

Research

Open Access

## Gender and power: Nurses and doctors in Canada

Barbara Zelek and Susan P Phillips\*

Address: Department of Family Medicine, Queen's University

Email: Barbara Zelek - bzelek@hotmail.com; Susan P Phillips\* - phillip@post.queensu.ca

\* Corresponding author

Published: 11 February 2003

Received: 25 August 2002

Accepted: 11 February 2003

*International Journal for Equity in Health* 2003, **2**:1

This article is available from: <http://www.equityhealthj.com/content/2/1/1>

© 2003 Zelek and Phillips; licensee BioMed Central Ltd. This is an Open Access article: verbatim copying and redistribution of this article are permitted in all media for any purpose, provided this notice is preserved along with the article's original URL.

### Abstract

**Background:** The nurse-doctor relationship is historically one of female nurse deference to male physician authority. We investigated the effects of physicians' sex on female nurses' behaviour.

**Methods:** Nurses at an urban, university based hospital completed one of two forms of a vignette-based survey in January, 2000. Each survey included four clinical scenarios. In form 1 of the questionnaire the physicians described were female, male, female, and male. In form 2, vignettes were identical but the physician sex was changed to male, female, male, and female. Differences in responses to questions based on the sex of the physician in each vignette were studied

**Results:** 199 self-selected nurses completed the survey. The responses of 177 female respondents and 11 respondents who did not specify their sex, and were assumed to be female based on the overall sex ratio of respondents, were analysed. Persistent sex-role stereotypes influenced the relationship between female nurses and physicians. Nurses were more willing to serve and defer to male physicians. They approached female physicians on a more egalitarian basis, were more comfortable communicating with them, yet more hostile toward them.

**Conclusion:** When nurses and doctors are female, traditional power imbalances in their relationship diminish, suggesting that these imbalances are based as much on gender as on professional hierarchy. The effects of this change on the authority of the medical profession, the role of nurses, and on patient care merit further exploration.

### Background

The income, prestige, and authority of doctors in most western countries reflects their omnipotence amongst health care professionals and their power within our society. The power of physicians appears to arise from knowledge and social class. However, concurrent with the increasing number of women entering medicine, there has been a recent decrease in that power.[1] For example, a significant proportion of female family physicians reports being sexually harassed by male patients.[2] Sexual harassment is an abusive behaviour perpetrated by those with power on the more vulnerable. The victimization of

female doctors could only occur if the offending male patients saw their physicians as vulnerable women rather than powerful professionals, that is, if gender rather than professional role was the primary determinant of power in the relationship.

If female physicians are "women first" in the eyes of some male patients, do their overwhelmingly female nurse colleagues also view them through a gender lens? How will the increasing percentage of women in medicine change professional relationships between doctors and nurses? This study examines whether the traditional authority of

doctors over nurses is eroded when that authority arises solely from profession and not from gender.

Historically both the gendered role of nursing and the sex of nurses was almost exclusively female. The profession primarily attracted working class or immigrant women whose background fostered unquestioning obedience to authority. [3,4] The "doctor - nurse" game described by Stein (1967) indicated that despite the passage of time, roles had not changed substantially. By showing initiative and making important recommendations, while appearing to defer passively to the doctor's authority, nurses could avoid usurping physician power and thus deflect open disagreement.[5] Stein revisited the nurse-doctor game in 1990 and argued that nurses had unilaterally decided to stop playing. The change was, in part, attributed to an increasing number of female physicians and male nurses, both of whom were unable to play. [6] Nurses' recent overt refusal to be dominated by physicians is also a reflection of the decrease in power differentials between men and women in western society at large.

In contrast to nursing, the gender role and the practitioners of medicine one hundred years ago were male. Physician education emphasized scientific expertise, autonomy, and authority. [3,7] Although current medical education generally mentions teamwork and collaboration, the emphasis remains unchanged.

Many nurses and physicians still overtly and covertly resist the equalization of power that true teamwork requires. Salvage and Smith argue that while assertive nurses resent being put down by doctors, physicians resent being challenged by nurses.[8] Obstacles to collaboration include gendered thinking [9], different styles of learning, models of working, regulatory mechanisms [10], role ambiguity, and incongruent expectations.[11]

