



DOI: https://doi.org/10.1590/1981-5271v45.1-20190345.ING

Receptiveness to students' presence at gynecological consultations: patients' motives and appraisal of learners' interpersonal communication skills

Receptividade à participação de estudantes em consultas ginecológicas: motivos das pacientes e suas avaliações da comunicação interpessoal dos aprendizes

ABSTRACT

Objective: To assess the expectation that the appraisal of students' interpersonal communication skills in prior appointments affects women's motives for consenting to or dissenting from the presence of a student and thereby their ultimate receptiveness regarding the learner's involvement when participating in gynecological consultations.

Methods: Face-to-face interviews were used to compile questionnaire data from 469 outpatients at the Brasília University Hospital. We used t-tests to evaluate the differences between the scores of the two motive-related scales of patients with prior experience of student involvement and those of patients without it, as well as contingency analyses to assess the association between the groups of women and an index of their receptiveness to students' participation in the consultation. Moreover, we performed correlation analyses to verify the interrelationships between the scales and the levels of association of these measures with the index of receptiveness as an outcome.

Results: Compared with inexperienced patients, experienced patients exhibited significantly broader receptiveness to students' participation in consultations (chi-squared = 20.49, df = 3, P < .001; Cramer's V = 209, P < .001). Broader receptiveness was positively correlated (rho = .314, P < .001) with their motivation to consent to and negatively (rho = -.454, P < .001) correlated with their motivation to dissent from students' presence at coming consultations. The motivation to consent was significantly higher (P < .001) in experienced women (M = 4.58, SD = .55, n = 408) than in inexperienced ones (M = 4.31, SD = .68, n = 61). The opposite result was true for the motivation to dissent (M = 2.35, SD = .94 vs. M = 2.70, SD = 1.02; P = .007). Notably, for those 408 women, their appraisals of students' interpersonal communication skills (in a prior consultation) positively correlated (rho = .236, P < .001) with their motivation to consent to and negatively with their motivation to dissent from students' presence (rho = -.208, P < .001).

Conclusion: The findings have implications for both the patients' role in the gynecological education of medical students and the learners' qualification in the clinical interview and, therefore, for the benefit of women's healthcare.

Keywords: Medical Students; Communication; Outpatients; Gynecology; University Hospitals; Surveys and Questionnaires.

RESUMO

Objetivo: Este estudo teve como objetivo apurar a expectativa de que o juízo sobre a comunicação interpessoal de estudantes de Medicina em consultas prévias teria impacto nos motivos das pacientes para consentir ou dissentir sua presença e, portanto, na receptividade final quanto à participação de aprendizes numa consulta ginecológica.

Métodos: Dados de questionário foram compilados por entrevista com 469 pacientes ambulatoriais do Hospital Universitário de Brasília. Construíram-se escalas para medir a avaliação das pacientes sobre a comunicação interpessoal de estudantes, bem como seus motivos para permitir ou não a presença de aprendizes. Utilizaram-se testes t para estabelecer as diferenças entre pacientes com e sem experiência prévia de envolvimento de estudante nos escores das escalas de motivos, realizaram-se análises de contingência para avaliar a associação entre esses grupos de mulheres e adotou-se um índice de sua receptividade à participação de estudantes na consulta. Ademais, foram realizadas análises de correlação para verificar as inter-relações entre as escalas e os níveis de associação dessas medidas com o índice de receptividade como desfecho.

Resultados: As pacientes experientes quando comparadas às inexperientes exibiram receptividade significativamente mais ampla à participação de estudantes (qui-quadrado = 20,49, df = 3, p < 0,001; V de Cramer = 209, p < 0,001). Essa maior receptividade correlacionou-se positivamente (rho = 0,314, p < 0,001) com a motivação das pacientes para consentimento e negativamente (rho = -454, p < 0,001) com sua motivação para dissentimento da presença de estudantes numa consulta futura. A motivação para consentir foi significativamente maior entre as pacientes experientes (M = 4,58, DP = 0,55, n = 408) em comparação com as inexperientes (M = 4,31, DP = 0,68, n = 61), e o oposto ocorreu na motivação para dissentir (M = 2,35, DP = 0,94 versus M = 2,70, DP = 1,02). Essas diferenças denotaram efeito de tamanho pequeno da experiência com estudante na consulta. Significantemente, a avaliação das pacientes experientes sobre a comunicação interpessoal estudantil em consultas prévias correlacionou-se positivamente (rho = 0,236, p < 0,001, n = 408) com sua motivação para consentimento, ao passo que se correlacionou negativamente (rho = -208, p < 0,001) com sua motivação para dissentimento da presença de estudante.

