The role of non-verbal behaviour in racial disparities in health care: implications and solutions

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CONTEXT People from racial minority backgrounds report less trust in their doctors and have poorer health outcomes. Although these disparities have multiple roots, one important set of explanations involves racial bias, which may be non-conscious, on the part of providers, and minority patients' fears that they will be treated in a biased way. Here, we focus on one mechanism by which this bias may be communicated and reinforced: namely, non-verbal behaviour in the doctor–patient interaction.

METHODS We review 2 lines of research on race and non-verbal behaviour: (i) the ways in which a patient's race can influence a doctor's non-verbal behaviour toward the patient, and (ii) the relative difficulty that doctors can have in accurately understanding the nonverbal communication of non-White patients. Further, we review research on the implications that both lines of work can have for the doctor-patient relationship and the patient's health.

RESULTS The research we review suggests that White doctors interacting with minority group patients are likely to behave and respond in ways that are associated with worse health outcomes.

DISCUSSION As doctors' disengaged non-verbal behaviour towards minority group patients and lower ability to read minority group patients' non-verbal behaviours may contribute to racial disparities in patients' satisfaction and health outcomes, solutions that target non-verbal behaviour may be effective. A number of strategies for such targeting are discussed.

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INTRODUCTION

> 'The [doctor's] tone of voice, their whole demeanour changes to me. They change when they treat somebody White as opposed to [someone Black]. They look at me and everything changes. They want to make sure [White patients] are ok.' (An African American patient explaining her distrust in doctors.[1])

> 'The physician … tells the patient [an older Chinese woman] she must begin medication to treat her newly diagnosed high blood pressure, and hands her a prescription. The patient nods respectfully. A year later the patient is seen again and found to have dangerously high blood pressure, and it becomes clear that she has not been taking her medication. [What the doctor has failed to understand is] that nodding or smiling in many cultures simply means "I hear you and I want to show you respect". It does not typically mean "I agree with you and commit to taking the treatment you prescribe".' (Example of a cultural misunderstanding from an article on instructing doctors in cultural competence.[2])

Race influences many aspects of interactions between doctors and patients, including the quality of communication during medical treatment. As the examples cited here illustrate, it can play a role not only in what patients and doctors say, but also in the nature and meaning of their non-verbal behaviour towards one another. For a variety of reasons, a doctor's tone of voice, facial expression, posture or degree of eye contact can shift when he or she interacts with a minority group patient, potentially leading the patient to conclude that the doctor cares less about that patient than about patients of another race. At the same time, a patient's own non-verbal communication, including his or her facial expressions, level of eye contact or, as in the second example, nods of agreement may be difficult for a doctor from a different background to understand. The assumptions and misunderstandings that arise in non-verbal communication have important consequences for patient trust and satisfaction, adherence to prescribed medical treatment and eventual health outcomes. In this article, we summarise research from the field of social psychology into the ways in which race can affect doctors' and patients' non-verbal communication, and discuss subsequent outcomes of patients' medical visits and treatment. We then outline a number of suggestions for improving non-verbal communication between doctors and patients of different racial or ethnic backgrounds.

DISTRUST AND DISSATISFACTION AMONG RACIAL MINORITIES

Members of racial minority groups report considerably more dissatisfaction with their health care than White patients.[3,4] Trust in doctors is a particular concern. For example, African American patients are less likely than White patients to trust their doctors and to feel that their doctors listen to them, communicate well, and treat them with dignity and respect.[5–8] Compared with White patients, African American patients also feel that doctors do not involve them in medical decisions, which leaves them less satisfied overall with medical visits.[9] Distrust and dissatisfaction are especially pronounced in encounters in which doctors and patients have different racial backgrounds[10] which is a common experience for people from many racial minority groups.[11]

A patient's trust, satisfaction and relationship with his or her doctor have important consequences for adherence with prescribed treatment and for long-term follow-up, which themselves are important to overall health.[12,13] Because differences in adherence to medical treatment may contribute to racial disparities in health,[4] identifying the sources of racial minorities' relative dissatisfaction with and distrust in their doctors is especially pressing.

