

Resident Psychosocial Performance: A Brief Report

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Shapiro J and Schiermer DD. Resident psychosocial performance: a brief report. *Family Practice* 1990; **8**: 10–13.

This study investigated the psychosocial skills of 55 family practice residents conducting patient interviews in actual clinical settings. Results indicated that resident performance was at least adequate, demonstrating competence in basic interpersonal and medical interviewing skills on the majority of categories rated. However, residents performed less well in areas of greater psychosocial complexity, in particular in addressing the meaning or implications of illness with patients and families. Sex differences between male and female residents were also explored and in general found to be nonsignificant, although women residents tended to perform somewhat better in terms of empathy, open-ended questions, and reassurance.

Social scientists began to seriously analyse doctor–patient interaction more than two decades ago¹ and research in this area remains vigorous.² The importance of systematic scientific attention to the psychosocial aspects of physician–patient interaction is well-documented.³ Studies have linked physicians' skill in communication with improved patient satisfaction.^{4,5} Other research has examined the relationship between physician communication and patient compliance, suggesting that communication is a strong mediating variable in optimal patient care.⁶ Epidemiological data point to the high numbers of psychological/behavioral diagnoses made in family practice,⁷ as well as the fact that the primary care sector is the sole source of treatment in over 60% of alcohol, drug abuse, and mental disorders.⁸

Many of these studies have been conducted at the medical student level,⁹ possibly because of greater accessibility to medical students, and possibly because this is the period of greatest emphasis on teaching interview-type skills. However, it has been demonstrated that even though students can be taught to exhibit a greater preference for psychosocial responses, they will not necessarily demonstrate these responses in actual encounters with patients.^{10,11} Research also shows that there is often significant decay in student interviewing performance.¹² For these reasons, this study focused on a population of residents, who have primary, daily responsibility for large

numbers of patients and who, with their greater experience, presumably have had more time to integrate education about the doctor–patient relationship into their practice.

The present study investigated the skills of family practice residents on a range of psychosocial and behavioural dimensions in typical doctor–patient encounters. This assessment provided an opportunity to compare the relative strengths and weaknesses of residents in these areas. The elucidation of particular areas of weakness could provide a focus for greater emphasis in the training of resident physicians.

METHODS

A 42-item questionnaire developed by the first author was used in making resident assessments. A Likert-type scale (1 = weak; 5 = strong) was used in rating the quality of resident performance. The assessment form was based on an examination of available instruments and interview checklists currently in use at other medical schools and departments of family medicine.¹³ Typical checklists of interviewing skills include the following, which also comprised items on the form used in this study: opening and closing skills; organization and structure of the interview; avoidance of medical jargon; ability to establish rapport and engender trust; sensitivity to both patient and physician nonverbal communication; clarity of information transfer; active listening skills; attention to psychosocial history; psychosocial impact of illness on patient and family; ability to understand the patient's perspective on illness; and skill in recognizing and expressing one's own feelings.^{14–16}

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Patients were selected for observation on the basis of resident availability, as the focus of the study was resident performance. Two out-patient family practice clinics were used in the study. The demographic profile of Clinic 1 included an average of 7500 patient visits per year while Clinic 2 saw approximately 8500 patients per year. The breakdown of male to female patients was 50% each at Clinic 1, and 58% to 42% at Clinic 2 (these figures include children). The ethnic distribution in Clinic 1 was 50% Caucasian, 21% Hispanic, 15% Southeast Asian, 5% African-American, and 9% other. At Clinic 2 these figures were as follows: Caucasian 1%; Hispanic 58%; Southeast Asian 24%; African-American <1%; and other, 17%. In Clinic 1, 32% of patients were between 0 and 25 years of age, while 68% were 26–73 years old. In Clinic 2, 37% were between 0 and 25 years of age, while 63% were 26–73 years. The insurance status of the two clinics were: Clinic 1, 29% indigent, self-pay; Medicare or Medi-Cal 59%; private insurance 12%; Clinic 2, 49% indigent, self-pay; 51% Medicare or Medi-Cal; and <1% private insurance. Patient presenting problems covered a wide range, including prenatal visits, well-child checks, upper respiratory infections, UTIs etc. Counselling sessions (eg, with a depressed patient), substance abusing patients, and emergency-type situations were excluded from the study.

During the period 1984–87, a total of 55 family practice residents (32 males and 23 females) were evaluated in terms of their psychosocial performance by two independent raters, representing 67% of the total residents participating in the residency program during these three years (total = 97). However, it represented 90% of all possible first-year residents. This is because resident observations were done most systematically in the first year. Residents who had less than three observations in a single year were not included in the study. Observation forms which were incomplete were also excluded from analysis. A total of 216 observations were scored. The mean number of observations per resident was 3.9 or roughly four observations/resident/year. *t*-Tests between average ratings of the two raters on each item were non-significant confirming the null hypothesis of interrater error bias. Thus, rater scorings were treated as equivalent.

RESULTS

The 42 items rated are listed by rank order of means in Table 1. The overall mean score of the 42 items was 3.49, with a standard deviation of 0.33, and a range of 1.36. In general, the mean scores of most of the 42 items did not differ significantly from the overall mean. However, calculation of *Z*-scores indicated that four items fell below the mean at the 0.05 level, two items fell below the overall mean at the 0.10 level, and six items fell above the mean at the 0.10 level (see Table 1).

Differences between male and female residents were also assessed and were generally non-significant.

