Introduction

In this chapter you will "peer through the keyhole" of the doctor's office door to see how physicians make diagnoses and what happens when misdiagnoses occur. You will become familiar with criteria used to make a medical diagnosis. Reasons for more variation in diagnosis in the area of psychopathology compared to biopathology are discussed. Examples and causes of misdiagnoses in cross-cultural settings are also described.

As a result of having this insider's perspective through reading this chapter, you can have more control over your own health care when you visit your physician or are in the hospital receiving treatment. If you are a health care professional, your own diagnoses will be more accurate because of your awareness of some of the diagnostic pitfalls that are influenced by cultural differences. As a result, you will be better able to give or receive health care.

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Tools and Rules for Observation and Data Gathering

Every profession uses its own special tools and materials. Farmers drive tractors and harvesting combines, teachers instruct with books and blackboards, and dentists use drills and amalgam, gold, or composite to fill the holes they drill.

Some methods that different professionals use to get the information they need to do their work properly are unique to their field. Limnologists collect water, algae, and seaweed samples from rivers and lakes. Lawyers study legal records and court cases. Sociologists conduct and analyze surveys and observational studies of human behavior.

All of these different approaches have something in common. They are all ways to make observations and gather information. Sophisticated instruments such as electron microscopes, laser-disk data bases, or laboratory tests are designed to further increase our ability to make observations and collect information.

Gathering Data for Diagnosis and Treatment in the Health Professions

In the medical profession, the most fundamental method of getting the information needed for a
medical diagnosis is to interview and examine the
patient. Physicians and other health professionals
will then use specialized tools and tests to allow
them to obtain information beyond what can be
obtained by talking with and performing a physical
exam of the patient.

Making a diagnosis about the nature of a per-
son's illness depends on a physician's ability to
gather sufficient information. This allows the phy-
sician to rule out competing explanations of an ill-
ness and zero in on the most likely one.

A diagnosis does two basic things. It classifies a
particular instance of illness into a category which
in turn, informs both physician and patient about
the prognosis—the natural course of the condition
and the likely outcome of alternative methods of
treatment. The most important aspect of making a
diagnosis, at least to the patient, is so that he or
she may receive relief and appropriate treatment
for the problem. The better the physician, nurse
practitioner, or other health professional is at
gathering information, the greater the likelihood
that the patient will receive appropriate and
timely care.

There are many manuals available to physi-
cians that describe signs, symptoms, and other cri-
teria used to classify diseases. The mission of the
World Health Organization is to promote health on
a global scale, and it has been instrumental in the
development of manuals that are designed to in-
crease consistency in the collection, coding, moni-
toring, and reporting of diseases in different
countries. Some of these manuals include The Inter-
national Classification of Disease (Ninth revised edi-
tion, 1977) and the International Nomenclature of
Diseases: Infectious Diseases (Volume 2, 1985).

In the area of psychopathology, the American
Psychiatric Association's Diagnostic and Statistical
Manual of Mental Disorders (DSM-III-R) is the stan-
dard reference for psychiatric conditions, and it has
been translated into Danish, Dutch, Finnish, Japan-
ese, Spanish, and other languages. However, even
though classification manuals such as the DSM-III-
R describe criteria for diagnoses, physicians from
different cultures are more likely to agree on the
diagnosis of biopathological conditions such as ma-
laria or coronary heart disease than with psycho-
pathological conditions like major depression or
antisocial personality disorder.

Causes of cultural variation in disease and rea-
sions for medical misdiagnoses are discussed in the
next two sections.

**CAUSES OF CULTURAL VARIATION IN PATTERNS
OF DISEASE**

Many variations in disease and health cross-cultur-
ally are due to biological, economic, and social
rather than psychological factors. The majority of
longitudinal studies, such as the two large-scale
multicentered studies sponsored by the World
Health Organization, have found significantly bet-
ter outcomes of schizophrenia in non-Western
countries compared to Europe or North America
(Lin & Kleinman, 1988). One reason for this are
mediating factors such as more work opportunities,
greater tolerance of, and more social support for,
mentally ill patients by family members and the
community in non-Western cultures.

The effects of diet and other lifestyle factors are
seen in the health status of an ethnic group or entire
nation. Because this chapter looks at the psycho-
logical aspects of misdiagnoses cross-culturally and
because there is more agreement about biological
and environmental factors that affect health, these
latter factors will not be discussed further here.

Some of the most significant culturally-rooted life-
style factors that affect disease patterns are dis-
cussed elsewhere (see Ilola, 1990).

