

**THE EFFECT OF THE PATIENT'S SOCIAL CLASS
ON THE DOCTOR'S DOMINEERINGNESS IN
DOCTOR-PATIENT COMMUNICATION¹**

Linda Coates, Anita Hanks, Ron Hoppe

Department of Psychology
University of Victoria

1. INTRODUCTION

The influence of the patient's social class on doctor-patient communication was examined in two role-playing studies. In the first experiment liberal arts students played the roles of doctor and patient where one half of the patient's role was lower class and the other half, higher class. The second experiment was similar to the first but had pre-medical and nursing students play the role of doctor. The domineeringness of the doctor in the communication was examined as it related to the variation in the patient's social class.

Since at least classical times doctors have been concerned with effectively communicating with their patients. For example, Hippocrates believed that improper communication accounted for many, if not most, of the patients not carrying out the prescribed treatment (Levine, 1971). This was of special concern when the patient died because the blame was often mistakenly placed on the physician. Hippocrates further believed that the practitioners should speak briefly and authoritatively and not engage in idle conversation because it would detract from the conveyance of the god-like image. It is of interest for the present study that an examination of 42 reported case histories from doctors of the school of Cos (Hippocrates') gave no evidence that the slaves were treated any differently than the citizens of Cos.

Although the case histories from the school of Cos give no evidence for variation in treatment with social class, it is probable that variation occurs today (Scully, 1980). Fisher (1983) found that middle and upper class women with abnormal pap-smear test results were less likely to receive a hysterectomy than were lower class women whose pap tests showed the same degree of abnormality. Other studies (Fisher & Todd, 1986a, 1986b) have also shown that lower class women are likely to receive more radical treatment than higher class women.

Also, how much the physician tells the patient can vary with social class. Pendleton and Bochner's (1980) results show that the number of explanations offered by practitioners to patients from the working class was fewer than those offered to women from higher classes. Perhaps, it is the difference in the amount of information transmitted by the doctor or patient that produces

differences in treatment. After studying 336 videotapes of doctor-patient interactions, Waitzkin (1985) found that gender, social class, and income, among many other factors, contributed to the amount of information given by the doctor. However, the proportion of variation in the information transmitted which was accounted for by patient characteristics was small--9 to 14 percent. Some doctors have argued that the behaviours of the patients lead to differences in the information given to them (Glaser, 1958; MacDonald, Hagberg, & Grossman, 1963), and of course, doctor-patient interaction is a two-way process. The often-noted shyness of lower class patients may lead them to ask fewer questions leading to receiving less information than higher class patients (Waitzkin and Stoeckle, 1976). However, familiarity with medical terms and the ability to understand medical information does not appear to be related to social class (McIntosh, 1974; Waitzkin & Stoeckle, 1976). It has been suggested (Kess & Hoppe, 1987) that physicians may want to use a structured plan in their discourse with patients to ensure that the essential information is transmitted and comprehended by patients in order for them to understand and choose the best course of treatment.

Fisher and Todd (1983) view the interaction of the doctor and patient within a broad social context where many social factors as well as the social structure of the medical institutions play a part in the communication process, the diagnosis, and the treatment. The doctor and patient engage in negotiations with the doctor presenting information for the patient to use to understand the nature of the problem, its treatment, and the consequences. The doctors also may use a persuasive strategy in order to gain acceptance for a recommended treatment. One aspect of the interaction is likely to be the degree of domineeringness of the doctors' behaviour because of their position of authority in the relationship. As Watzlawick, Beavin, and Jackson (1967) have pointed out every message contains an aspect of both content (in this case, information) and relationship, and within the relationship it is the domineeringness of the doctor and its possible variation with the social class of the patient that is the focus of the two studies to be reported here.

Domineering behaviour has been defined by Rogers-Millar and Millar (1977) as the use of "one-up messages--verbal statements which claim the right to be dominant." The doctor is dominant if the patient accepts the one-up messages, and the proportionately more domineering messages issued by the doctor, the more domineering the doctor is. Dominance, in contrast to domineeringness, is defined as the acceptance of the one-up messages. Therefore, the more accepting the patient is, the more dominant the doctor is in the relationship. It is likely that when doctors exhibit much domineering behaviour during an interaction, they are suggesting a paternalistic and dependent relationship. Dominance results from the complementary behaviour of the patient.