However, on four items, differences between male and female residents achieved significance, and on an additional five items, differences approached significance (Table 2). Women residents performed significantly better on noting time available, using open-ended questions, showing empathy toward the patient, and reassuring the patient.

DISCUSSION

Surveying the higher end of the continuum of means in Table 1, we discover items which constitute medically necessary as well as basic interpersonal skills in the doctor-patient interaction. These variables have

TABLE 1 Mean scores of psychosocial variables

Variable name	Mean	SD
Quality of patient greeting ^a	3.93	.72
Consults with attending	3.91	.90
Presents specific course of action ^a	3.90	.77
Uses specific questions ^a	3.89	.74
Elicits patient rationale for visit ^a	3.83	.76
Overall rapport with patient ^a	3.82	.68
Explains diagnosis and treatment	3.81	.94
Asks questions of family members	3.80	1.1
Looks up information	3.78	.80
Explains reason for referral	3.77	.95
Makes effort to put patient at ease	3.75	.76
Summarizes information	3.70	.77
Overall control of presentation	3.69	.84
Reassures patient appropriately	3.66	.84
Avoids criticism, judgment of patient	3.66	.85
Uses appropriate nonverbals	3.61	.88
Checks patient compliance	3.60	.89
Makes psychosocial intervention	3.59	1.0
Makes use of self-disclosure	3.55	1.3
Scans other problem areas	3.55	.77
Refers to patient chart	3.54	.81
Uses paraphrasing skills	3.54	.79
Requests info on health/fam members	3.51	.81
Awareness of patient nonverbal cues	3.50	.86
Overall structure of interview	3.50	.84
Elicits feedback from patient	3.49	.70
OVERALL MEAN	3.49	
Uses open-ended questions	3.48	.83
Reinforces patient	3.48	.86
Elicits patient expectations for treatment	3.46	1.1
States goals for session	3.44	.78
Shows empathy toward patient	3.42	.77
Avoids technical language	3.37	.87
Engages in active listening skills	3.36	.82
Requests psychosocial information	3.35	1.0
Writes down patient tasks	3.35	1.3
Discusses own emotional response	3.33	1.3
Explores emotional concerns ^a	3.11	1.2
Notes time available ^a	3.10	.96
Encourages patient paraphrasing ^b	2.89	1.2
Uses family to implement treatment ^b	2.81	1.5
Discusses impact of diagnoses on patient ^b	2.65	1.3
Discusses impact of diagnoses on family ^b	2.57	1.3

^a *Z*-score significant at 0.05

^b *Z*-score at the 0.10 level

TABLE 2 Differences between performance of male and female residents on psychosocial variables

Variable name	Male residents		Women residents		t-value
	X	SD	X	SD	
Notes time available	2.5	0.98	3.5	0.76	-2.1 ^b
Uses open-ended questions	3.4	0.83	3.7	0.86	-2.5 ^c
Uses paraphrasing skills	3.4	0.76	3.6	0.71	-1.7 ^a
Shows empathy toward patient	3.3	0.73	3.6	0.80	-2.2 ^b
Looks up information	3.6	0.77	4.1	0.70	-1.7 ^a
Discusses own emotional response to patient	3.2	1.2	3.7	1.2	-1.7 ^a
Reassure patient appropriately	3.6	0.86	3.9	0.79	-2.5 ^c
Rapport with patient	3.8	0.67	4.0	0.71	-1.7 ^a
Suggests specific course of action	4.0	0.77	3.7	0.75	1.7 ^a

^a significance < 0.10

^b significance < 0.05

^c significance < 0.01

smaller standard deviations, suggesting a core of behaviours which residents mastered well. Specifically, these were skills in greeting the patient, consulting with others, suggesting a specific future course of action, overall rapport with patient, and using specific questions. This cluster of items suggests that residents have strengths in establishing a certain baseline psychosocial interaction, are responsible about seeking help and excel in the specific, concrete tasks of interviewing.

However, the items which fell significantly below the mean, as well as those which approached but did not achieve significance, suggest certain important areas of psychosocial interviewing which need improvement. In particular, residents demonstrated a serious weakness in discussing with patients and families the meaning, or phenomenological reality, of their symptoms, and what this might imply for the patient's day-to-day living or long-term future. Residents also were consistently less successful in incorporating family members in treatment plans than the overall psychosocial profile. Residents further showed relatively poor performance in the patient-centered skill of encouraging the patient to paraphrase, in noting how much time was available for the interview, and in exploring possible emotional concerns or problems. Thus it is possible to speculate that more complex psychosocial skills, which involve the emotional lives of the patient and family, still tend to be performed with less skill than other more basic psychosocial behaviours.

In terms of sex differences in psychosocial performance between residents, it appeared that while, overall, men and women performed equally well, there was a tendency on certain dimensions for women residents to outperform men. The only area in which the difference favoured male residents was in terms of making specific, concrete suggestions to the patient. Otherwise, the results suggested that women residents perform better in empathy skills, open-ended questions, reassurance, rapport, paraphrasing, and discussing their own feelings. Further research is needed to clarify and validate these findings on sex differences.

This study, which ranked the mean skill level on a wide array of items measuring specific skills, showed that residents' greatest proficiency was in basic interpersonal skills as well as those which are essential for conducting an adequate interview. They fared less well generally in areas requiring more sophistication and skill in dealing with the emotional and interpersonal components of patients' lives. This may be due in part to differences among residents in broaching these topics with patients, their lack of experience in doing so, and the greater difficulty of effecting change in the opinions of residents' interviewing behaviour. The results point to a constellation of psychosocial skills which should receive greater emphasis during residency training.

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