Conclusão: Os achados têm implicações para o papel das pacientes na educação ginecológica de estudantes de Medicina e para a qualificação dos aprendizes na entrevista clínica e, portanto, para o benefício da saúde da mulher.

Palavras-chave: Alunos de Medicina; Comunicação; Ginecologia; Pacientes Ambulatoriais; Hospitais Universitários; Pesquisa e Questionários.

¹ Universidade de Brasília, Brasília, Distrito Federal, Brazil.

Chief Editor: Daniela Chiesa | Associate editor: Daniela Chiesa

Received on 01/09/20; Accepted on 12/06/20. | Evaluated by the double blind review process.

INTRODUCTION

Medical students' involvement in gynecological consultations is of the essence for a useful educational experience in women's medical care. An essential feature of that experience is the students' clinical skills qualification through the interaction with the women going through gynecological care under the guiding supervision of the teaching staff. Thereby, as future physicians working in the country's healthcare system, the students shall meet the health needs of women.

To reach such a desideratum, the willingness of women to accept student engagement in their consultations is crucial. Nevertheless, the intimate nature of a gynecological consultation requires an interpersonal context of confidence and privacy. Thus, a patient may not feel at ease with a student's presence during her appointment, depending on a diversity of factors, such as the woman's needs, expectations and experiences, the student's attributes, and the context of care¹⁻⁴. Obstacles to learners' involvement could prevent not only adequate clinical training but also the choice of specialty training in Ob-Gyn, which is an unhelpful outcome in times of growing demands for the provision of women's health services⁵. A current review summarizes the learners' perceptions of the patients' factors related to, and the potential reasons for the gender differences in clinical opportunities and outcomes⁶.

Among the patients' factors, it is noteworthy the possible effect of an earlier experience with students in gynecological consultations on the women's attitudes towards the learners. Several studies found a mostly facilitating influence of prior acquaintance on the patients' willingness to accept and feel at ease with the learners' presence^{1,3,7,8}. Two Brazilian studies revealed similar effects in the setting of women's outpatient care at public hospitals^{9,10}. What features of a prior appointment experience would impact the patients' intended attitudes? One study noted that patients assigned high ratings to interpersonal communication attributes in connection to the patients' attitudes towards student involvement³. Another study revealed that experienced patients rated such (trainees') professional skills even higher, according to the duration of contact⁸. However, those studies did not clarify the level and the nature of the relationship between the women's perceptions of learners' interpersonal communication attributes and the women's acceptance of student involvement. Further analysis seems necessary to investigate the association of those perceptions with positive or negative motives regarding the students' presence.

Accordingly, this exploratory study aimed at assessing the expectation that patients' appraisal of students' interpersonal communication attributes in prior appointments would correlate to the patients' motives for consenting to or dissenting from student presence and, therefore, impact the patients'

ultimate receptivity regarding a learner's involvement in coming consultations. We extended the data analyses from a recent cross-sectional survey¹⁰ by using several of the patients' responses to a tested questionnaire to pursue the following research questions.

- How did the scales—which indicate the patients' appraisal of students' interpersonal communication attributes and patients' motives to consent to and dissent from a student's presence at their consultation — fare in dimension and reliability?
- 2. How significant were the relationships between the measures of patients' consenting and dissenting motives and an index of their receptivity to student participation in an impending consultation?
- 3. How meaningful were the differences between the measures of consenting and dissenting motives of patients who experienced a student's presence at a prior appointment and those patients who did not experience a student's presence at a prior appointment?
- 4. How significant were the relationships between the patients' appraisal of students' interpersonal communication attributes during earlier appointments and the measures of consenting and dissenting motives concerning a learner's presence at a prospective consultation?