Domineeringness and social class were examined in two role-playing studies where the participants were undergraduate, female students who assumed the roles of doctors and patients where the socioeconomic status of the patient's role varied and domineering behaviour was operationalized according to Ericson and Rogers (1973) elaboration of Sluzki and Beavin's (1965) coding scheme for dyads. Basically, the scheme is a three-step procedure that examines the communication properties at the transactional level and is described in more detail in the method section of the first experiment. The hypothetical situation for the role-playing interaction was adapted from Fisher's (1983) study where the results of an abnormal pap-smear test are discussed between the doctor and patient, and they come to an agreement about the course of treatment.

2. Experiment 1

2.1 Method

Subjects. The subjects were 20 female students from the Department of Psychology's volunteer subject pool and from appeals for volunteers from posted notices and class solicitations. They were between 17 and 35 years of age.

Procedure. The subjects were asked to meet and role-play in pairs. One member of the pair, chosen at random, played the role of a doctor and the other the patient. When the subjects arrived at the laboratory, they were seated, and they read the role-playing instructions during which time the experimenter left briefly to adjust such things as the camera focus and the sound level of the videotape recording. After the subjects had enough time to read through their instructions, the experimenter rejoined them, orally went over the instructions, and answered questions. The experimenter then said to each in turn, "This is your doctor" and "This is your patient."

The doctor's role-playing instructions were as follows:

"Your patient is here today because the results of her last pap smear were abnormal. It was described as a Class 111, which means your patient has a 33 per cent chance of having cervical cancer.

Your responsibilities are:

- (1) to protect the patient from more extensive disease (in this case, cancer).
- (2) to preserve reproductive functions.

The three common courses of treatment are:

- (1) Cryosurgery.

This is an office procedure which requires no aesthetic.

The cells are frozen.

Some follow-up treatment, involving regular monitoring of cell growth, is required to be sure there is no further abnormal growth.

The chance of successfully treating cancer, if present, is 20 percent.

(2) Cone biopsy.

This procedure requires anaesthetic. A thin, cone-shaped slice is cored out of the endocervical canal and is examined. If the cells at the top are normal, some follow-up is required to be sure there is no cancerous growth.

If the cells at the top are abnormal, a hysterectomy usually follows.

This procedure may threaten, but does not usually terminate reproductive capacity. The chance of successfully treating cancer, if present, is 35 percent.

(3) Hysterectomy.

This is surgical removal of the uterus.

This procedure requires anaesthetic.

This procedure terminates reproductive capacity.

The chance of successfully treating cancer, if present, is 90 percent.

Based on your extensive experience as a doctor you are likely to choose:

cryosurgery TWO times out of TEN,
cone biopsy THREE times out of TEN, and
hysterectomy FIVE times out of TEN."

Each "doctor" was given a fictional patient history. The two patient histories were distributed at random among the "doctors" and were as follows:

The first patient history:

"Single.

Age 28.

Three children.

Welfare recipient.

History of heart disease in family.

Father is diabetic--controlled with insulin injections.

Underwent tonsillectomy in June, 1981.

Physically fit--weight trains

Prone to bladder infection--investigated in November, 1983 found to be normal.

Experienced occasional minor depressive episodes--agreed that this may be related to diet."

The second patient history was identical to the first, except on three of the first four items, which were:

"Married

Age 28

One child

Works as a secondary school teacher."

The "patients'" instructions were considerably less elaborate than the "doctors":

"You are here to see the doctor because your last pap smear was abnormal. You need to decide what to do now, in terms of treatment. Your doctor has a lot of expertise and also knows a bit about your medical history and will draw on all of this information, expertise, and experience to help you make your decision."

The "patient" was also given her patient history in order to facilitate the role-playing.

The subjects sat facing each other, with a small table between them as they read through their instructions and played out the interaction. The subjects were told that they were being videotaped and that they needed to come to a treatment decision. Some suggestions were to try one treatment, a series of treatments, or to postpone their decision. The experimenter observed the interaction on a video screen in the control room.

Once the pair had arrived at their decision the experimenter returned to the subjects who were thanked and given an opportunity to view their videotape. After viewing the tape the experiment was explained to them. The subjects were then asked to sign a permission form indicating how they would allow the experimenter to use their tape.

