BIASES IN THE DIAGNOSIS OF ELDERLY ALCOHOLICS

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VITA

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THESIS ABSTRACT

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The present study investigated factors that may contribute to the misdiagnosis of and poor prognosis given to elderly alcoholics. Medical residents from the Montgomery and Birmingham, Alabama areas served as participants. Each participant read a hypothetical vignette that described an alcoholic patient and listed out three probable diagnoses and a prognosis for each diagnosis listed. The participants also completed the Kogan Attitude Toward Old People Scale as well as a demographic questionnaire. The hypothetical vignettes were identical except for age (35 vs. 70) and lab values (presence vs. absence). Forty-nine vignettes were completed and analyzed. It was hypothesized that the older patient in the vignette would not be diagnosed with alcoholism as often as the younger patient. This hypothesis was supported. It was also hypothesized that the vignettes containing lab values would yield the diagnosis of alcoholism more frequently

than the vignettes without lab values. This hypothesis was not supported. The Kogan Attitude Toward Old People Scale was used to determine whether negative attitudes towards the elderly led to a misdiagnosis or poor prognosis for those patients diagnosed with alcoholism. No participants held negative attitudes towards the elderly, therefore this hypothesis was not supported. Results are discussed in terms of how much the present findings extended previous research on the misdiagnosis of elderly alcoholics.

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BIASES IN THE DIAGNOSIS OF ELDERLY ALCOHOLICS

Stereotyping and Biases

Biases are important factors that may influence a clinician's view of a patient. Biases are the result of pre-existing stereotypes, apparent in everyday life, not just in a medical or mental health setting. It was once a popular belief that only "bigoted" people use stereotypes, but in actuality, everyone uses them all the time without even knowing it. A stereotype is defined as a fixed notion about members of an identifiable group (Deux, Dane, & Wrightsman, 1993). By the time a child is five years of age, he or she may already have developed stereotypes about gender, race, and other social groups (Paul, 1998).

Some frequently negatively stereotyped groups include women, African-Americans, homosexuals, and the elderly. Ethnic and racial stereotypes exist in every culture (Devine, 1989). Because race is a preoccupation with our society, racial attitudes, prejudices, and discrimination have been extensively studied (Fairchild, Yee, Wyatt, & Weitzmann, 1995). Prejudice refers to an attitude held towards members of another group that is emotionally, rigidly, or inflexibly acted upon, and negative (Deux et al., 1993).

While stereotypes may be negative, some argue that they are not all bad (Devine, 1989). If a person has knowledge of a certain stereotype, it does not mean that personal beliefs are associated with that stereotype. Also, stereotypes do not always produce prejudice. Stereotyping can be viewed simply as a way to categorize knowledge.

Cognitive Schemas

Stereotypes may prove harmful when clinicians' moral and ethical judgments about diagnosis, prognosis, and attitude towards a client are affected by automatic stereotyping or biases based on the client's membership in a certain group. It is important for clinicians to be well aware of cognitive schemas that may exist for specific groups. A schema is defined as "a network of beliefs about what goes with what, and includes beliefs about people or objects" (Haverkamp,1994 pg.157). Stereotypes are just one type of cognitive schema that may influence a clinician's perception and judgment. Stereotypes may provide a clinician with quick information about others, although sometimes this information will be inaccurate. People in general tend to form impressions of others along a good versus bad dimension, with negative information being more heavily weighted than positive (Klein, 1991, in Haverkamp, 1994). Thus, initial impressions of an individual may influence the clinician's assessment of that person.

Occupational perception is an example of an area where learned stereotypes are frequently employed (Glick, Wilk, & Perreault, 1995; Hershey & Farrell, 1997; Lobel & Shavit, 1997). Females are perceived as more likely to hold jobs concerning the welfare of others, whereas males are expected to have occupations requiring characteristics such as assertion and dominance (Lobel & Shavit, 1997). Hershey and Farrell (1997), in a study determining how individuals perceive wisdom to be related to various occupations, found that subjects saw physicians, surgeons, and judges as having more wisdom than toll collectors, bus drivers and maids.

Research on Biases

Research suggests that factors such as physical attractiveness, race, sex, socioeconomic status, age, or health may lead to negative impressions of the client by the professional, which could possibly lead to a misdiagnosis or poorer prognosis. These biases are based on stereotypes adopted from society.

Barocas and Vance (1974) studied physical attractiveness bias. Findings suggest that physical attractiveness is positively related to judgments of favorable prognosis by clinicians. The physical attractiveness of clients was rated by both the counselors and the receptionists of a university counseling center. Clients rated more attractive received more favorable prognoses. Another study that relates to physical attractiveness was conducted by Kaplan and Thomas (1981). This study dealt with obesity bias in vocational rehabilitation counseling. Results of this study showed that a woman of normal weight was rated as more competent, more attractive, and less dependent that an overweight woman. These impressions are extremely important because they could dramatically affect rehabilitation outcome.

Racial bias has also been studied as a possible influence on medical diagnosis. In a recent study, Schulman et al. (1999) looked at the influence of patient's race and sex on physicians' recommendations for cardiac catheterization. Schulman et al. found that race and sex of the patient independently influenced how physicians managed chest pain. Black females were significantly less likely to be referred for catheterization than white males. The researchers note that the biases observed may either represent overt prejudice on the part of the physicians, or could be the result of subconscious perceptions made by the physicians. Subconscious bias occurs when a patient's membership in a target group

automatically activates a cultural stereotype in the physician's memory regardless of their personal level of prejudice (Schulman et al., 1999).

Luepnitz, Randolph and Gutsch (1982) performed a study to determine whether patients' race and socioeconomic status influence a diagnosis of alcoholism. Results indicated that race had differential effects on the diagnosis of alcoholism, socioeconomic status had differential effects on the diagnosis of alcoholism, and there was a significant interaction between race and socioeconomic status. Black individuals were diagnosed correctly as alcoholics more often than their White counterparts. Also, lower socioeconomic status individuals, regardless of race, were diagnosed correctly for alcoholism more often than those of upper socioeconomic status. Black individuals of lower socioeconomic status were the group most correctly diagnosed with alcoholism. The researchers believe these results stem from the popular impression that individuals with lower socioeconomic status are more likely to drink and abuse alcohol and the myth that blacks drink more often than whites.

Ray, Raciti, and Ford (1985) attempted to identify biases in diagnoses related to the age of the client and the gender of the psychiatrist. They concluded that female psychiatrists discriminated more towards the elderly than male psychiatrists, although both groups discriminated. Discrimination was measured by how likely the participants were to view older patients as ideal for their practice and the ratings of prognosis for the older patients described in the clinical vignettes used in the study. Female psychiatrists also rated the prognoses for older patients more poorly than male psychiatrists did. In addition to female gender, the characteristics correlated highest with negative attitudes toward the elderly were psychoanalytic theoretical orientation and board certification.

James and Haley (1995) also conducted research on age bias, but included "healthism" in their study as well. Healthism refers to devaluative attitudes and stereotypes toward those in poor health (Gekoski & Knox as cited in James & Haley, 1995). The researchers found that doctoral level psychologists rated older clients as less appropriate for their services and saw their prognoses as less positive than younger clients. The psychologists also offered consistently poorer interpersonal ratings for persons in poor health, relative to those with no health problems.

Some biases are less obvious than those already discussed. One such bias, the effect of suggestion (suggestion bias) on clinical psychodiagnosis, was researched by Temerlin and Trousdale (1969). Participants (sample included college students, psychologists, and psychiatrists) listened to a recording of a man who, in reality, was psychologically normal. Participants were told to write a brief description of the patient and derive an appropriate diagnosis. Some groups were given a prestige suggestion beforehand. Someone members of the groups held in high regard (such as a well-known psychologist, psychiatrist, or course instructor) told the group beforehand that the person being interviewed on the recording "looked neurotic, but actually was quite psychotic." The results of the study indicated that prestige suggestion bias influenced diagnosis. Knowing in advance the opinion of someone held in high prestige may have caused participants to question their own judgment and comply with the suggestion of the prestigious individual.

Diagnosis of Alcoholism

Despite the vast number of alcoholics seen by physicians, alcoholism is one of the most inaccurately diagnosed of the common illnesses. Approximately one alcoholic in ten is correctly diagnosed and treated (Smith, 1983).

Evolution of Diagnostic and Statistical Manual of Mental Disorders (DSM) Criteria

Mental health professionals and physicians need to have criteria that will allow them to make a precise diagnosis of patients who misuse alcohol. Knowledge and familiarity with current diagnostic descriptions and operationalized criteria are essential for a correct diagnosis of alcohol abuse or dependence in a patient. The diagnostic concept of alcoholism has evolved throughout the years. Attempts to define alcoholism have been characterized by uncertainty, ambiguity, and conflict (Keller & Doria, 1991). An exact definition of alcoholism will probably never be fully agreed upon by the public and physicians, however, so for the sake of this discussion, the focus will be on the criteria of the Diagnostic and Statistical Manual for Mental Disorders (DSM).

In the late 1960s, alcoholism became viewed as an independent disorder, separate from personality disorders (Meyer, 1989). In the DSM-I, alcoholism was understood as one aspect of "Sociopathic Personality Disturbance" (Sellman, 1994). E.M. Jellinek's disease model of alcoholism helped separate it from sociopathy in the DSM-II (Sellman, 1994). What qualified as alcoholism in the DSM-II may be viewed as merely heavy social drinking by today's standards. In the mid 1970s, alcoholism was divided into two terms: alcohol abuse and alcohol dependence. This division is still used in diagnosing alcoholism today. The DSM-III, in the 1980s, added to the definition of alcohol dependence the symptoms of tolerance and withdrawal (Meyer, 1989). Tolerance refers

to an individual's need for increased doses of alcohol in order to achieve effects originally produced by lower doses. Withdrawal is said to occur in an individual when he or she must drink to avoid the discomfort of the absence of alcohol in his or her body. Alcohol abuse was defined as "a pattern of pathological alcohol use" (Smith, 1983, p. 1017). The major focus of the alcohol use disorders in the DSM-III-R is dependence; abuse is included as a residual category. This is in contrast to the prominence of alcohol abuse in the DSM-III (Sellman, 1994).