Many factors contribute to this lack of trust in doctors and dissatisfaction with their care. Suspicion of institutions that have historically treated particular groups poorly, actual differences in doctors' treatment decisions, and concerns about discrimination may be at play.[14] However, even in the absence of overt bias, subtler differences in the doctor–patient interactions experienced by White and minority group patients, respectively, may produce these discrepancies in trust and satisfaction. The non-verbal behaviour of doctors and patients is one key component to consider.

We focus here primarily on interactions between White doctors and African American patients, largely because these are the two groups on which the social psychological research we review has tended to focus. However, many processes similar to those we describe in this article may also unfold in interactions between doctors and patients who come from a variety of different backgrounds. In general, doctors interacting with patients who differ from them in socially meaningful ways, such as racial group

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membership, may shift their behaviour in subtle but important manners that have consequences for the doctor–patient relationship and the patient's eventual health outcomes. Likewise, doctors may have particular difficulty in accurately interpreting the non-verbal behaviours of patients whose backgrounds differ significantly from their own. Further, although non-verbal miscommunications can and do occur between any two members of different groups, they may be especially likely or especially pronounced when the doctor is from a dominant or powerful social group and the patient is from the minority or less powerful group. We revisit this issue of generalisability to other groups and elaborate on this issue at the end of this paper.

DOCTORS' NON-VERBAL BEHAVIOUR TOWARDS WHITE AND NON-WHITE PATIENTS

American society values and promotes ideas and practices of racial equality, but at the same time, many of its institutions (e.g. the media) perpetuate stereotypes about racial groups.[15,16] These two features of American society can lead people, including doctors, to exhibit different non-verbal behaviours towards, respectively, White individuals and members of racial minorities. Specifically, both stereotypes about minorities, and concerns about appearing prejudiced can contribute to disengaged or inattentive non-verbal behaviours on the part of doctors. Both can give rise to what we will refer to throughout this paper as non-verbal behaviour that conveys disengagement on the part of the doctor. This includes a collection of subtle behaviours such as sitting further away, leaning forward less, averting one's eyes, gesturing less, fidgeting, nodding less, having an open body posture, or exhibiting more facial rigidity, all of which may convey lack of attention or empathy towards a patient.[17] By contrast, non-verbal behaviours that convey engagement, such as sitting close to the patient, leaning forward, making eye contact, nodding, having a closed body posture and exhibiting facial expressiveness, can have more positive consequences for the doctor–patient relationship.[18] Importantly, behaving in these ways does not necessarily mean the doctor is *actually* engaged or disengaged. Rather, these labels describe the messages that these sets of behaviours tend to convey to the patient.

Stereotypes

Firstly, doctors may hold stereotypical ideas about what patients of other races are like. Some doctors might, for example, believe that African American patients are of lower intelligence, more likely to abuse drugs and less likely to follow medical advice than White patients,[18,19] or they might hold other negative views about patients who are not White.[19,20] The assimilation of these stereotypes can derive merely from living in this society and being exposed to American culture (e.g. the media).[21,22] People, including doctors, know the negative stereotypes prevalent in their culture and may harbour stereotypical associations, even without consciously realising it.[23] Furthermore, these stereotypes may come to mind automatically when a person who holds them encounters someone of the relevant racial group, even in people who value equality and genuinely do not want to discriminate according to race.[15] In fact, merely being in a position of power in an interaction (e.g. being the doctor in a doctor–patient interaction) makes stereotypes especially likely to come to mind.[24]

Valuing equality and explicitly wishing to behave fairly can go a long way towards promoting effective interracial doctor–patient interactions. Doctors who try to be unbiased can avoid obvious discriminatory behaviours towards a non-White patient.[24,25] However, when it comes to subtler components of interactions, unconsciously activated stereotypes can exert their influence. Doctors who hold negative stereotypical beliefs about their patients' racial groups may display non-verbal behaviour that conveys disengagement towards these patients, even if they are unaware of doing so.[25–28] This may be especially true when the doctor is rushed and lacks the time or attention to devote to considering these subtle behaviours.