There is limited research on interactions between female nurses and doctors. Nurses generally experience greater satisfaction when communicating with female rather than male physicians [12] and prefer a female managerial style.[13,14] Women doctors are perceived to be less demanding and more consultative in their approach.[15] Nurses doubt that physicians' sex affects their behaviour, although some admit anger or disappointment when female physicians do not exceed the standards nurses set for male physicians.[15] They deny any sexual chemistry that favours male physicians, despite the female doctors' impression to the contrary. Some female nurses describe female doctors in stereotypic terms such as "demanding", "domineering", and "bitchy".[16] Female physicians, on the other hand, resent both having to make extra efforts to be nice to nurses, and devising conscious strategies to cultivate egalitarianism and friendship. More than 80% feel

that at some time in their careers they have experienced unequal treatment [15,17], more intense scrutiny [18], or a lack of respect [19] from nurses because they (the doctors) were female. A recent Norwegian study examined the physician's perspective on what happens to the doctor-nurse relationship when both are women. Both male and female physicians thought the relationship was influenced by the doctor's gender. Female doctors perceived that they received less respect or help than did their male colleagues. The physicians interpreted this in two ways, thinking that either nurses' wishes to reduce status differences between nurses and physicians affect female doctors more than male, or that there is an "erotic game" taking place between male doctors and female nurses.[20]

### Method

Hypothesizing that the sex of the physician could affect nurses' behaviour, we examined differences in the interaction between female nurses and female and male physicians. A self selected population of nurses working in an urban, university based hospital was asked to complete one of two forms of a three page questionnaire in Jan. 2000. The questionnaire included four clinical vignettes reflecting some previously identified areas of strain in the doctor nurse relationship.[15] In form 1 of the questionnaire the physicians described were female, male, female, and male. In form 2 they were male, female, male and female. Scenarios were otherwise identical and described common hospital activities. Participants were asked five point Likert type questions about nurse physician interactions, their expectations, probable actions, and feelings about the physicians. Open-ended comments have been noted and quoted, but were not quantified.

The questionnaire was pre-tested amongst a small group of hospital nurses to assess face and content validity. Criterion validity could not be tested as no appropriate standard exists.

Letters explaining that the accompanying study's aim was to examine teamwork in a hospital setting, that participation was voluntary, and that responses would be confidential were left at all patient care planning areas (nursing desks) of the hospital. Registered nurses were invited to complete the questionnaire. All surveys left at a specific patient care planning area were of the same form. The two survey forms were randomly distributed among hospital floors. Nurses were asked to return questionnaires, whether completed or not, to an identified collection envelope, and to complete only one questionnaire.

Following the final collection date, letters explaining that responses to the two forms of the questionnaire would be compared to identify differences in interactions between

nurses and physicians based on the doctor's sex, and describing the "nurse-doctor game" were distributed.

Data were analysed using SPSS 9.0. The analysis compared the responses to each question based on the sex of the physician in the particular vignette (ie responses to form 1 and form 2 of the questionnaire). Pearson chi-square analysis was used to test for statistical significance ( $p < 0.05$ ). In addition, a descriptive analysis was performed on the comments made by respondents.

This study was approved by the Queen's University Health Sciences Ethics Review Board.

## Results

Of the three hundred surveys printed, 265 were taken, 197 were returned completed, 2 were returned with no responses, and 66 were not returned. The overall response was 74% (199 of 265 taken) and included approximately 22% of the 900 nurses employed by the hospital.

The nurses' ages ranged from 21 to 63 years. The inpatient nursing specialties were broadly represented amongst the 95% ( $n = 177$ ) who indicated they were female, the 5% ( $n = 9$ ) who were male, and the 11 respondents who did not specify. Based on the overall sex ratio of respondents these 11 were assumed to be female and included in the analysis. Responses from men were excluded, leaving 188 surveys for inclusion (95 surveys of form 1 and 93 of form 2).

In the first vignette a physician leaves a suture tray with needles at the bedside, despite a department policy assigning cleanup responsibility to the user of any "sharps". Female nurses expected physicians of either sex, to dispose of the needles (85.3% – female physician, 86.0% – male physician,  $p = 0.97$ ) but were significantly less likely to remove the needles for female physicians ( $p < 0.05$ ). Nurses' expectations of, and conflicts with physicians varied by sex. Those surveyed were more likely to feel indifferent about a male physician, and negative about a female physician when the nurse ultimately removed the needles herself ( $p < 0.01$ ).

In vignette two, the nurse was interrupted while checking a patient's vital signs and asked to do the same check on the doctor's patient. Nurses were equally unlikely to immediately stop and help a female or male physician ( $p = 0.69$ ). However assertive requests by physicians were more likely to be acted upon if the physician were male ( $p < 0.03$ ) despite near universal resentment of this aggression (80% toward females, and 77% toward males,  $p = 0.89$ ). When physician requests for help were polite, nurses felt positive toward both male and female physicians (68.5% toward females, and 65.1% toward males,  $p =$

0.33) but, as in vignette 1, were less likely to help the female physician ( $p = 0.17$ ).