In addition to the diagnostic criteria for alcohol abuse and dependence, former definitions of alcoholism include: one who cannot help repetitively drinking quantities of alcohol in amounts sufficient to cause intoxication, intemperance, inebriety, and habitual drunkenness (Keller & Doria, 1991). These definitions have negative connotations, perhaps implying a moral judgment about the alcoholic's degree of responsibility and free will.

The DSM-IV (1994) maintains the differentiation between alcohol abuse and alcohol dependence. The diagnosis of alcohol dependence is characterized by three or more of the following, occurring at any time in the same twelve month period: tolerance; withdrawal symptoms; inability to cut down or control alcohol use; a great deal of time spent in activities necessary to obtain alcohol; social, occupation, or recreational impairment, and continued alcohol use despite the knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by alcohol. Alcohol abuse is an appropriate diagnosis if a person's pattern of alcohol use is leading to significant impairment or distress, as manifested by one or more of the following, occurring within a twelve month period: recurrent alcohol use resulting

in a failure to fulfill work, school, or home obligations; recurrent alcohol use in situations that are physically hazardous; recurrent legal problems resulting from alcohol use; or continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by alcohol.

Psychosocial Factors

In addition to diagnostic criteria, a medical professional should be aware that a patient presenting with alcohol abuse or dependence may also display certain social indicators. However, it is difficult to establish a "good mix"of alcohol-related criteria for the population as a whole that would be reliable in diagnosing alcoholism (Mammo & French, 1998). According to Peterson and Cangemi (1993), Caucasians, northerners, younger, non-religious, urban, and college educated people are more likely to drink than African Americans, southerners, older, religious, rural, and those with only a high school or grade school education. Plutchik and Plutchik (1989) gave questionnaires to inpatient and outpatient lower and lower-middle class alcoholics. These questionnaires measured several areas which they believed would correlate with alcoholism. Their findings indicated that the highest correlations for male alcoholics were: having previous experience with alcohol abuse, having a father who is remembered as being intoxicated during one's adolescence, and living in a racially mixed neighborhood. For female alcoholics, the highest correlations were: having a mother who is remembered as being angry, unhappy, or intoxicated during one's childhood and adolescence, and a history of violence in the family of origin. Severity of drinking problems appeared to be related to anxiety, a history of family violence, menstrual problems in women, and a lack of pleasant social experiences. Males were more subject to greater stress than females (at

least in lower class society) and were more inclined to rely on alcohol as a coping mechanism. Tarter et al. (1992) cite the following characteristics of those with alcohol problems: antisocial behavior, deficiencies in assertiveness, and dysfunctional family life. Relating to social skills, deficiencies in refusal and compliment giving skills are proposed by the researchers to be exacerbating factors of alcohol problems.

Even when a diagnosis of alcoholism is made by a clinician, the diagnosis may become unstable over time, due to the nature of the disease. Therefore, there may be reason to question whether or not alcoholism is a chronic, stable disease, or a progressive disorder (Tarter et al., 1992).

The Misdiagnosis of Alcoholism

Negative Attitudes of Physicians

One factor that contributes towards the misdiagnosis of alcoholism is physicians' attitudes toward alcoholics. Effective treatment of alcoholism relies on medical professionals having positive attitudes regarding the disease and its prognosis (Fisher et al., 1975). If a physician has a negative attitude toward alcoholics, or believes the prognosis of alcoholism to be less than favorable, then treatment of the alcoholic will be affected. It has been suggested that a physician's lack of motivation to treat alcohol patients is projected onto the patient which hinders diagnosis and treatment (Fisher et al., 1975).

Research on Negative Attitudes Towards Alcoholics

In a study conducted by Knox (1971), surveys of attitudes on alcoholism were given to a number of psychiatrists and psychologists. The responses to the survey revealed that both groups of professionals were largely unwilling to devote much of their

own time and effort to the treatment of alcoholics. In addition, psychologists and psychiatrists participating in this study believed treatment benefits were limited at best and personally did not want to be associated with treatment to any degree.

Hanna (1978) also conducted research involving therapist biases towards treating alcoholics. One finding is that alcoholics evoke feelings of helplessness and hopelessness in many therapists. The study also concludes that alcoholics were considered second class citizens among the patient population by health workers.

In a study designed to evaluate the Zinberg Center for Addiction Studies, Scotch et al. (1997) administered questionnaires to 69 clinical fellows to determine their professional attitudes towards alcoholics and drug users. The researchers found that graduates overcame stereotypes and professional attitudes towards both groups of people (alcoholics and drug users) as a result of their clinical training. This finding is consistent with the idea that medical school or professional training plays a crucial role in physicians' and clinicians' attitudinal development (Fisher et al., 1975). This study is important because it cites a need for more research focused on clinical training programs to assess whether or not these programs are diminishing the presence of stereotypes.

Common Stereotypes of Alcoholics

Physicians' negative attitudes toward alcoholic patients are largely fueled by common stereotypes associated with alcoholism. The most common stereotype is that of a "skid row" alcoholic, which conjures up an image of a derelict sleeping on the sidewalk with an empty liquor bottle close by (Smith, 1983). The terms "drunkard," "lush," "boozer," and "wino" are still widely used to describe individuals suffering from alcoholism (Tarter et al., 1991). Furthermore, labels such as "addict" or "alcoholic"

require a person to take on a negative identity. The negative attitudes surrounding alcoholism may lead to incorrect diagnoses and inaccurate prognoses by physicians and clinicians.

Different Ethnic Norms

Different ethnic groups have different social norms, which may inhibit a diagnosis of alcoholism (Ames & Rebhurn, 1996; Leland, 1984; Lisansky, Gomberg, & Lisansky, 1984). Different cultures influence circumstances, occasions, and rituals associated with drinking, types of beverages consumed, and definitions of heavy and light drinking (Ames & Rebhun, 1996). Religion, national origin, and social class are some different components of ethnicity. Although European-Americans (whites) are recognized as the norm in most research, it is important to know that other groups have their own set of beliefs, patterns, and influences involving drinking. For example, group public drinking is more likely observed with Native Americans, blacks, and to a lesser extent Hispanics (Leland, 1984). Ames and Rebhun (1996) cite that heavy drinking in African-Americans may be influenced by poverty, repercussions of racism, and the current trend towards targeted alcohol advertising. Native Americans may be influenced by the history of conquest, relocation, and confinement to reservations suffered by various tribes. Therefore, physicians should keep in mind that an alcohol consumption pattern that is deemed abnormal or deviant is contextually restricted to the time and place of observation (Tarter et al., 1991). Because of differing social norms, an objective, fixed standard for diagnosing alcoholism is not entirely possible.

Dual Diagnosis

Alcoholism is often hard to identify especially if a person is given a diagnosis of more than one disorder. Psychiatric comorbidity has been observed a great deal in alcoholic patients in alcoholism and substance abuse treatment centers (Arolt & Driessen, 1996; Haver & Dahlgren, 1995) as well as in population studies (Haver & Dahlgren, 1995). A dual diagnosis in a patient presents a challenge for clinicians due to possible diagnostic ambiguities and even special legal vulnerabilities (Miller, 1993; Schmidt, 1991). Some complicating conditions that contribute to psychiatric comorbidity in alcoholics include major depression, dysthymia, phobias, and organic brain syndromes (Arolt & Driessen, 1996; Miller, 1993).

Radouco-Thomas et al. (1986) conducted a study on psychiatric comorbidity using 30 male alcoholic inpatients as participants. Seventy-seven percent of participants were described as having alcoholism associated with anywhere from 1 to 4 or more psychopathologies. The psychopathologies were predominately major depression, bipolar disorders, and antisocial personality disorder.

Therapists specializing in the treatment of alcoholism believe that addiction gives rise to numerous physical, social, and emotional symptoms in clients. Mental health employees believe that alcoholism could be a symptom of an underlying mental disorder or even a self-prescribed method of treatment (Miller, 1993; Schmidt, 1991). These ideas contribute to many misdiagnoses of alcoholism and a lack of treatment. Not only is a patient with a dual diagnosis harder to identify as an alcoholic, many issues involving treatment exist as well. Dual diagnosis patients need specialized forms of treatment (Arolt & Driessen, 1996; Radouco-Thomas et al., 1986). Alcoholics and drug addicts

with a dual diagnosis may not fit conveniently into diagnostic categories used by clinicians and therefore may not get the treatment and attention they need (Miller, 1993). Research has shown that dually diagnosed patients are given poorer treatment prognosis by physicians than are patients who have only one diagnosis(Schmidt, 1991).

Special Populations

Women

Women are especially vulnerable to misdiagnoses of alcoholism. Alcoholism has long been considered a disease that primarily affects men, and this attitude in turn affects research, assessment, and treatment of women alcoholics (Fillmore, 1984; Smith, 1986; Wilke, 1994). While women alcoholics have always existed, they have not been incorporated into the public stereotype of the alcoholic (Smith, 1986). The popular stereotype of the chronic alcoholic is usually a male (Beresford & Lucey, 1994).

