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Cover Page Footnote

Acknowledgement: We would like to thank students from COMM 2320 during the 2013-14 academic year for their help in the data collection.

Female and male patients' perceptions of primary care doctors' communication skills in Hong Kong

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Abstract

This study examined how female and male patients perceive primary doctors' communication skills in the Chinese context. To do so, this study specifically investigates female and male patients' general perceptions toward primary care doctors' communication skills in medical consultations. Specifically, this study focused on (a) female and male patients' satisfaction level toward primary care doctors' communication skills in medical consultations (b) female and male patients' perception of the types of verbal and nonverbal communication skills applied by primary care doctors in medical consultations (c) as well as which gender of doctors with whom patients prefer to communicate during primary care medical consultations in Hong Kong. A purposive sampling survey of Hong Kong residents aged 18 or older was conducted in April 2014. A total of 450 completed questionnaires were received. All respondents have visited a public hospital for outpatient service in the past 2 years. Results showed that there were no patient gender differences in patients' perceptions of doctors' communication skills, both female and male patient respondents showed a preference for same-gender doctors. Interestingly, in contrast with prior research, male patient respondents in this study revealed a stronger preference for doctors of the same gender than female patient respondents did. Other differences, such as cultural norms, values and practices, rather than just gender differences, may account for patients' perceptions of doctors' communication skills.

Keywords

Patient experience, patient satisfaction, healthcare, communication

Acknowledgement

We would like to thank students from COMM 2320 during the 2013-14 academic year, for their help in the data collection.

Background

Roter and Hall suggested, "talk is certainly the fundamental instrument by which the doctor-patient relationship is crafted and by which therapeutic goals are achieved."^{1(p4)} Therefore, doctor-patient communication remains a main ingredient in healthcare service. However, most doctors' medical school communication skills do not highlight the differences in communicating with female and male patients.⁴² As a result, many doctors communicate with both genders similarly. Indeed, women and men may not think, communicate verbally or nonverbally, or emote the same way.² Differences exist regarding expectations and communication between women and men; thus, it is potentially erroneous to make broad generalizations when communicating with patients, and it would also be a mistake to assume that both genders respond to medical information and situations similarly.

It is important to consider gender differences and both genders' unique needs when communicating with patients.³ Understanding those variances can be vital to doctors' success in providing healthcare to this important segment of the population and help them ensure that they

are connecting with different patients in their practice. Doctors must reassess their approach to the provision of medical care to women and men and contemplate a change of strategy to communicate with these two segments of their practice.

A large body of literature has investigated how female and male doctors communicate with their patients.^{4,5} Although the results are mixed, many studies indicate that female doctors are more humanistic and have better communication skills than male doctors in general. For example, Roter and her colleagues found that female doctors engage in more positive talk (e.g. use of nodding, facilitators and back channels),⁶ ask more psychosocial questions, discuss emotions more, and demonstrate more partnership-building behaviors.⁷ Along the same line, another study found that female doctors tend to engage in more partnership building, provide more information, and are more psychosocially oriented.⁸ Several studies also reported that female doctors conduct longer consultations than their male counterparts.^{6,7} More recently, researchers have found that female doctors' communication was rated as more empathic than men's.⁹

With consideration for the aforementioned references, the majority of the study is based on third-person interpretation (i.e. the researchers themselves); the way women and men perceive their patient experiences received comparatively little attention. As Gabbard-Alley asserted, "patient gender was one of the variables first discarded in research designs in studies concerned with communication, compliance, satisfaction, and their elation with health care."^{10(p.36)} Yet, among those prior studies that examine gender differences in patient experiences, very few studies have primarily examined outpatient experiences in general.^{11,12} Prior studies have identified that male patients are generally focused on specific aspects of outpatient care, such as equipment defects, the doctor, and waiting times,^{13,14,15} while some reported that female patients are more likely to express dissatisfaction with nursing care and staff attitude.^{16,17} Also, a study conducted by Williams revealed that female patients place greater emphasis than male patients on the quality of interpersonal interaction they have with their doctors.¹⁸ These studies' results showed that female patients tend to focus on the degree to which the doctors provide them with sufficient information when requested, whether the doctor values their opinions and respects their intelligence, and the comfort level they experience with the doctors. Such results parallel the findings from Hall and her colleagues' study that female patients are more satisfied with their female doctors when they use more psychosocial problem talk.⁶ On the other hand, male patients place greater emphasis on factors such as the doctor's possession of the latest medical equipment and location in a facility with convenient access to other needed specialists.

