The influence of patient characteristics on communication between the doctor and the patient

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This review article investigates the influence of patient characteristics upon the course of a consultation. To this purpose a literature survey and a meta-analysis were performed: the results of the various surveys have been assessed following a statistical procedure. There are rather strong indications that elderly patients are at an advantage: they appear to receive more attention, more time and more information. Women seem to have an advantage as well: they get more information and more time. Patients from a higher social class (in which mainly level of education appears to be significant) are better off in all respects. Furthermore, doctors communicate better and more emphatically with Anglo-Americans than with Hispano-Americans, whereas whites receive more information than do non-whites, and are treated in a more positive manner as well. Poorly groomed, unwashed patients with dirty clothes are less thoroughly questioned by their doctors; patients that look well-groomed get more opportunity to discuss their problem, have more eye contact and are less often interrupted. For all surveyed variables there are therefore indications that they influence the general practitioner's behaviour.

Roter DL. The influence of patient characteristics on communication between the doctor and the patient. Huisarts Wet 1991; 34(7): 295-301.

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Introduction

It has been argued that the basis of trust between patients and their physicians lie in the physician's dedication to 'universalism', that is the responsibility to treat all patients alike without regard to particular attributes or ascriptive traits.[1] It is reasoned that patient care must be universalistic or suspicion and caution would prevail over trust and confidence in the doctor-patient relationship. Fear that physicians might act upon ageist, class, or racist stereotypes could undermine the fabric of the social contract upon which the therapeutic relation rests. In light of the significance of potential violations of physician universalism, investigation of the association between patient attributes and aspects of care should be a research priority. This is not the case. There have been relatively few methodologically sound studies designed to specifically investigate the role of sociological factors in medical visits.[2-4]

There are several mechanisms by which one might expect physician behavior to relate to patient characteristics. There may be an unintended association between the care process and patient attributes produced by mutual ignorance of social or cultural norms. The marked differences between physicians and patients unlike themselves (those patients who are poor, uneducated, and minorities) may lead to very basic communication difficulties. For instance, citing sociolinguistic theorists, *Waitzkin* has generalized to the medical context the finding that middle-class subjects tend to be verbally explicit while working-class subjects tend to communicate more implicitly through nonverbal signals. These nonverbal signals could easily be missed by by physicians with consequenses for misunderstanding, misinterpretation, disappointment.[5]

A second explanation for an association between patients' sociodemographic characteristics and the medical care process may be differences in physicians' behavior driven by patients' response tendencies arising from sociocultural attitudes, beliefs, and expectations of the groups to which patients belong.[6] In this case the association between sociodemographic variables and the nature of the care process is moderated by socially patterned expectations and responses to illness. For instance, in his classic study of ethnicity and pain, *Zborowski* found that patients' interpretation of pain and expectations regarding pain control varied widely across ethnic groups and that members of these groups communicated their expectations to their physicians. Consequently, tailoring pain management in this way maximized effective medical care.[7]

Finally, it is possible that physicians like others in our society are negatively affected by stereotypes with implications for the care they give to patients. Physicians have generally scored about the same as non-physicians in surveys reflecting attitudes toward the elderly or the poor.[8-10] Further, the range in physicians' political and ideological beliefs indicate a broad spectrum of response to patient groups.[5]

The research question explored here is the extent to which the literature presents evidence for the three hypothesized mechanisms by which patient characteristics may effect doctor-patient communication and its consequences. Specifically evidence of patients' age, gender, social class, ethnicity, and physical appearance effecting doctor-patient communication will be explored through the framework of:

- unintended violations due to miscommunication, misattribution or misunderstandings;
- divergent response tendencies of patients, which necessitate varying provider responses, arising from sociocultural attitudes, beliefs, and expectations regarding medical issues;
- conscious violations of a universalistic orientation through stereotypes and prejudice.

Methods

This review will present a brief overview of the research literature which is based on direct observation of medical visits to explore the association between patient characteristics and the communication process. The literature review, included a diligent search of the published, English-lan-

Samenvatting

Roter D. De invloed van kenmerken van patiënten op de communicatie tussen arts en patiënt. Huisarts Wet 1991; 34(7): 295-301.