Clinical Presentation

A woman alcoholic clearly presents very differently from a male alcoholic. Women's drinking patterns differ greatly from those of men. Women tend to drink smaller quantities than men and are more likely to drink alone (Smith, 1986; Wilke, 1994). Women also are less likely to drink daily, to drink continuously, or to binge drink when compared to men (Braiker, 1984; Smith, 1986; Wilke, 1994). Women alcoholics tend to start drinking at a later age, but experience more severe levels of impairment than men, and experience more interpersonal problems than men (Smith, 1986; Wilke, 1994). Women are also more likely than men to hide their drinking problems, and be protected from drinking difficulties by their spouses (Braiker, 1984). Women are less likely than men to drive while intoxicated (Ferrence, 1984). These gender differences in drinking

patterns significantly influence how alcoholism is assessed in women. Assessment tools such as the Michigan Alcoholism Screening Test (MAST) and the MacAndrew Alcoholism Scale (MAC) are male-as-norm biased and provide inconclusive information regarding female alcoholics (Wilke, 1994).

Social Indicators

Social indicators of women alcoholics also differ significantly from social indicators associated with men alcoholics. In the past, alcoholism in women was attributed to factors such as menopause, depression, personality disorganization, or sexual dysfunction (Fillmore, 1984). Today, researchers recognize that female alcoholics may experience harmful or painful relationships with men, come from alcoholic families in which the father is an alcoholic, and have a relationship with an alcohol abusing partner (Wilke, 1994). There is also a high rate of incest and sexual abuse history among female alcoholics (Wilke, 1994). Smith (1986) conducted in-depth interviews with a sample of male and female alcoholics from a private social club for Alcoholics Anonymous members and found that women were more likely than men to become alcoholics in response to trauma or stress, and more likely to be seen in the mental health system for a psychiatric diagnosis other than alcoholism. Women with alcohol problems are also likely to be diagnosed with mood disorders, anxiety disorders, and personality disorders (Haver & Dahlgren, 1995). Men were found to be more proud of their drinking and perceived themselves as normal when compared to their peers. Researchers attribute these differences to sex-role types: women alcoholics are seen as "unfeminine" and often reach alcoholism treatment by chance or by exhibiting less traditionally appropriate sex-role behavior, such as excessive drinking in social situations.

Antecedents of Drinking

When dealing with female alcoholics, it is important for a professional to be aware of the antecedents associated with alcoholism in women. Certain risk factors have been identified that may make it more likely for a woman to develop a drinking problem. Women are more likely than men to drink in response to family problems, whereas men are more likely to drink as a result of work related pressures (Lisansky et al., 1984). Ferrence (1984) cites many risk factors of female alcoholics, including employment status, age, and marital status. Regular drinking is positively correlated with the level of employment status among women (Ames & Rebhun, 1996; Ferrence, 1984). Young women are more likely to report problem drinking than older women, although younger women do not report higher levels of consumption. Divorced and separated women experience an increased risk for alcohol problems. Depressed women are at an especially high risk of developing alcohol problems (Braiker, 1984; Ferrence, 1984; Haver & Dahlgren, 1995).

Reasons for Misdiagnosis

Sex-role expectations. Sex-role expectations play a significant role in the misdiagnosis of alcoholism in women (Braiker, 1984; Fillmore, 1984; Lisansky, 1984; Smith, 1986). Women are perceived as having special obligations of caring for her household as well as carrying the "moral torch of the society" (Fillmore, 1984). Drunkenness is seen as a symbol of instability of a society in which women are perceived as taking on the roles that men previously occupied (Fillmore, 1984). There is also a double standard in which heavy drinking is expected of men but not women (Fillmore, 1984; Leland, 1984). Traditional sex roles give men the freedom to drink heavily,

whereas if a woman were to engage in such behavior, she would be labeled deviant. As a result of these sex-role expectancies, women are less likely to report problem drinking because they are more sensitive to disapproval and judgment (Braiker, 1984).

Biased assessment tools. Misdiagnoses occur when physicians fail to acknowledge that sex differences in alcohol use exist. Lack of proper assessment tools also prevents clinicians from correctly diagnosing women alcoholics (Wilke, 1994). For example, when using the Lederman Curve, which is based on quantity and frequency of drinking, to aid in a diagnosis of alcoholism, different cut off points should be established for men and women (Braiker, 1984).

Treatment Issues for Women Alcoholics

Because women alcoholics present differently than male alcoholics, specialized treatment, education, and prevention efforts should be developed to fit their needs (Ferrence, 1984; Fillmore, 1984; Vannicelli, 1984). A longstanding myth regarding women alcoholics is that they are harder to treat and have a poorer prognosis than males (Vannicelli, 1984; Wilke, 1994). There is, however, no scientific basis for this myth, which may hinder treatment of female alcoholics (Vannicelli, 1984). Therapeutic issues that may be relevant for women and not men include underlying conflicts in the following areas: sex-role identity, femininity, dependency, and power (Braiker, 1984). Knowledge of the differences between male and female alcoholics, with respect to clinical presentation and therapeutic issues, will lead physicians and clinicians to more accurate diagnoses and more effective treatment efforts. However, much remains unknown about alcoholism in women due to the male-as-norm bias being overused in research (Wilke, 1994).

Elderly

Another population where misdiagnoses of alcoholism frequently occurs is among the elderly. Doctors are less likely to diagnose alcoholism in the elderly for many reasons, two of which are that alcoholism seems to decline in old age and that most people simply do not expect it (Addiction letter, 1995). Older patients frequently underreport their drinking to professionals, (Addiction letter, 1995; DeHart & Hoffman, 1997), which leads to inaccurate diagnoses as well. In the late 1970s, alcohol problems affected between 2-10% of the general elderly population, with even higher rates for widowers, individuals with medical problems, and people with police involvement (Schuckit, 1977). Alcoholism occurs more often in health care settings, such as nursing homes, than in the community (Adams & Cox, 1997). Ten percent of those over 65 years old have an alcohol abuse problem (Adams & Cox, 1997). According to the Council on Scientific Affairs (1996), surveys indicate that 6 to 11 percent of elderly patients admitted to hospitals exhibit symptoms of alcoholism, as do 20 percent of elderly patients in psychiatric wards. Also, 14 percent of elderly patients admitted into emergency rooms exhibit symptoms of alcoholism (Addiction letter, 1995).

Clinical Presentation

Substance abuse problems in the elderly have received much less attention than similar problems in younger citizens (Schuckit, 1977). Elderly alcoholics differ in many ways from their younger counterparts. Clinical presentations of elderly alcoholics include the following: self-neglect, falls, injuries, confusion, depression, unusual behavior, incontinence, diarrhea, malnutrition, myopathy, and hypothermia (Bienenfeld, 1987). Compared to younger alcoholics, elderly alcoholics were more likely to be men,

Caucasians, and individuals with a lower educational level (Schuckit, 1977). The older alcoholic is also more likely than a younger alcoholic to drink daily (Schuckit, 1977). Older alcoholics tend to drink in response to loneliness and have meager social support networks (Schonfeld & Dupree, 1997).

Research suggests that the elderly may be more susceptible than younger people to some alcohol-related health problems due in part to age-related changes in physiology (Adams & Cox, 1997; Smith, 1997). Elderly alcoholics are at an increased risk for dementia, multiple physical disorders, marital and social problems, and suicide (Bienenfeld, 1987). Some common complaints among the aged that are characterized as complications of alcoholism include musculoskeletal pain, insomnia, depression, and anxiety (Bienenfeld, 1987). Alcohol abuse can cause conditions such as cardiovascular disease, cognitive loss, and osteoporosis to worsen (Atkinson, 1987).

Two Groups of Elderly Alcoholics

Researchers have distinguished between two groups of elderly alcoholics: early-onset alcoholics and late-onset alcoholics (Adams & Cox, 1997; Atkinson, 1987; Benshoff & Roberto, 1987; Liberto & Oslen, 1997; Schuckit, 1977). Early-onset alcoholics are individuals who have had significant alcohol problems throughout earlier stages of life, and who enter their elderly years with these existing alcohol problems (Benshoff & Roberto, 1987). Late-onset alcoholics develop alcohol problems later in life. Despite the division of elderly alcoholics into two distinct groups, no significant differences between the groups have been found by researchers in respect to age, employment, living status, or education (Liberto & Oslen, 1997). It is essential for

physicians and clinicians to know characteristics of each group of elderly alcoholics, especially for diagnostic purposes.

Early-onset alcoholics. Early-onset alcoholics report more frequent alcohol use, greater quantities of alcohol consumed, and are intoxicated twice as often as late-onset alcoholics. Early-onset alcoholics are also more likely to be in treatment programs or Alcoholics Anonymous. While early-onset alcoholics are more likely referred to treatment by professionals, family, friends, or self, late-onset alcoholics are more likely referred after a DWI legal charge. Early-onset alcoholics have more physical symptoms than late-onset alcoholics and have higher rates of falling, Delirium Tremens, diabetes, cirrohosis, and fatty liver disease. Early-onset alcoholics have more legal, employment, and financial problems, and have less psychosocial support than late-onset alcoholics (Liberto & Oslen, 1997).

Late-onset alcoholics. Late-onset alcoholics have more intact social resources than early-onset alcoholics (Adams & Cox, 1997; Liberto & Oslen, 1997). Alcoholism in this group is likely to be caused by bereavement and retirement (Benshoff & Roberto, 1987; Liberto & Oslen, 1997). Late-onset alcoholics more frequently report depression, sadness or loneliness than early-onset alcoholics. Late-onset alcoholics are more difficult for professionals and others to identify because they are often in denial about their problems with alcohol and are less self-critical of their drinking than early-onset alcoholics (Liberto & Oslen, 1997). Late-onset alcoholism is more commonly found in women (Atkinson, 1987; DeHart & Hoffman, 1997; Liberto & Oslen, 1997).