METHOD

Context. The study was conducted at a gynecological outpatient unit. This unit, belonging to the Brasília University Hospital (HUB), provides well-diversified gynecological care to any woman registered for a medical appointment. Supervised medical students (45% females) have attended outpatient consultations during two semesters of their clinical training for the last 25 years.

Participants. We used a consecutive sampling strategy for the women complaining from a wide variety of gynecological problems. No exclusion criteria were established based on demographics or nosological conditions, so a total of 471 patients were interviewed over 24 nonconsecutive weeks. The mean age of the participants was 43.06 years (SD=14.1, median=43, range=12-78). Of the total number of participants, 53.4% were married, 27.4% were unmarried, and the remaining 19.1% were divorced or widowed. Nulliparous women comprised 21.7% of the participants, and 78.3% of the participants had given birth one or more times. Only 23.9% of the participants had a lower level of schooling. Only 9.8% earned five or more minimum wages per month, and the remainder earned less than that. A majority (61.7%) of the women

recollected attending four or more previous appointments in the outpatient unit, but 15.7% were undergoing a consultation for the first time. All patients signed a consent form agreeing to participate in the study. The Committee of Ethics of the School of Medicine approved the study protocol (CAAE 45773315.3.0000.5558).

Instrument. Based on examples in the literature^{8,11-13}, we developed a 32-item closed-question questionnaire and pretested it with 29 outpatient volunteers. The tool contained 16 Likert-type questions (5 = strongly agree, 1 = strongly disagree); six questions addressed the patients' motives to dissent from a student's presence, four questions addressed their reasons to consent to a student's presence, and six questions addressed their appraisal of a student's interpersonal communication attributes in a preceding appointment. We adapted those last questions from two works^{3,8}.

Analysis. Incomplete answers to critical questions led to the exclusion of two participants. The SPSS software was used for the analyses. T-tests were included to define differences between groups, and correlations (Spearman's rho) and crosstab statistics were used to measure relationships and compare proportions between the indicator variables. Performing dimension and reliability analyses helped to validate the scale measures. These measures included the 4-item questioning about motives for consenting to the students' presence, the 6-item questioning about motives for dissenting from students' presence (Tables 1 and 2), and the 6-item questioning about students' interpersonal communication attributes (Table 3). Additionally, we defined a composite variable by dichotomizing and adding the responses related to three facets of receptiveness: being comfortable with the students' presence (1 = accepting the presence of either a male or female student); the number of students allowed in the consultation (1 = three or more students); and pelvic examination by a student (1 = acceptance, either by a male or female student). Using this composite variable as a receptiveness index constituted a useful outcome measure of the patients' level of acceptance of students' participation in the consultation. Following the usual norms¹⁴, we reported the values for Spearman's rho and Cramer's V as effect sizes and accepted P-values < .05 as significant.

RESULTS

No significant differences emerged, when using chisquared tests, between the proportions of five demographic factors in women with prior experience of students' presence at gynecological appointments (n = 408) and those in women without this prior experience (n = 61). The respective P values were .92 (age bracket, family income), .79 (schooling, conjugal experience), and .52 (parity).

The Principal Component Analysis (PCA) of the results

of the 4-item questioning about motives for consenting to the students' presence at the consultation yielded a single component, which accounted for 47.3% of the total variance. The standardized Cronbach's alpha for corresponding items (henceforth called the consenting motivation scale, CMS) was .62 (Table 1). Likewise, for the 6-item questioning about motives for dissenting from student attendance, PCA yielded a single component, which accounted for 40.8% of the total variance. The standardized Cronbach's alpha for the corresponding items (henceforth called the dissenting motivation scale, DMS) was .70 (Table 2). Moreover, for the 6-item questioning about the students' interpersonal communication in an earlier consultation, PCA yielded a single component, which accounted for 52.7% of the total variance. The standardized Cronbach's alpha for the same items (henceforth called the students' interpersonal communication skills scale, SIC) was .81 (Table 3).