What is the relationship between the perception
and the expression of physical pain or symptoms?
Are psychosomatic symptoms such as upset stom-
ach or insomnia real or imagined? A study of de-
pressed patients of Western and Asian origin who
immigrated to Israel showed that culture did not
affect the patients' subjective experience of physical
distress. All depressed patients had more physical
complaints than did controls. This lead to the con-
clusion that in addition to experiencing feelings of
depression, depressed people actually do have more physical complaints than do people who aren't
depressed. Culture affected the voicing of com-
plaints, the weight attached to them, and the sig-
nificance the examining physicians attached to
them, but not the prevalence of complaints (Silver,
1987).

**REASONS FOR MISDIAGNOSES IN
PSYCHOPATHOLOGY**

There are a number of things that contribute to the
problem of disagreement among clinicians about
cross-cultural diagnosis in psychopathology. First, the manuals used to classify diseases differ somewhat in various cultures. For example, even though the Chinese Classification of Mental Disorders is based on the DSM-III-R, one study found only 75 percent agreement when Chinese and U.S. psychiatrists evaluated the same Chinese patients. The diagnoses of schizophrenia were identical but the U.S. psychiatrist was more likely to recognize major depression whereas the Chinese psychiatrist diagnosed those patients with anxiety disorder or neurasthenia, a type of neurosis (Altshuler, et al., 1988).

Differences in diagnosis are accompanied by differences in treatment. In the example cited above, the Chinese psychiatrists were more likely to hospitalize manic patients but not depressed patients, probably because a nonsuicidal, withdrawn person is well-tolerated by the family and society in Chinese culture.

A second reason for misdiagnosis is that psychopathological conditions have a degree of plasticity. There is a difference between disease (biological process) and illness behavior (the psychological experience and social expression of disease). Cultural variables interact with biological processes and as a result, there is overlap in the culture-specific (emic) and culture-general (etic) features of a disease. There are also differences in the way sick people report symptoms and express signs of illness. For example, Hispanics and Asians are more likely than Caucasians to express their illness as physical illness, something called the somatization trait.

To make diagnostic matters more complex, some culture-bound syndromes have been documented. Even though underlying symptoms may be universal (insomnia, upset stomach, anxiety), a condition may be expressed in a culturally-stereotyped manner. Some examples are the eating disorder of bulimia in North American Euroamericans (mostly females); susto in Latin America, characterized by severe anxiety, restlessness, fear of black magic and of the evil eye; and taijin-kyofusho (anthropophobia) in Japan. This latter syndrome affects mostly males and is a type of social phobia characterized by the etic components of anxiety and fear of rejection and the emic components of fear of eye contact, concern about body odor, and easy blushing. Figure 1 shows how the emic components of a culture-bound syndrome relate to the etic aspects of the more general condition, in this case social phobias. The percentages are approximations only for the sake of illustration of the relationships among emic and etic components of a condition.

A final pitfall in diagnostic accuracy arises from the use of culturally-biased tests (intelligence tests, questionnaires, etc.). The purpose of back-translation procedures is to minimize testing error and maximize the cross-cultural equivalencies of terms and concepts in diagnostic and screening tests.

What is of particular interest to cross-cultural psychologists is how the diagnoses a clinician makes are affected by internal psychological factors that are the product of socialization within another culture. These culturally-influenced psychological factors affect perceptions and the attributions used to explain observations. These factors include culturally defined expectations and roles that the as-

![Figure 1](attachment:Figure1.png)
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power distance and those who are lower in social standing (e.g., students, employees) show respect for superiors (e.g., teachers, supervisors). Patients are also more compliant with physician directions in a culture with high power distance. Health professionals from an individualistic culture may feel uncomfortable with this non-egalitarian hierarchy, but in order to be a more effective therapist they should assume the culturally-ascribed role. Dragnos (1990) describes other specific techniques for the therapist who must cross cultures in psychotherapy.

There are other culture-general phenomena such as role expectations and social hierarchies that transcend many cultures. What some of these are and how they affect day-to-day interactions are discussed in more detail in Brislin, et al. (1986).

Even though clinicians from different cultures may agree about a diagnosis, the diagnosis can still be wrong. The diagnosis must really be what it is judged to be (construct validity). This can only be determined by observing the course of the condition and the effects of treatment over time. For example, it has been argued that episodic heavy alcohol consumption by American Indians does not constitute alcoholism. A 10-year follow-up study of 45 American Indians, however, showed higher mortality from alcohol-related causes and deteriorated health and social status in those who continued to drink heavily. Those who had been abstinent for from 3 to 10 years improved in health and/or social status. This pattern is the same for alcoholics in the general population and therefore demonstrates the cross-cultural validity of the initial diagnosis of alcoholism in this sample of American Indians (Westermeyer & Peake, 1983).

In summary, both reliability and validity are needed for an accurate cross-cultural diagnosis. The first is demonstrated by agreement among clinicians about the diagnosis (intrarater reliability). The second is verification that the disease really is what it is thought to be (construct validity). The natural course of the disease or the results of treatment are the final judge in the latter case.

