

8.5 Disparities in Health Care

Stereotypes, prejudice, or bias based on gender expectations and other arbitrary evaluations of any individual can manifest in a variety of subtle ways. Differences in treatment that are not directly related to differences in individual patients' clinical needs or preferences constitute inappropriate variations in health care. Such variations may contribute to health outcomes that are considerably worse in members of some populations than those of members of majority populations.

This represents a significant challenge for physicians, who ethically are called on to provide the same quality of care to all patients without regard to medically irrelevant personal characteristics.

To fulfill this professional obligation in their individual practices physicians should:

- (a) Provide care that meets patient needs and respects patient preferences.
- (b) Avoid stereotyping patients.
- (c) Examine their own practices to ensure that inappropriate considerations about race, gender identify, sexual orientation, sociodemographic factors, or other nonclinical factors, do not affect clinical judgment.
- (d) Work to eliminate biased behavior toward patients by other health care professionals and staff who come into contact with patients.
- (e) Encourage shared decision making.
- (f) Cultivate effective communication and trust by seeking to better understand factors that can influence patients' health care decisions, such as cultural traditions, health beliefs and health literacy, language or other barriers to communication and fears or misperceptions about the health care system.

The medical profession has an ethical responsibility to:

- (g) Help increase awareness of health care disparities.
- (h) Strive to increase the diversity of the physician workforce as a step toward reducing health care disparities.
- (i) Support research that examines health care disparities, including research on the unique health needs of all genders, ethnic groups, and medically disadvantaged populations, and the development of quality measures and resources to help reduce disparities.

AMA Principles of Medical Ethics: I,IV,VII,VIII,IX

Background report(s):

CEJA Report 9-A-05 Racial and ethnic disparities in health care

CEJA Report B-I-90 Gender disparities in clinical decision making

CEJA Report C-I-89 Black-white disparities in health care

REPORT OF THE COUNCIL ON ETHICAL AND JUDICIAL AFFAIRS*

CEJA Report 9 - A-05

Subject: Racial and Ethnic Health Care Disparities

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Referred to: Reference Committee on Amendments to Constitution and Bylaws
(Art L. Klawitter, MD, Chair)

1 INTRODUCTION

2
3 Despite the advances in social equality achieved over the last half century, many individuals
4 remain disadvantaged due to personal characteristics such as race or ethnicity. In the context of
5 health care, considerable evidence indicates that racial and ethnic minority populations have worse
6 health outcomes than other groups.^{1,2} These discrepancies persist even when controlling for
7 variables such as access to insurance, educational level, and income.²

8
9 While certain differences in medical care among subpopulations may be acceptable when based
10 upon medical necessity or patient preferences,³ differences in outcomes that are not directly
11 attributable to such considerations are problematic. These disparities represent a significant
12 challenge for physicians who are ethically committed to serve all patients equally, irrespective of
13 personal characteristics. Accordingly, this report explores the ethical obligations of individual
14 physicians and the medical profession as they pertain to racial and ethnic disparities in health care.

15 EVIDENCE OF HEALTH CARE DISPARITIES

16
17 Available clinical evidence consistently indicates that patients from minority populations are less
18 likely than whites to receive needed services, including clinically necessary procedures.⁷ In 2004,
19 the Agency for Healthcare Research and Quality's (AHRQ's) *National Healthcare Disparities*
20 *Report* revealed significant quality differentials in the care received by minority patients.⁴
21 Furthermore, the Institute of Medicine (IOM) report *Unequal Treatment* found that such quality
22 differentials persist even in the presence of equal insurance coverage and equivalent access to
23 health care.⁵

24
25 Examples of disparate treatment are well documented, especially amongst African American
26 populations.⁶ For instance, African-Americans are more likely to die from cardiovascular
27 complications, but are less likely than whites to undergo coronary artery bypass grafts or
28 angioplasty procedures.^{7,8,9} Although they constitute a disproportionate percentage of individuals
29 with end-stage renal disease, African-Americans are also less likely to be referred for kidney
30

* Reports of the Council on Ethical and Judicial Affairs are assigned to the reference committee on Constitution and Bylaws. They may be adopted, not adopted, or referred. A report may not be amended, except to clarify the meaning of the report and only with the concurrence of the Council.

1 transplant evaluation, to be placed on an organ recipient waiting list, or undergo transplant surgery,
2 even when adjusting for socioeconomic and health status variables.^{10,11} These patients additionally
3 face higher rates of diabetes-related complications^{12,13} and have worse survival rates following
4 cancer diagnosis than do white patients.¹⁴ Paradoxically, African-Americans are also more likely
5 to receive undesirable services such as diabetes-related lower limb amputations.¹⁵

6
7 Although the preponderance of research findings has focused upon African-Americans, similar
8 disparities have been documented among Hispanic, Asian-American/Pacific Islander, and Native
9 American populations as well.¹⁶ For example, Hispanic patients are less likely to receive
10 cholesterol management services or appropriate pharmacotherapy following acute cardiovascular
11 events.¹⁶ Hispanic patients are also less likely to receive cardiovascular procedures such as
12 percutaneous transluminal coronary angioplasties or coronary artery bypass grafts.¹⁷ Quality
13 disparities are likewise documented amongst Native American diabetes patients, who are less likely
14 to have their LDL cholesterol and HbA1C levels tested as part of their diabetes management
15 regimens.¹⁶ Clinical studies additionally indicate that Asian-American/Pacific Islander patients
16 receive fewer cancer screening services such as fecal occult blood tests or mammograms.¹⁸

17
18 Overall, the AHRQ National Healthcare Disparities Report estimated that African-American
19 patients receive poorer quality care than whites on two-thirds the quality measures under
20 examination.⁴ Hispanics and Native Americans likewise fared worse on approximately one-third
21 of these measures.⁴ Asian-Americans/Pacific Islanders also received lesser-quality of care on one-
22 tenth of the available quality measures.⁴ In light of these and other documented disparities, the
23 Centers for Disease Control and Prevention has recently concluded that little tangible progress has
24 been made toward assuring the equitable treatment of all patients.¹⁹ Were these disparities in
25 health care to be eliminated, five times as many lives could be saved as are saved by advances in
26 medical technology.²⁰

27 28 CAUSES OF HEALTH CARE DISPARITIES.

