

**The Impact of Race and Socioeconomic Status on Individuals within the Intensive Care
Unit**

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Abstract

Race and socioeconomic status play a big role in the life of individuals because of the stress of where one stands in society. This can relate to their income status, education, skin color, occupation, and other crucial factors. When thinking about this social and economic status, as well as race, an individual's corresponding health is typically always associated. Among the populations, the inequality in socioeconomic status and race tends to influence the critically ill and mortality rates. Most hospitals have a unit or floor referred to as the intensive care unit or ICU. This kind of unit is for patients who require critical care and constant monitoring due to their unstable, life-threatening illnesses. Research has been conducted to look at the race and socioeconomic status of the patients in an ICU setting and whether there is a substantial connection between the two. Many times, the mortality rate of these ICU patients is also looked at concerning one's race and socioeconomic status. Unfortunately, patients with lower socioeconomic status have less income, less education, less desirable occupations, less insurance, and less financial access compared to those with higher socioeconomic status. This leads to poor outcomes for these patients in an ICU setting. Many different aspects bring an individual to be a patient in the ICU, as well as determine their outcome before any care is brought to the patient. Through this essay, I will address these aspects of socioeconomic status and race to show a direct correlation to why certain outcomes may be favorable. With the supporting literature, I argue that there is a substantial influence of socioeconomic status and race on ICU patients, as well as discuss possible rebuttals to my argument.

Keywords: intensive care, socioeconomic status, race

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Introduction

Among the United States and other countries across the globe, an individual's life is heavily correlated with one's race, ethnicity, and socioeconomic status. Race and ethnicity are typically used interchangeably and refer to one's culture and ancestry, but these terms are separate entities. Race is referred to as the physical differences that groups and cultures consider socially significant, and ethnicity is correlated with a shared culture, such as language, ancestry, practices, and beliefs (American Sociology Association, 2020). Whereas socioeconomic status is an individual's social standing or class of an individual or group and measured as a combination of education, income, and occupation (American Psychological Association, 2020). With so many aspects to race and socioeconomic status, individuals often identify with vast differences from one another, meaning an individual's status in society is unique to them because of differing income, education, financial security, and subjective perceptions of social status and social class (American Psychological Association, 2017). Socioeconomic status and race encompass and affect the quality of life, as well as opportunities and privileges imparted to people within society (American Psychological Association, 2017). For example, poverty can be connected to numerous physical and psychosocial stressors, with a potential for a decline in health. Overall, socioeconomic status and race is a consistent and reliable predictor of a vast array of outcomes across the life span, including physical and psychological health (American Psychological Association, 2017). According to societal trends, an individual's socioeconomic status, along with race, significantly impacts one's overall and future health, which in turn influences the chance of becoming critically ill.

A Connection to Health

With a concern for an individual's socioeconomic status, it goes together with a concern for overall human functioning. Typically, low economic and social status correlates to lower educational achievement, poverty, and poor health leading to societal inequality. Inequalities in health distribution, resource distribution, and quality of life are on the rise within the US and around the globe (American Psychological Association, 2017). Race and ethnicity become intertwined with socioeconomic status, as research shows race and ethnicity often determine a person's socioeconomic status (American Psychological Association, 2017). According to status, segregation of communities occurs and shares characteristics of low economic growth and development, poor health conditions, and low educational levels (American Psychological Association, 2017). These communities at risk are now faced with a slew of health disparities reflecting the inequalities that exist in society, stemming from races and low socioeconomic status.

Institutional discrimination and segregation by socioeconomic status, race, and ethnicity create barriers to health care access, as well as reduce the quality of care they receive (American Psychological Association, 2017). When individuals are faced with a lack of access to health care or provided with inadequate care, they are at risk for developing further complicating and dangerous health issues. Once these complications develop, these individuals have a greater chance of becoming critically ill, landing them in an intensive care unit within the hospital in unstable and poor condition. If an individual who lives in these segregated communities and shares these inequalities seeks medical care, the individual is already worse off than another individual in a more socioeconomically stable environment. Although the two individuals from separate communities may present to a hospital with the same problem, the individual with low

socioeconomic status or of a certain ethnic background is worse off due to existing inequalities and health disparities. This often can be the difference between being treated and having a quick recovery to being admitted to an intensive care unit due to existing health complications.

Socioeconomic Status and Health

Although life expectancy and health status of all populations have improved over the twentieth century, individuals of lower socioeconomic status have faced higher mortality than individuals of higher status (Feinstein, 1993). Unfortunately, this is due to the health inequalities that have not diminished over recent decades but instead may have increased. Low socioeconomic status reveals low class, low income, low education, and overall low social standing in society. The impact of socioeconomic status on health is undeniable. Research shows a sharp negative relationship between class and mortality for both men and women. Those of lower socioeconomic status had a mortality rate that is approximately 60 percent higher than the rate of those that sit in the highest class (Feinstein, 1993). Along with class, there is a significant negative relationship between education and mortality, and income and mortality. This goes to show there is an increased rate of individuals dying due to their status being in a lower class, with less education and less income than those in a higher class, with better education and higher income.