2.2 Results

The videotapes were scored for domineeringness of those who played the role of doctor by coding the "doctors'" messages according to the relation coding scheme described by Ericson and Rogers (1973). First, each message was assigned a three-digit code which described the message. The first digit indicated the speaker and the second the message's speech act: (1) assertion, (2) question, (3) talk-over, (4) incomplete, (5) other. The third digit described the response form: (1) support, (2) nonsupport, (3) extension, (4) answer, (5) instruction, (6) order, (7) disconfirmation, (8) topic change, (9) initiation-termination, and (0) other.

The second step in the coding procedure was to translate the code into a control direction. A one-up message occurred when movement was made toward dominance, e.g., when an assertion occurred in the form of nonsupport (12); a one-down message occurred when movement was made towards being controlled by, seeking, or accepting dominance of the other, e.g., if the message was an assertion expressing support for a previous message (11); and a one-across message occurred when the movement sought neither to control nor to be controlled, e.g., when an assertion extended the dialogue (13). For a complete explanation of these concepts and an example of how the scoring is done see Ericson and Rogers (1973) or Watzlawick, et al. (1967).

A ratio was formed of one-up statements to the total number

of statements made by each "doctor" for each role-playing interaction. A one-factor, two-level ANOVA was performed on these proportions to determine whether the "doctors" were more domineering when their "patients" were of a lower social class than of a professional class.

The hypothesis was rejected. The "doctors" whose "patients" were of lower class showed proportionately slightly more domineering behaviour ($M = .40$) than the "doctors" with higher class "patients" ($M = .36$), but the difference was not statistically significant.

Other differences were also not significant, such as the decisions of course of treatment, length of time the "doctors" spent with their "patients", and the rate of domineering statements per minute.

2.3 Discussion

Of course, there are many reasons for finding no significant differences, and with a role-playing experiment a likely reason is that the role-playing was not an accurate replica of real life. Perhaps, the subjects who played the doctors could not adequately do so, and/or the subjects playing the patient were middle class and may not have been able to adopt a role of another class. Then too, those who played both roles were female and perhaps differences only occur when the doctor is male and the patient is female. Also, Canadian medicine is less susceptible to social class effects than American medicine because Canada's medical plan does not discriminate according to socioeconomic status as does the American system. The findings of Fisher (1983) and some others mentioned earlier occurred within the American system. Therefore, within the Canadian system there may not be real differences in the medical communication process and treatment.

Nevertheless, the possibility of the same hypothesized differences was examined in a replication where the subjects who played the role of doctor were more closely related to the role than were those in the first experiment. An additional hypothesis was made: It was predicted that if there were the expected class differences in the domineeringness of the doctor, then there would also be class differences in the complementary behaviour of the patient, that is, the subjects playing the role of the patient from the lower class would be more accepting of the domineeringness than those playing the patient of the professional class. The differences in acceptance would indicate a greater dominance of the doctor as well as greater domineeringness when interacting with a patient from the lower class.

3. EXPERIMENT 2

3.1 Method

Subjects. The subjects were drawn from the Department of Psychology's subject pool and through appeals to undergraduate classes. Eleven pre-medical and bachelor of nursing students, who had the Registered Nurses degree, role-played doctors. It was hoped that they would be more familiar with the medical information and technical terms that doctors use in discussions with patients than those who played the doctor in the first experiment and thereby play the role more realistically. Twenty two students from the Department's pool played the patients. All 33 subjects were females between 19 and 40 years of age.

Procedure. The procedure differed somewhat from that of the first experiment. Each of the "doctors" interviewed two "patients"--one from each social class. The order of the "patient's" social class was counterbalanced to avoid order effects.

The subjects who played the roles of doctor and the first patient read the same role-playing instructions and patient histories as were used in Experiment 1 but in separate rooms. Then, each was given an opportunity to ask questions, individually. The "doctor" donned a white laboratory jacket and the "patient" a hospital examining gown over their clothing. The experimenter then brought the "patient" into the laboratory room with the "doctor." Subjects were introduced by the experimenter saying: "Doctor (her name) your patient, (her name), is here."

The subjects discussed the treatments, etc., as in the first experiment. During the videotaping of the interaction, the second patient was given her role-playing instructions and patient history to read. Following a treatment decision and the conclusion of the interaction, the patient was taken out of the laboratory room. The doctor was then given the second patient's history. The experimenter separately asked if the second patient or doctor had any questions. The second patient was then seated in the laboratory and introduced to the doctor in the same manner as the first interaction.