29
30 Several factors are associated with disparate health care among minority population groups. These
31 include cultural and linguistic factors, the influence of stereotypes and bias, and the dynamics of
32 patient-physician interactions.

33 34 *Cultural and Linguistic Factors*

35
36 Communication difficulties related to cultural, ethnic or racial differences between patients and
37 physicians are known to be more prominent when both parties are from different racial
38 backgrounds, as compared to racially concordant patient-physician pairings.²¹ Poor communication
39 can impede the delivery of quality health care by compromising physicians' abilities to understand
40 patients' explanations.²² Poor communication can also compromise patient autonomy by limiting
41 individuals' understanding of clinical information or the choice of available interventions.²³ It also
42 has been demonstrated that physicians are less likely to engage in participatory decision-making
43 practices with minority patients.^{24,25} Taken together, these factors can substantially reduce
44 satisfaction with the use of health services among minority populations.²⁶

45
46 Cultural and linguistic factors can significantly affect patients' levels of health literacy.²⁷ The
47 Healthy People 2010 project has defined health literacy as "the degree to which individuals have
48 the capacity to obtain, process, and understand basic health information and services needed to
49 make appropriate health decisions."²⁸ Low health literacy is correlated with reduced utilization of

1 preventive services and increased reliance upon emergency care.²⁹ Overall, patients' health literacy
2 impacts the quality of clinical interactions to a much greater extent than does racial concordance
3 between patients and their physicians.²⁶

4
5 Cultural factors can additionally influence patients' health beliefs.³⁰ These beliefs, in turn,
6 potentially affect patients' attributions of physical symptoms and their willingness to seek or
7 adhere to treatment recommendations.^{30,31} Patients' cultural backgrounds can also affect the quality
8 of clinical interventions as the use of some traditional remedies may interfere with conventional
9 science-based treatments.³⁰

10 *Stereotypes and Bias*

11
12
13 Medical decision making occurs within a context of limited time and limited information.
14 Clinicians must evaluate a range of data, including a history, physical examination, and results of
15 diagnostic tests, in the process of identifying treatment options. Even under the best of
16 circumstances, clinical uncertainty is unavoidable, and many clinicians rely upon clinical
17 epidemiology and probability inferences to risk-stratify their patients on the basis of demographic
18 or clinical characteristics.³²

19
20 Reliance on demographic characteristics is problematic when physicians inappropriately rely upon
21 these variables as proxies for socioeconomic status or individual behavior.³³ In practice, such
22 inappropriate use has been demonstrated to influence clinical interactions negatively by affecting
23 physicians' evaluation of patients' physical symptoms³³ or decision-making capacities,³⁴ and
24 ultimately influencing physicians' treatment recommendations.³⁵ When this occurs, physicians fail
25 to provide the same quality of care to all patients and affected persons are denied the opportunity to
26 receive individualized health care based upon their personal needs and preferences. Physicians
27 therefore must recognize the limited predictive validity of racial or ethnic variables within the
28 clinical decision-making process in order to ensure that all patients are treated equally.

29 30 *Trust and the Patient-Physician Relationship*

31
32 Trust is fundamental to the clinical relationship because it fosters patients' abilities to make
33 autonomous decisions.³⁶ However, the diminished quality of clinical encounters between minority
34 patients and their physicians has left many individuals from racial and ethnic groups with the
35 perception that their lives are not equally valued by medical professionals.³⁷ This results in
36 decreased levels of trust,³⁸ which is correlated with lessened patient and provider satisfaction,
37 poorer continuity of care, reduced patient adherence to the care plan, and diminished health
38 status.^{39,40} In contrast, greater levels of trust are associated with patients' increased willingness to
39 seek medical care, utilize preventive services, and adhere to treatment recommendations.^{41,42} A
40 strong degree of patient-physician trust therefore is critical to enable members of minority
41 populations to seek and receive quality health care.⁴³

42
43 Certain historical interactions between physicians and African-Americans have also contributed to
44 the sustained mistrust of physicians or public health officials among minority patients. For
45 example, in the Tuskegee Alabama Syphilis Study, the investigators failed to secure the informed
46 consent of participants, and it was later determined that the harms incurred were not justified by
47 research findings. The widespread criticism following the publication of this study resulted in fears
48 among some minority patients that their rights might be violated in the interest of science.^{37,44}
49 Such distrust has contributed to low levels of participation in clinical trials and other medical

1 interventions.⁴⁵ In some instances, this distrust also may contribute to higher levels of treatment
2 refusal, although such refusals explain only a small percentage of reported disparities in the
3 utilization of health care.⁴⁶

5 ETHICAL OBLIGATIONS OF PHYSICIANS IN REDUCING DISPARITIES

6
7 As currently stated in Opinion E-9.121, “Racial Disparities in Health Care,” (AMA Policy
8 Database) physicians are ethically obligated to treat their patients fairly by providing the same
9 quality of care to all patients. Physicians can achieve this goal by examining their clinical practice
10 for potential sources of bias, providing patient-centered care to all patients, and helping to promote
11 diversity within the physician workforce.

13 *Critical Examination of Clinical Practices*

14
15 In accordance with the AMA’s Principles of Medical Ethics, physicians must provide “competent
16 care, with compassion and respect for human dignity and rights.” This ethical obligation requires
17 the provision of quality care regardless of medically irrelevant personal characteristics. By
18 adhering to this requirement, physicians can help reduce inequalities in health care received by
19 members of minority groups.⁴⁷

20
21 To this end, physicians must educate themselves and learn to recognize the causes of health
22 disparities.⁴⁸ This can be accomplished in part by acquiring a greater understanding of the cultural
23 or ethnic characteristics that affect patients’ beliefs, as well as their abilities to conceptualize
24 medical information and participate actively in medical decision making.