The third vignette described a nurse and physician caring for an unresponsive newborn. The nurse wonders if the physician remembers that the mother received meperidine (a medication that could depress the baby's breathing and that could be reversed by giving the baby naloxone) two hours previously. Nurses were more likely to suggest to the physician that the newborn needed naloxone, (99% were likely or very likely to suggest to female physicians and 97.8% for male physicians,  $p = 0.24$ ), than they were to tell the physician that the newborn needed naloxone (31.8% were likely or very likely to tell a female physician and 26.1% for a male physician,  $p = 0.21$ ). Again, though not statistically significant in this case, there was a trend for nurses to be more forward with female doctors. They were less likely to wait for a female doctor to make her own decision about giving naloxone ( $p = 0.15$ ), and more likely to suggest ( $p = 0.21$ ) or tell ( $p = 0.20$ ) the female doctor to give the medication. Nurses also expected female doctors would respond more positively to their suggestions ( $p < 0.04$ ).

In the final vignette a doctor on call has just gone to sleep in her/his call room. Nurses were asked if they would call the physician for an acetaminophen (an analgesic) order. Responses to all questions lacked statistical significance. There was, however, a consistent and contrary trend to that observed in the other scenarios. Nurses were less likely to call a female physician than a male, regardless of whether the physician had given the nurse a complement earlier in the day ( $p = 0.24$ ), or had been rude earlier on ( $p = 0.63$ ). Nurses were more likely to feel that a male physician's anger was inappropriate ( $p = 0.39$ ). They were less comfortable approaching a female doctor to discuss her anger ( $p = 0.38$ ). In this vignette same sex, rather than opposite sex interactions may have been somewhat more cooperative.

## Discussion

In general, nurses' expectations of physicians of either sex were similar. Our findings suggest, however, that the process of, and feelings around nurse physician interactions are informed by gender stereotypes. In addition to professional hierarchy, gender appears to account for physicians' perceived power over nurses. Although physicians may well reinforce these same stereotypes this study did not examine their beliefs. Overall, nurses' behaviour was influenced by the sex of the physician.

In vignette 1, those surveyed expected both male and female physicians to remove needles left on a suture tray. They were, however, more willing to clean up after male physicians, and to do so with indifference rather than

with the hostility they directed toward female doctors. Findings that nurses are statistically less likely to remove needles for female doctors, and to feel somewhat more resentful toward female doctors for whom they have cleaned up, speaks to the primacy of sex over hierarchy in defining the doctor nurse relationship. Perhaps nurses feel role confusion because female physicians do not fit into their learned male stereotypes, and instead better fit into traditionally female roles such as "cleaner". These results corroborate Pringle's subjective findings that nurses do more for male physicians and expect more of female physicians.[15]

That nurses were unlikely to drop everything to assist either a male or female physician take a blood pressure is consistent with the increasing autonomy of the nursing profession. Assertive physician requests met with resistance from these increasingly confident nurses who commented, "Many times doctors feel they have the right to interrupt with little to no consideration for the RNs. They feel their job is more important!" and, "She is perfectly capable of doing vital signs." Pleasant requests for nursing help were more effective. Again, however, sex role stereotypes appeared to enter the relationship as nurses accepted aggressive male behaviour and acquiesced more readily to male requests for help.

Responses to the third scenario suggest that the 'doctor-nurse game' [5,6] is alive and well. Nurses deferred to the physicians' status despite knowing what was medically necessary, and would suggest, but not dictate, treatment for the unresponsive baby. As one respondent wrote, "I would be more likely to phrase it in a way that would make him feel in control." Nevertheless, there was again more deference to the authority of male doctors.

In the final vignette, respondents showed a non-significant trend toward a more kindly association with female than male physicians. At first this would seem contrary to the preceding findings. This vignette, however was the only one of the four requiring a nurse to initiate, rather than respond to an action. Perhaps nurses are hostile and reactive to female physicians in situations where their expectations (often based on sex stereotypes) are not met, such as when women fail to clean up after themselves. However, when the nurse is in control, her less hierarchical relationship with another female, despite the power differential of profession, may foster collegiality.

When doctors and nurses are both female, elimination of the power differential of gender diminishes nurses' perceptions of professional power inequalities. As a result, female nurses appear more comfortable approaching and communicating with female doctors, but are also more hostile toward female physicians' use of medical authori-

ty. These paradoxical behaviours will confuse female physicians if they view themselves as doctors first, rather than as women, and expect nurses to interact with all physicians equally. As females these same physicians may anticipate appreciation for their increased collaboration and egalitarianism, and not understand the nurses' confusion at the lack of traditional professional hierarchy. Perhaps the perception that female physicians are more caring and compassionate than their male counterparts creates conflicts with nurses, who define caring as their function, and may feel their role in health care delivery is threatened by women physicians.[21]

In general, the nurses surveyed said they would resist being controlled by physicians. This decrease in the power of medicine over nursing is concurrent with an increase in the number of women physicians in North America. Although the feminization of medicine could diminish the power and prestige of all physicians within the health care system, our findings suggest that nurses are more resistant to domination by female, rather than male doctors. Changes in power differentials between medicine and nursing appear to be shaped by gender, suggesting that the traditional omnipotence of physicians in the health care hierarchy arose from gender roles, and not solely from profession.