CONSEQUENCES OF MISDIAGNOSIS

The consequences of a misdiagnosis of illness can be serious and costly. The patient may receive painful, useless, and expensive tests and treatments without any relief from what is really causing the illness. A youngster may be placed in a special-education class for mild to borderline mentally retarded children—as has happened to some Native Americans tested with standard intelligence tests. Or, the person may be subject to social controls such as psychiatric institutionalization because it is decided that the person is a danger to others and himself.

For example, in one study of the reliability of diagnoses, 109 refugees to the United States appealed the psychiatric diagnoses that led to them being institutionalized or incarcerated before they were to be sent back to Cuba (Boxer & Garvey, 1985). The second medical board that reviewed the cases overturned 43 percent of the exclusionary or "Class A" certifications. The most common diagnosis that was overturned was that of antisocial personality disorder. They upheld the majority (72 percent) of the 54 diagnoses of schizophrenic disorders, organic mental disorders, mental retardation, and psychoses.

Other studies have also found similar patterns of consistency in diagnoses, with the highest intrarater reliability for organic syndromes (e.g., senile dementia), intermediate levels of agreement for schizophrenia, and the lowest agreement for depression and affective disorders.

Why were the diagnoses of antisocial personality disorder overturned so frequently? One reason is because the diagnosis was made on what the person chose to tell the physician about his past behavior, without any confirming evidence from
medical or prison records, family members, friends, or employers still in Cuba. Because the physicians knew the initial diagnosis and its consequences (expulsion), there may have been some rater bias toward greater leniency. Also, there are two types of antisocial behavior. A technicality in the immigration law allows someone with adult antisocial behavior to immigrate but excludes someone when there is evidence of antisocial behavior before the age of 15. Such evidence is difficult to obtain when the person is a refugee.

Even though "antisocial behavior" is detailed in the DSM-III-R, it is also in part culturally defined and environmentally determined. Such behavior may be necessary for survival for someone growing up in a rough and deprived environment. An extreme example is the riots and destruction in Los Angeles after a jury verdict failed to convict police of brutality in the beating of a black man, Rodney King. The verdict surprised millions of people internationally who had seen the beating on television. Even more unexpected was the destruction that followed—inocent victims were attacked, shops were looted, and millions of dollars were lost as homes and buildings burned to the ground. This reaction was antisocial by any definition. But these behaviors were also the combined product of interracial hostility and resentment and frustration because of a lack of economic and social opportunities available to inner-city minority groups in particular.

Racial differences have contributed to the volatility of judicial decisions as in the example above. They have also been found to affect the diagnosis and choice of treatment of psychiatric patients. When compared to indigenous psychiatric patients in one study, the behavior of Asian patients was interpreted as more bizarre and as a result more members of that group were diagnosed as schizophrenic. Treatment also differed according to diagnostic labels. Because more Asian patients in this sample were diagnosed as schizophrenic, they were also more likely to receive electro-convulsive ("shock") therapy than were the non-Asian controls (Saikh, 1985).

Being a member of the majority group does not prevent one from becoming a victim of misdiagnoses. The table may be turned when the physician is culturally different and a foreign medical graduate from the Philippines, Mexico, India, or some other country. This is not to suggest that they are less competent as physicians. However, even though they may have completed medical resi-
dency training in the United States, England, or Canada, they still bring with them some of their own cultural assumptions. Language difficulties increase the potential for misunderstanding and a feeling by the patient that the physician is too different to be trusted. This can have negative effects on patient compliance and satisfaction with the care provided by the physician.

Perceptions aside, there are two sides to the coin. There are also benefits to having physicians and psychiatrists from developing countries, particularly if the patient comes from a developing country too. Because of their training in both developing and industrialized cultures, these psychiatrists are more accurate in diagnosing patients from both developing and industrialized countries. Although their accuracy is good with patients from industrialized countries, psychiatrists from industrialized countries are less reliable when diagnosing patients from a developing country.

SUMMARY

In this chapter it was shown that the first step in making a medical diagnosis is to gather information. It is obtained by interviewing and performing a physical examination of the patient. Laboratory tests and medical reference manuals are also used to identify distinguishing characteristics of a disease. The making of a diagnosis is to classify a particular instance of illness into a category. This is done to determine its prognosis and to select the most appropriate treatment for the problem.

A number of factors contribute to misdiagnoses when the clinician works in a multicultural context. These factors include differing systems of classifying and screening diseases; confounding effects of emic and etic manifestations of illnesses; the existence of culture-specific syndromes; and cross-cultural differences in the perception, attribution, and expression of signs and symptoms of diseases.

The better the physician, nurse practitioner, or other health professional is at gathering information, the greater the likelihood that the patient will receive medically sound, culturally appropriate, and timely care.

REFERENCES