Dokters zouden in beginsel, conform de richtlijnen zoals geformuleerd door *Parsons*,[1] iedere patiënt even goede zorg moeten verlenen. Het is echter de vraag of dit in de praktijk ook gebeurt. In dit overzichtsartikel wordt nagegaan welke invloed bepaalde *patiënt*kenmerken hebben op de gang van zaken tijdens het consult. Daartoe is een literatuuronderzoek verricht – in hoofdzaak via Medline – en is een meta-analyse uitgevoerd: de resultaten van de verschillende onderzoeken zijn via een statistische procedure 'gewogen'.

Leeftijd

De onderzoeksresultaten op dit terrein zijn tegenstrijdig. In een klein onderzoek (twee maal twintig patiënten) scoorden artsen hoger op schalen voor 'gelijkwaardig gedrag' en 'betrokkenheid' in consulten met ouderen, en waren arts en patiënt het in consulten met ouderen vaker eens over inhoud en doel van het consult. *Stewart* stelde vast dat artsen minder vaak grapjes maken tegenover ouderen, en dat ouderen vaker tegendraads of defensief gedrag laten zien.[14] Anderzijds vonden *Hooper et al.* dat artsen meer tijd uittrokken en meer informatie gaven in consulten met mensen boven, dan met mensen onder de 40 jaar.

Verder stelden ze vast dat dokters beleefder waren tegen ouderen boven de 74 jaar.[16] *Roter* meldt dat dokters aan patiënten boven de 74 'meer warmte' gaven.[17] *Waitzkin* vond dat ouderen meer uitleg kregen, minder 'jargon' en meer begrijpelijke taal.[5]

Na meta-analyse bleken er tamelijke sterke aanwijzingen te zijn dat ouderen eerder 'bevoordeeld' dan 'benadeeld' worden: ze lijken meer aandacht, meer tijd en meer informatie te krijgen.

Geslacht

Het grootste onderzoek op dit terrein is van *Waitzkin*; daarin bleek dat vrouwelijke patiënten meer informatie kregen, en dat die informatie bovendien op een begrijpelijker manier werd gepresenteerd.[5] In een vervolgonderzoek aan de hand van hetzelfde materiaal lieten *Wallen et al.* zien dat dit vooral het gevolg was van het feit dat vrouwen meer vroegen.[19] *Pendleton & Bochner* kwamen tot vergelijkbare conclusies.[20] *Stewart* concludeerde dat artsen vaker grapjes maken en lachen in consulten met vrouwen, en vaker naar gevoelens vragen.[14] *Hooper et al.* stelden vast dat vrouwen meer informatie en empathie ontvingen, en minder vaak werden onderbroken dan mannen.[16] *West* daarentegen vond dat vrouwen juist vaker werden onderbroken, met name door mannelijke dokters.[21]

Na meta-analyse bleken vrouwen beter af: ze kregen meer informatie en meer tijd.

Sociale klasse

Pendleton & Bochner stelden na analyse van 79 op video opgenomen consulten vast dat artsen spontaan meer uitleg aan patiënten uit een hogere sociale klasse gaven.[20] Deze uitkomst was goeddeels in overeenstemming met de resultaten van *Bain*, die bovendien vaststelde dat mensen uit lagere sociale klassen zelf ook minder praatten.[23 25] Dat deze vooral ook minder vragen stelden, bleek uit onderzoek van *Cartwright* en *Waitzkin*.[26 5] Uit de laatste – omvangrijke – studie bleek bovendien dat hoger opgeleide patiënten meer aandacht en spontane informatie kregen en dat er begrijpelijker taal tegen ze werd gebruikt. Ook *Stewart* stelde vast dat hoger opgeleiden meer uitleg kregen; daar stond echter tegenover dat lager opgeleiden weer meer emotionele steun kregen.[14] Deze laatste observatie wordt niet bevestigd in drie onderzoeken die werden uitgevoerd in praktijken van kinderartsen: goed opgeleide ouders bleken in alle opzichten in het voordeel: er werd beter naar hen geluisterd, en ze kregen meer empathie en betere zorg.[27 29]

Na meta-analyse bleken patiënten uit hogere sociale klassen (waarbij vooral 'opleidingsniveau' van belang was) in alle opzichten beter af.