Reasons Elderly May Be Misdiagnosed

Denial by others. Alcoholism is consistently underdiagnosed and underreported by physicians and clinicians (Bienenfeld, 1987; DeHart & Hoffman, 1997; Joseph, 1997). There are many reasons elderly alcoholics are frequently misdiagnosed. A psychological denial process can be seen on the part of those close to the elderly alcoholic (Benshoff & Roberto, 1987). For instance, an elderly alcoholic's spouse or family members may act as enablers, hindering any attempts made by professionals to get the alcoholic into treatment (Bienenfeld, 1987). The employer of an elderly alcoholic may not want to confront the drinking behavior because the elderly person has been with the job for a long time. Even physicians may exhibit denial because it may be easier and falsely seems kinder to mislabel or misdiagnose rather than confront the truth and embarrass the elderly alcoholic (Benshoff & Roberto, 1987). As a result of this denial, physicians may not even inquire about the drinking pattern of an elderly patient unless an alcohol problem is extremely obvious (DeHart & Hoffman, 1997). Physicians may even choose to ignore a diagnosis of alcohol in order to let the elderly patient have one source of pleasure in his or her old age (Bienenfeld, 1987).

Inappropriate assessment tools. Many of the tools used to diagnose alcoholism may not be suitable for use with the elderly. For example, social criteria related to the existence of alcoholism may be invalid for the elderly population. An elderly alcoholic may have retired, be widowed, or have stopped driving, therefore making an assessment based on these areas of life inconclusive for the elderly population (Adams & Cox, 1997; Benshoff & Roberto, 1987; Bienenfeld, 1987). Because of the lifestyle of the elderly, assessing social decline is not an accurate way to determine alcoholism.

A person's tolerance for alcohol is another factor that is often assessed by physicians in patients suspected to have a drinking problem. Older people obtain a higher blood alcohol level per amount consumed, therefore an elderly person may honestly report consuming a smaller amount of alcohol to achieve the same effect previously (Adams & Cox, 1997; DeHart & Hoffman, 1997). Professionals may believe that since the elderly person is not displaying a tolerance for alcohol, the person does not have a drinking problem, when in fact, this lack of tolerance is due to the effects of aging. Research has shown that many items on assessment tools such as the MAST correlate poorly with alcohol abuse in the elderly (DeHart & Hoffman, 1997). Alcoholism screening instruments, for example, the Michigan Alcoholism Screening Test- Geriatric version (MAST-G) have been developed in an attempt to be more sensitive in detecting alcoholism in older adults (DeHart & Hoffman, 1997; Schonfeld & Dupree, 1997).

Similarity to organic disease. Some symptoms of alcoholism mimic symptoms of other geriatric illnesses, making it even more difficult to identify an elderly alcoholic (Benshoff & Roberto, 1987; DeHart & Hoffman, 1997). Professionals may mistake slurred speech, ataxic gait, and mental confusion as symptoms of senility instead of signs of a drinking problem (Benshoff & Roberto, 1987). Such findings as malnutrition, injuries or falls, incontinence, depression, mood swings, and confusion in an elderly patient should alert the health care provider that alcoholism may be the culprit (Bienenfeld, 1987).

Ageism. Ageism is an important factor that may play a role in the misdiagnosis of alcoholism in the elderly. Ageism is defined as "biased values that youth-oriented culture holds concerning the elderly" (Butler 1969, as cited in Ray et al., 1985).

Furthermore, Butler (1980, as cited in Kimmel, 1988) divides ageism into three components: 1) prejudicial attitudes toward the aged, toward old age, and toward the aging process, including attitudes held by the elderly themselves; 2) discriminatory practices against the elderly, particularly in employment, but in other social roles as well; and 3) institutional practices and policies which often without malice, perpetuate stereotypic beliefs about the elderly, reduce their opportunities for a satisfactory life and undermine their personal dignity. In addition to discriminatory practices, ageism is responsible for segregation, bias, and hostile humor directed towards the elderly (Gatz & Pearson, 1988; Schaie, 1988). Ageism is practiced by many groups of professionals, including psychiatrists, nurses, social workers, and physicians (Gatz & Pearson, 1988; Ray et al., 1985).

The reasons for ageism are not entirely known, but speculations have been made by researchers. Ageism may be the result of aging being seen as negative by society (Kimmel, 1988). Boredom and resentment towards the physical and mental deterioration of aged patients is another proposed cause (Ray et al., 1985).

The effects of ageism on the elderly population are evident. Besides preventing accurate assessment and leading to inaccurate diagnosis (Herrick, Pearcy, & Ross, 1997), ageism is responsible for keeping the elderly from seeking mental health treatment (Herrick et al., 1997; Kimmel, 1988). The stigma placed on the elderly as a result of ageism may discourage professionals from serving the aged population (Gatz & Pearson, 1988). Physicians tend to overdiagnose Alzheimers disease and dementia in the elderly due to ageism and stereotypes of the elderly, when a reversable condition may be the actual condition present (Gatz & Pearson, 1988; Kimmel, 1988).

In addition to the studies by James and Haley (1995) as well as Ray et al. (1985), much research has been conducted on the issues relating to ageism. Thorson, Whatley, and Hancock (1974) researched attitudes towards the elderly as a function of age and education of the participants. Participants were recruited from various continuing education courses. The researchers assessed attitudes towards the elderly by giving participants the Kogan's Old Person Scale (Kogan, 1961). Researchers found that older participants had a more negative attitude towards the elderly than younger participants. A more positive attitude toward the aged was found among the younger and better educated subjects.

A study was performed by Borges and Dutton (1976) with the purpose of measuring attitudes on aging. Participants were given a questionnaire asking them to rate their own lives and an average person's life at each of 8 age intervals. Findings revealed that as a person grows older, he or she perceives the years ahead more optimistically. This study confirmed the researchers' hypothesis that a lack of awareness exists on the part of younger people in respect to the satisfaction potential in middle-age and later maturity.

Belgrave, Lavin, Breslau, and Haug (1982) explored stereotyping of the aged by medical students. Participants were taken from two different schools: one was an established 4-year school that emphasizes research and specialization, the other was a new 6-year program which accepts students straight out of high school and emphasizes community and family practice. Negative stereotyping of the aged was measured by researchers with a shortened version of Palmore's Facts of Aging Quiz. Results of the indicate that factors which relate to less stereotyping among the aged by medical students

include: being in a family practice-oriented school, choosing medicine because of a service orientation, and preferring a primary care specialty. Because a tendency to stereotype the aged was present among participants, the researchers feel it is necessary for medical schools to offer gerontological training.

Although much research has been done confirming society's negative attitudes towards old age, many other studies have been conducted that show a shift in these attitudes. For example, Hickey, Rakowski, Hultsch, and Fatula (1976) examined attitudes towards aging and the elderly as a function of training intervention and practitioner age difference. Participants (all female) were given a questionnaire developed by the Ontario Welfare Council's Section on Aging, inquiring about opinions regarding certain groups of people. Researchers found few instances of unfavorable attitudes towards aging in any age group, with younger women evidencing less cynicism toward aging, less social distance from the aged, and slightly less stereotyping. Training intervention, according to the results from this study appeared to result in less cynicism, stronger endorsements of family and public responsibility, and slightly greater anxiety towards the elderly. The slightly greater anxiety associated with training, according to the researchers, reflects the unintended negative effects of educational programs.

Attitudes toward old age were also studied by Austin (1985). The study was a replication of a study done by Tringo (1970) on disability groups. While Tringo (1970) found that old age ranked 11th among all respondents and 13th among graduate student responses on Tringo's Social Distance Scale, Austin's replication of this study showed that all respondents ranked old age tied with 5th place, and graduate students ranked old

age 2nd. Austin (1985) concluded that attitudes toward disabilities remained extremely stable overall, but attitudes towards old age were more positive.

The battle over whether ageism is as prevalent as some people believe may never be resolved, but the fact remains that stereotypes of the elderly do indeed exist and interfere in the treatment and assessment of elderly patients. The negative attitudes toward and stereotypes of the aged may have a profound effect on the service they receive. Elderly patients may not be diagnosed accurately by physicians and clinicians due to attitudes held by society (Schaie, 1988). In order to prevent inadequate medical care for the elderly, those in the health care field should be trained and well aware of the existence of ageism and the effects it may have.

Rationale for the current study

In summary, research has shown that influences such as stereotypes and biases are important factors that affect how we view people. Biases based on gender, race, or age, are apparent in everyday life, as well as in medical and mental health settings. These stereotypes are harmful when a clinician's moral and ethical judgments concerning diagnosis, prognosis, and attitude towards a client are affected by the client's membership in a certain group. One group of patients who are particularly vulnerable to negative stereotyping by physicians is alcoholics. Female alcoholics, as well as elderly alcoholics are often misdiagnosed.

Effective treatment of alcoholism relies on medical professionals having positive attitudes regarding the disease and its prognosis (Fisher et al., 1975). Research has shown that many psychiatrists, psychologists, and therapists do not want to be associated with the treatment of alcoholism in any degree (Hanna, 1978; Knox, 1971).

Gleason study

Gleason (1991) performed a study to assess whether physicians could accurately diagnose a hypothetical patient who was exhibiting symptoms of alcoholism and whether the inability to provide a correct diagnosis was due to ageism. Participants read a vignette describing a hypothetical patient who was either 35 years old or 70 years old. Gleason found that the young patient vignette was more frequently given a diagnosis of alcoholism than the old patient vignette. In addition to reading and providing diagnoses and prognoses for the vignettes, each subject completed the Kogan Attitude Toward Old People Scale (Kogan, 1961). This scale was used to determine whether the lack of correct diagnosis for and poor prognosis given to the elderly patient was due to negative attitudes held towards the elderly by the participants. The interaction between negative attitudes towards the elderly and poor prognoses was insignificant in this study.