However, the limitations of the above studies include partial investigation and analysis on how doctors manifest their communication skills in doctor-patient interactions from the perspectives of both female and male patients. Doctor-patient communication is of great importance to healthcare delivery, since it represents the principal means of exchanging information. Therefore, it is vital to understand what kind of communication from doctors is more appealing to female and male patients that may affect the way they receive and respond to medical information.

Although many healthcare professionals and scholars readily acknowledge that the most successful healthcare begins with productive communication between doctors and patients, achieving effective communication has become more challenging than ever in today's healthcare environment, especially in Hong Kong. In this city of more than seven million people,¹⁹ limited consultation time, heavy patient load, and complicated health care system are some of the major issues that impede effective communication between doctors and patients.⁴³

In Hong Kong, many people visit the general outpatient clinics (GOPCs) of public hospitals to receive primary

healthcare services. According to the Hospital Authority Statistical Report for 2012-13, more than 5.6 million people visited a GOPC during that time period.²⁰ On average, therefore, more than 15,000 visitors per day required service from general doctors during that single year alone. Due to this high consumption of outpatient clinical services, it is critical that these facilities ensure and maintain effective healthcare services. However, the Hong Kong GOPC doctors working within a shift system. Most of the time, patients cannot consult with the same doctor between separate visits. Therefore, each individual may have preferences (e.g. seeing a doctor of the same gender) that cannot be fulfilled due to shortages of some kind, such as the availability of medical staff. This makes it difficult to build and/or maintain strong doctor-patient relationships.

Echoing prior research, this study asserts that doctors and patients who are consistently effective in communicating can achieve better health outcomes, higher patient compliance, increased doctor and patient satisfaction, and decreased malpractice risk.²¹ Unfortunately, in the Hong Kong context, relatively little detailed documentation has been created concerning how patients perceive their doctors' communication skills. As Cline and McKenzie argued, "viewing gender, age, and ethnicity as cultural phenomena provides guidance for conducting programmatic research into each area as a source of difference that influences interaction."^{22(p.72)} This study, therefore, begins to fill this gap by investigating how female and male patients perceive primary care doctors' communication skills during medical consultations.

Research objectives

Within the analysis of how female and male patients perceive their doctors' communication skills among primary care consultations in Hong Kong, this study proposed four research objectives:

- To examine female and male patients' general perceptions toward primary care doctors' communication skills in medical consultations
- To examine female and male patients' satisfaction level toward primary care doctors' communication skills in medical consultations
- To investigate female and male patients' perception of the types of verbal and nonverbal communication skills applied by primary care doctors in medical consultations
- To explore which gender of doctors with whom patients prefer to communicate during primary care medical consultations in Hong Kong.

Methodology

Subjects

A purposive sampling survey of Hong Kong residents aged 18 or older was conducted in April 2014. Forty-five students in a communication research method class in a public university in Hong Kong were asked to invite friends to answer a questionnaire. Each student was requested to recruit 10 respondents from the age groups of 18-29, 30-39, and 40 or older. A total of 450 completed questionnaires were received. All respondents have visited a public hospital for outpatient service in the past 2 years.

This study represents an even distribution of male and female respondents. About 57% of respondents were aged 18-29, followed by respondents who were aged 30-39 (23%). About 20% of respondents were aged 40 or older.