Etnische achtergrond

Zola stelde vast dat Amerikanen van Italiaanse afkomst in vergelijking tot mensen van Ierse of Angelsaksische afkomst meer 'drama' maakten over hun klachten, en bijgevolg vaker als psychiatrische patiënten werden aangemerkt;[30] in een replicatie werden dezelfde resultaten gevonden, zij het in mildere vorm.[31] *Hooper et al.* stelden vast dat dokters beter en empatischer communiceerden met Anglo-Amerikanen dan met Hispano-Amerikanen;[16] *Roter et al.* stelden vast dat 'whites' meer informatie kregen dan 'non-whites', en ook positiever werden behandeld.[4]

Andere kenmerken

Onverzorgde, ongewassen patiënten met vieze kleren bleken in het onderzoek van *Hooper et al.* minder goed ondervraagd te worden door hun huisartsen; patiënten die goed in het pak zaten en er ook overigens goed verzorgd uitzagen, kregen meer gelegenheid om hun probleem te bepreken, hadden meer oogcontact en werden minder vaak onderbroken.[16]

Hier geldt dus in hoge mate hetzelfde als voor patiënten uit etnische minderheden en lagere sociale klassen.

Beschouwing

Voor alle onderzochte variabelen geldt dat er aanwijzingen zijn dat ze het gedrag van de huisarts beïnvloeden. De uitkomsten van dit onderzoek vertonen een zekere overeenkomsten met een recente analyse van sociaal-demografische factoren van patiënten als predictor voor hun tevredenheid: ouderen en mensen uit een hogere sociale klasse zijn vaker tevreden over de wijze waarop ze worden behandeld.

guage literature through 1986 for all studies which involved non-psychiatric, medical encounters, for which there was a neutral observation (nonparticipant observers, audiotape, or videotape) and some result relating aspects of communication to patient or provider variables. The review was done in the spirit of a meta-analysis, as described in greater detail elsewhere.[4 11] This paper focuses specifically on patient characteristics and the communication process, utilizing results of the meta-analysis referred to above, but presented in the context of a more traditional narrative literature review which was updated through 1990.

Patient age

It has been maintained that ageism, the system of destructive false beliefs about the elderly, is pervasive in our society, and reflected in the health context through negative physician attitudes and a general reluctance to deal with older patients.[12 2] Evidence, however, of the direct manifestation of attitudes in medical practice with the elderly is sparse and somewhat contradictory.

A rare study specifically designed to compare the communication in medical visits of patients over the age of 65 and those 45 years of age or younger was undertaken by Greene et al.[2] A small sample of 40 patients (20 in each age group) matched by physician, sex, and race were audiotaped and coded for medical topics, communication content, and emotional exchange. The investigators found little evidence of blatant ageism, but did find some differences in how topics were addressed, the emotional tone of the visit, and several patterns of exchange that was related to patient age. There were more medical topics and fewer psychosocial issues discussed in interviews with older patients, and further, when older patients raised psychosocial issues, doctors tended to be less responsive than when younger patients raised similar issues. Physicians were rated higher regarding the degree of questioning, information provided, and support given to younger compared to older patients. In additional analysis, the investigators report that agreement on the major goals and major medical topics discussed during the medical visit was significantly greater for younger patents and their physicians than for older patients.[13]

In terms of the emotional tone of the visit, observers listening to audiotapes rated physician behavior to be significantly less positive when with elderly patients. Physicians were less egalitarian, patient, engaged, and respectful when with older patients.[2] Also concluding that visits with elderly patients may carry more tension than those of younger patients, *Stewart* found that physicians were less likely to engage in 'tension release', that is joke and laugh when with older patients and that older patients were much more likely to express antagonism or defensiveness than younger patients.[14]

There is some evidence from the investigation of nonverbal or paralinguistic qualities of interaction which suggest that communication between elderly patients and providers differ from that of younger patients. This question was explored by *Caporael et al.* focusing on the use of displaced baby talk to the institutionalized elderly.* More than 22% of speech to residents in one nursing home was coded as baby talk. The investigators conclude that this phenomenon is widespread and that baby talk directed toward elderly adults was not a result of fine tuning of speech to individual needs or characteristics of a particular patient but rather a function of social stereotyping of the elderly.