#### Study Limitations

Written responses may define socially desirable values rather than actual behaviours in clinical situations, however the hostility toward physicians expressed in many of the nurses' written comments (not reported here) mitigates against this concern. Because the study was limited to hospital nurses and the scenarios were hospital based, results may not be generalisable. As with any study in which participants are self-selected rather than randomly surveyed, selection bias is possible. Our relatively high response rate (74%) minimizes, but does not preclude this limitation.

#### Conclusion

Historically, the power held by a predominantly male medical profession may have arisen primarily from gender rather than from hierarchical position. Current relationships between doctors and nurses appear to be shaped by gender as well as by profession. When nurses and doctors are female the traditional power imbalance between the two diminishes. The effects of this change on the authority of the medical profession, the role of nurses, and on patient care remain undefined.

#### References

1. Riska E **Towards gender balance: but will women physicians have an impact on medicine?** *Soc sci med* 2001, **52**:179-187
2. Phillips SP and Schneider M **Sexual harassment of female doctors by patients.** *N Engl J Med* 1993, **329**:1936-1939

3. Ehrenreich B and English D **Witches, Midwives and Nurses: A History of Women Healer.** New York: Feminist Press 1972,
4. Peplau HE **Nurse-doctor relationships.** *Nursing Forum* 1999, **5(1):**60-75
5. Stein LI **The doctor-nurse game.** *Arch Gen Psychiatry* 1967, **16:**699-703
6. Stein LI, Watts DT and Howell T **The doctor-nurse game revisited.** *N Engl J Med* 1990, **322:**546-549
7. Kalisch BJ and Kalisch PA **An analysis of the sources of physician-nurse conflict.** *J of Nursing Admin* 1977, 51-57
8. Salvage J and Smith R **Doctors and nurses: doing it differently.** *BMJ* 2000, **320:**1019-1020
9. Davies C **Getting health professionals to work together.** *BMJ* 2000, **320:**1021-1022
10. Doyal L and Cameron A **Reshaping the NHS workforce.** *BMJ* 2000, **320:**1023-1024
11. Hojat M, Fields SK, Rattner SL, Griffiths M, Cohen MJM and Plumb ID **Attitudes toward physician-nurse alliance: comparisons of medical and nursing students.** *Academic Medicine* 1997, **72(10):**S1-S3
12. Glenn TH, Rhea J and Wheelless LR **Interpersonal communication satisfaction and biologic sex: nurse-physician relationships.** *Communication Research Reports* 1997, **14(1):**24-32
13. Baird JE and Bradley PH **Styles of management and communication: A comparative study of men and women.** *Communication Monographs* 1979, **46:**101-111
14. Camden CT and Kennedy CW **Manager communicative style and nurse morale.** *Human Communication Research* 1986, **12:**551-563
15. Pringle R **Nursing a grievance: women doctors and nurses.** *Journal of Gender Studies* 1996, **5(2):**157-168
16. Tellis-Nayak M and Tellis-Nayak V **Games that professionals play: the social psychology of physician-nurse interaction.** *Soc Sci Med* 1984, **18(12):**1063-1069
17. Pringle R **Sex and medicine: gender, power and authority in the medical profession.** Cambridge, Cambridge University Press 1998, 184-201
18. Firth-Cozens J **Sources of stress in women junior house officers.** *BMJ* 1990, **301:**89-91
19. Tannen D **Talking from 9 to 5: How women's and men's conversational styles affect who gets heard, who gets credit, and what gets done at work.** New York, William Morrow and Company Inc 1994, 123-124
20. Gjerberg E and Kjolsrod L **The doctor-nurse relationship: how easy is it to be a female doctor co-operating with a female nurse** *Soc Sci Med* 2001, **52(2):**189-202
21. Riska E and Wegar K **Gender, work and medicine: women and the medical division of labour.** London, Sage Publications Ltd. 1993, 103

Publish with **BioMed Central** and every scientist can read your work free of charge

"BioMed Central will be the most significant development for disseminating the results of biomedical research in our lifetime."

Sir Paul Nurse, Cancer Research UK

Your research papers will be:

- available free of charge to the entire biomedical community
- peer reviewed and published immediately upon acceptance
- cited in PubMed and archived on PubMed Central
- yours — you keep the copyright

Submit your manuscript here:  
[http://www.biomedcentral.com/info/publishing\\_adv.asp](http://www.biomedcentral.com/info/publishing_adv.asp)