CASA study

In 1999, the Center for Alcohol and Substance Abuse Research (CASA) conducted the National Survey of Primary Care Physicians and Patients on Substance Abuse. The survey was given to 648 physicians who were primary care specialists in family medicine, general practice, internal medicine, obstetrics and gynecology, or pediatrics. In addition, the survey was given to 510 patients who were receiving treatment for substance abuse. Physicians were also given a vignette describing a 38-year-old with early symptoms of alcohol abuse. These symptoms included recurrent abdominal pains, intermittently elevated blood pressure and gastritis visible on gastroscopy, irritability, and waking up frequently throughout the night. The patient was

(see Appendix C), and lastly, a demographic questionnaire (see Appendix D) were administered. On a bottom section of the consent form, the participants were able to indicate if they were interested in receiving a summary of the results of the study. The residents were encouraged to ask questions or voice concerns regarding the questionnaire packet.

The researcher protected confidentiality and anonymity of the participants by not asking for any identifying information. As soon as the questionnaires were completed by the participants, the researcher removed the consent form in order to ensure confidentiality. Only group data was analyzed and reported.

Results

Description of participants

The 49 study participants were recruited from several Internal Medicine and Family Practice medical residency programs in Birmingham and Montgomery, Alabama. The medical residents who participated in the study ranged in age from 21 years to 48 years, with a mean age of 29.5 years. The majority of participants were male (83%), while 17% were female. Fifty-four percent of participants are specializing in Internal Medicine, while 17% cited Family Practice as their specialty. The remaining 28% of participants have other specializations, including transitional medicine, dermatology, and radiology. Most residents were in their second year (range = 1-3 years).

Each participant was asked to estimate the percentage of patient population that falls into selected age categories: age 18-35, 36-45, 46-55, 56-65, and 66-75. The estimated proportion of patients in each age group for the combined sample was: 18-35= 6.3%, 36-45= 9.7%, 46-55= 16.8%, 56-65= 24.6%, and 66-75= 28.4%. The medical residents have ample exposure to and experience with older patients. They reported that approximately 53% of their patients were over age 55. To check for differences among groups in patient population age characteristics, a series of 2X2 factorial ANOVAs were conducted with percentage of patients in various age groups serving as the dependent variables. Independent variables were age of the patient (35 vs. 70) and presence of lab values (present vs. absent). No significant main effects or interactions were found,

indicating that the residents in each of the four groups saw similar patients, at least with respect to the age variable.

The mean for the Kogan Attitude Toward Old People Scale was 146 with a standard deviation of 13.54. Out of a possible score of 204, the highest score was 176, while the lowest score was 112. There were no differences among the four groups of participants on the attitude scale.

Analysis of Hypotheses

The first hypothesis dealt with the age of the patient in the vignette. The independent variable was age of the patient in the vignette; the dependent variable was the diagnosis of alcoholism in any priority order. Hypothesis *a* stated that younger patients (35-year-olds) will be more likely to be diagnosed with alcoholism than older patients (70-year-olds). This hypothesis was supported, ($\chi^2 = 8.8$, df = 1, $p<.007$). The odds ratio was 6.3, indicating that the 35-year-old was approximately 6 times more likely to be diagnosed with alcoholism than the 70-year-old.

Hypothesis *b* stated that patients for whom lab findings are reported will be more likely to be diagnosed with alcoholism than patients for whom no lab findings were reported, regardless of age. In this case, the lab values serve as the independent variable, with diagnosis of alcoholism continuing as the dependent variable. Hypothesis *b* was not supported. Presence of lab values did not influence diagnosis of alcoholism ($\chi^2 = .194$, df = 1, $p = .659$).

Hypothesis *c* stated that the elderly patients (70-year-olds) with no lab findings reported will be the least likely of all patients to be correctly diagnosed with alcoholism. This hypothesis was not supported. Out of 49 participants, 27 correctly diagnosed

alcoholism as primary, secondary, or tertiary. Five participants diagnosed alcoholism in the 70-year-old without lab values, whereas only 3 participants diagnosed alcoholism in the 70-year-old with lab values. In the 35-year-old without lab values, 9 participants diagnosed alcoholism; 10 participants diagnosed alcoholism in the 35-year-old with lab values.

Hypothesis *d* stated that younger patients (35-year-olds) who receive a diagnosis of alcoholism will receive a better prognosis than the older patients (70-year-olds) who receive a diagnosis of alcoholism. This hypothesis was not supported. The mean prognosis score for the 35-year-olds who were diagnosed as alcoholics was 3.5; the mean prognosis for the 70-year-olds who were diagnosed as alcoholics was 3.9 ($t = -.77$, $df = 28$, $p = .45$).

Hypothesis *e* stated that negative attitudes towards the elderly held by participants will lead to a worse prognosis given to the older patients who are diagnosed with alcoholism. This hypothesis was not supported. Prognosis did not differ by age among patients diagnosed with alcoholism. Among those who provided a diagnosis of alcoholism, no differences were found in the scores on the Kogan Attitude Toward Old People scale. Those who diagnosed the 35-year-old patients with alcoholism had attitude scores that were equal to the scores of physicians who diagnosed the 70-year-old patients. The mean score on the attitude scale for those participants who diagnosed the 35-year-old as alcoholic was147.1, while the mean score for those who diagnosed the 70-year-old as alcoholic was 146.9 ($t = -.038$, $df = 25$, $p = .97$).

Hypothesis *f* stated that positive attitudes towards the elderly held by participants will lead to the correct diagnosis of alcoholism in the older patients. Because only positive attitudes were observed in this study, this hypothesis was not further explored.

Additional Analyses

With respect to the priority order of diagnoses, alcoholism was most likely to appear in the first position in participants who included the diagnosis of alcoholism at all (n = 14) followed by the secondary position (n = 12) and the tertiary position (n = 4). So, if the diagnosis of alcoholism or alcohol-related disorders was considered at all, it was most likely chosen by the participants as the most likely diagnosis.

There were a total of 12 diagnostic categories used by participants in response to the vignette. The lower the priority order of the diagnosis, the wider the range of diagnoses made by participants. As a primary diagnosis, an endocrine disorder was the most common diagnosis given (32.7%), while alcoholism closely followed (30.6%). In the secondary position, psychiatric problems were diagnosed most frequently (40.8%), with the combination of alcoholism and alcoholism plus mood disorder ranking second (24.4%). As a tertiary diagnosis, psychiatric disorders were the most common diagnoses (27.7%), followed by gastrointestinal problems (19.1%), neurological disorders (12.8%), and endocrine disorders (10.6%). Alcoholism combined with alcoholism plus mood disorder ranked fifth out of a possible 11 diagnoses (8.5%), tying with metabolic/electrolyte/nutritional difficulties.

Discussion

Objective of study

One objective of this study was to examine the effects age and presence or absence of lab values have on a diagnosis of alcoholism. The attitudes of medical residents towards the elderly were also investigated in order to determine their influence, if any, on a prognosis for alcoholism.

Hypotheses

Hypotheses *a* and *b* dealt with the independent variables in this study, which were age of patient and presence or absence of lab values, respectively. Hypothesis *a* stated that younger patients (35 years of age) will be more likely to be diagnosed with alcoholism than the older patients (70 years of age). This study yielded results that supported this hypothesis. An odds ratio showed that the 35-year-old was approximately 6 times more likely to be diagnosed with alcoholism than the 70-year-old. These results are congruent with earlier studies that maintain that the elderly are more likely to be misdiagnosed or underdiagnosed when compared to younger patients (Addiction letter, 1995; Bienenfeld, 1987; Gleason, 1991; Schuckit, 1977).

Hypothesis *b* examined the effect of presence or absence of lab values in the vignette. Hypothesis *b* stated that patients for whom lab findings are reported will be more likely to be diagnosed with alcoholism than patients for whom no lab findings were reported, regardless of age. This hypothesis was not supported. Lab values were added

to the vignette as a result of a study done by CASA in 1999. CASA's study included a vignette describing a hypothetical patient. Ninety-four percent of participants in the study (physicians) did not include substance abuse as a probable diagnosis for the patient in the vignette. The study was criticized by a gastroenterologist, who believed the symptoms described in the vignette could have pointed to a number of different conditions (The Montgomery Advertiser, 2000). Lab values were added to the vignette in the current study in an attempt to make a diagnosis of alcoholism more visible. The lab values were derived from a journal article in which Smith (1983) cited elevations of GGT as a common lab finding in patients with alcohol problems and also from the Nursing Spectrum website (2001). Many of the lab values included in the vignette were included as distracters; they were results of lab tests that are almost always ordered as part of complete bloodwork [i.e. high density lipoprotein (HDL), low density lipoprotein (LDL), total cholesterol, red blood cells (RBC), and white blood cells (WBC)].

Possible reasons this hypothesis was not supported may be inconclusiveness of lab values or not enough relevant lab values given. Four family practice physicians were shown the vignette including the lab values after the study was completed. They concluded that the lab values could lead a participant to include a variety of probable diagnoses including the following: hereditary cholesterol problems, hyperthyroid problems, or HIV. However, only one participant listed HIV as a possible diagnosis for the patient in the vignette. One doctor stated that the mean corpuscular volume (MCV) value would be higher in a person who abused alcohol. Additional lab values, such as results of other liver tests besides blood urea nitrogen (BUN) that was included in the

vignette, may have provided participants with sufficient information to make an accurate diagnosis.