Along with overall higher mortality rates, evidence shows lower socioeconomic groups have overall poorer healthcare experiences. Preventative care is essential to consider as it is the first step to improving health. With adherence to screening guidelines recommended for breast cancer (mammogram), cervical cancer (pap smears), and other cancers, lower status women are less likely to follow recommended screening guidelines than higher-status women (Feinstein, 1993). This could be heavily due to the lack of healthcare education provided to lower

socioeconomic groups. Another area to consider is the diagnosis of disease and admission into the hospital for treatment. Evidence shows that both the diagnosis of illness and admission into the hospital occurs at a later point in the development of the illness among lower social classes (Feinstein, 1993). For example, women living in lower-income tracts tend to have their cancers detected at later stages (Feinstein, 1993). Among emergency room admissions, individuals of lower socioeconomic status are generally more ill upon admission than individuals of higher socioeconomic class (Feinstein, 1993). This demonstrates a lack of equal and appropriate care provided by healthcare professionals to individuals regardless of class or income. Whether due to a provider's bias or society's continuing healthcare disparities, persons of low socioeconomic status receive poor care in comparison to higher status persons.

Inequality among patient awareness of treatment options, decision-making, and quality of care also exists. In a study of random assignment to a health maintenance organization (HMO) or fee-for-service physician, lower-income individuals who were sick did better in fee-for-service care, where higher-income individuals who were sick preferred HMO (Feinstein, 1993). This is largely due to the difficulties for poorer individuals to "work the system" within the nature of the HMO, as well as less able to take advantage of the greater range of treatment options offered by fee-for-service care (Feinstein, 1993). Following treatment or diagnosis, studies show patients of lower socioeconomic status have lower survival probabilities (Feinstein, 1993). Higher-income is associated with longer survival time and could be due to lack of education. Education is somewhat correlated with survival, and lower-income patients are less aware of treatment options, as well as recurrence, side effects, or other posttreatment abnormalities (Feinstein, 1993). Education is essential to any medical diagnosis, as well as to a successful recovery. If an individual does not have equal access to education, the individual is at a severely larger

disadvantage, leading to worsening health and admission to a critical care unit (ICU). Lastly, with nursing-home admissions, it has been shown that nursing homes are less willing to admit and take longer to admit patients who are quite sick and Medicare financed rather than by a private payer (Feinstein, 1993). Lower socioeconomic groups also have a harder time finding access to a nursing-care facility (Feinstein, 1993). It can be clearly said that individuals of lower socioeconomic status are worse off in the healthcare system due to contributing inequalities. Overall, a lower income and lower status employment can restrict choice of physician, health care plan, and treatment options, along with lower education reduced awareness and decision-making skills (Feinstein, 1993). With a poor physician, mediocre health plan, inadequate treatment options, substandard awareness, and inferior decision-making skills, all of which are congruent with lower socioeconomic individuals, it is more likely to end up in an unstable, threatening condition in the ICU.

Ethnicity/Race and Health

In addition to health disparities occurring in lower socioeconomic status, individuals of racial and ethnic minorities face similarities in the healthcare system. Racial and ethnic minorities have worse overall health than White Americans (American Psychological Association, 2017). The disparities may stem from economic determinants, education, geography and neighborhood, environment, lower-quality care, inadequate access to care, inability to navigate the system, provider ignorance or bias, and stress (American Psychological Association, 2017).

Race and ethnicity, much like socioeconomic status, are associated with several healthcare inequalities. Race and ethnic minorities are related to avoidable procedures, avoidable hospitalizations, and untreated disease due to unfair and unequal care being provided by

healthcare providers (American Psychological Association, 2017). African Americans have worse outcomes than whites at each level of income or education (American Psychological Association, 2017). This is in part due to adverse health effects of more concentrated disadvantage, or a range of experiences related to racial bias (American Psychological Association, 2017). Another example is the connection of low birth weight with ethnic/minority status, as well as substantial racial differences in insurance coverage (American Psychological Association, 2017). Racial discrimination also has implications in higher psychological distress. Research on post-traumatic stress disorder (PTSD) showed that African Americans, Hispanics, Asians, American Indians, and Native Hawaiians have higher rates of PTSD than Whites (American Psychological Association, 2017). Other health disparities include that American Indians are at an increased risk for alcohol dependence, and African Americans are more frequently diagnosed with schizophrenia compared to Whites (American Psychological Association, 2017).

