (81.6)
Male	93/111 (83.8)
Women in programs	
Psychiatry	15/21 (71.4)
Obstetrics and gynecology	9/14 (64.3)
Family medicine	37/58 (63.8)
Anesthesia	7/15 (46.7)
Pediatrics	9/22 (40.9)
Internal medicine	12/39 (30.8)
Surgery	3/15 (20.0)
Graduates of Canadian medical schools	
Year of training	
Postgraduate year (PGY) 1	54/185 (29.2)
PGY 2	71/185 (38.4)
PGY 3	18/185 (9.7)
PGY 4	22/185 (11.9)
PGY 5 or greater	20/185 (10.8)



Table 2 shows the number and proportion of respondents who chose a score of 4 ("appropriate") or 3 ("slightly inappropriate") for each of the items.

The significant predictors of the language attitude score were the resident's sex, country of graduation and residency program (Table 3). Male sex, non-Canadian country of graduation and particular residency programs were associated with gender-exclusive attitudes. In the multivariate analysis only 2 variables remained significant. Residency program remained highly significant ($p < 0.0001$) and explained 18% of the variance, and sex had borderline significance ($p = 0.03$) and explained an additional 3% of the variance. Thus, the respondent's sex, al-

though significant as a univariate predictor, was a minor determinant of response because of its association with residency program (for example, in surgery, the program in which the respondents had the most gender-exclusive attitudes, only 20% of the residents were women).

Discussion

The results of our factor analysis and the high Cronbach's α supported our hypothesis that there is a single dominant factor related to residents' inclination to use gender-neutral, respectful language. We have called this construct "language attitude." Further support for our hypothesis comes from the strong relation between the language attitude score and the extent of the residents' support for the mandatory use of gender-neutral language in the workplace.

We found substantial differences between residents in their attitudes toward language use. Furthermore, residents in different programs had large differences in their attitudes. On a 4-point scale, residents in the surgical program had a mean score that was almost 1 whole point more gender-exclusive than the mean score for psychiatry residents (Table 2). In addition, the apparent effects of sex on attitudes (with women being more gender-inclusive and men more gender-exclusive) explain a much smaller proportion of the variance than does the program in which the residents work. In other words, a portion of the apparent effect of sex in the unadjusted analysis was actually related to the different distributions of women and men in the different programs. The women in the surgical program were almost as gender-exclusive as the men, and the men in the psychiatry program were almost as gender-

Table 2: Responses to language attitude items

Item	No. (and %) of respondents choosing "appropriate" or "slightly inappropriate"
1. Using the term "chairman" when the person is a man	158 (86)
2. Using the term "chairman" when the person is a woman	94 (51)
3. Using the term "chairman" when the person's gender is unknown	112 (61)
4. Using the default pronoun "he" when the person's gender is unknown	88 (48)
5. Using the default pronoun "she" when the person's gender is unknown	81 (44)
6. Women referring to other women in their professional capacity as "girls"	55 (30)
7. Men referring to women in their professional capacity as "girls"	28 (15)
8. Women referring to other women in their professional capacity as "ladies"	130 (71)
9. Men referring to women in their professional capacity as "ladies"	130 (71)
10. Referring to adult female patients as "dear"	28 (15)
11. Referring to adult male patients as "dear"	25 (14)
12. Women referring to men in their professional capacity as "boys"	39 (21)
13. Men referring to other men in their professional capacity as "boys"	54 (29)
14. Women referring to men in their professional capacity as "gentlemen"	142 (78)
15. Men referring to other men in their professional capacity as "gentlemen"	143 (78)

Table 3: Predictors of language attitude score, from univariate regression analyses

Independent variable	Mean*	p value
Age	-	0.83
Years since graduation	-	0.20
Sex		0.002
Female	2.32	
Male	2.62	
Country of graduation		0.007
Canada	2.41	
Other	2.75	
Year of postgraduate training	-	0.61
Residency program		< 0.0001
Surgery	3.02	
Anesthesia	2.85	
Pediatrics	2.75	
Family medicine	2.43	
Internal medicine	2.35	
Psychiatry	2.11	
Obstetrics and gynecology	2.08	

*Mean values of responses ranked on a 4-point scale in which 1 = very inappropriate, 2 = somewhat inappropriate, 3 = slightly inappropriate and 4 = appropriate.



inclusive as the women. We suspect that there are 2 related explanations for this: first, women and men choose specialties in which the prevailing environment is consistent with their own attitudes; second, both women's and men's attitudes are influenced by their training environment.

To the extent that the use of gender-exclusive language reflects or helps create an environment that is unwelcoming to women, our findings are a cause for concern. Surgical programs continue to enrol a much greater proportion of men than other medical specialties. One reason may be that, in their undergraduate exposure to surgical residency programs, women observe that the training environment in surgery is more hostile than that in other specialties. A survey of 105 medical students at Johns Hopkins University supports this explanation.¹⁵ None of the men surveyed, but 96% of the women, believed that surgery was unfavourable toward their sex. Of the women, 92% felt out of place on a surgical service; this was not true of any of the men.

Our study is limited in that we examined attitudes toward language use rather than language use itself. Respondents may have deliberately falsified their results, to be seen as sensitive or insensitive to women's issues. If this was the case, the differences in responses among residency programs would still require explanation, and different training environments would remain a very plausible explanation.

Conclusion

We have shown that residents differ systematically in their attitudes toward the use of respectful, gender-neutral language. Women in medicine continue to face obstacles that men encounter less frequently. Sexual harassment occurs while women are still students,¹⁶⁻²⁰ during residency training²¹ and once they have entered practice.²²⁻²⁴ Advancement comes more slowly to women who enter academic medicine, even after one takes into account difference in rates of publication.^{25,26} Men continue to hold most positions of power and authority in medicine.^{12,27} These issues have received limited discussion in the medical literature. If we wish to offer women equal opportunities in all specialties, educators must systematically address the culture of the academic environment and confront the attitudes that discount women and their contribution to health care.²⁸ Highlighting the implications of language choices and the underlying attitudes these choices may represent is one way of addressing this issue.

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