Measures

The questionnaire was divided into four main parts. In the first part, nine attitudinal statements exploring respondents' general perception toward primary care doctors in medical consultation were presented. All of the

the subscale for verbal communication was .55. Three items were reverse coded. The Cronbach's alpha of the subscale for non-verbal communication was .69.

Finally, demographic information such as age and gender was collected.

Findings

Patients' general perceptions toward primary care doctors' communication skills in medical consultations

Respondents were very positive toward primary care doctors and their communication skills. All attitudinal statements had mean scores that differed significantly from the median split. In general, they believed that primary care doctors in Hong Kong are polite ($M = 3.7$), patient ($M = 3.4$), and professional ($M = 3.9$). They also described them as caring ($M = 3.4$) and trustworthy ($M = 3.7$). Table 1 summarized the results. However, the t-test results showed that there is no significant difference between male and female patients' perceptions of primary care medical consultations.

Table 1. Patients' general perceptions toward primary care doctors in medical consultations

	Mean	SD	t-value
In general, doctors in Hong Kong are professional.	3.9	0.7	25.0
In general, doctors in Hong Kong are polite.	3.7	0.7	21.0
In general, doctors in Hong Kong are trustworthy.	3.7	0.7	22.3
In general, my experience in medical consultation is satisfactory.	3.6	0.7	17.2
In general, doctors always satisfy my extra request(s) e.g., extra medication, medical certificate etc).	3.5	0.8	12.5
In general, doctors in Hong Kong are patient.	3.4	0.8	12.8
In general, doctors in Hong Kong are caring.	3.4	0.8	10.5
In general, doctors in Hong Kong are arrogant.	3.1	0.8	3.6
In general, doctors in Hong Kong only care about making profit.	3.0	0.9	1.63

Note: All variables are measured on a five-point scale with 5 = strongly agree; 1 = strong disagree; * $p < 0.05$

statements were measured on a five-point scale, with 1 indicating "strongly disagree" and 5 indicating "strongly agree." Two items were reverse coded. The Cronbach's alpha of this subscale was .78.

The second part asked five questions regarding the participants' satisfaction toward primary care doctors' consultation. All of the statements were measured on five-point scales, with 1 indicating "strongly disagree" and 5 indicating "strongly agree." The Cronbach's alpha of this subscale was .71.

In the third and fourth parts, respondents were asked to evaluate the types of verbal and nonverbal communication used in primary care doctors' consultation. A total of eighteen questions were asked. The Cronbach's alpha of

Patients' satisfaction level toward primary care doctors' communication skills in medical consultations

Patients' satisfaction toward primary care medical consultations is summarized in Table 2. All statements had mean scores that differed significantly from the median split. In general, respondents were highly satisfied with their primary care doctors' communication skills during consultation services. The majority of the respondents indicated that they would re-visit the same doctor the next time they seek medical advice ($M = 3.6$). Many of them would refer or recommend the same doctor to their friends and family members ($M = 3.5$). They believed that the doctors' consultation was worth the cost ($M = 3.3$). However, similar to perceptions toward primary care

Table 2. Patients' satisfaction toward primary care doctors in medical consultations

	Mean	SD	t-value
I will re-visit the same doctor next time when I need to seek for medical advices.	3.6	0.8	16.1
In general, I am satisfied with the advices given by doctors during consultation.	3.6	0.7	17.1
I will refer the doctors I trust to my friends and family members.	3.5	0.9	12.7
In general, medical consultations in Hong Kong worth the costs.	3.3	0.8	9.4
I will recommend the doctors I trust on some medical related forums (e.g., hk-doctor.com).	2.5	1.1	7.3

Note: All variables are measured on a five-point scale with 5 = strongly agree; 1 = strong disagree; * p<0.05

medical consultations, t-test results showed no significant difference in satisfaction between male and female patients toward primary care medical consultations.