25
26 Physicians also must examine critically their own practices in an effort to ensure unbiased delivery
27 of health care. As potential biases are often subtle, all physicians must scrutinize their own
28 behavior to uncover any unwarranted assumptions based on racial or ethnic characteristics.
29 Physicians should also be alert to the behavior of their colleagues, other health care professionals
30 and support staff, and seek to improve any behaviors that might impact negatively upon patients’
31 clinical encounters or otherwise contribute to health care disparities. Moreover, as the majority of
32 medical services are delivered in hospitals, examining differences in minority patients’ utilization
33 of services that are recognized as indicators of quality health care should become an integral part of
34 peer review and accreditation activities.^{49,50}

35
36 Finally, physicians should help increase awareness of health care disparities by engaging in open
37 and broad discussions about the issue in medical school curricula, in medical journals, and at
38 professional conferences.⁴⁹ Physicians should also advocate for continued research investigating
39 the sources of health care disparities. These efforts may include the development of relevant
40 quality measures for use in quality improvement initiatives, which have been demonstrated to
41 reduce health care disparities.^{51,52,53}

43 *Provision of Patient-Centered Care*

44
45 Patient-centered care is an essential component of Principles I and VIII of the Code of Medical
46 Ethics, which require physicians to provide compassionate care and to regard responsibility to the
47 patient as paramount. Patient-centered care is characterized by participatory decision-making
48 practices to meet the needs, expectations and preferences of patients.⁵⁴ It emphasizes good
49 communication with patients and an understanding of the individual patient’s perspectives, such as

1 cultural or religious factors that influence their health beliefs, their communications about medical
2 information, and their involvement in medical decision making.⁵⁵ The provision of patient-
3 centered care is effective in increasing patients' trust.⁵⁶ Additionally, physicians may benefit from
4 better understanding the complex relationships between patients' beliefs about health care and their
5 socio-cultural environment.^{57,58} Good communication also requires that language barriers be
6 minimized (for example, through the appropriate use of interpreters⁵⁹) so that information is
7 exchanged in a manner that both parties can understand.

8
9 Patients from different backgrounds often have varying expectations regarding their interactions
10 with physicians.⁶⁰ A culturally sensitive patient-physician interaction therefore entails a
11 negotiation process between the physician's and the patient's perceptions of what processes and
12 actions are appropriate.⁶¹ Physicians can empower patients by encouraging them to ask questions
13 and to make their health care preferences known.⁶¹

14
15 Physicians should strive to ensure that the presence of cultural or linguistic barriers does not
16 compromise the quality of clinical encounters.⁶² All medical services must be provided in
17 accordance with patients' needs and current standards of practice.⁶²

18 19 *Promoting Diversity in the Healthcare Workforce*

20
21 Minority physicians may be more adept at serving minority patients²¹ and are more likely to
22 practice in underserved minority communities.⁶³ However, while approximately one quarter of the
23 American population is comprised of African Americans, Hispanics, and American Indians, less
24 than 6% of the nation's physicians represent these minority populations.⁶⁴ Accordingly, the
25 Sullivan Commission's report *Missing Persons: Minorities in the Health Professions* has
26 recommended that the medical profession take active steps to increase the number of minorities in
27 the health professions as one means to reduce health care disparities.⁶⁴ This recommendation is
28 consistent with Opinion E-9.03, "Civil rights and Professional Responsibility," which requires
29 equality of opportunity within the medical profession. Individual physicians can also assist in
30 encouraging diversity within the medical work force by volunteering as mentors to minority
31 students or otherwise encouraging minority students' interests in pursuing medical careers.⁶⁵

32 33 CONCLUSION

34
35 Variations in treatment that are based on medically irrelevant considerations such as race or
36 ethnicity constitute health care disparities and may be detrimental to the health and wellbeing of
37 minority patients. Physicians are ethically obligated to treat all patients equally, providing all
38 medical care in accordance with accepted standards of practice and patients' individual needs and
39 preferences. In order to address the disparate treatment of patients, physicians must recognize the
40 limited predictive validity of clinical assumptions based upon culture or ethnicity. They must also
41 communicate effectively with their patients and enable them to engage in participatory decision-
42 making practices. Finally, physicians must critically examine their own clinical practices, as well
43 as that of their colleagues and staff, with the intention of improving any behaviors that might
44 contribute to the differential treatment of minority patients. Ultimately, the adoption of these
45 measures can help physicians provide patient-centered care that is sensitive to the cultural and
46 ethnic characteristics that influence health care decisions without relying on stereotypes.

1 RECOMMENDATIONS

2
3 The Council on Ethical and Judicial Affairs recommends that the following be adopted and the
4 remainder of the report be filed:

5
6 Differences in treatment that are not directly attributable to variances in clinical needs or
7 patient preferences constitute disparities in health care. Among racial and ethnic minority
8 populations, such disparities may contribute to health outcomes that are considerably
9 worse than those of majority populations. This represents a significant challenge for
10 physicians who ethically are called upon to serve patients without regard to medically
11 irrelevant personal characteristics. The following guidelines are intended to help reduce
12 racial and ethnic disparities in health care.