Because the family practice physicians believed the lab values may have pulled towards a diagnosis of an endrocrine disorder, additional analyses were performed on the data. Considering diagnoses in the first, second, and third position, 13 endocrine disorder diagnoses were found in the two groups with lab values and 13 were found in the two groups without lab values. In the first diagnosis position, there were 8 endocrine disorder diagnoses for the two groups with lab values, and 7 endocrine disorder diagnoses for the two groups without lab values.

Overall, there were a total of 30 alcohol-related diagnoses made versus 27 endocrine disorder diagnoses made. In the two groups, there were more alcohol-related diagnoses than endocrine disorder diagnoses. In one group, there was a tie and in the other group there were more endocrine diagnoses than alcohol related diagnoses. In conclusion, there is no evidence that the lab values influenced physicians towards an endocrine disorder diagnosis.

Hypothesis *c* stated that elderly patients with no lab findings reported will be the least likely of all patients to be correctly diagnosed with alcoholism. This hypothesis was not supported. The reasoning behind this hypothesis stems from the CASA study, research on physicians' perceptions of the elderly alcoholic, and studies on ageism. As stated previously, based on the results of the CASA study, lab values were added to the vignette to make a diagnosis of alcoholism more likely. Therefore, vignettes containing no lab values should provide the diagnosis of alcoholism less frequently than those containing lab values. However, this was not supported in the present study.

Elderly alcoholics are unlikely to be identified due to a variety of reasons. Physicians may not expect alcoholism in an elderly person, and hence neglect to diagnose it; in addition, alcoholism seems to decline in old age (Addiction letter, 1995). Physicians may not diagnose alcoholism in an older person because it may embarrass the person or his/her family (Benshoff & Roberto, 1987). Alcoholism may also mimic organic disease in the elderly (Benshoff & Roberto, 1987; DeHart & Hoffman, 1997). Symptoms included in the vignette, such as: grouchiness, arguments with wife and family, feelings "down" and "lonely," and avoidance by friends and family may have caused participants to diagnose depression or Alzheimer's Disease. Depression was listed 19 times for the elderly patient, regardless of priority order and 14 times for the younger patient. Mental confusion, as cited in the vignette "[he] had some difficulty attending to questions" could have led participants to a diagnosis of Alzheimer's; however, only one participant diagnosed Alzheimer's in the elderly patient.

Further, ageism, defined as a bias toward the elderly, can lead to inaccurate diagnosis (Herrick et al., 1997). Physicians tend to overdiagnose Alzheimer's and dementia due to stereotypes of the elderly (Gatz & Pearson, 1988; Kimmel, 1988). In this study overall, 3 participants diagnosed dementia in the elderly patient.

Hypothesis *d* addressed prognosis for the hypothetical patients who were correctly diagnosed with alcoholism. Hypothesis *d* stated that younger patients who receive a diagnosis of alcoholism will receive a better prognosis than the older patients who are diagnosed with alcoholism. The number of participants who diagnosed the patient in the vignette with alcoholism was 27 (n=19 for 35-year-olds; n=8 for 70-year-olds). This hypothesis was not supported. The difference between prognosis given for the 35-year-

old patient and prognosis given for the 70-year-old patient was not significant. The rationale behind this hypothesis was based on previous research concerning prognoses given to older patients by physicians. Previous studies have shown that physicians typically assign worse prognoses to older clients (James & Haley, 1995; Ray et al., 1985). However, in the present study, prognosis did not differ significantly for younger patients versus older patients.

Hypotheses *e* and *f* dealt with scores on Kogan's Attitude Scale and their relationship with prognoses and diagnoses of elderly alcoholics. Hypothesis *e* stated that negative attitudes towards the elderly held by participants will lead to a worse prognosis given for the older patients who are diagnosed with alcoholism. This hypothesis was not supported; prognosis did not differ by age among patients diagnosed with alcoholism. Among those who provided a diagnosis of alcoholism, no differences were found in the scores on the Kogan Attitude Towards Old People Scale.

Out of a possible score of 204 on the Kogan Attitude Scale, the highest score was 176; the lowest score was 112. When using 102 as a cut off point between positive attitudes and negative attitudes, it is apparent that none of the participants displayed a negative attitude towards the elderly. Austin (1985) conducted a study on attitudes toward old age that was based on previous research by Tringo (1970) on disability groups. In 1970, Tringo found that old age was ranked 11th among all respondents and 13th among graduate students on Tringo's Social Distance Scale. By 1985, Austin's results showed that all respondents ranked old age 5th, while graduate students ranked old age 2nd. These results show a shift toward a more positive view of the elderly. Medical school curriculum presently may include more gerontological training than in previous

years. Some of the negative attitudes of the past may have stemmed from a fear of the unknown. More exposure to the elderly may yield more positive attitudes in professionals. Physicians may feel more confident in dealing with and treating the elderly after sufficient training. An increase in training on treating the elderly may account for the shift towards more positive attitudes concerning older people.

Hypothesis *f* stated that positive attitudes towards the elderly held by participants will lead to the correct diagnosis of alcoholism in the older patients. Because only positive attitudes were observed in the results of this study, there was no group with negative attitudes to compare the number of correct diagnoses with. Therefore, hypothesis *f* was not further explored.

Limitations of study

One limitation of this study was the small sample size. Participants were recruited locally in group settings, with between six and twenty medical residents present at a time. Participants came from several different family practice and internal medicine residency programs. While the group approach was effective, perhaps more participants could have been obtained if research materials had been mailed out to residents in other parts of the country. Mailing out surveys would have cost more, and the return rates may have been low. Being able to talk directly to participants and explain the instructions for the materials was an advantage of the method used in this study, although the number of subjects was small (N=49). More conclusions could be drawn about the data if the sample size had been larger.

The Kogan Attitude Toward Old People Scale did not yield any negative attitudes from participants in this study. Because no negative attitudes were observed, it was

impossible to measure the relationship between negative attitudes and prognosis or diagnosis of elderly alcoholics. Perhaps another scale would have been more appropriate for this study. Criticisms of the Kogan scale, including dated wording and response bias, increased in the 1990s (Hilt, 1997). Also, the validity studies on the Kogan Scale were not very extensive. Other scales that measure the attitudes towards the elderly include Palmore's Facts of Aging Quiz (1981), Tuckman and Lorge Attitudes Toward Old People (1953), and Aging Semantic Differential (1969). The scores from the Kogan Attitude Toward Old People Scale may be an indication that attitudes are changing in a positive way towards the elderly as a function of education or time. Society as a whole may be becoming more accepting of the elderly, therefore attitudes may register as positive regardless of what scale is used to measure them.

The lab values included on some of the vignettes did not have a significant effect on the diagnosis given for the patient, regardless of age. Several practicing physicians from Birmingham, Alabama suggested that more lab values, including liver tests, be added to further describe an alcoholic patient. One physician stated that the MCV value should have been elevated in the hypothetical patient. A MCV value of 100 fL or more points to alcohol abuse (Nursing Spectrum, 2001). An elevated CDT value is another indicator of alcohol abuse, but is not routinely ordered on patients. Additional lab values, such as those mentioned, could have increased the number of patients diagnosed with alcoholism in the vignettes that included lab values.

The symptoms in the vignette may have pointed to other possible diagnoses. Psychiatric disorders and endocrine disorders were prevalent diagnoses yielded by

participants. Psychiatric disorders were the most common of diagnoses given, although not in the first position.

Depression was the most frequent of the psychiatric disorders listed (n=33). Other psychiatric disorders diagnosed included: anxiety disorders, panic disorder, bipolar disorder, mood disorder, and paranoid schizophrenia. The patient was described in the vignette as "perspiring, easily startled, anxious, and a having difficulty attending to some questions," which may have led participants towards an anxiety-related diagnosis. Also, because in the majority of the data collection group meetings, the researcher was introduced as a graduate student in psychology, the participants may have been biased towards a psychiatric diagnosis.

The vignette may have been more effective if it had included only symptoms relevant to alcoholism. The vignette states that the patient's only vice is smoking a pack of cigarettes a day. This statement may have misled participants to believe the patient had been asked about alcohol abuse and reported none.

Future research

There are several independent variables of interest for future studies. For instance, in addition to lab values, future researchers could look at the effect gender or race has on a diagnosis of alcoholism. Research has confirmed that women alcoholics are often overlooked (Fillmore, 1984; Haver & Dahlgren, 1995; Wilke, 1994). The effect of race on the diagnosis of alcoholism has also been explored previously. Luepnitz et al. (1982) found that with regards to the hypothetical vignettes used in their study, Black individuals were diagnosed correctly as alcoholics more often than Whites. Future

research could look at the interaction, if any, between age and race of an alcoholic patient.

While the present study highlighted ageism as it relates to an adult patient's diagnosis of alcoholism, future researchers may look at ageism as it affects younger (adolescent) patients. Researchers could also study physicians' attitudes towards adolescent drinking and whether or not they affect a diagnosis of alcohol or drug use in an adolescent patient.

In conclusion, consistent with past research, this study showed that elderly alcoholics are often overlooked when compared to their younger counterparts. In this study, younger alcoholics were approximately 6 times more likely to be diagnosed than older alcoholics. However, the reason for the misdiagnosis of the elderly alcoholics is unclear. The Kogan Attitudes Toward Old People Scale did not yield any negative attitudes towards the elderly. Although ageism has been cited as a possible reason for misdiagnosis and poorer prognosis of the elderly, this study did not support this idea. Ageism should not be ignored, however, because another scale might have produced a different range of attitudes. The prognoses for younger and older alcoholics in this study did not differ significantly. Attitudes towards the elderly may be improving as a result of better medical training.