Notably, patients who had experience with a student's being present in prior appointments (SIC assessment) expressed greater acceptance of a learner's participation in their coming consultations than those who did not have this experience in prior appointments. A chi-squared test of independence showed a significant association between the condition of familiarity and the outcome of receptiveness: chi-squared = 20.49 (df = 3), P< .001; Cramer's V = 209, P < .001. These data show that the prior experience was associated with a greater proportion of patients expressing broader receptiveness to the students' participation, with a medium-sized effect. Broader receptiveness equals rank 3 regarding the index of receptiveness and stands for gender fairness and openness to learners (see Methods). Table 4 depicts the data.

Table 1. Loadings and commonalities of motives to consent to students' presence extracted by the principal component analysis (N = 469)

Items: Motives for consenting	Consenting motivation component	
Consenting	Loadings	Commonalities
Students helping with the consultation	.751	.564
Expecting the student to be present	.738	.544
Wishing to help the students' education	.682	.465
Learning about one's health	.566	.321
Eigenvalue	1.89	
Percentage of variance	47.35	

Table 2. Loadings and commonalities of motives to dissent from students' presence extracted by the principal component analysis (N = 469)

Items: Motives of dissenting	Dissenting motivation component	
	Loadings	Commonalities
Need for privacy in a pelvic examination by an Ob-Gyn	.764	.583
Need for privacy in a dialogue with an Ob-Gyn	.695	.482
Feeling ashamed during an examination by a male student	.683	.466
Feeling ashamed during an examination by a female student	.640	.410
Students' lack of expertise	.541	.293
Lingering consultation in the student's presence	.496	.246
Eigenvalue	2.48	
Percentage of variance	41.33	

Table 4. Relationship between the patients' familiarity with and assessment of students' involvement in a prior appointment and their facets of receptiveness to students' presence in a forthcoming consultation (N = 469)

Receptiveness	Familiarity with student' involvement		Total	
Index	Inexperienced Experienced			
	N (%)	N (%)	N (%)	
0 (zero facets of acceptance)	19 (31.1)	44 (10.8)	63 (13.4)	
1 (one facet of acceptance)	10 (16.4)	79 (19.4)	89 (19.0)	
2 (two facets of acceptance)	20 (32.8)	142 (34.8)	162 (34.5)	
3 (three facets of acceptance)	12 (19.7)	143 (35.0	155 (33.0)	
Total	61 (100)	408 (100)	469 (100)	

Facets (yes or no): at ease with both female and male learners; allows a pelvic examination by students of both genders; welcomes some students in the consultation.

Chi-square = 20.40, df = 3, P < .001. Cramer's V = .209, P < .001

Table 3. Loadings and commonalities of students' interpersonal communication skills extracted by the principal component analysis (N=408)

Interpersonal communication*	Interpersonal communication component	
She (he):	Loadings	Commonalities
3. Revealed concern for my health.	.807	.652
4. Acted professionally during the consultation.	.801	.642
5. Communicated well throughout the appointment.	.787	.619
2. Was respectful and caring.	.732	.536
6. Had good looks and manners, which helped with the consultation.	.692	.478
1. Asked permission to attend the consultation.	.484	.234
Eigenvalue	3.16	
Percentage of variance	52.68	

^{*}Numbered by their order in the study questionnaire.

Additionally, significant correlations (P < .001) emerged between both the CMS and DMS and the outcome of receptiveness to students' participation. For the CMS, the correlation with receptiveness was positive (rho = .314), while the correlation was negative for the DMS (rho = -.454). However, the CMS and DMS scores of experienced and inexperienced patients differed significantly. On average, the 408 experienced participants showed higher CMS scores (M = 4.58, SD = .55) than the 61 inexperienced participants (M = 4.31, SD = .68). The difference (.27, SE .08) was significant: t(468) = 3.54, P < .001. In contrast, on average, the experienced participants showed lower DMS scores (M = 2.35, SD = .94) than inexperienced participants (M = 2.70, SD = 1.02). The difference (-.35, SE = .13) was significant: t(468) = -2,70, P = .007. For both comparisons, the difference observed denoted a small-sized effect (d = .41 and d = .37, respectively).