- 13
- 14 (1) Physicians must strive to offer the same quality of care to all their patients irrespective
15 of personal characteristics such as race or ethnicity. The provision of care should be
16 customized to meet patient needs and preferences.
17
 - 18 (2) Physicians must learn to recognize racial and ethnic health care disparities and should
19 examine their own practices to ensure that inappropriate considerations do not affect
20 clinical judgment.
21
 - 22 (3) Physicians should work to eliminate biased behavior toward patients by other health
23 care professionals and staff who come into contact with patients. Inappropriate
24 discrimination toward any patient or group of patients must not be permitted.
25
 - 26 (4) Participatory decision making should be encouraged with all patients. This requires
27 trust, which in turn requires effective communication. Physicians should seek to gain
28 greater understanding of cultural or ethnic characteristics that can influence patients'
29 health care decisions. Physicians should not rely upon stereotypes; they should
30 customize care to meet the needs and preferences of individual patients.
31
 - 32 (5) Physicians should recognize and take into account linguistic factors that affect
33 patients' understanding of medical information. In particular, language barriers should
34 be minimized so that information is exchanged in a manner that both parties can
35 understand.
36
 - 37 (6) Increasing the diversity of the physician workforce may be an important step in
38 reducing racial and ethnic health care disparities. Physicians should therefore
39 participate in efforts to encourage diversity in the profession.
40
 - 41 (7) Physicians should help increase awareness of health care disparities by engaging in
42 open and broad discussions about the issue in medical school curricula, in medical
43 journals, at professional conferences, and as part of professional peer review activities.
44 Research should continue to investigate health care disparities, including the
45 development of quality measures.
46

47 (New HOD/CEJA Policy).

Fiscal Note: Staff cost estimated at less than \$500 to implement.

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CEJA Report B – I-90 Gender Disparities in Clinical Decision-Making

INTRODUCTION AND SUMMARY OF CONCLUSIONS

A number of recent studies have examined whether a patient's sex inappropriately affects the amounts and kinds of medical treatment received. These studies have documented gender disparities in treatment in a number of areas, including kidney transplantation, cardiac catheterization and the diagnosis of lung cancer. While biological factors account for some differences between the sexes in the delivery of medical care, the studies indicate that there may be non-biological or nonclinical factors which affect clinical decision-making. There are not enough data to identify the exact nature of the non-biological or non clinical factors. Nevertheless, their existence is a cause for concern at must be addressed by the medical community.

The Council on Ethical and Judicial Affairs recommends that physicians examine their practices and attitudes for influence of social or cultural biases which could be inadvertently affecting the delivery of medical care. The nature of any non-biological or non-clinical factors which affect the delivery of medical care should be ascertained, and any inappropriate biases eliminated. In addition, more research on women's health issues and women's health problems should be pursued. Finally, awareness of and responsiveness to socio-cultural factors which could lead to gender disparities may be enhanced by increasing the number of female physicians in leadership roles and other positions of authority in teaching, research, and the practice of medicine.

EVIDENCE OF DISPARITIES

Gender Differences in Health Care Utilization

There is some evidence that, compared to men, women receive more health care services overall. One of the most extensive studies on gender differences in the utilization of health care services found that when medical care differs for men and women (in about 30-40% of cases), the usual result is for more care for women than men, even when both sexes report the same type of illness or complaint about their health. Women receive more examinations, lab tests, blood pressure checks, drug prescriptions, and return appointments than men. Women have more physician visits per year and receive more services per visit.¹ However, the reasons for this are unclear.

Other studies suggest that women have less access than men to major diagnostic and therapeutic interventions, including dialysis, kidney transplantation, and cardiac catheterization.^{2-7,9}

Disparities In the Delivery of Major Diagnostic and Therapeutic Interventions

1. Kidney Dialysis and Transplantation. Sex has been found to correlate with the likelihood that a patient with kidney disease will receive dialysis or a kidney transplant. In one study researchers analyzed the percentage of patients in the US with end-stage renal disease who received dialysis.² Of males who needed dialysis, 37.3% were dialyzed, as compared with 31.1% of women. However, 90% of the difference resulted from the fact that younger people have a greater likelihood of being dialyzed than older people.

Disparities based on gender are more pronounced for the likelihood of receiving a kidney transplant. An analysis of individual dialysis patient data from the years 1981 through 1985 revealed that females undergoing renal dialysis are approximately 30% less likely to receive a cadaver kidney transplant than

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males.³ Another study, done during the period 1979 through 1985, showed that a female dialysis patient has only three-quarters the chance of a male patient to receive a renal transplant.⁴ Controlling for age did not significantly reduce sex as a factor in the likelihood of receiving a transplant. Men were more likely to receive a transplant in every age category. The discrepancy between sexes was most pronounced in the group aged 46 to 60 years old, with women having only half the chance of receiving a transplant as men the same age.⁴

2. Diagnosis of Lung Cancer. Recent autopsy studies have revealed that as much as a quarter of patients with lung cancer are not diagnosed as such while they are alive.⁷ A comparison between the population in which lung cancer is diagnosed and the population in which it is not diagnosed shows that there is a detection bias which favors the ordering of diagnostic testing for lung cancer in patients who are smokers, have a recent or chronic cough, or are men.⁷

One study compared the rates of lung cancer detected at autopsy with the way sputum cytologies were ordered in a hospital setting to detect lung cancer. Men and women have relatively equal rates of previously undiagnosed lung cancer detected during autopsy. In addition, other studies have shown that women and men with similar smoking practices are at essentially equivalent risk for lung cancer.⁸ However, the cytology study found that men were twice as likely to have sputum cytologies ordered as women. Once smoking status and other medical considerations were taken into account, men still had 1.6 times the chance of having a cytology done.⁷

3. Catheterization for Coronary Bypass Surgery. Men seem to have cardiac catheterizations ordered at a rate disproportionately higher than women, regardless of the likelihood of each sex to have coronary artery disease.

A study done in 1987 showed that in a group of 390 patients, of those with abnormal exercise radionuclide scans, 40% of the male patients were referred for cardiac catheterization, while only 4% of women patients were referred for further testing.⁹ The study showed that once researchers controlled for the variables of abnormal test results, age, types of angina, presence of symptoms, and confirmed previous myocardial infarction, men were still 6.5 times, ore likely to be referred for catheterization than women, although men have only 3 times the likelihood of having coronary heart disease than women.