Patients' perception of verbal and nonverbal communication skills used by primary care doctors in medical consultations

Table 3 summarized the evaluation of verbal communication skills used in medical consultations. Eight out of ten statements had mean scores that differed significantly from the median split. In general, respondents expressed the belief that doctors talk at an appropriate pace during consultations. During the consultations, respondents indicated that their doctors did talk in a friendly manner and they were clear in their explanation. Generally, this showed that doctors like to ask a lot of questions during consultation and they like to use encouraging phrases such as “go on” and “yes” during consultation.

Regarding the evaluation of nonverbal communication skills, five out of eight statements had mean scores that differed significantly from the median split. The results showed that doctors in Hong Kong maintained direct eye contact with patients during consultation. They listened to patients patiently and dressed like professionals. They were also punctual during consultation. Interestingly, doctors in

Hong Kong like to avoid social touch, such as patting their patients' shoulder. Table 4 summarized the results. T-test results reported no statistical difference between male and female patients' evaluation of both the verbal and nonverbal communication skills adopted in primary care medical consultations.

Doctors' gender preference primary care medical consultations

Results showed that about 60% of respondents prefer a male doctor for medical advice, while only 40% of respondents prefer a female doctor. Results also indicated a chi-square significant difference between male and female respondents regarding their preference for which gender of doctors they would prefer in medical consultation. Patients tended to prefer to have same-sex doctors during medical consultation. Among the female respondents, 39% of them preferred a male doctor, while 61% of them preferred a female doctor in medical consultation. Conversely, among the male respondents, a majority of them (about 79%) preferred a male doctor, while 21% of them preferred a female doctor in medical consultation.

Table 3. Patients' perception of verbal communication skills used by primary care doctors in medical consultations

	Mean	SD	t-value
In general, doctors are clear when they explain about my disease.	3.6	0.8	15.8
In general, doctors have good language skills.	3.6	0.8	18.0
In general, doctors always talk at an appropriate pace.	3.5	0.7	15.4
In general, doctors talk friendly.	3.5	0.8	15.2
In general, doctors like to use encouraging phrases, such as “keep on” and “yes” during consultation.	3.2	0.9	5.7
In general, doctors like to ask a lot of questions during consultation.	3.1	0.9	4.2
In general, doctors like to interrupt whilst I was describing my symptom.	3.1	0.9	2.6
In general, doctors like to talk in an indifferent tone.	2.9	0.8	0.4
In general, doctors like to use medical jargons during consultation.	2.9	0.9	0.8
In general, doctors like to dominate the conversation during consultation.	2.8	0.8	3.2

Note: All variables are measured on a five-point scale with 5 = strongly agree; 1 = strong disagree; * p<0.05

Table 4. Patients' perception of nonverbal communication skills used by primary care doctors in medical consultations

	Mean	SD	t-value
In general, doctors dress like a professional.	3.9	0.8	21.5
In general, doctors listen to me patiently.	3.5	0.7	15.7
In general, doctors maintain direct eye contact with me during consultation.	3.4	0.9	10.6
In general, doctors are punctual.	3.2	0.9	5.7
In general, doctors smile during consultation.	3.0	0.9	2.0
In general, doctors lean forward when they talk.	3.0	0.8	1.9
In general, doctors like to use various body languages (e.g., hand gesture, body touch) when they explain.	3.0	0.9	1.9
In general, doctors like to avoid social touch (e.g., tap my shoulder) during consultation.	2.5	0.8	10.9

Note: All variables are measured on a five-point scale with 5 = strongly agree; 1 = strong disagree; * $p < 0.05$

Discussion and implications of the study

This study aims to explore female and male patients' perception toward primary care doctors' communication skills in medical consultations in Hong Kong. Overall, respondents showed positive attitudes toward primary care doctors' communication skills. However, in line with prior studies that have examined gender differences in outpatient experiences, this study found limited differences according to patients' gender.^{11,12}

First, provided that female and male patients behave differently and that doctors also behave differently toward female and male patients based on different assumptions regarding gender,²³ both female and male respondents in this study consistently agree that primary care doctors in Hong Kong are "professional", "trustworthy", "polite", "patient", and "caring". Foss and Hofoss found that female patients were more likely to describe their doctors as caring (psychosocial-related), while male patients were more likely to perceive their doctors as helpful (task-oriented).²⁴ However, the current finding suggests that the role of gender concordance in medical interactions might not significantly affect patients' perception of their doctors; both female and male patients might look for similar characteristics (such as caring nature, expertise) while evaluating their doctors.