In contrast, to the findings described above, several other investigators conclude that the elderly appear to have some advantage over younger patients in communication with physicians. For instance, *Hooper et al.* found physicians to be more courteous with elderly compared to younger patients. This effect, however, was only evident for patients over the age of 74. Physicians also spent significantly more time and gave more information to patients over the age of 40.[16] In my own studies there was evidence of greater warmth directed toward the 'old-old', that is patients over the age of 74, and little evidence otherwise of an effect of increasing age on the content or effectiveness of communication.[17 18] *Waitzkin* reports that older patients in his study appeared to receive more explanations, more explanations in non-technical and comprehensible language, and more explanations that were matched to the sophistication of the question than younger patients. *Waitzkin* notes, however, that age was positively associated with both poorer prognosis and longer acquaintance with their doctors, both of which mediated the relationship between age and information-giving.[5]

There is strong statistical evidence, based on meta-analytic review, that older patients receive more information than younger patients.[11] The combined Z† for six relevant studies is 4.29 with a very small associated $P < 10^{-5}$. It is also likely that age is also positively associated with more talk overall; the combined Z for the five relevant studies is 2.42 with an associated $P < .01$. In sum, older patients appear to have some advantages in terms of quantity of communication, they receive more communication overall, and especially more information than younger patients. Older patients may, nonetheless, be subject to a subtle ageism which is reflected in the tone and quality of interactions rather than directly in blatant bias or name calling.[2]

Gender

In the largest study addressing patient sex differences in communication, *Waitzkin* found that female compared with male patients were given more information and that the information was given in a more comprehensible manner, that is, technical explanations were also explained or reworded in simpler language. There was also

* Baby talk is a simplified speech pattern with distinctive paralinguistic features of high pitch and exaggerated intonation contour usually associated with speech to young children.[15]

† Meta-analysis combines the results of independent studies by transforming them to a common metric, usually a standard normal deviate (Z) associated with a reported correlation. As a summary statistic the combined Z, which is the sum of the Z's associated with correlations reported in each reviewed study divided by the square root of the number of studies reviewed, is noted to give the reader an indication of the strength of association. The p values associated with the combined Z are also reported.[11 19]

a tendency for physicians to appropriately match their response to female patients' questions in terms of technical sophistication, consequently avoiding the appearance of talking up or talking down to them.[5] In an analysis of the same data set, *Wallen et al.* demonstrated that the greater information directed toward women was largely in response to womens' tendency to ask more questions in general and to ask more questions following the doctor's explanation.[20] Very similar conclusions were drawn by *Pendleton & Bochner* in their English study of general consultations. These investigators found that female patients are given more information than males and that this information is in answer to their more frequent questions.[21]

Several other investigators report that female patients receive more positive talk and more attempts to include them in discussion than males. *Stewart's* analysis of some 140 audiotapes of primary care practice found that physicians were more likely to express 'tension release' (laughter, mainly) with female patients, and were also more inclined to ask them about their opinions or feelings. Female patients were more likely to express tension and ask for help than were males, but male patients appeared more likely to take the initiative in exchange. For instance, males showed higher scores on a 'patient-centered' cluster of behaviors which included such patient behaviors as giving suggestions, opinions, information, and orientation to the physician, as well as more negative verbal behaviors, including disagreements and antagonisms.[14] A direct observational study of some 150 patient visits reported by *Hooper et al.* similarly concluded that female patients had a more positive experience with their physicians than male patients. Information giving was significantly higher and there was greater use of empathy with female compared to male patients. There was also less frequent physician-initiated interruptions during the visit with female compared to male patients.[16] This finding is discrepant from the results of a sociolinguistic analysis of several medical encounters which indicated a tendency toward greater interruptions of female patients, particlarly by male physicians.[22]

While there are studies which failed to find any association between patient gender and studied aspects of communication[23] none showed less information given to female patients. Statistical evidence from meta-analysis favors female patients in the receipt of more information and more total communication over males. The combined Z for information, is 2.56 with an associated $P < .01$; for total communication the effect is larger, with a combined Z of 3.62 and an associated $P < .0005$).[11]

As noted by *Hooper et al.*,[16] communication differentials attributable to sex may reflect sexism in medical encounters but that this may act to the advantage of female patients with a more informative and positive experience than typical for male patients.