Concerns about appearing prejudiced

Ironically, for different reasons, concerns about appearing prejudiced – in a society that explicitly values *not* appearing prejudiced – can have similarly disadvantageous consequences through doctors' subtle, non-verbal behaviours. Social norms in many contexts dictate that one ought not to behave in a racially biased manner,[29] and many doctors genuinely do not wish to treat patients differently based on the patient's race. Because interactions with minority group patients present situations in which it is possible for White doctors to appear biased (even if they are not), these contexts can make White doctors anxious or apprehensive.[30] This anxiety can create cognitive demands that, ironically, lead to types of behaviour that are associated with prejudice, namely, non-verbal behaviours that convey disengagement.[31–33]

There is little research on non-verbal behaviours towards minorities in a specifically medical setting. However, one study using audio-recordings of doctor–patient interactions found that doctors were more dominant, had less positive affect, and were less patient-centred in their communication with African American than with White patients.[34] This, and the larger literature on interracial interactions, suggests that White doctors are likely to behave in a more disengaged manner when interacting with minority group patients.

Consequences of behaviour conveying disengagement

The type of non-verbal behaviour that doctors might display towards racial minority patients has important consequences. Patients report less satisfaction with visits when doctors' non-verbal behaviour indicates that they are disengaged.[35–38] Behaviours that indicate engagement make patients feel their doctors are paying close attention to them and treating them with respect.[39] These findings hold across a wide range of patient complaints, from chest pain to risk for human immunodeficiency virus (HIV) infection to depression,[40] and are strongest when patients have more serious ailments.[41]

Part of this satisfaction may stem from what occurs during a medical visit. When doctors' non-verbal behaviour conveys engagement, patients disclose more about medical symptoms and social and psychological concerns.[42–44] Patients are also more likely to bring up structural and organisational factors that interfere with health and wellness.[45] Furthermore, not only do patients reveal more themselves, but they respond better to what the doctor tells them. Specifically, they tend to agree more with their doctor,[46] and at the end of the visit, understand their conditions better.[38]

Further, the benefits derived from these encounters matter when patients leave their doctors' offices. Doctor engagement in non-verbal behaviour helps to build relationships with patients that, in turn, influence patient intentions to comply with the doctor's instructions.[45] Indeed, doctors' communication skills, including the effectiveness of their non-verbal behaviour, are associated with patients' adherence to prescribed treatment.[47]

Perhaps as a result of patient satisfaction with and adherence to treatment, the doctor's non-verbal behaviour also matters to the patient's long-term prognosis. Patients whose health care providers' non-verbal behaviour conveys engagement experience greater reduction in a variety of symptoms. By contrast, doctor behaviours that convey disengagement are associated with poorer outcomes.[48,49] This relationship extends to outcomes in psychological illnesses, such as depression, and outcomes in illnesses such as cancer.[50] Thus, a doctor's non-verbal behaviour has both immediate consequences at a patient's first visit and longer-term consequences for the patient's eventual recovery and well-being. Doctors' non-verbal behaviour influences not only patients' satisfaction with their medical care, but also their overall health.

UNDERSTANDING PATIENTS' NON-VERBAL COMMUNICATION

Another important component of building the relationship between the doctor and patient is the doctor's understanding of the non-verbal behaviour of the patient. In order to build trusting relationships with their patients and to effectively elicit information from them, doctors must not only hear what their patients are saying, but must be able to effectively read their non-verbal behaviours. As people, especially majority group members, are less skilled in reading the non-verbal behaviours of minority group members,[51] White doctors may not be properly effective in responding to and treating minority group patients.

Racial differences in patients' non-verbal behaviours

Although there are some commonalities in non-verbal behaviours across race, a patient's racial or ethnic background can be an important determinant of his or her non-verbal behaviour. Therefore, race may influence how a patient behaves in interactions with his or her doctor.