Of those patients whose nuclear scan test results ultimately turned out abnormal, women were more than twice as likely to have their symptoms attributed to romantic, psychiatric, or other non-cardiac causes as men. For patients whose test scans were normal, men and women had a relatively equal chance of having their symptoms attributed to non-cardiac causes. Those women who were most likely to have a cardiac-related cause for their symptoms were most likely to have their symptoms attributed to a non-cardiac cause.

The authors concluded that the wide difference in referral rates between men and women could not be explained by sex-based differences in the accuracy of nuclear scans. Even after abnormal test results had been established, men were referred significantly more often than women. Also, men had higher referral rates in every category of abnormality. It is unlikely that the discrepancy could be explained by the fact that some types of nuclear scan abnormalities have a higher likelihood of referral. Men were also more likely to be referred regardless of the pre-nuclear scan probability of having coronary artery disease.

POSSIBLE EXPLANATIONS

Biological Differences Between the Sexes

Differences in biological needs between males and females probably account for a large part of the

differences in the utilization of health care services. The kind and number¹⁰ of illnesses which are reported differ somewhat for women and men. For instance, women are more likely to need medical care for anemia, diabetes, osteoarthritis and rheumatoid arthritis, whereas men seem to have higher rates of heart disease, hypertension and cholesterol problems.¹⁰ Possibly, women get more care because they have more illnesses or the types of illnesses which they have require more overall care. Some figures show that the generally lower socioeconomic status of women may be associated with poorer health. However, real differences in morbidity and mortality between the sexes would not explain the fact that women seem to receive more care than men for the same type of complaint or illness.¹

Real biological differences also cannot account for the gender disparities in rates of cardiac catheterization, kidney transplantation or lung cancer diagnoses. For instance, one explanation for the discrepancy between the rates of dialysis for men and women might be that women, for biological reasons, have coexisting diseases which lessen the potential effectiveness of dialysis. However, the Health Care Financing Administration reports that female dialysis patients have a slightly better survival pattern than males.¹¹

Similarly, other biological differences between men and women cannot explain the disparity in the likelihood of receiving a kidney transplant. Differences in the amount of cytotoxic antibodies, post transplant complication rates, or the type of renal disease between men and women were not able to explain the discrepancy.⁴ It is unlikely that the difference reflects patient preference since successful transplantation is generally considered superior to lifetime dialysis by both patients and physicians.^{3,4}

The difference in sputum cytologies between male and female patients may reflect the historical association between male sex and cigarette smoking. Traditionally more men than women have been smokers.⁸ In fact, past demographic data showed that men were more likely to have lung cancer than women. Physicians, in turn, may have come to view smoking and male sex as independent risk factors for lung cancer and therefore tended to suspect cancer more readily in patients who either smoked or were male even though sex is not an independent risk factor.⁸

Differences in disease prevalence between men and women have been cited to explain the differences in cardiac catheterization rates.¹² However, the difference in disease prevalence between men and women is 3:1, whereas the difference in catheterization rates was almost 7:1.^{9,13} Additionally, the absence of differences in use of antianginal drug treatment indicates that the patients were clinically comparable.⁹

Societal Attitudes May Inappropriately Exert an Effect on Decision Making in the Health Care Context

Data which suggest that a patient's sex plays an inappropriate role in medical decision making raise the question of possible gender bias in clinical decision making. Gender bias may not necessarily manifest itself as overt discrimination based on sex. Rather, social attitudes, including stereotypes, prejudices and other evaluations based on gender roles may play themselves out in a variety of subtle ways.

For instance, there is evidence that physicians are more likely to perceive women's maladies as the result of emotionality.¹⁴⁻¹⁶ Also, many researchers who have noted the greater utilization of health care services by women than men have attributed, without supporting evidence, this difference to "overanxiousness" or overutilization on the part of women. However, characterizing women's utilization patterns as a result of emotional excess or overuse risks providing inadequate care for women. For example, in the study of catheterization rates, attributing a disproportionate percent of women's abnormal nuclear scan results to psychological or non-cardiac causes for their symptoms may have compromised their care.⁹

Perceiving men's utilization practices as normal and attributing overanxiousness to women's concerns about their health may be doing a disservice to both sexes. One study concluded that "women's greater

interest in and concern with health matters and their greater attentiveness to bodily changes may be part of a set of behaviors which do contribute to women's lower mortality rates."¹⁷ Men may tend to be underanxious about their health or to ignore symptoms or illnesses, and consequently underutilize health care". Statistics which show that men tend to have a lesser number but more severe types of health problems may reflect men's reluctance to seek care until a health problem has become acute.

Societal value judgments placed on gender or gender roles may also be disadvantaging women in the context of receiving certain major diagnostic and therapeutic interventions, such as kidney transplants and cardiac catheterization. Perhaps a general perception that men's social role obligations or the value of their contribution to society is greater than women's fuels these disparities. For instance, altering one's work schedule in order to accommodate health concerns may be viewed as more difficult for men than women. Overall, men's contribution to support of the family may be considered more critical than women's. A kidney transplant is much less cumbersome than dialysis. Coronary bypass surgery, for which catheterization is a prerequisite, is a more efficient and immediate solution to the problem of coronary artery disease than continuous antianginal drug therapy. However, judgments based on evaluations of social worth or preconceptions about the probable roles of men and women are inexcusable in the context of medical decision making.