During the videotaping of the second interview, the experimenter gave the first patient the option of receiving a written explanation of the experiment, and view the videotape at a later date, or waiting to see the videotape after the second interaction. All subjects chose to see the video immediately after the second interaction.

After the second interaction, the three subjects were shown the videotape, and given a verbal explanation of the study. The subjects were then asked to fill out a permission form indicating how they would allow the videotape to be used.

3.2 Results

Using the same scoring procedure as in the first study, the videotapes were scored for domineering behaviour exhibited by the

doctor. To test for an order effect a comparison was made of the proportions ($\bar{M} = .28$) of domineering messages given to the first patient with those ($\bar{M} = .31$) given to the second patient. A repeated measures ANOVA indicated no significant order effects in the domineering messages that the "doctors" gave during the interactions.

A second comparison was made to test the hypothesis that the proportion of domineering messages given by the "doctor" was related to the socioeconomic status of the "patient." Results of a repeated measures ANOVA supported the hypothesis by showing that the proportions ($\bar{M} = .33$) of one-up messages given to the lower social class "patients" were significantly greater than the proportions ($\bar{M} = .26$) given the higher class "patients", $F(1, 10) = 9.82$, $p < .025$. Thus, the findings indicate that the patient's socioeconomic status affects the number of domineering messages given during an interaction by a doctor.

According to Fisher (1983) and Fisher and Todd (1986a, 1986b) the treatment decision made during the interaction should depend on the patients' social class, in that those patients of lower status should receive more radical treatments. The results of an ANOVA showed no significant differences in the treatment decisions made for patients of the two classes.

In order to better understand the nature of domineering behaviour, comparisons were also conducted on the number of one-down messages the "patients" gave during the interactions. Generally, the proportions ($\bar{M} = .76$) of one-down messages made by "patients" were significantly greater than the proportions ($\bar{M} = .13$) of one-up messages, $F(1, 21) = 122.26$, $p < .01$. However, an ANOVA revealed no significant differences between the social classes in the proportions of one-down messages that were given. This finding may be due to a floor effect in that the patients gave few messages during the interviews, and those they did give were typically one-down messages.

4. GENERAL DISCUSSION AND CONCLUSIONS

Generally, the women who played the role of doctor in the second experiment were significantly more domineering when interacting with women who played the role of lower class patients than with those who played professional class patients. The finding is consistent with previous studies which have found that patient attributes influence doctor-patient interactions (Blum, 1960; Fisher, 1983; Garrity, Wilson, & Hafferty, 1984; Pendleton, & Bochner, 1980; Waitzkin, & Stoeckle, 1976), and it suggests that the stereotypes which doctors may have can influence their behaviour during the interaction with patients.

If the differences in the doctors' behaviour and problems during interactions were, as some doctors postulate, due mainly to the patients' behaviour, then the results of the second experiment can not be easily explained. The subjects who were

assigned to the patients' roles of the two social classes did not differ significantly in their communicative behaviour during the interactions. A large proportion of the patients' messages in both classes were one-down messages. Therefore, while the behaviour of a patient undoubtedly influences that of the doctor, it can not be argued that it was the patients' behaviour which induced the doctors' communicative messages in this study. Thus, knowledge of a patient's social class appears to affect the role playing of a doctor's communicative behaviour, regardless of the other characteristics of the patient.

Contrary to Fisher (1983) and Fisher and Todd (1986a, 1986b) the results of both experiments did not show any significant differences in the treatment decisions reached between patients of different classes. Instead, treatment decisions tended to be the same for patients who interacted with the same doctor. Since Fisher and Todd were focusing on the mutual influence of social structure and individual characteristics, the overriding social structure may have been a major cause of the differences in treatment decisions which were found in their studies. For example, the doctors dealing with patients of the lower social class were in need of surgical experience, whereas the doctors dealing with patients of the higher class were not. This could account for the lower class patients being more likely to receive hysterectomies. However, it should be pointed out that it is still likely, that the domineeringness of the doctors in need of surgical experience influenced the "mutual" decisions on the course of treatment.