Although this study did not provide evidence of negative attitudes towards the elderly by medical residents, it is still important to note that the elderly alcoholic was often overlooked. This could be because physicians do not expect older people to be alcoholics or because the vignette did not contain enough information to point towards the correct diagnosis. The addition of lab values was not significant in increasing the

diagnosis of alcoholism is either the older or younger patient. Because so many alcoholics, especially elderly alcoholics, may go unnoticed or be misdiagnosed, more research should be conducted to uncover reasons for this phenomenon. Hopefully in the future, physicians will be better able to identify problem drinkers and get them the treatment they need.

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also described as being married, having job-related stress, reporting normal libido, and having no previous psychiatric history.

In the CASA study, 94% of primary care physicians failed to include substance abuse among the five diagnoses they offered when presented with the vignette. Researchers believed the patient in the vignette was inaccurately diagnosed because physicians do not regularly discuss substance abuse with their patients. Researchers hypothesized the following reasons why physicians may avoid discussions of substance abuse with their patients: lack of adequate training in medical school, residency programs, and continuing medical education; skepticism regarding the effectiveness of treatment for substance abuse; resistance by the patient (patients may lie when discussing substance abuse); discomfort discussing substance abuse; fear of losing patients (bringing up substance abuse may frighten or anger them); time constraints; and lack of insurance coverage.

Patients who completed the survey composed by CASA yielded unfortunate results for the medical community as well. More than half of the patients said their primary care physician did nothing about their substance abuse. Forty-three percent reported their physicians never diagnosed it, while 10.7% believed their physicians knew about the addiction, but did nothing about it.

The CASA study was criticized by a gastroenterologist, who said the symptoms described in the vignette were "vague and common symptoms that can be related to a whole variety of conditions" in addition to alcohol abuse (The Montgomery Advertiser, 2000). The addition of laboratory results to the vignette may have aided physicians in narrowing down possible diagnoses. Some common laboratory findings in alcoholics are

macrocytosis not associated with megaloblastosis or anemia; disturbed glucose metabolism with either hyperglycemia or hypoglycemia; and elevations of lactate dehydrogenase (LDH), serum glutamic pyruvic transaminase (SGPT), serum glutamic oxaloacetic transaminase (SGOT), and especially gamma-glutamyl transferase (GGT) (Smith, 1983). The lab findings of alcoholics may also show an elevation in high-density lipoproteins (HDLs) (Smith, 1983).

Elderly alcoholics

Being elderly and an alcoholic is a double liability because negative stereotypes and biases exist for the elderly as well as the alcoholic (Gleason, 1991). Persons 65 or older compose the fastest growing segment of the American population, therefore the diagnosis and treatment of alcohol abuse are likely to become increasingly important as the elderly population grows (National Institute on Alcohol Abuse and Alcoholism, 1988). Many factors contribute to the misdiagnosis of the elderly alcoholic. It is vital for physicians to overcome existing stereotypes of alcoholics and the elderly in order to effectively diagnose and treat older alcoholics. The misdiagnosis of elderly alcoholics may be due in part to denial by those close to the alcoholic (Benshoff & Roberto, 1987; Bienenfeld, 1987), inappropriate assessment tools (Adams & Cox, 1997; Benshoff & Roberto, 1987; Bienenfeld, 1987; DeHart & Hoffman, 1997; Schonfeld & Dupree, 1997), or its similarity to organic disease (Benshoff & Roberto, 1987; Bienenfeld, 1987; DeHart & Hoffman, 1997). Ageism, which is a bias towards the elderly, is also an important factor that may play a role in the misdiagnosis of the elderly. Ageism affects many groups of professionals, including psychiatrists, nurses, social workers, and physicians (Gatz & Pearson, 1988; Ray et al., 1985).

Because alcoholics, and especially elderly alcoholics, are so often overlooked by physicians, research must be conducted to make clinicians aware of any potential biases that may affect a misdiagnosis or poor prognosis. Objectives of this study are (a) to look at variables (age and lab findings) that may affect a diagnosis of alcoholism, and (b) to investigate the attitudes of medical residents towards the elderly and whether these attitudes influence the prognosis for alcoholism.

The hypotheses of this study are as follows:

(a) Younger patients (35 years of age) will be more likely to be diagnosed with alcoholism than the older patients (70 years of age).

(b) Patients for whom lab findings are reported will be more likely to be diagnosed with alcoholism than patients for whom no lab findings are reported, regardless of age.

(c) Elderly patients with no lab findings reported will be the least likely of all patients to be correctly diagnosed with alcoholism.

(d) Younger patients (35 years of age) who receive a diagnosis of alcoholism will receive a better prognosis than the older patients (70 years old) who are diagnosed with alcoholism.

(e) Negative attitudes towards the elderly held by participants will lead to a worse prognosis given for the older patients (70 years old) who are diagnosed with alcoholism.

(f) Positive attitudes towards the elderly held by participants will lead to the correct diagnosis of alcoholism in the older patient (70 years old).

Method

Participants

The participants were 49 medical residents whose specialty is Internal Medicine or Family Practice. Participants were recruited from the Montgomery and Birmingham, Alabama areas.

Apparatus

The Kogan Attitude Toward Old People Scale. The Kogan Attitude Toward Old People Scale contains a set of Likert-type questions with 34 short statements, 17 of which are worded positively and 17 statements that are identical in context, but worded negatively. The six response categories on the Kogan Attitude Toward Old People Scale are as follows: strongly disagree, disagree, slightly disagree, slightly agree, agree, and strongly agree. A higher score reflects a positive attitude towards the elderly. The highest possible score representing a very positive attitude is 6; the lowest is 1. A median-split was used as the cut-off point. The cut-off point determined whether a participant has a negative attitude towards the elderly or not. Those scores above the split represent a positive attitude towards the elderly, while scores falling below the split represent a negative attitude towards the elderly. In this study, all scores on the Kogan Scale fell above the cut-off point.

The Kogan Attitude Toward Old People Scale covers topics such as residential patterns, discomfort in associating with old people, cross-generational relations,

dependency issues, personal appearance, personality, and cognitive style. The topics addressed on the scale will combine to give a representation of a person's attitude towards the elderly.

Reliability of the scale was determined from results of research done by Kogan (1961). The Kogan Attitude Toward Old People Scale was given to students enrolled in an introductory psychology course at both Northwestern University and Boston University. The scale was given to two groups of participants at Northwestern University and one group at Boston University. Odd-even Spearman-Brown reliability coefficients for the negative scale were .76, .73, and .83, respectively for the Boston sample and Northwestern University sample 1 (N=128) and sample 2 (N=186). Coefficients for the positive scale for the same groups were .77, .66, and .73 respectively. The interscale correlations for the three groups of subjects were .51, .52, and .46 and these were significant at the .05 level, indicating that the reliability for this scale is adequate for the present study.

Validity was assessed for the Kogan Attitude Toward Old People Scale by determining the correlation between the three samples and the original Authoritarianism scale. The correlations for the Boston University sample and samples 1 and 2 from Northwestern University were .28, .21, and .21 respectively and were significant. These correlations indicate that more authoritarian people hold less favorable attitudes towards the elderly as measured by the negative Old People Scale statements. On the positive scale, the correlation for sample 2 from Northwestern University (-.29) was significant. Correlations between Kogan's Scale and Antiminority and Disability Scales were both positive and significant for both the positive and negative statements (Kogan, 1961).

The Kogan Attitude Toward Old People Scale was chosen primarily because it was used in the Gleason (1991) study. McTavish (1982) concluded from careful analysis of several instruments that measure attitudes towards the elderly that the Kogan Scale is one of the better scales available. Because this scale has been so widely used, comparing results obtained in this present study to past studies was possible.

Vignettes. Another instrument that is used in this study is a vignette that described a hypothetical patient who is seeing a doctor for the first time and complains of nausea, vomiting, stomach pains, and diarrhea (see Appendix B). The behaviors and symptoms described in the vignette are congruent with those of alcohol dependence. The case vignette that was used was modeled after the one in the Gleason (1991) study. In the original vignette, the patient's primary complaint was listed as gastritis. The diagnosis of gastritis was omitted in the vignettes used in this present study because it may have influenced the participants' diagnosis of the hypothetical patient. Also noted on the revised vignette was that the patient did not have a fever. This detail is important because the symptoms described are congruent with infections. By noting that the patient does not have a fever, participants were able to discount probable diagnoses of an infection for the patient. The vignette is based on DSM-III-R criteria for alcohol dependence as well as clinical descriptions from researchers who have studied elderly alcoholics. Four experts had previously read the vignette and deemed it accurate in describing an alcoholic (Gleason, 1991). The vignette required further modification based on newer DSM-IV criteria for alcohol dependence.

All vignettes were identical, except for the age of the patient and presence or absence of lab values. There were four conditions formed by varying the age of the

patients and whether or not laboratory results are included. The four conditions are as follows: 35-year-old with lab results, 35-year-old without lab results, 70-year-old with lab results, and 70-year-old without lab results. The inclusion of laboratory results is based on criticisms of the vignette used in the CASA study. The vignette used in the CASA study was criticized for being vague and describing symptoms that could yield many diagnoses. By adding laboratory results, the diagnosis of alcoholism should be more apparent to the trained physician. The addition of the lab results also lessens any ambiguity regarding the condition of the patient in the vignette.

Based on information from the vignette, physicians were asked to list three probable diagnoses in rank order as well as to predict the patient's prognosis for each of the listed diagnoses. The diagnosis of alcoholism was considered with regards to its prioritization when analyzing data. In addition, diagnoses other than alcoholism were also analyzed to observe whether there is a trend based on information given in the vignettes.