INATTENTION TO GENERAL HEALTH CONCERNS FOR WOMEN

General Concerns Raised by the Public Health Service Task Force on Women's Health Issues

Concerns have been raised that women are being disadvantaged because of inadequate attention to the research, diagnosis, and treatment of women's health care problems. In 1985, the Public Health Service's Task Force on Women's Health Issues reported that the lack of research data on women limited understanding of women's health needs.¹⁸

One concern is that medical treatment of women is often based on a male model, regardless of the fact that women may react differently to a treatment than men or that some diseases manifest themselves differently in women than men. The results of medical research in men are often generalized to women without any real evidence of effectiveness or safety for women.^{19,20} For example, the research on the prophylactic value of aspirin in preventing coronary artery disease is derived almost exclusively from research on men, yet recommendations based on this research have included the general population.²⁰

Some researchers have attributed the lack of research on women to the influence of women's reproductive cycles. Women's menstrual cycles may constitute a separate variable which may affect test results.¹⁸ (IV.58,59) Also, researchers are reticent to perform studies on women of child-bearing age, because it may affect their ability to bear children. However, the task force pointed out that it is precisely because medications and other therapeutic interventions have a differential effect on women according to their menstrual cycle that women should not be excluded from research.¹⁸(IV.59) For instance, research on anti-depressants was initially conducted entirely on men, despite the fact that women seem to have higher rates of clinical depression.¹⁸(IV.59) Evidence is now emerging that the effects of some anti-depressants vary over the course of a woman's cycle. As a result, a constant dosage of an anti-depressant may be too high at some points in a woman's cycle yet too low at others.^{19,20}

The task force reported a critical need for studies on problems specific to women¹⁸(1-9) and comparative studies of men and women's health problems. Some areas in which a lack of information about women creates problems for diagnosis and treatment are cardiovascular disease, alcoholism, drug dependency, mental illness, and the differential effects of medications on women.¹⁸(IV)

The task force also highlighted a need for the examination of the attitudes of health care professionals

towards women's health needs.^{18(IV-48)} Initial evidence that women may be treated less well in the health care system was cited as an area which deserved further scrutiny.^{18(IV-49)}

A Specific Example: Women's Cardiovascular Health

Women may be disadvantaged by inadequate attention to the manifestations of cardiovascular disease in women. There is some evidence that cardiovascular disease is not diagnosed early enough in women or not treated early enough once a diagnosis is made. Studies show that women have a higher operative mortality rate for coronary bypass surgery^{21,22} and a higher mortality rate at the time of an initial myocardial infarction.²³⁻²⁵ These higher mortality rates reflect the fact that cardiovascular disease is further advanced in women than men at both the time of surgery and the time of an initial heart attack.²³

Cardiovascular disease may be more advanced in women than men before diagnosis or treatment because of a tendency among physicians to ignore angina as a symptom of disease.²⁶ Early reports from the Framingham Heart Study showed that the rate of angina uncomplicated by myocardial infarction in women is higher than in men. The prevalence of uncomplicated angina may have led to a belief that angina in women is largely a benign occurrence.^{22,26} However, angina is the most common initial presentation of coronary heart disease among women, and presence of angina doubles the risk of mortality for women.^{22,23} In addition, the conclusion that angina may not be cardiac-related in females was made based primarily on experience in young women.²⁸ Less attention may have been paid to angina in women than was warranted; misinterpretation of chest pain symptoms may have resulted in missed opportunities for preventive therapies and earlier surgical interventions.²² Research on cardiovascular disease has concentrated almost entirely on men²⁰ despite the fact that cardiovascular disease is the leading cause of death for women in the U.S.^{19,22}

The lack of research done specifically on women may have resulted in a failure to develop diagnostic criteria and treatments that are appropriate for cardiovascular disease in females. Cardiovascular disease in women differs from the disease in men in several significant ways. One study showed that diabetes is a greater risk factor in women for morbidity and mortality from coronary heart disease than in men.²³ The same study also showed that the level of HDL cholesterol is a stronger predictor of heart disease in women than in men.²³ These differences between the sexes in the manifestation of cardiovascular disease may affect diagnostic and treatment indications for women.

ETHICAL CONSIDERATIONS IMPLICATED BY EVIDENCE OF GENDER DISPARITIES

The Role of the Medical Profession in Examining Gender Disparities and Eliminating Possible Gender Bias

Available data do not conclusively demonstrate the existence of a causal connection between gender bias and gender disparities in the delivery of health care. Designing a study which can control for the myriad social, economic and cultural factors which might influence decision making in a clinical context has proved extraordinarily difficult. Explanations for gender disparities may range from gender bias to misperceptions of disease prevalence.

However, the medical community cannot tolerate any discrepancy in the delivery of care which is not based on biologically or medically indicated factors. The Public Health Service Task Force on Women's Health Issues concluded that "[b]ecause health care is a legitimate concern of all people, the health professions are obligated to seek ways of ensuring that clinical decisions are based on science that adequately pertains to all people."¹⁸ The obligation of the medical profession includes vigilance in ascertaining the source of disparities and eliminating them from the practice of medicine.

Transcending Historical Discrimination.

Historically, societal perceptions regarding women's health status have often resulted in the disadvantage of women. Throughout the mid-nineteenth and well into the twentieth centuries, women's perceived disposition toward both physical and mental illness was used as a rationale for keeping women from worldly spheres such as politics, science, medicine, and the law. Women whose behavior violated expected gender-role norms were frequently viewed as having mental illnesses, which in turn were often "treated" with gynecological surgeries such as hysterectomies, and occasionally, clitoridectomies.²⁷

There are some areas of concern in modern medicine which warrant particular scrutiny. Evidence that most medical research is conducted on men is troublesome. Lack of research on women is not only discriminatory but may be dangerous; medical care or drugs which prove effective in men may not always be safely generalizable to women. Evidence of attitudes toward women's health care utilization practices and scholarly explanations for disparities in the delivery of care tend to characterize women negatively in relation to men.^{1,16}

Society and medicine have addressed and are working to remedy sex stereotypes and biases. Yet, many social and cultural attitudes which endorse sex-stereotyped roles for men and women remain. Because of the influence that social attitudes and perceptions have had on health care in the past, the suggestion that some traditional biases may remain and are affecting medical care should warrant careful attention.

