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Discrepancy between physicians' perceptions and practices during pelvic examinations in Taiwan

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ABSTRACT

Objective: This study explored (1) physicians' perceptions of pelvic examination (PE) procedures and (2) the discrepancy between physicians' perceptions and their practices as observed by their attending nurses.
Method: Data were collected from 20 physician-completed questionnaires on the perceived importance of 23 PE procedures. Each physician's practice of the same 23 PE procedures was assessed by 4–6 attending nurses (100 nurse observations). Physicians and nurses were sampled by convenience from the obstetrics/gynecology outpatient departments of 3 teaching hospitals in central Taiwan. Discrepancies between physicians' perceptions and their practices as assessed by attending nurses were examined by the Mann–Whitney *U* test.
Results: Physicians' mean scores ranged from 3.15 to 4.00, indicating that PE procedures were generally perceived as important. The procedures were rank ordered according to the mean scores from highest to lowest. Physicians' 5 top-ranking procedures were wearing gloves during the PE, asking agreement for the examination, paying attention to privacy during the PE, protecting the woman's personal information, and protecting the woman's medical records. Physicians' 5 lowest ranking procedures were telling the woman before inserting the speculum that she will feel some pressure, explaining the procedure before the PE, proactively providing information, asking the woman how she feels during the PE, asking a woman's permission to examine prior to commencing the PE, and describing observations to the woman during the PE (the last two procedures were tied for 5th rank). For 15 of the 23 PE procedures, physicians' perceptions did not differ significantly from their practices as assessed by attending nurses. The remaining 8 procedures were statistically significant between physicians' perception and their practices, and were rated higher by physicians (perception) than by attending nurses (practice).
Conclusion: The 5 top-ranking PE procedures in terms of perceived importance were related to procedural behaviors, whereas the 5 lowest ranking procedures were verbal statements with explicit affective content. During nurse-observed PEs, Taiwanese physicians consistently practiced the procedural aspects of PEs they perceived as important (e.g., communication and consultation, protection and skilled technique, and confidentiality). However, physicians' practices were less consistent in affective aspects (e.g., explanation and consent, information and instruction, and sensitivity).
Practice implications: Our results suggest that physicians should concentrate not only on procedural behaviors, but also on affective behaviors. These findings could be incorporated in medical education, particularly for medical students training to become obstetric and gynecological physicians.

1. Introduction

Pelvic examination (PE) is a frequently performed procedure in reproductive health care [1]. Apart from the physical discomfort, women generally show psychological symptoms of anxiety in PE. This anxiety is due to the exposure of private body parts while in a vulnerable or defenseless situation with loss of control [2] and to sometimes being asked sensitive gynecological questions [3]. To deal with this anxiety, many scientific books and articles offer recommendations for physicians when performing a PE [4–9]. Although previous research has explored what procedures are important for physicians in

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PE, there has been scant focus on the discrepancy between their perceptions and practices. This discrepancy is important since it reflects the divergence between the perceived importance of a PE procedure (the ideal practice recommended in the literature) and its practice during PE. The authors assumed that the importance of any PE procedure perceived by a physician should be perfectly reflected in his/her practice during PE. In other words, physicians' perceptions of PE procedures should be consistent with their practices during PE.

Physicians' practices during PE have often been examined from the perspective of patients [10,11], but rarely have these practices been documented from the perspective of the attending nurse. In Taiwan, because a physician always has an attending nurse to assist him/her in the examination room, the attending nurse makes a good observer of a physician's practices. Therefore, the purposes of this study were to explore physicians' perceptions of PE procedures and to examine the discrepancy between their perceptions and practices in PE as observed by their attending nurses.

This study was designed to empirically answer 2 research questions regarding physicians' perceptions and practices about 23 PE procedures. First, which PE procedures are perceived by physicians as most and least important? Second, based on the above assumption, are physicians' perceptions of PE procedures consistent with their practices as assessed by their attending nurses, and if not, what are those procedures?