Consistently, the experienced participants reported a mostly favorable appraisal of SIC in prior appointments (M = 4.75, SD = .47, 95% CI 4.71-4.80), and no significant differences in the scores emerged for any of the participants' demographic features (age bracket, parity, conjugal experience, schooling, and family income). The most positive, prevalent appraisal was for *She/he acted professionally during the consultation*, while the least positive appraisal was for *She/he asked permission to attend the consultation*. Furthermore, weak correlations emerged between those patients' appraisal of SIC in earlier

appointments and both their CMS score (rho = .236, P < .001) and DMS score (rho = -.208, P < .001) for the students' presence at their coming consultation. For each of the six SIC attributes, except for *She/he was respectful and caring*, the strength of the correlation was higher in the CMS score than in the DMS score. Table 5 reports the data.

Finally, a weak correlation also emerged between the patients' assessment of SIC and their index of receptiveness to the students' involvement (rho = .147, P = .003). The strongest correlation was for *She/he asked permission to attend the consultation* (rho = .136, P = .006).

DISCUSSION

In summary, we have tested and confirmed the expectation that the positive effect of the patients' prior familiarity with the students' presence on their forward acceptance of trainee involvement is related to their appraisal of the learners' interpersonal communication skills and its impact on the balance of motives that impact the level of receptiveness to the presence of trainees in consultations. Using standardized scales helped to establish significant differential relationships between the indicators (students' interpersonal communication skills, patients' consenting and dissenting motivations) and their associations with the outcome of receptiveness to students' participation¹⁵. The main pieces of the argument are as follows.

First, the receptiveness to the students' participation regarding women with the experience of students' attendance at prior appointments differs from that of women without this experience, and the level of acceptance is related to the patients' consenting and dissenting motives regarding future consultations. Compared with inexperienced women, experienced women showed about twice the receptiveness (denoting gender fairness and openness to learners) and just one-third of null responsiveness to trainee involvement. The patients' level of receptiveness positively (and more strongly) correlated with their motives to consent and negatively (and less strongly) with their reasons to dissent. Indeed, experienced participants had higher scores for consenting and lower scores for dissenting motivations than inexperienced ones. The tendency to consent reflected both a positive view of the student's role and a perceived or expected benefit of the trainee's attendance for the patient's understanding of her health condition. Thus, prior experience increases the willingness and decreases the unwillingness to accept, and the trends show that the balance between the patients' consenting and dissenting motivations would predict a stronger or weaker tendency for their ultimate receptiveness.

Furthermore, the patients' motives for consenting or dissenting are related to their appraisal of the students'

Table 5. Patients' appraisal of student interpersonal communication skills in prior appointments was positively correlated with a scale of motivation to consent, and negatively correlated with a scale of motivation to dissent regarding the students' presence at an impending consultation (N= 408).

Attributes* of students' interpersonal communication	Consenting motivation	Dissenting motivation
(SIC) skills She (he):	Rho	Rho
4. Acted professionally during the consultation.	.255	225
3.Showed concern for my health.	.218	216
2. Was respectful and caring.	.214	231
5. Communicated well throughout the appointment.	.197	185
6. Had good looks and manners, which helped with the consultation.	.179	103
1. Asked permission to attend the consultation.	.176	149
SIC average score	.236	208

^{*}Numbered according to their order in the study questionnaire. P values for the correlations between the dissenting motivation scale and the SIC attribute 6 and 1 were .037 and .002, respectively; all other P values were <.001.

interpersonal communication attributes. Amona the experienced participants, the recollection of the students' attributes during the medical interview of earlier appointments was mostly approving, although a specific intervention should improve those skills^{16,17}. The expressions of interpersonal communication skills, such as showing respect and kindness, conveying concern, and acting professionally during the consultation, could contribute to the woman's attitude regarding the welcoming of a student in a pending appointment. Although the relationship between the appraisal of SIC and the outcome of receptiveness was weak (albeit significant), the correlations were meaningfully stronger between that patient's estimate assessment and both their CMS (positive correlation) and their DMS scores (negative correlation). We infer that the influence of the recollection of interpersonal communication attributes was an indirect one, through the moderation of the patients' motives and feelings concerning prospective student attendance. Thus, a stronger appraisal of the prior interpersonal communication skills would reinforce the willingness to consent to the trainee's attendance and attenuate the willingness to dissent from the trainee's attendance.