RECOMMENDATIONS

1. Attitudes and practices. Physicians should examine their practices and attitudes for influence of social or cultural biases which could be inadvertently affecting deliver of medical care. Further research and education should be conducted to increase awareness of the possible influences that social perceptions of gender roles may have on health care.
2. Research. More medical research on women's health and women's health problems should be pursued. Results of medical testing done solely on males should not be generalized to females without evidence that results apply equally to both genders. Research on health problems that affect both genders should include male and female subjects. Sound medical and scientific reasons should be required for excluding females from medical tests and studies, such as that the proposed research does not or would not affect the health of females. An example would be research on prostatic cancer.
3. Removing gender bias. Physicians must ensure that gender is not used inappropriately as a consideration in clinical decision-making. The development and implementation of procedures and techniques which preclude or minimize the possibility of gender bias should be developed. For instance, a gender-neutral determination for kidney transplant eligibility should be used.
4. Medical staff assessment. Medical staffs should develop programs to determine whether treatment decisions are influenced by gender bias and whether either gender is being disadvantaged by treatment decisions generally.
5. Remedial action. Instances in which a physician's treatment decision appears to turn inappropriately on the patient's gender deserve further scrutiny. If evidence of systematic gender bias in clinical decision-making is found, then appropriate review or corrective proceedings should be undertaken.
6. Increasing numbers of female physicians in leadership positions. Awareness of and responsiveness to sociocultural factors which could lead to gender disparities may be enhanced by increasing the number of female physicians in leadership roles and other positions of authority in teaching, research

and the practice of medicine. The AMA should continue its efforts to insure access to higher-level positions in medicine for female physicians.

Further study to determine causes of disparities. Further research into the possible causes of gender disparities should be conducted. It is important to ascertain to what extent gender disparities in medical care are a result of bio-logical differences between the genders and to what extent utilization practices and physican-patient interactions are influenced by cultural and social conceptions of gender.

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Black-White Disparities in Health Care

There are persistent, and sometimes substantial, differences in the quality of health among Americans. Despite improvements in health care for black Americans since the 1960s, blacks have twice the infant mortality rate of whites and a life expectancy that is six years shorter than the life expectancy of white Americans.¹ Black men less than 45 years old have a 45% higher rate of lung cancer and ten times the likelihood of dying from hypertension than white men under age 45.² Underlying the racial disparities in the quality of health among Americans are differences in both need and access. Blacks are more likely to require health care but are less likely to receive health care services.

The disparity between blacks and whites in health care access and treatment reflects the continuing disparities in their income, education and other characteristics which correlate with the receipt of any complex and expensive service. But medical care is a unique and essential service and substantial disparities cannot be tolerated. Equal access to basic medical care by all Americans is a longstanding policy of this country and the American Medical Association.

Moreover, recent studies have suggested that, even when blacks gain access to the health care system, they are less likely than whites to receive certain surgical or other therapies. These studies vary in their purpose, depth and validity, but they cannot be ignored. This report reviews the recent studies and discusses their significance.

Many of the disparities that exist for black patients also exist for other racial minorities, although there has not been the same degree of documentation in such cases. The concerns expressed in this report apply equally to other racial minorities.

EVIDENCE OF DISPARITIES IN MEDICAL TREATMENT

Recent studies have suggested that the use of specific medical treatments differs between black and white patients. These studies have examined treatments in several areas, including cardiology and cardiac surgery, kidney transplantation, general internal medicine and obstetrics.

In a national survey of patients who were discharged from hospitals with a diagnosis of anterior myocardial infarction (AMI), black men had an AMI rate that was three-fourths of the rate for white men. However, the black males were only half as likely to undergo angiography and one-third as likely to undergo bypass surgery as the white males.³ On the other hand, mortality rates suggested that the severity of illness was comparable between blacks and whites at the time of admission. Nineteen percent of the whites and 8% of the blacks died while hospitalized for their AMI. Long-term survival rates were not measured.

Another study reviewed data on all patients discharged from Massachusetts hospitals in 1985 with a preliminary diagnosis of circulatory system disease or chest pain. While blacks and whites had similar rates of hospitalization, whites were one-third more likely to undergo coronary angiography and more than twice as likely to be treated with bypass surgery or angioplasty.⁴ The racial disparities persisted even after differences in income and the severity of disease were taken into account.⁴ In a study of all patients who underwent coronary angiography between 1970 and 1978 at a major tertiary care center, whites were two to three times more likely to undergo bypass surgery than blacks who had similar clinical

characteristics.⁵ Similarly, in a study of data from the Coronary Artery Surgery Study, which enrolled patients in 1974 to 1979 from fifteen geographically diverse academic institutions, a large differential between blacks and whites in the rate of bypass surgery could not be explained by differences in clinical or angiographic characteristics.⁶ In that study, surgery was recommended for whites more often than blacks, and, among those for whom surgery was recommended, whites were more likely to have the surgery performed. In addition, among those for whom medical treatment was recommended, whites were more likely than blacks to undergo bypass surgery.⁶

Racial status has also been found to correlate with the likelihood that a patient with kidney disease will receive chronic hemodialysis or a kidney transplant. Racial disparities in access to chronic hemodialysis are on the order of 5-15%; the most favored person is the white male, age 25-44.⁷

Several studies have documented racial disparities among patients who undergo kidney transplantation. In one study, the researchers reviewed all patients on chronic dialysis in the United States in 1983 and all patients on chronic dialysis in the upper Midwest between 1979 and 1985. Non-white dialysis patients were two-thirds as likely as white patients to receive a kidney transplant.⁸

A review of patients with end-stage renal disease who were covered by Medicare benefits from 1977 to 1985 revealed that blacks accounted for 33% of patients with end-stage renal disease but only 21% of patients who received kidney transplants.⁹ In a national survey of nearly 15,000 patients who began treatment for end-stage renal disease between 1981 and 1985, and who were therefore covered by Medicare benefits, researchers found that the likelihood of receiving a kidney transplant correlated with race and income and that the effects of race and income were independent of each other. Patients who were treated at institutions that served a predominantly white population and that were located in high-income areas were almost twice as likely to receive a transplant as patients who were treated at institutions that served a predominantly black population and that were located in low-income areas.¹⁰