The expression of emotions is one important area in which a patient's non-verbal behaviour may differ as a function of his or her background. Patients' cultural backgrounds are likely to affect the emotions they feel or want to feel in certain situations (T Sims, J L Tsai, B Koopman-Holm, E A C Thomas, M K Goldstein; 'Valuing excitement shapes medical choices'; unpublished paper, 2013),[52,53] as well as the likelihood that they will express these emotions.[54,55] For instance, whereas people from Western backgrounds tend to want to feel excitement and other positive states that are high in arousal, many from East Asian cultural contexts tend to place more value on positive states that are lower in arousal (e.g. feelings of calm and peacefulness). Furthermore, when emotions are expressed, a

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person's cultural background can affect his or her particular manner of expression in meaningful and perceptible ways.[56,57] Because people have more experience and familiarity with their own cultural context, they are better at identifying the emotions of people from their own in-group.[53,58] Majority group members, such as White people in the USA, have particular difficulty in recognising the emotional expressions of minority group members.[53] Thus, White doctors or others who are less likely to have experience interacting with a diverse set of individuals may be especially unskilled in picking up on the emotions of minority group patients.

Racial or ethnic background also affects other important components of non-verbal behaviour. For example, White individuals are more likely than those of other racial groups to make eye contact during interaction and to use eye contact to signal whether they are paying attention to their conversation partner and are engaged in the conversation.[59–62] Ethnic background may also affect the extent to which a person is comfortable during a conversation, as well as how likely he or she is to initiate a conversation.[63,64]

Some of these differences arise from divergent cultural values. For example, to Native Americans and people of Hispanic origin, averting one's gaze or waiting to speak until one is spoken to can signal respect for a conversation partner.[62–64] Other differences, however, can arise out of discrepancies in power, such as that between majority and minority racial groups in the USA, and the stereotyped views groups hold of the other. People who are high in status tend to have a more open posture, be more emotionally expressive, gesture more, and put less distance between themselves and others than people who are low in status.[64,65] Furthermore, interacting with individuals who sit further away, lean forward less, make less eye contact, have a less open body posture, and make more speech errors – the types of behaviour more likely to be directed towards non-White patients – can lead people to behave the same way in return.[66] Finally, even in the absence of biased behaviour, the stress and fatigue caused by worrying about possible discrimination may decrease a person's engagement with the interaction.[67,68]

Although these racial differences in non-verbal behaviour exist, many people, including doctors, may not recognise some or all of them. As we know, people tend to have an easier time reading the non-verbal behaviours of others in their own racial or ethnic in-group.[53,69,70] Further, majority group members often fail to see that out-group members' behaviour may reflect different cultural values and may misinterpret the behaviour of out-group members.[71–73] As a result, they may draw inaccurate conclusions from the behaviour of patients whose cultural backgrounds differ from their own.

Implications of a doctor's ability to decode a patient's non-verbal behaviour

Relatively little literature exists on the correlates of doctors' ability to read patients' non-verbal behaviour. However, the research that does exist suggests that the ability to perceive and accurately interpret patients' non-verbal behaviour results in many of the same positive consequences as their own expressive non-verbal behaviour. Patients whose doctors are more sensitive to their non-verbal communication are more satisfied and have better health outcomes. In one study, the doctor's non-verbal sensitivity was found to be correlated with the patient's sense that the doctor understood and cared about the patient and could tell when he or she was worried.[74] Similarly, the patient whose doctor has high non-verbal sensitivity tends to like the doctor more and to see the doctor as more compassionate.[75]

The benefits extend beyond patient satisfaction. Doctors who are more skilled in interpreting patients' non-verbal behaviour tend to have fewer appointment cancellations that do not get rescheduled, which suggests that their patients may adhere better to ongoing treatment.[76] Similarly, patients whose genetics counsellors have high non-verbal sensitivity tend to leave the visit with more knowledge and understanding of their own risk for genetic diseases.[77] Finally, doctors who are more effective in picking up on and responding to patients' emotional cues tend to have shorter visits with patients, perhaps because they are better able to effectively and efficiently elicit and respond to information from their patients.[78] Taken together, these findings suggest that racial or ethnic differences between doctors and patients may impair doctors' ability to accurately read their patients' non-verbal behaviour, which may, in turn, have negative consequences for the development of trust within the relationship and for patient health.