Additionally, women's factors and student attributes differ regarding the acceptance of the learners' involvement. The factors related to women (needs, expectations, and preferences,

as subsumed in the CMS and DMS levels) prevailed over the students' attributes (subsumed in the SIC level) regarding the eventual acceptance of the learners' participation. Nevertheless, the results above highlight the relevance of the patients' appraisal of the trainees' professional skills, thus confirming and extending earlier reports^{3,8}. From the patients' viewpoint, the learners show abilities and help with the consultation through some means, while the women themselves want to help the students' medical education. As remarked elsewhere, reciprocal altruism may underlie the student-patient relationship¹⁰.

Overall, the results confirm the positive influence of prior experience, as reported by many authors^{1,3,7,8}. The findings extend the argument by providing quantitative evidence and uncovering the potential role of the patients' assessment of students' interpersonal communication skills in their willingness to accept the trainee's involvement. Without claiming causality, a sequential relationship between appraisal, motives, and receptiveness seems conceptually plausible and meaningful. Nevertheless, the study cross-sectional and exploratory nature, as well as the participants' response context, rule out high certainty.

Hence, we proffer that the results display implications for both medical students' clinical preparation and women's healthcare from the viewpoint of the physician's work construction. The results highlight the relevance of patients' perceptions of trainees' attributes in the medical interview and the importance of learners' embodiment of professional behavior and compassionate approaches¹⁸, as incorporated into the students' communication skills. We suggest that a stronger willingness to accept the students' participation among the patients with prior experience of student attendance may reveal the perception of ethical stances of teaching and learning, in the outpatient health-task context. Indeed, the assertion that modifiable student-related characteristics influence women's willingness to agree to a pelvic examination¹⁹ by a student concurs with our findings. Besides, the results underline the importance of revealing the framework and balance of the patients' motives and expectations regarding their care in the gynecological outpatient setting.

The study has limitations regarding its survey design¹⁵. The single-site report about patients from a public medical care service hinders the generalizability of the findings. Using a closed-question questionnaire in a cross-sectional design restricts its scope and strength. A restricted scope prevents a deeper understanding of ethical profiles of teaching, learning, and partnership in health services. Nonetheless, the study shows strengths, including the participants' sample size and excellent response rate. The study also upholds the credibility of the reported findings¹⁰, explains the positive influence of prior experience and hints at the potential usability of that explanation

in grounding research from a qualitative outlook to the interest of patient-physician partnership in public health services²⁰.

CONCLUSION

The results imply that the appraisal of students' interpersonal communication skills in earlier appointments moderates the patients' consenting and dissenting motivations regarding the students' attendance and thereby their receptiveness to learner involvement in coming consultations. Notably, the results suggest that better assessment of interpersonal communication skills reinforces the willingness to consent to student attendance and attenuates the unwillingness to accept it. Furthermore, higher consenting scores and lower dissenting scores correlate (positively and negatively, respectively) with broader receptiveness, which stands for gender fairness and openness to learners. Overall, the results confirm the positive influence of the preceding experience, clarify its relationships with consenting and dissenting motives by providing quantitative evidence, and reveal the potential role of patients' appraisal of students' interpersonal communication skills in balancing the women's motives and, hence, their ultimate receptiveness towards learners' participation. The findings have implications for both the patients' role in the gynecological education of medical students and the learners' qualification in the clinical interview and, therefore, for the benefit of women's healthcare.

AUTHORS' CONTRIBUTION

Both authors contributed equally to the design of the research project, the data analyses, the initial writing, and the final revision of the manuscript.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

SOURCES OF FUNDING

We declare there was no funding for this research.