Second, the results also showed that both female and male respondents were highly satisfied with their primary care doctors. They expressed the likelihood that they would revisit the same doctor for medical advice and would refer or recommend their doctor to their friends and family members, even if they cannot make a request at the public outpatient clinics. The results parallel prior studies that have shown that female and male patients respond similarly to doctors. However, such results may be explained by the study of Krupat and his colleagues.²⁵

They found that patient gender differences were insignificantly related to the patients' level of satisfaction. Likewise, Arguete and Roberts also found that patient satisfaction levels differed only when doctors projected different communication styles rather than patients' gender, which seems to promote positive patient evaluation.²⁶

Yet, the two aforementioned discoveries might be further explained by two possible points. First, Hong Kong remains a high-context culture despite the influence of western cultural values. Instead of balancing the hierarchical, asymmetrical relationship between doctors and patients, to maintain more control during consultations and remain in a high position in the medical hierarchy,²⁷ doctors in Hong Kong may reinforce their inherited powers and authority through professionalism. Hence, the greater power distance between Hong Kong patients and their doctors is retained for efficient medical service. Yet, second, the notion of "face-saving" is especially important in Chinese culture.²⁸ To avoid ruining and/or threatening one's reputation, doctors work to maintain each other's good name, even if their conversation becomes difficult.²⁸ Thus, generally, doctors in Hong Kong not only project their professional side in an authoritative manner, but also their benevolent characteristics, which help producing a higher satisfaction level in patients in general.

Specifically, despite the patient gender differences previously noted regarding doctor-patient communication, the findings of the present study revealed that both female and male patients have similar evaluations of their doctors' verbal and nonverbal communication skills used in their medical consultations. Both female and male patients stated that their doctors talk at an appropriate pace and talk in a friendly and clear manner. Their doctors also use questions and encouraging phrases to invite the patients' participation. Furthermore, both female and male patients agreed that their doctors provide an adequate amount of

direct eye contact with them, pay enough attention to their narrations, dress professionally, and arrive punctually. However, the respondents disclosed that their doctors, in general, avoid social touching for affiliating or encouraging purposes. This might be due to the Chinese cultural practice. Touching is not typically common in the Chinese culture, especially among strangers.²⁹ Although Buller and Buller suggested that certain doctors' verbal and nonverbal communication behaviors should be of relatively little relevance and importance to either female or male patients, while some might gain more attention due to the different expectations, the present study provides no statistical difference on how females and males evaluate their doctors.³⁰ This could be explained by the indirect effect of patients' gender on their evaluation of doctors' communication behaviors; in addition, other factors such as cultural and social factors might play a more significant role than patients' gender.³¹ Referring to the study of Smith, another possible explanation would be that Hong Kong patients are not especially concerned about whether their doctors can communicate well.³² Further study is needed to determine what other facets might interfere with patients' evaluation of doctors' communication practice beyond just gender.

Also, the results of the patient preference for doctors' gender indicated that more than half of the respondents (60%) prefer a male doctor in general. This could be explained by the people's culturally conventional gender roles and beliefs. Hong Kong is a patriarchal Chinese society influenced by traditional Confucian values.³³ Many Chinese still believe that males are dominant and should occupy roles of authority.³⁴ Such a belief might influence individuals' perception of gender-appropriate roles. Also, until recently, male doctors significantly outnumbered female doctors. Therefore, the male doctor is still a normative preference for the general public in the Chinese context.