Many studies have been conducted on the manifestation of widespread racism in healthcare. Even though African Americans' life expectancy has more than doubled during the 20th century, they continue to bear a higher burden of death, disease, and disability than Whites (Becker & Newsom, 2003). One of the biggest agents in this problem is research indicates that physicians tend to perceive African Americans and members of low-status groups more negatively than they do Whites and high-status groups, which affects the delivery of care (Becker & Newsom, 2003). A big statistic includes that African Americans have an over-death rate that is 1.6 times higher than that of the White population, and an increased mortality rate for African Americans compared with the White population exists for 8 of the 10 leading causes of death (Becker & Newsom, 2003). The healthcare experiences of African Americans are affected

by the awareness of the long history of racism in American healthcare, such as Tuskegee experiments, and the barring of African Americans from entering the medical profession until recently (Becker & Newsom, 2003). More negative attitudes are expressed by African Americans regarding the nation's health because of the circumstances and experiences that fail to get rid of historical racial disparities. The healthcare experiences of African Americans are affected by the awareness of the long history of racism in American healthcare, such as Tuskegee experiments, and the barring of African Americans from entering the medical profession until recently (Becker & Newsom, 2003). The history and present-day treatment of racial and ethnic minorities are essential to analyzing the delivery of health care in the US. The shown unequal treatment and delivery of care to members of ethnic and racial groups leads to their increased risk of being admitted to the ICU because of increased health problems and undesirable issues.

Race and Socioeconomic Status on Outcomes in COVID-19

Some diseases disproportionally affect individuals of non-White race, especially Black Americans, and place them into intensive care. This is exactly the case with the coronavirus disease. Statistics in Michigan show Black Americans making up 37% of COVID-19 cases and 42% of deaths, even despite making up 14% of Michigan's population (Quan et al., 2021). These statistics are due to social and health disparities rendering Black Americans vulnerable to the disease, such as medical comorbidities (Quan et al., 2021). Unfortunately, because of healthcare disparities, low SES individuals and racial minorities have a high prevalence of comorbidities that include hypertension, diabetes, chronic pulmonary disease, heart disease, and obesity due to many reasons, with the one being the lack of healthcare access (Quan et al., 2021). The comorbidities mentioned put these populations at higher risk of contracting the disease, ending up in the ICU, and dying. One study showed an increase in the likelihood of hospital admission

for COVID-19 in Black individuals and those who lived in low-income areas (Quan et al., 2021). Socioeconomic disadvantage paired with patient-level risk factors leaves these populations vulnerable to be in grave conditions in the ICU. Analysis of outcomes in an extensive study showed that patients from poorer neighborhoods had significantly higher frequencies of mechanical ventilation and ICU admissions compared to patients from the wealthier neighborhood (Quan et al., 2021). COVID-19 shed light on the large socioeconomic and racial differences in individuals affected by the disease, as well as the severity, and the need for a multi-level approach to reduce the disparities putting individuals at greater risk of contracting COVID-19 and becoming critically ill.

Factors Leading to ICU Stay

After discussing the evident displays of how low socioeconomic status and ethnic/racial minorities face inequalities within the healthcare system, it is necessary to address why such striking disparities by socioeconomic status and race exist across numerous health outcomes. Lack of insurance and lack of access to health care are two clear reasons why low socioeconomic individuals suffer worse health (Chen & Miller, 2013). It is also clear that low socioeconomic individuals live in worse physical conditions with exposure to toxicants, pollutants, and other hazards in their homes (Chen & Miller, 2013). Low socioeconomic individuals are also more likely to witness or be the victims of violence, as well as believe people cannot be trusted (Chen & Miller, 2013). To understand the factors leading to socioeconomic inequality, it is important to consider a variety of factors at the neighborhood (violence and social capital), family (parenting and conflict), and individual (negative emotions and behaviors) levels and the roles each play in socioeconomic and health relationships.

The socioeconomic and racial/ethnic factors that place an individual at a disadvantage in the healthcare system are the same disadvantages that can place these individuals in the ICU over individuals of higher status. Global studies look at the intensive care units and analyze how socioeconomic status (SES) impacts mortality and admission to ICUs (Schnegelsberg et al., 2016). Low SES is associated with both a higher risk of bacteremia and increased mortality (Schnegelsberg et al., 2016). Individuals of low SES are at a significant disadvantage because of the lesser conditions they live in that put them at a higher risk of developing an infection. Unfortunately, the population of lower SES status live in poor conditions and are unable to get access to healthcare for reasons such as lack of transportation or lack of finances. With no healthcare, individuals are forced to live with these concerning health issues and eventually end up in a critical condition in an ICU, instead of being able to get care when the condition/issue was treatable. Low socioeconomic status is associated with a high incidence of diseases and worse health outcomes, even in developed countries, at admission to a surgical ICU (Bein et al., 2012). Therefore, low SES was associated with prolonged length of stay in the ICU (Bein et al., 2012). Individuals of higher SES typically had a higher number of visitors compared to low SES, which could be due to differences in marital status as well as other psychological aspects (Bein et al., 2012). Emotional factors influence the motivation for visiting a critically ill family member. A lack of support, for example through visiting, can make a substantial difference in promoting patients into healing.