REFERENCES

- Hartz MB, Beal JR. Patients' attitudes and comfort levels regarding medical students' involvement in Obstetrics-Gynecology outpatient clinics. Acad Med. 2000;75:1010-14.
- O'Flynn N, Rymer J. Women's attitudes toward the sex of medical students in a gynaecology clinic: cross-sectional survey. BMJ. 2002;325(7366):683-4.
- Mavis B, Valenok P, Schuh R, Marshall J, Jeffs MC. Medical students' involvement in outpatient clinical encounters: a survey of patients and their obstetricians-gynecologists. Acad Med. 2006;81(3):290-6.
- Yang J, Black K. Medical students in gynaecology clinics. Clin Teacher. 2014;11(4):254-8.
- Wanderley MS, Sobral DT. Editorial: Ob-Gyn gender preferences of gynecology ambulatory patients and students' choice of the specialty. Rev Bras Ginecol Obstet. 2017;39:645-6.

- Kostov S, Koppula S, Babenko O. Gender differences in women's health and maternity care training: A scoping review. doi: 10.15694/ mep.2018.0000050.1
- 7. Fortier AM, Hahn PM, Trueman J, Reid RL. The acceptance of medical students by women with gynaecology appointments. J Obstet Gynaecol Can. 2006;28(6):526-30.
- Carmody D, Tregonning A, Nathan E, Newnham JP. Patient perceptions of medical students' involvement in their obstetrics and gynaecology care. Aus N Zee J Obstet Gyn. 2011;51:553-8.
- Rio SMP, Trivellato IM, Caldeira NM, Araujo SF, Rezende DF. Experience of women attended by medical students in gynecological care. Rev Bras Educ Med. 2013;37:492-500.
- Wanderley MDS, Sobral DT, Lima BAO, Freire MEB, Silva MACD, Rosa MPESG, et al. Attitudes and personal attributes relating to patients' receptivity towards medical students' participation in gynecologic consultations: A cross-sectional study. Rev Bras Ginecol Obstet. 2019;41(10):613-20.
- Ching SL, Gates EA, Robertson PA. Factors influencing obstetric and gynecologic patients' decisions toward medical student involvement in the outpatient setting. Am J Obstet Gynecol. 2000;182:1429-32.
- 12. Berry RE Jr, O'Dell K, Meyer BA, Purwono U. Obtaining patient permission for student participation in obstetric-gynecologic outpatient visits: a randomized controlled trial. Am J Obstet Gynecol. 2003;189(3):634-8.
- Alawad AAM, Younis FH. Patients' attitude towards undergraduate medical students at University Charity Teaching Hospital in Sudan. Int J Med (Dubai). 2014;2(1):28-31.

- 14. Privitera GJ. Essential statistics for the behavioral sciences. Los Angeles: Sage, 2016.
- Gehlbach H, Artino AR. The survey checklist (manifesto). Acad Med. 2018;93:360-6.
- Simon-Fisher R, Hobden D, Waller A, Dodd N, Boyd L. Methodological quality of teaching communication skills to undergraduate medical students: a mapping review. BMC Med Educ. 2018;18:151. doi: 10.1186/ s12909-018-1265-4.
- 17. Franco CAGS, Franco RS, Lopes JMC, Severo M, Ferreira MA. Clinical communication skills and professionalism education are required from the beginning of medical training a point of view of family physicians. BMC Med Educ. 2018:18:43. doi: 10.1186/s12909-018-1141-2.
- Abadel FT, Hattab AS. Patients' assessment of professionalism and communication skills of medical graduates. BMC Med Educ. 2014;14:28 doi: 10.1186/1472-6920-14-28.
- Armitage AJ, Cahill DJ. Medical students and intimate examinations: What affects whether a woman will consent? Med Teacher. doi: 10.1080/0142159X.2018.1428736.
- 20. He B, Prasad S, Higashi RT, Goff HW. The art of observation: a qualitative analysis of medical students' experiences. BMC Med Educ. 2019;19:234. doi: 10.1186/s12909-019-1671-2.



This is an Open Access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.