However, when looking separately at the female and male respondents' results, both female and male patients actually showed a preference for same-gender doctors. This result echoes the assertions by prior studies that gender concordance has been associated with greater patient trust in their doctor and thus better communication during their medical consultation.³⁵⁻³⁸ Note that previous studies have promoted the theory that female patients have a stronger preference for a doctor of the same gender than do male patients.³⁹ Yet, this study reveals that male patients in Hong Kong have a stronger preference. Again, this could be explained by the cultural value in a Chinese context. Possible reasons may include that the female doctor/male patient dyad creates a certain tension in the surrounding, because the female is in the dominant, authoritative, and professional role, which contradicts the normative, stereotypical gender roles in Chinese society. Male patients may feel less at ease talking

about their health condition in detail. Also, unlike female patients, male patients may find it difficult to talk to female doctors, especially about their emotional agendas. Hence, male patients in Hong Kong strongly prefer a same-gender doctor.

Although respondents addressed their desire to have a doctor of the same gender, currently, the majority of general outpatient clinics in Hong Kong do not accommodate patient requests to select the gender of their doctor. It is crucial to respect and grant patients their gender preferences, especially when patients typically feel more comfortable revealing, verbally and nonverbally, their health conditions to a doctor of the same gender. Cross-gender embarrassment is clearly an important hindrance in situations like physical examination and gynecologic care. It is understandable that public outpatient clinics try to avoid this issue due to greater staffing needs and increased costs. However, it remains a significant issue waiting to be tackled in the future for better patient experience.

Conclusion

The generalizability of this study has several limitations. First, the study sample was limited to patients in the public health sector who receive primary care from the same institutional system. Such commonality offers more comparability; however, it restricts generalizability to other health care systems. Future study could recruit participants from other health care organizations for comparison. A second limitation of the study is that purposive sampling methodology, rather than quota sampling, was adopted. A majority of the respondents were aged 18-29. This representation might skew the results. A sample of mostly 18-29-year-old respondents is not representative of the patient population in Hong Kong. Hence, future study should ensure that similar numbers of participants from each age group are recruited to participate.

Also, this study investigated only the respondents' evaluation of their most recent experience with a public primary care doctor in the past two years. This study did not account for variations in the time since consultation, so it is possible that some respondents may have had a consultation a day before completing the questionnaire, while some might have met with their doctors months ago. Due to the gap in time, the participants' responses may not reflect accurately how they perceived the actual consultations with their doctors immediately following the visits. Also, the self-reported questionnaire may lack external validity, because actual perception is determined by many other influences. Therefore, future study should try to minimize such a time gap in order to gain a more accurate response from the participants.

Despite these limitations, we believe that the current study sheds light on how female and male patients in Hong Kong perceive public primary care doctors' communication skills during medical consultations. Although this study did not find any gender differences in patients' perceptions of doctors' communication skills, an important finding of this study is that effective communication in the health care sphere is not exclusive of gender sensitivity. Although Weisman and his colleagues advocated for gender-sensitive patient satisfaction measures and Khourey and Weisman also suggested that attention should be focused on gender differences and gender-specific needs in health research,^{40,41} we believe that, in addition to gender influence, other facets such as cultural norms and practices in the health care context may also be significant. This study offers avenues for future research that treat gender as part of a complex cultural dynamic. A follow-up qualitative study can be executed to complement the quantitative approach applied in this study.