THE ROLE OF DOCTOR RACE

Both a doctor's behaviour towards a patient and a doctor's ability to accurate read a patient's non-ver-

bal behaviour will, of course, depend not only on the patient's race, but also on the doctor's race. Some of the difficulties in non-verbal communication we describe here are likely to occur in any interaction between a doctor and patient from different racial groups, whereas others will be somewhat more common in encounters with doctors from particular groups. A doctor's own seemingly disengaged non-verbal behaviour may stem from negative stereotypes that doctor holds about the patient's racial group and concerns about appearing prejudiced. Doctors of any race may hold negative stereotypes,[79] although doctors who themselves have experienced discrimination may be more motivated to critically examine or change their own beliefs[80] in a way that lessens their effects. Similarly, any doctor may be concerned about appearing prejudiced. However, such concerns may loom especially large for White doctors, who are more likely to have had their equitable treatment of others questioned in the past.[81–83] Doctors' misinterpretation of patients' non-verbal communication, by contrast, may occur in any interaction between a doctor and a patient from different groups. Furthermore, the likelihood of each of these potential difficulties will depend upon the past experiences of the doctor and the patient, as well as the characteristics of the setting in which they are interacting. Doctors who have had a great deal of experience in interacting successfully with patients from other groups or in working in settings in which they are not judged too harshly for the occasional misstep in communication with patients are in a better position to conduct productive interactions and relationships with patients. The challenge for the medical profession concerns how doctor training and patient treatment can be set up to most effectively foster these positive outcomes.

POSSIBLE SOLUTIONS

Understanding the ways in which non-verbal behaviours contribute to patient satisfaction and health outcomes is the first step in uncovering possible solutions to racial disparities in health care. Three types of solution seem promising. The first set of potential solutions targets the sources of such behaviours (i.e. doctors' stereotyped views and concerns about appearing prejudiced) to improve doctors' non-verbal behaviour towards members of racial minorities. A second group of solutions aims to improve doctors' relationships with patients by enhancing their ability to read patients' non-verbal cues. Finally, a third type of solution aims to interrupt the relationship between ineffective non-verbal behaviour or ineffective understanding of non-verbal behaviour and negative outcomes.

Changing doctors' non-verbal behaviour towards minority patients

Successful steps to improve interracial doctor-patient communication involve helping to change physicians' negative views about minority patients and allay their fears about appearing prejudiced in their interactions with their patients. At first glance, these might seem like contradictory goals; it seems challenging to both recognise (and counter) the stereotypes that doctors hold and simultaneously quell their anxiety that they will appear biased. However, we offer suggestions to address each problem without exacerbating the other.

Changing stereotypes

The most effective way to eliminate doctors' negative stereotypes about patients is to provide counter examples to these stereotypes. Research suggests that thinking about real or fictional examples of people who do not conform to stereotypes, as well as exposure to more positive ideas about negatively stereotyped groups, can decrease people's bias against these groups.[84–89] Therefore, medical training that incorporates stories about patients or mock patients that deliberately counter negative racial stereotypes could shift White doctors' unconscious views of minority group patients. This would, in turn, change doctors' non-verbal behaviours towards actual patients.