When examining intensive care unit admissions, use of mechanical ventilation, and receiving cardiopulmonary resuscitation, minority race/ethnicity, lower-income and educational attainment, and Medicaid insurance were associated with a requirement for higher intensity care (Brown et al., 2018). Social determinants of health are associated with whether an individual

needs a degree of an intense and critical level of care in an ICU setting. For example, among Medicare patients with advanced cancer, black patients experience more emergency room visits and hospitalizations, longer lengths of stay, increase likelihood of admission to an intensive care unit (ICU), and more in-hospital deaths than whites do (Brown et al., 2018). This clearly shows a crucial impact of race on whether an individual needs care in an ICU because of their likelihood of being worse off. With admission to the ICU, racial/ethnic minorities are more likely to experience high-intensity interventions like intubation and CPR (Brown et al., 2018). Uninsured patients are more likely to be admitted to an ICU and die there than patients with private insurance (Brown et al., 2018). Patients with lower levels of educational attainment are less knowledgeable about advanced directives and end-of-life care (Brown et al., 2018). This leads lower SES individuals to end up in the ICU with aggressive care rather than educated individuals who may decide to utilize palliative care. Findings such as these suggest the need for interventions designed to eliminate healthcare disparities to properly deliver appropriate and fair care to individuals of all races/ethnicities and socioeconomic statuses.

Opposing Arguments

With seeking to determine whether race/ethnicity and socioeconomic status are associated with critically ill patients, rebuttals against the argument arose. An article conducted research and concluded that admission to the ICU and hospital mortality did not differ by race, ethnicity, or socioeconomic status. The argument can be had that conflicting results can occur due to differences in care provided, incomplete adjustment and determination of SES, the severity of an illness, and failure to account for chosen lifestyle choices (Erickson et al., 2011) It is also necessary for all research to be conducted in a densely diverse population of critically ill patients while considering the severity of illnesses choices (Erickson et al., 2011). With varying

populations, results can become varied, therefore harder to determine if socioeconomic status and race cause a significant amount of influence on whether an individual has a higher chance of being admitted to the ICU. Different aspects of race and socioeconomic status may play a bigger role than others altering the general conclusion. For example, an individual may be of an ethnic/racial minority but is of high socioeconomic status. Another rebuttal to consider is individuals may view or consider low socioeconomic status differently than others. This would then cause discrepancies on what individuals are truly low SES or just happen to think they are. It would be necessary to come up with set criteria that would accurately classify individuals as low, middle, or high socioeconomic status. Such information can create the rebuttal that the ability to accurately determine the effect on whether an individual ends up in the intensive care is too vague.

Conclusion

Differences in health due to socioeconomic groups, race, and ethnicities are and have been a real pressing issue in society for decades. To avoid overlooking important factors that affect an individual's health, one must acknowledge both the cultural, social, and economic background. Society proves how an individual's socioeconomic status, along with race, significantly impacts one's overall and future health, which in turn influences the chance of becoming critically ill. Socioeconomic status and race consistently and accurately predict a vast array of outcomes across the life span, including physical and psychological health (American Psychological Association, 2017). Understanding socioeconomic status is to consider one's occupation, income, education, and health-related and cultural resources (Bein et al., 2012). Each of these aspects leaves an individual at an advantage or disadvantage at having optimal health in life. An individual with a less desirable occupation, low income, low education, and little

resources will have a harder time achieving good health. Oftentimes, this individual will face extensive health issues due to existing health disparities that lead an individual down a slippery slope. Just one of these aspects of socioeconomic status makes life an uphill battle. For example, with a less desirable occupation, this may lead to poor finances and poor insurance that leaves the individual with no ability to afford to go to the hospital to get checked out if he or she does not feel well. This then turns into the individual's health rapidly declining to the point of being rushed to the emergency department and admitted to the ICU, all because of his undesirable job and little income. If the individual was able to seek to care the minute he or she did not feel well, the admission to hospital due to being in an unstable, critical condition could have been avoided. Therefore, this is exactly how a racial minority and poor socioeconomic status can negatively affect one's health and lead to unfavorable outcomes. Racial and socioeconomic disparities is a complex topic that requires an understanding of past evidence to see the big picture on all levels.

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