Procedure

The questionnaires were given to residents specializing in Internal Medicine Family Practice in Montgomery and surrounding areas. The residents were randomly assigned to one of the following four groups: a) those who received the vignette for the 35-year-old with lab results, b) those who received the vignette for the 35-year-old without lab results, c) those who received the vignette for the 70-year-old with lab results, and d) those who received the vignette for the 70-year-old without lab results.

Written informed consent was obtained before the questionnaires were given to the participants. Following the consent form (see Appendix A), a packet containing the hypothetical vignette (see Appendix B), the Kogan Attitude Towards Old People Scale

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APPENDIX A
STATEMENT OF INFORMED CONSENT

Factors influencing physicians' diagnosis of elderly alcoholics

"Auburn University Montgomery"

STATEMENT OF INFORMED CONSENT

You are being invited to participate in a study that I, Allison Paganelli, a graduate student at Auburn University Montgomery am conducting. The purpose of this study is to investigate factors that may influence the way patients are diagnosed by medical residents. The results of the study may benefit future medical residents' decisions regarding diagnoses.

If you decide to participate, you will be asked to read and fill out three short questionnaires. As soon as you hand in your questionnaires, your consent form will be detached from the questionnaires so that your anonymity is ensured. Furthermore, any personal information connected with this study will remain confidential. Only group data will be analyzed and reported.

The administration of the materials in this experiment should take about 20-30 minutes. The procedures pose no risks to your health or safety. However, you have the right to terminate your participation at any time during the experiment.

Your responses to the materials used in this study will remain confidential. Your identity will not be contained in any written report. If you have any additional questions, I will be happy to answer them. You may reach me at (334) 244-3306. You can also contact my advisor, Dr. Steve Lobello, at (334) 244-3309. Thank you for your help.

YOU ARE MAKING A DECISION WHETHER TO PARTICIPATE. YOUR SIGNATURE INDICATES THAT YOU HAVE DECIDED TO PARTICIPATE, HAVING READ THE INFORMATION PROVIDED ABOVE.

_____ _____

Signature of participant Date

_____ _____

Witness Signature of investigator

If you wish to receive a summary of findings when the study is completed, please print your name and address below:

APPENDIX B
CLINICAL VIGNETTES

Vignette

Mr. Smith, age 35, presented himself to a physician's office. The patient's chief complaints were as follows:

Physical :

Mr. Smith complained of nausea, vomiting, stomach pains, and diarrhea. He had no fever. He also complained of difficulty falling asleep at night, which he believed was making him "grouchy." These symptoms have been building up over the past three days. When queried about his past medical history, he denied any past surgery, but said he had gone to the emergency room a few times in the past because of minor falls. He didn't think it had been necessary to go to the ER, but his wife was a "worrier," so he went in order to please her. The ER physicians typically "would put a few stitches in" when he needed them. Furthermore, the patient said his biggest vice was smoking about a pack of cigarettes a day, and that he had tried to quit in the past but was unsuccessful. There is no history of chronic disease.

Psychosocial:

Mr. Smith reported that his "grouchiness" had led to numerous fights and arguments with his wife and family. He reported feeling "down" and "lonely." He also complained that his friends never called him, and that his children seemed to avoid him.

Observations:

During his physical exam, it was noted that the patient appeared underweight and moderately malnourished. The patient's complexion was blotchy and puffy, and some abrasions and bruises were evident on his arms and legs. Coarse tremors of hands and tongue were also noted. During his initial evaluation, the patient was perspiring and easily startled. At times he seemed anxious and had some difficulty attending to questions.

Lab: The following are some selected lab values obtained during the office visit:

HDL = 95 LDL = 88 Total Cholesterol=240, HCT =39, HGB=14, MCV=85, RBC=4.4, WBC= 7.1, BUN=9, Creatinine = .9, GGT= 74, Uric Acid = 8.4.

Vignette

Mr. Smith, age 70, presented himself to a physician's office. The patient's chief complaints were as follows:

Physical :

Mr. Smith complained of nausea, vomiting, stomach pains, and diarrhea. He had no fever. He also complained of difficulty falling asleep at night, which he believed was making him "grouchy." These symptoms have been building up over the past three days. When queried about his past medical history, he denied any past surgery, but said he had gone to the emergency room a few times in the past because of minor falls. He didn't think it had been necessary to go to the ER, but his wife was a "worrier," so he went in order to please her. The ER physicians typically "would put a few stitches in" when he needed them. Furthermore, the patient said his biggest vice was smoking about a pack of cigarettes a day, and that he had tried to quit in the past but was unsuccessful. There is no history of chronic disease.

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BASED ON THE INFORMATION ABOVE, PLEASE ANSWER THE FOLLOWING QUESTIONS:

1) What do you think are the three most likely diagnoses for this patient's presenting complaint? (the 1st being the most likely, the 2nd being the next most likely, and the 3rd being the least likely diagnosis out of the three that you listed)

   1._____

   2._____

   3._____

2) With regard to this patient's presenting complaint, how would you rate his prognosis for each of the diagnoses you selected? (circle the number that best reflects your prognosis, the higher the number, the better the prognosis)

   Diagnosis #1 _____ 1 2 3 4 5 6 7
   verypoor very good

   Diagnosis #2 _____ 1 2 3 4 5 6 7
   very poor very good

   Diagnosis #3 _____ 1 2 3 4 5 6 7
   very poor very good

APPENDIX C
KOGAN ATTITUDE TOWARD OLD PEOPLE SCALE

On the following pages, you will find a number of statements expressing opinions with which you may or may not agree. Following each statement are six blanks labeled as follows:

strongly disagree	disagree	slightly disagree	slightly agree	agree	strongly agree
____	____	____	____	____	____

You are to indicate the degree to which you agree or disagree with each statement by checking the appropriate blank.

Please consider each statement carefully and do not spend too much time on any one statement. *Do not skip any items.*

There are no "right" or "wrong" answers- the only correct responses are those that are true *for you.* THIS INVENTORY IS BEING USED FOR RESEARCH PURPOSES AND IS COMPLETELY ANONYMOUS.

---

	strongly disagree	disagree	slightly disagree	slightly agree	agree	strongly agree
1. It would probably be better if most old people lived in residential units with people their own age.	____	____	____	____	____	____
2. It would probably be better if most old people lived in residential units that also housed housed younger people.	____	____	____	____	____	____
3. There is something different about most old people: It's hard to figure out what makes them tick.	____	____	____	____	____	____
4. Most old people are really no different from anybody else: they're as easy to understand as younger people.	____	____	____	____	____	____
5. Most old people get set in their ways and are unable to change.	____	____	____	____	____	____
6. Most old people are capable of new adjustments when the situation demands it.	____	____	____	____	____	____
7. Most old people would prefer to quit work as soon as pensions or their children can support them.	____	____	____	____	____	____
8. Most old people would prefer to continue working just as long as they possibly can rather than be dependent on anybody.	____	____	____	____	____	____

	strongly disagree	disagree	slightly disagee	slightly agree	agree	strongly agree
9. Most old people tend to let their homes become shabby and unattractive.	___	___	___	___	___	___
10. Most old people can generally be counted on to maintain a clean, attractive home.	___	___	___	___	___	___
11. It is foolish to claim that wisdom comes with old age.	___	___	___	___	___	___
12. People grow wiser with the coming of old age.	___	___	___	___	___	___
13. Old people have too much power in business and politics.	___	___	___	___	___	___
14. Old people have too little power in business and politics.	___	___	___	___	___	___
15. Most old people make one feel ill at ease.	___	___	___	___	___	___
16. Most old people are very relaxing to be with.	___	___	___	___	___	___
17. Most old people bore others by their insistence on talking about the "good old days."	___	___	___	___	___	___
18. One of the most interesting qualities of old people is their accounts of their past experiences.	___	___	___	___	___	___
19. Most old people spend too much time prying into the affairs of others and in giving unsought advice.	___	___	___	___	___	___
20. Most old people respect others' privacy and give advice only when asked.	___	___	___	___	___	___
21. If old people expect to be liked, their first step is to try to get rid of their irritating faults.	___	___	___	___	___	___
22. When you think about it, old people have the same faults as anybody else.	___	___	___	___	___	___
23. In order to maintain a nice, residential neighborhood, it would be best if too many old people did not live in it.	___	___	___	___	___	___

	strongly disagree	disagree	slightly disagree	slightly agree	agree	strongly agree
24. You can count on finding a nice residential neighborhood when there is a sizeable number of old people living in it.	____	____	____	____	____	____
25. There are a few exceptions, but in general, most old people are pretty much alike.	____	____	____	____	____	____
26. It is evident that most old people are very different from one another.	____	____	____	____	____	____
27. Most old people should be more concerned with their personal appearance; they're too untidy.	____	____	____	____	____	____
28. Most old people seem to be quite clean and neat in their personal appearance.	____	____	____	____	____	____
29. Most old people are irritable, grouchy, and unpleasant.	____	____	____	____	____	____
30. Most old people are cheerful, agreeable, and good humored.	____	____	____	____	____	____
31. Most old people are constantly complaining about the behavior of the younger generation.	____	____	____	____	____	____
32. One seldom hears old people complaining about the behavior of the younger generation.	____	____	____	____	____	____
33. Most old people make excessive demands for love and reassurance.	____	____	____	____	____	____
34. Most old people need no more love and reassurance than anyone else.	____	____	____	____	____	____

APPENDIX D
DEMOGRAPHIC QUESTIONNAIRE

Please answer the following questions:

Your age: _____

Your gender: _____

How far into your residency are you? ____1 year ____ 2 years ____3 years

What is your medical specialty? _____

Approximately what percentage of your patients is between the ages of:

18-35 _____%

36-45 _____%

46-55 _____%

56-65 _____%

66-75 _____%

76 and over _____%