While the use of students to role-play doctors and patients can be criticized, it does not invalidate the results of the present studies. Indeed, the use of role playing should, if anything, have increased the difficulty of finding a significant difference in the number of domineering messages given by doctors to patients. Given the esoteric nature of the doctor's medical knowledge, it is likely that the use of domineering messages and the asymmetry in the interactions would increase in actual doctor-patient interactions.

It is interesting to note that although the usual findings that social class influenced the doctors' communications, they were, typically, perhaps even exclusively, with male doctors. The present studies using females in the doctor's role suggest that the gender of the doctor is probably not a major factor contributing to the discrimination by physicians.

In sum, the current studies illustrate that knowledge of the patient's social class affects the relationship definition offered by the doctor to the patient, as measured by the doctor's domineering behaviour and that the domineeringness is not a result of the patient's communicative behaviour.

NOTE

1. This report is based on Linda Coates' (1989) and Anita Hanks' (1988) honours theses, Department of Psychology, University of Victoria.

REFERENCES

- Blum, R. H. (1960). The Management of the Doctor-Patient Relationship. New York: McGraw-Hill.
- Ericson, P. M. & Rogers, L. E. (1973). New procedures for analyzing relational communication. Family Process, 12, 246-267.
- Fisher, S. (1983). Doctor-patient talk: How treatment decisions are negotiated in doctor patient communication. In S. Fisher & A. D. Todd (eds.), The Social Organization of Doctor-Patient Communication (pp. 135-157). Washington, D.C.: The Centre for Applied Linguistics.
- Fisher, S. & Todd, A. D. (1983). Introduction: Communication and social context--toward broader definitions. In S. Fisher & A. D. Todd (eds.), The Social Organization of Doctor-Patient Communication (pp. 3-19). Washington, D.C.: The Centre for Applied Linguistics.
- Fisher, S. & Todd, A. D. (1986a). Communication in institutional contexts: Social interaction and social structure. Advances in Discourse Processes: Discourse and Institutional Authority: Medicine, Education and Law, xix, ix-xviii.
- Fisher, S. & Todd, A. D. (1986b). Negotiating decisions to use oral contraceptives. Advances in Discourse Processes: Discourse and Institutional Authority: Medicine, Education, and Law, xx, 3-25.
- Garrity, T. F., Wilson, J. F., & Hafferty, F. W. (1984). medical care for the elderly: Intervening in medical education. Journal of Community Psychology, 12, 369-378.
- Glasser, M. A. (1958). A study of the public's acceptance of the salk vaccine program. American Journal of Public Health, 48, 141-153.
- Kess, J. F. & Hoppe, R. A. (1987). Patterned language formats in monologic and dialogic discourse. PALM/Papers in Applied Linguistics--Michigan, 2, 60-68.
- Levine, E. B. (1971). Hippocrates. Twayne: New York.
MacDonald, M. E., Hagber, K. L. & Grossman, B. J. (1963).

- Social factors in relation to participation in follow-up care of rheumatic fever. Journal of Pediatrics, 63, 503-510.
- McIntosh, J. (1974). Processes of communication, information seeking and control associated with cancer: A selective review of the literature. Social Science and Medicine, 8, 167-187.
- Pendleton, D. A. & Bochner, S. (1980). The communication of medical information in general practice consultations as a function of patients' social class. Social Science and Medicine, 14A, 669-673.
- Rogers-Millar, L. E., & Millar, F. E. (1977). Domineeringness and dominance: A transactional view. Unpublished manuscript, Cleveland State University, Department of Communication, Cleveland, Ohio.
- Scully,, D. (1980). Men Who Control Women's Health: The Miseducation of Obstetrician-Gynaecologists. Boston: Houghton Mifflin.
- Sluzki, C. E. & Beavin, J. (1977). Symmetry and complementarity: An operational definition and a typology of dyads. In P. Watzlawick and J. H. Weakland (eds.). The Interactional View. Toronto: W. W. Norton and Company, Inc., 77-87.
- Waitzkin, H. (1985). Information giving in medical care. Journal of Health and Social Behaviour, 26, 81-101.
- Waitzkin, H., & Stoeckle, J. D. (1976). Information control and the micropolitics of health care: Summary of an ongoing research project. Social Science and Medicine. 10, 263-276.
- Watzlawick, P., Beavin, J., & Jackson, D. D. (1967). The Pragmatics of Human Communication: A Study of Interactional Patterns, Pathologies, and Paradoxes. New York: Norton.