1.1. Pelvic examination procedure

PE procedures were classified as recommended by Abraham [12] and from preliminary interviews with nurses about their experience of PE. We also considered the time sequence during PE, i.e., before, during and throughout the session. Thus, PE procedures were classified into 6 categories: (1) explanation and consent (before session); (2) communication and consultation (throughout session); (3) information and instruction (during session); (4) protection and skilled technique (during session); (5) sensitivity (throughout session); and (6) confidentiality (throughout session). Of these categories, (1), (2), (3), (4) (skilled technique), and (5) were based on Abraham [12], and (4) (protection) and (6) were based on nurse interviews. These 6 categories are described in detail below.

1.1.1. Explanation and consent (before session)

Physicians must obtain permission from the patient prior to commencing with the PE and explain what will be done and why [5,8,9,13,14].

1.1.2. Communication and consultation (throughout session)

Physicians should use general terminology while probing gently and listening to the complaints of the patient, allowing her sufficient time to communicate her health concerns and taking time answer her questions, while proactively providing her information and asking how she feels. The above communication and consultation procedure may promote patients participation in the PE procedure and feeling in control of the situation [1,15].

1.1.3. Information and instruction (during session)

The physician teaches the patient how to relax, informs the patient what s/he is about to do and what the patient might feel, and then explains the findings. This information could help the patient to mentally prepare for the next step, reduce her anxiety, and provide her with coping strategies to facilitate a sense of cognitive control of the situation [1,3,6,9].

1.1.4. Protection and skilled technique (during session)

Physicians wear gloves during the examination, insert the speculum into the patient's vagina in a slow and steady manner, and wash their hands immediately after the examination. Protection and skilled technique are based on protecting the patient from infection and doing no harm (neither physical nor psychological) during the PE procedure [13].

1.1.5. Sensitivity (throughout session)

Physicians must be careful not to invade the patient's privacy when taking a medical history, avoid causing discomfort during the examination by paying attention to physical privacy [8] and the temperature of the speculum, and be careful not to make the patient feel anxious. Gentle and considerate "good manners" throughout the examination will help the patient to relax sufficiently for the PE and have confidence in the physician [5].

1.1.6. Confidentiality (throughout session)

The physician must protect the privacy of the patient's papers and her medical records throughout the PE procedures. Earning the trust and confidence of the patient requires that appropriate confidentiality safeguards be applied to the disclosure of patient information [16,17].

2. Methods

2.1. Participants and data collection

Twenty physicians and 25 nurses were recruited by convenience sampling from the obstetrics and gynecology outpatient departments (OB/GYN OPD) of 3 teaching hospitals in central Taiwan between March and May 2006. In Taiwan, one nurse often works as the attending nurse for several (4–6) different physicians; thus, the 20 physicians as observed by their attending nurses resulted in 100 nurse observations. The criteria for inclusion of physician participants were being (1) an obstetrician–gynecologist attending physician, (2) in charge of the OB/GYN OPD, and (3) willing to complete the questionnaire about perceptions of PE procedures. The inclusion criteria for nurses were (1) working in the OB/GYN OPD and (2) willing to complete the questionnaire about physician's practices during a PE as observed when assisting that physician with a PE.

2.2. Instruments

Data on physicians' perceived importance of PE procedures and on nurses' observations of physicians' practice of PE procedures were collected by two versions of the same 23-item questionnaire. Of the 23 PE procedures, 19 (items 1–14 and 17–21) were adapted from Abraham [12] and 4 (items 15–16 and 22–23) were derived from preliminary interviews with attending nurses. The clarity of the questionnaires was assessed by 3 physicians, who ensured that each item was unambiguous and captured the true meaning of the PE procedure or diagnosis. Participating physicians were asked to rate the importance of each item (PE procedure) using a 4-point Likert-type scale (1 "not very important," 2 "not important," 3 "important," and 4 "very important"). In addition, the content validity was assessed by 3 OB/GYN physicians and by 5 attending nurses with OB/GYN clinical experience. The content validity index (CVI) ranged from 87.5% to 100%. The internal consistency reliability (Cronbach's alpha) for physicians' perceptions was 0.91.

The extent of physicians' practices during a PE was not assessed by asking the physicians themselves, thus avoiding social desirability bias in their replies. Instead, this study adopted nurses' direct observations of a specific physician to measure his/her practices in