While the patients in these studies were covered by Medicare, differences in income were still important. Until 1987, Medicare did not pay any of the bills for outpatient drugs, which, in the case of the immunosuppressive drug, cyclosporine, could cost as much as \$5,000 annually. In addition, for patients who do not live near a transplant center, transportation costs may be substantial.¹⁰

The evidence of racial disparities in treatment decisions also appears in general internal medicine. A study of treatment for patients hospitalized because of pneumonia found that the patient's race correlated with the intensity of care provided.¹¹ The researchers reviewed all patients hospitalized with a primary diagnosis of pneumonia in 17 hospitals between 1970 and 1973. The hospitals were selected in a manner designed to ensure that they varied in size, teaching status and expenditures per patient. The study showed that, after controlling for differences in clinical characteristics and income, blacks were less likely to receive medical services, particularly intensive care.¹¹

In a review of 65,000 deliveries in four New York City hospitals over a five-year period, researchers found that private patients were more likely than clinic patients to have a cesarean section even though the private patients were less likely to have medical problems or to deliver low birth weight babies.¹² The disparity in cesarean section rate between private and clinic patients carried over to the subgroup of patients who were considered to be at low risk for a cesarean delivery.¹² While 47% of the clinic patients were black, 22% of the private patients were black. Thus, blacks were probably less likely than whites to be delivered by cesarean sections even when clinically comparable.

Racial disparities in access to treatments have been documented previously. In a study of hospital admissions from the emergency room of a major tertiary care hospital during 1968, researchers found that

blacks were more likely to be classified as ward patients and whites to be classified as private patients, even when there was a comparable ability to pay for care. In addition, ward patients were less frequently admitted to the hospital even when clinical characteristics were similar.¹³ Studies from the psychiatric literature in the 1960s indicated that black patients were less often accepted for psychotherapy, more often assigned to inexperienced therapists, and seen for shorter periods of time and with less intensity.¹⁴

The racial disparities in access to treatments are consistent with studies of patient perceptions. A national telephone survey conducted in 1986 found that blacks were more likely than whites to report that their physician did not inquire sufficiently about their pain, did not tell them how long it would take for prescribed medicine to work, did not explain the seriousness of their illness or injury, and did not discuss test and examination findings. In addition, blacks were less likely than whites to be satisfied with the care provided during their most recent hospitalization or ambulatory care visit.¹⁵ Similar results were found in a survey of patients with hypertension in Edgecombe County, NC. Compared to white patients, the black patients reported more general difficulties getting into the health care system and greater dissatisfaction with medical care services.¹⁶

REASONS FOR RACIAL DISPARITIES

It is difficult to draw firm conclusions from these studies regarding the role of race in decisions to treat patients. With regard to bypass surgery, for example, while the studies tried to control for incidence and severity of disease, they generally did not control for other relevant variables that may account for the differences between blacks and whites. In the Massachusetts study, where the data were adjusted for differences in age, gender, severity of disease, income, and type of insurance, and racial disparities in the frequency of bypass surgery were still found, the researchers did not have actual income data but used the patient's residence as a proxy for income. That is, they assumed that the patient's income was the average household income for people living in the patient's zip code. With more precise data, there might be a decrease in the extent of the racial disparities.⁴

Some of the disparity in kidney transplantation may be explained by medical or biological differences. For example, most of the kidneys donated for transplantation come from whites, and intraracial antigen matching is often more favorable than interracial matching.¹⁰ However, it is unlikely that medical differences account for all of the disparities. Whites not only are more likely to receive transplants, but they disproportionately appear on waiting lists for transplants.¹⁰

Income differences are probably the most important explanation for the disparities. Race and income are highly correlated, and patients with higher incomes are better able to bear the direct and indirect costs of expensive medical procedures.

Some medical experts have also suggested that physicians are more likely to treat aggressively patients who are wealthier, more productively employed and more assertive.^{17,18} Such patients might be viewed as more likely to respond successfully to therapy. It has also been suggested that they might be viewed as more valuable to society.¹⁰ In addition, there is a natural tendency to respond to those who are persistent in their requests for services.

Other factors, of course, such as education and the skills that come from it, inevitably restrict the ability of some blacks to gain access and to effectively negotiate for the best medical treatment available. And commentators have also speculated that blacks and whites may differ in terms of their treatment preferences, although such a difference has not been documented.

Disparities in access to treatment may reflect the existence of subconscious bias. This is a serious and troubling problem. Despite the progress of the past 25 years, racial prejudice has not been entirely eliminated in this country. The health care system, like all other elements of society, has not fully eradicated this prejudice.

SIGNIFICANCE AND RESPONSE

Whether the racial disparities in treatment decisions are caused by differences in income and education, sociocultural factors or failures by the medical profession, they are unjustifiable and must be eliminated. Not only do the disparities violate fundamental principles of fairness, justice, and medical ethics, they may be part of the reason for the poorer quality of health of blacks in the United States.

The Council recognizes the complexity of the problem and the efforts within and outside organized medicine to address it. The Council emphasizes three approaches that it believes should be given high priority:

PROPOSED SOLUTIONS

- (1) Greater access -The studies discussed in this report underscore the need for ensuring that black Americans without adequate health care insurance are given the means for access to necessary health care. In particular, it is urgent that Congress address the need for Medicaid reform.
- (2) Greater awareness -Because racial disparities may be occurring despite the lack of any intent or purposeful efforts to treat patients differently on the basis of race, physicians should examine their own practices to ensure that inappropriate considerations do not affect their clinical judgment. In addition, the profession should help increase the awareness of its members of racial disparities in medical treatment decisions by engaging in open and broad discussions about the issue. Such discussions should take place as part of the medical school curriculum, in medical journals, at professional conferences, and as part of professional peer review activities.
- (3) Practice parameters -The racial disparities in access to treatment indicate that inappropriate considerations may enter the decision making process. The efforts of the specialty societies, with the coordination and assistance of the AMA, to develop practice parameters should include criteria that would preclude or diminish racial disparities.

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