Social class

The association between patients' social class and elements of doctor-patient communication has been consistently reported in studies in the US, as well as in Canada, England, and Scotland.[5 14 21 24] *Pendleton & Bochner*, in their English videotape study of 79 general consultations, found that patients' social class was a significant predictor of how many explanations were volunteered by doctors. Physicians spontaneously offered more explanations to patients of higher-SES backgrounds during visits than to others patients. The investigators suggest that physician explanations are less likely to be volunteered to patients of lower-SES backgrounds because they are perceived as less interested in information and more diffident in question asking.[21]

In an earlier Scottish study, *Bain* found that patients of lower-SES backgrounds were less verbally active overall during medical visits than others and this was especially evident in such areas as patient presentation of their symptoms, question asking, and social talk. Physicians were much more likely to give higher-SES patients information regarding problem resolution and to engage in social talk with them than they were with lower-SES group patients.[25] In further analysis of this data, *Bain* found that communication regarding drugs was significantly less successful with patients of lower-SES backgrounds as their recall of diagnosis, drugs prescribed, and advice given regarding how often drugs should be taken and the duration of treatment was lower than other patients.[24] A later, large study conducted by *Bain* in the US with 22 physicians and a total of 556 patients confirmed similar differences in the overall content of communications for patient from different socioeconomic groups. Patients of higher-SES backgrounds engaged in nearly 60% more talk with their physician during the visit than patients of lower-SES groups.[26]

Work by *Cartwright* and others appear to support the contention that patients of lower-SES backgrounds appear diffident in question asking, but not because they do not wish to know about medical matters, but rather because the social distance between themselves and their physician discourage verbal assertiveness.[27] *Waitzkin* attributes the paucity of direct question-asking by working-class patients to be a reflection of their sociolinguistic culture which tends to be less verbal than that of the middle class. Because of the tendency away from direct (verbal) communication, working-class patients may be communicating their desire for information in ways physicians are likely to miss. Doctors, like other members of the middle-class, expect communication to be verbal and explicit; if patients have questions, they expect that they will be asked. Consequently, nonsolicited information is not offered and reticence is taken as an indication of disinterest.[5]

Waitzkin's large US study found that better educated patients of patients of higher SES backgrounds received more physician time, more total explanations, and more explanations in comprehensible language than other patients. Thus, physicians not only gave more information to higher-SES patients, but also appeared to go out of their way to offer these explanations in clear, non-technical language. Multivariate analysis of this data further demonstrated that it was patients' level of education that was more important than social class in explaining information transmittal. Thus, *Waitzkin* concludes that the educational

aspect of social class determination is a particularly strong factor in doctor-patient communication.[5]

In a similar vein, *Stewart* reports that better educated patients were much more likely to receive a justification for their treatment regimen from their physicians than less educated patients. In this study, however, more information came at the price of communication which offered emotional support. The better educated patients in this study received less 'solidarity' from their physicians than did those patients without some university level training.[14]

The opposite finding in regard to emotional support has been reported in several communication studies of pediatric visits wherein better educated parents of patients receive more emotional support than less educated parents. The classic study by *Korsch et al.* of pediatric encounters in an emergency walk-in clinic found that better educated parents of patients were more likely to express their fears and hopes to the doctor and that they had a better chance of having these responded to or dealt with than less educated parents.[28] Similarly, the pediatric study by *Wasserman at al.* found that better educated mothers received more reassurance, encouragement, and empathy during pediatric visits than less educated mothers.[29] Finally, in the most extensive observational study of pediatric practice, *Ross et al.* observed indicators of performance quality, both technical and interpersonal, in over 400 pediatric visits and reported that poorly educated parents received worse care on all acounts from their physicians. Also noted in this study was that low-income families did not have as consistently negative experience as did the children of the poorly educated.[30] Thus these authors concluded, as did *Waitzkin*,[5] that education has more significance for health experience than other socio-economic indicators.