References

- Roter DL, Hall JA. *Doctors Talking with Patients / Patients Talking with Doctors: Improving Communication In Medical Visits*. Westport, CT: Praeger; 2006.
- Podesta C. *Selling to Women: The Deal Makers and Deal Breakers You Must Know to Close the Deal Every Time*. Austin, TX: Greenleaf Book Group Press; 2009.
- Tabenkin H, Goodwin MA, Zyzanski SJ, Stange KC, Medalie JH. Gender differences in time spent during direct observation of doctor-patient encounters. *J Womens Health (Larchmt)*. 2004;13(3):341–349.
- Hall JA, Blanch-Hartigan D, Roter DL. Patient's satisfaction with male versus female physicians: A meta-analysis. *Med Care*. 2011;49(7):611–617.
- Kenny SA, Veldhuijzen W, van der Weijdem T, et al. Interpersonal perception in the context of doctor-patient relationships: A dyadic analysis of doctor-patient communication. *Soc Sci Med*. 2010;70(5):763–768.
- Hall JA, Irish JT, Roter DL, Ehrlich CM, Miller LH. Gender in medical encounters: An analysis of physician and patient communication in a primary care setting. *Health Psychol*. 1994;13:384–392.
- Roter DL, Hall JA, Aoki Y. Physician gender effects in medical communication: A meta-analytic review. *J Am Med Assoc*. 2002;288:756–764.
- Bertakis KD, Franks P, Azari R. Effects of physician gender on patient satisfaction. *J Am Med Womens Assoc*. 2003;58(2):69–75.
- Nicolai J, Demmel R. The impact of gender stereotypes on the evaluation of general practitioners' communication skills: An experimental study using transcripts of physician-patient encounters. *Patient Educ Couns*. 2007;69:200–205.
- Gabbard-Alley AS. Health communication and gender: A review and critique. *Health Commun*. 1995;7(1):35–54.
- Roohan PJ, Franko SJ, Anarella JP, Dellehunt LK, Gesten FC. Do commercial managed cared members rate their health plans differently than Medicaid managed care members? *Health Serv Res*. 2003;38(4):1121–1134.
- Zaslavsky AM, Zaborski LB, Ding L, Shaul JA, Cioffi MJ, Cleary PD. Adjusting performance measures to ensure equitable plan comparisons. *Health Care Financ Rev*. 2001;22(3):109–126.
- Cleary PD, Zaslavsky AM, Cioffi M. Sex differences in assessments of the quality of medicare managed care. *Womens Health Issues*. 2000;10(2):70–79.
- Elliot MN, Lehrman WG, Beckett MK, Goldstein E, Hambarsoomian K, Giordano LA. Gender differences in patients' perceptions of inpatient care. *Health Serv Res*. 2012;47(4):1482–1501.
- Weisman CS, Henderson JT, Schiffrin E, Romans M, Clancy CM. Gender and patient satisfaction in managed care plans: Analysis of the 1999 HEDIS/CAHPS 2.0H adult survey. *Womens Health Issues*. 2001;11(5):401–415.
- Larsson BW. Patients' views on quality of care: Age effects and identification of patient profiles. *J Clin Nurs*. 1999;8(6):693–700.
- Foss C. Gender biases in nursing care? Gender-related differences in patient satisfaction with the quality of nursing care. *Scand J Caring Sci*. 2002;16(1):19–26.
- Williams J. *The Role of Gender in Determining Strength and Nature of Marketing Relationships*. In press 2008.
- The World Bank [homepage on the Internet]. World development indicators, 2014. Available from: <http://databank.worldbank.org/data/views/reports/tableview.aspx>. Accessed July 21, 2014.
- Hospital Authority [homepage on the Internet]. Hospital Authority statistical report 2012–13, 2014. Available from: http://www.ha.org.hk/upload/publication_15/491.pdf. Accessed January 30, 2015.
- Kreps GL, ed. *Health Communication (The Sage Benchmarks in Communication Series)*. Vol. 1–5. London: Sage Publications; 2010.
- Cline RJ, McKenzie NJ. The many cultures of health care: Difference, dominance and distance in physician-patient communication. In: Jackson LD, Duffy BK, editors. *Health Communication Research: A Guide to Development and Directions*. Westport, CT: Greenwood Press; 1998:57–74.
- Safran DG, Rogers WH, Tarlov AR, McHorney CA, Ware Jr. JE. Gender differences in medical treatment: The case of physician-prescribed activity restrictions. *Soc Sci Med*. 1997;45(5):711–722.
- Foss C, Hofoss D. Patients' voices on satisfaction: Unheeded women and maltreated men? *Scand J Caring Sci*. 2004;18(3):273–280.