Reducing concerns about appearing to be prejudiced

At the same time, doctors need to feel less anxious that their behaviour with patients might reveal prejudice. It would not be effective to simply tell doctors that they do not hold any biases because stereotypes and biases can themselves be part of the problem. Instead, doctors must be able to recognise that bias exists without becoming so anxious about possibly expressing bias that the interaction suffers. Research suggests that seeing interracial interactions as an opportunity to learn and grow can decrease anxiety and lead to more engaged and effective non-verbal behaviour in such interactions.[90–93] Often in interracial interaction, White individuals who think they might be seen as prejudiced will worry that even one mistake will confirm this view. By contrast, when White people approach such interactions with the

idea that they can learn from them, one slip is not as much of a cause for concern or a source of anxiety; instead, it is an opportunity for growth. As an additional benefit, this type of 'learning mindset' can actually reduce the extent to which people endorse stereotypes.[94] In addition, it may actually open a person up to learning more about race, which in itself has been shown to reduce racial bias.[95]

Talking explicitly about how bias can be unlearned and how interactions with patients from other groups present opportunities for doing so will help to foster such a learning mindset. In addition, when discussing racial bias, speaking of *behaviours* that may be seen as prejudiced, rather than of prejudiced *people*, can help. As behaviours can be changed, discussing behaviours suggests that learning and improvement are possible. By contrast, speaking about bias as a characteristic of a person (e.g. by describing a person as 'prejudiced' or 'racist') suggests that this is a permanent part of that person's character. Framing bias in this way makes it possible to discuss – and reduce – the racial bias that people do have while minimising their anxiety about interactions that might reveal this bias.

Improving doctors' ability to read minority patients' non-verbal behaviours

Doctors must also learn to accurately recognise and interpret the non-verbal behaviours of a diverse group of patients. To this purpose, programmes specifically designed to train doctors to read the non-verbal behaviours of patients might be most effective. In one study, people who attempted to identify the emotions on the faces of people from other cultures and received feedback after doing so became more accurate over time.[96] Although this study was conducted with lay people, another study with medical students suggested that their communication skills can be improved by teaching them to more accurately recognise the emotions on people's faces.[97] Although both of these studies investigated the non-verbal expression of emotion, similar training programmes that focus on many different types of non-verbal behaviour could be developed.

Interrupting the negative consequences of racial bias and non-verbal behaviours

A final potential solution involves addressing the consequences of doctors' non-verbal behaviours. Doctors might learn to recognise the potentially negative consequences of poor non-verbal communication and take steps to avoid them. Taking extra time to ask patients about their lives or displaying in waiting rooms materials that acknowledge the diversity of the patient pool may go a long way towards making minority patients feel comfortable. Similarly, doctors who are concerned about their patients' knowledge and comprehension of their own conditions might ask patients to describe their illnesses and treatment in their own words and thus be able to correct any misunderstandings. Even if these strategies do not directly improve non-verbal communication, they may still help to avoid many of the problems that poor non-verbal communication can create.

Teaching doctors to approach interracial interactions with the goal of learning could open them to learning more about race and cultural differences; such learning might counter harmful stereotypical knowledge and improve doctors' abilities to read others' non-verbal expressions, in addition to reducing their anxiety about such interactions. Similarly, asking more questions to ascertain a patient's level of understanding of his or her medical condition might improve the doctor's relationship with the patient in a way that reduces the doctor's anxiety about interacting with that patient. These strategies are not mutually exclusive. Consequently, the wisest approach might be to implement many of these solutions simultaneously.

CONCLUSION

Implemented together, these solutions might effectively improve non-verbal communication between doctors and patients who come from different racial groups. As we have shown, doctors are likely to display non-verbal behaviour towards minority group patients that signifies that they are disengaged, and they are also likely to be less skilled in reading the non-verbal behaviours of minority group patients. Both problems impair the doctor–patient relationship, prevent the effective communication of information, decrease patients' adherence to prescribed treatments and harm patients' health.

Improving the medical experiences and overall health of African American individuals and of members of other minority groups is an important goal of multiculturalist efforts and cultural competence training in medical education.[4,98,99] Consideration of the role played by non-verbal communication on the part of both doctors and patients in interactions

between White doctors and minority group patients should be a key part of these efforts. Recognition of how poor non-verbal communication can cause such doctor–patient interactions to go awry is an important step in understanding and addressing racial disparities in trust in the health care system and potentially even long-term health outcomes.

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