Meta-analytic analysis confirms these findings reflecting significant, positive relationships between social class and the receipt of information (the combined Z was 2.39, associated with $P < .01$) and social class and total communication (the combined Z of 2.03, associated with $P < .05$).[11] In sum, we can say that physicians engage in more talk overall, and especially more informative talk when with patients of higher as compared to lower social classes. Moreover, the evidence suggests that it is education which may play a key role in the differential communication to patients of varying SES groups. The communication advantage for the better educated is especially evident in socioemotional support expressed during pediatric encounters.

Care setting may also act as an indicator of social class distinction in that poorer patients tend to use clinic services. In this regard, cross-study comparisons revealed that clinic patients are asked more questions by their providers than private practice patients ($F=8.93$, $P<.01$ = point biserial correlation of .69*).[4] Clinic patients also appear less active in the visit and ask fewer questions of their doctors than do private practice patients ($F=4.6$; $P<.06$; point biserial correlation of .63) but are given more partnership statements by their physicians than private patients ($F=6.0$; $P<.06$; point biserial correlation of .74). Partnership statements reflect the efforts of providers to enlist and enhance patient participation (i.e. facilitating patients response, interpreting and paraphrase, asking for opinion) and may reflect physician attempts to facilitate greater involvement of patients who appear passive or reticent.

Ethnicity

Ethnic origin and cultural background has been associated with differences in how patients present symptoms to the physician. A classic study of health and culture *Zola* found that American patients of Italian descent, reported more pain, more symptoms overall, and in more bodily locations, and more consequent dysfunction than Americans of Irish or Anglo-Saxon descent. The Italians tended toward drama and exaggeration as a means of dissipating and coping with anxiety associated with illness, whereas the Irish and Anglo-Saxons demonstrated a tradition in which control and denial were foremost. As a result of the manner of presentation, Italians were much more likely to be labeled as having 'psychiatric problems' by their physicians, despite the fact that there was no objective evidence that these problems were more frequent among them.[31]

More recent replications have found similar differences in pain report between American patients of Anglo and Italian descent; however, the effects of culture were less evident with younger patients for whom the process of acculturation diminished ethnic effects.[32]

One of the few communication studies to directly address the issue of ethnicity, found that physicians demonstrated better questioning and facilitating skills and more empathy skills when with Anglo-American as compared to Spanish-American patients. The investigators suggest that poorer performance is particularly evident in skills requiring sensitive processing of patient's input such as receiving and perceiving communications.[16] Other than the study just mentioned, conclusions regarding the effect of ethnic differences on communication must be drawn from cross study comparisons in which ethnicity was related to communication process variables.[4] Comparing descriptive results of three studies of white patients and four studies of non-white patients revealed a tendency for whites to receive more information than non-whites ($F=2.8$; $P<.15$; point biserial correlation of .60). White patients (in three studies) were also asked fewer questions than non-whites (in three studies) ($F=4.2$; $P<.09$; point biserial correlation of .67) and also given more positive talk than minority patients ($F=2.8$; $P<.64$; point biserial correlation of .64).

Other patient characteristics

Addressing the influence of physical appearance on doctor-patient communication, *Hooper et al.* rated the physical appearance of the patients included in their observational study. Patients who appeared rumpled, disheveled or with dirty clothing had encounters with lower physicians' ratings on interviewing, that is appropriately using open-ended questions,

* The effect size computed as the point biserial correlation indicates strengths of association of at least of moderate magnitude and greater than .60.

eliciting details and allowing the patient an opportunity to ask questions than other patients. Similar differences were also evident in poorer nonverbal communication including eye contact and physician's body position, and in courtesy for poorly groomed patients. In contrast, patients with the highest ratings on appearance, those who were 'clean and pressed' in a three-piece suit or attractive dress, hair clean and neatly styled had fewer physician-initiated interruptions during their visits than other patients.[16] These findings are quite similar to the negative experience reported for patients of lower-SES or ethnic minority backgrounds.

Because of the difficulty in investigating the influence of patients' psychological and personality characteristics on medical visits in natural settings, an analogue study worthy of note was conducted by *Gerbert*.[3] In this study 93 physicians indicated their likely behavior in response to videotape vignettes depicting patients in varying combinations of independent attributes of likability and competence. Physicians indicated they would give extra education to patients depicted as incompetent than competent (regardless of likability); that patients who were unlikable (regardless of competence) would be interviewed more often for psychological data; and, finally, that likeable-competent patients would be encouraged to contact the office more often and receive more medication than other patients.