25. Krupat E, Rosenkranz SL, Yeager CM, Barnard K, Putnam SM, Inui TS. The practice orientations of physicians and patients: The effect of doctor-patient congruence on satisfaction. *Patient Educ Couns.* 2000;39(1):49–59.
26. Aruguete MS, Roberts CA. Gender, affiliation and control in physician-patient encounters. *Sex Roles.* 2002;42(1/2):107–118.
27. Fisher S, Todd AD. Friendly persuasion: Negotiating decisions to use oral contraceptives. In: Fisher S, Todd AD, editors. *Discourse and Institutional Authority: Medicine, Education, and Law.* Norwood, NJ: Ablex publishing Corporation; 1986:3–25.
28. Brown P, Levinson S. *Politeness.* Cambridge, UK: Cambridge University Press; 1987.
29. Matsumoto D. Culture and nonverbal behavior. In: Manusov V, Patterson M, editors. *Handbook of Nonverbal Communication.* Thousand Oaks, CA: Sage; 2006:219–235.
30. Buller MK, Buller DB. Physicians' communication style and patient satisfaction. *J Health Soc Behav.* 1987;28(4):375–388.
31. Foss C. Gender as a variable in patient satisfaction (in Norwegian). *Tidsskr Nor Laegeforen.* 2000;120:3283–3286.
32. Smith DH. What Hong Kong patients want and expect from their doctors. *Health Commun.* 1999;11(3):285–297.
33. Cheng K, Leung V. Reinforcing gender stereotypes: A critical discourse analysis of health-related PSAs in Hong Kong. *Am Int J Soc Sci.* 2014;3(3):36–48.
34. Furnham A, Mak T. Sex-role stereotyping in television commercials: A review and comparison of fourteen studies done on five continents over twenty-five years. *Sex Roles.* 1999;41:413–437.
35. Ahmad F, Hansa G, Rawlins J, Stewart DE. Preferences for gender of family physician among Canadian European-descent and South-Asian immigrant women. *Fam Pract.* 2002;19:146–153.
36. Furnham A, Petrides KV, Temple J. Patient preference for medical doctors. *Br J Health Psychol.* 2006;11:439–449.
37. Plunkett BA, Kohli P, Milad MP. The importance of physician gender in the selection of an obstetrician or a gynecologist. *Am J Obstet Gynecol.* 2002;185:926–928.
38. Bonds DE, Foley KL, Dugan E, Hall MA, Extrom P. An exploration of patients' trust in physicians in training. *J Health Care Poor Underserved.* 2004;15:294–306.
39. Lillesto J, Uboe J, Ronsen Y, Hjortdahl P. Patient allocations in general practice in case of patients' preferences for gender of doctor and their unavailability. *BMC Res Notes.* 2011;4:112–122.
40. Weisman CS, Rich DE, Rogers J, Crawford KG, Grayson CE, Henderson JT. Gender and patient satisfaction with primary care: Turning in to women in quality measurement. *J Womens Health Gend Based Med.* 2000;9(6):657–665.

41. Khoury AJ, Weisman CS. Thinking about women's health: The case for gender sensitivity. *Womens Health Issues*. 2002;12(2):61–65.
42. Gabbard-Alley AS. Explaining illness: An examination of message strategies and gender. In: Whaley BB, editor. *Explaining illness: Research, theory, and strategies*. Mahwah, NJ: Lawrence Erlbaum Associates; 2000:145-167
43. Hospital Authority. (2016, January). Hospital Authority Annual Report on Sentinel and Serious Untoward Events 2014-2015. Retrieved from <http://www.ha.org.hk>