The continuum of likability in this study is reminiscent of the personality attributes described by *Grove* of the hateful patient. These are patients who appear to physicians as overly dependent, demanding, manipulative, rejecting, or self-destructive. *Grove* suggests that the negative reactions these patients evoke from their physicians should be used as clinical data to facilitate better understanding and more appropriate psychosocial management.[33] If the findings of the analogue study can be generalized to the clinical situation, then this advice appears to be well taken by the study physicians in that hateful patients have more psychological attention given to them. Likewise, beneficial treatment of incompetent patients in terms of increased education would appear appropriate. Thus, *Gerbert* concludes that on the whole physicians in her study acted in their patients best interest when confronted with negative patient attributes,[3] although one might argue that the implicit label of 'incompetent' or 'unlikable' in itself carries negative connotations and possible negative consequences.

Discussion

There appears to be evidence for all three earlier hypothesized mechanisms by which patient characteristics may effect doctor-patient communication. There may be unintended violations of universalism due to miscommunication, with lower-SES patients not making their desire for information clear to physicians, as suggested by *Waitzkin*;[5] divergent response tendencies of patients, for instance more question-asking by female patients, leading to more information directed towards female compared with male patients; and, finally, perhaps conscious violations of a universalistic orientation through stereotypes, dislike, and prejudice as in interaction with unlikeable or 'difficult' patients. There are certainly differences in doctor-patient communication which may be attributable to differences in such patient characteristics as sex, age, race, educational level and social class. What is not clear from the body of literature reviewed is whether these distinctions are uniformly negative in their effect on patient care. In regard to gender, for instance, *Hooper et al.* suggest that in contrast to the widely publicized view that medical care is given in a way that disparages or discriminates against women, that sexism may work in favor of better medical care for female patients.[16] This is consistent with utilization studies which have established that females receive more services than males, including return visits, tests, and prescriptions.[34] Beneficial treatment for the elderly is less clear; older patients may receive more information than others but it may be communicated in a manner reflective of subtle ageism undermining their effectiveness as participants in medical exchanges. Less conflicting evidence has been found in regard to the experience of patients of lower-SES backgrounds, minorities, and the poorly educated–these patients have more negative health experiences than others.

In their careful analysis, *Hooper et al.* determined that the four patient characteristics they studied, age, sex, physical appearance, and ethnic origin acted independently in influencing physician behavior.[16] *Waitzkin*, however, failed to find any independent contribution of sex or SES to variation in physicians' information giving behavior so that only patients' age and educational level appeared in these analyses to be significant predictors of differential communication.[5] Thus, the independent effect of patient characteristics on medical care is not at all clear and a profile of patients most at risk for poor communication, for example, elderly, poorly-groomed, hispanic males, is not evident.

The results of this review are for the most part consistent with a recent analysis of patient sociodemographic characteristics as predictors of satisfaction with medical care. *Hall & Dornan* report that patients' age is significantly related to satisfaction, with patients' social status having nearly significant relations such that patients who are older and patients of higher social status appear more satisfied. A tendency for whites to more satisfied was also reported. There was no evidence of an association between gender and patient satisfaction.[35]

Greater salience of these issues and investigation of their implications, both positive and negative, for medical care are necessary before it is likely that any changes will be made in the way medical care is communicated between patients and physicians.

References

1 Parsons T. The social system. New York: The Free Press of Glencoe, 1951.

2 Greene M, Adelman R, Charon R, Hoffman S. Ageism in the medical encounter: an exploratory study of the language and behavior of doctors with their old and young patients. Language and Communication 1986; 6: 113-24.

3 Gerbert B. Perceived likability and competence of simulated patients: influence on physicians' management plans. Soc Sci Med 1984;

18: 1053-60.
4 Roter D, Hall J, Katz N. Patient-physician communication. A descriptive summary of the literature. Patient Education and Counseling 1988; 12: 99-119.
5 Waitzkin H. Information giving in medical care. J Health Soc Behav 1985; 26: 81-101.
6 Fox JG, Storms DM. A different approach to sociodemographic predictors of satisfaction with health care. Soc Sci Med 1981; 15A: 557-64.
7 Zborowski M. Cultural components in responses to pain. J Soc Issues 1952; 4: 16-30.
8 McTavish DG. Perceptions of old people: a review of research methodologies and findings. The Gerontologist 1971; winter: 90.
9 Marshal VW. Physician characteristics and relationships with older patients. In: Haug MR. Elderly patients and their doctors. New York: Springer, 1981.
10 Price JH, Desmond SM, Snyder FF, Kimmel SR. Perceptions of family practice residents regarding health care and poor patients. J Fam Pract 1988; 27: 615-21.
11 Hall J, Roter D, Katz N. Meta-analysis of correlates of provider behavior in medical encounters. Med Care 1988; 657-75.
12 Haug MR. Elderly patients and their doctors. New York: Springer, 1981.
13 Greene MG, Adelman RD, Charon R, Friedmann E. Concordance between physicians and their older and younger patients in the primary care medical encounter. Geronlogist 1989; 29: 808-13.
14 Stewart M. Patient characteristics which are related to the doctor-patient interaction. Fam Pract 1983; 1: 30-5.
15 Caporael LR. The paralanguage of caregiving: baby talk to the institutionalized aged. J Personality and Social Psychology 1981; 40: 876-84.
16 Hooper EM, Comstock LM, Goodwin JM, Goodwin JS. Patient characteristics that influence physician behavior. Med Care 1982; 20: 630-8.
17 Roter D. Elderly patient-physician communication. A descriptive study of content and affect during the medical encounter. Advances in Health Education 1991; 3: 15-23.
18 Rost K, Roter D. Predictors of recall of medication regimens and recommendations for lifestyle change in elderly patients. Gerontologist 1987; 27: 510-5.
19 Mosteller FM, Bush RR. Selected quantitative techniques. In: Lindzey G, ed. Handbook of social psychology, Vol 1. Cambridge, MA: Addison-Wesley, 1954.
20 Wallen J, Waitzkin H, Stoeckle JD. Physician stereotypes about female health and illness. Women & Health 1979; 4: 135-46.
21 Pendleton DA, Bochner S. The communication of medical information in general practice consultations as a function of patients' social class. Soc Sci Med 1980; 14A: 669-73.
22 West C. Routine Complications: troubles with talk between doctors and patients. Bloomington: Indiana University Press, 1984.
23 Beisecker AE, Beisecker TD. Patient information-seeking behaviors when communicating with doctors. Med Care 1990; 28: 19-28.
24 Bain DJ. Patient knowledge and the content of the consultation in general practice. Med Educ 1977; 11: 347-50.
25 Bain DJ. Doctor-patient communication in general practice consultations. Med Educ 1976; 10: 125-31.
26 Bain DJ. The content of physician/patient communication in family practice. J Fam Pract 1979; 8; 745-53.
27 Cartwright A. Patients and their doctors. London: Routledge & Kegan Paul, 1967.
28 Korsch BM, Gozzi EK, Francis V. Gaps in doctor-patient communication. Pediatrics 1968; 42; 855-71.
29 Wasserman RC, Inui TS, Barriatua RD, Carter WB, Lippincott P. Developmental and Behavioral Pediatrics 1983; 4: 171-6.
30 Ross CR, Duff RS. Returning to the doctor: the effects of client characteristics, type of practice, and experiences with care. J Health Soc Behav 1982; 23: 119-31.
31 Zola IK. Culture and symptoms: an analysis of patients' presenting complaints. Am Sociological Rev 1966; 31: 615-30.
32 Koopman CS, Eisenthal S, Stoeckle J. Ethnicity in the reported pain, emotional distress and requests of medical outpatients. Soc Sci Med 1984; 6: 487-90.
33 Grove JE. Taking care of the hateful patient. N Engl J Med 1978; 298: 883-7.
34 Weisman CS, Teitelbaum MA. Women and health care communication. Patient and Education and Counseling 1989; 13: 183-99.
35 Hall JA, Dornan MC. Patient sociodemographic characteristics as predictors of satisfaction with medical care. A meta-analysis. Soc Sci Med 1990; 7: 811-8.

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