

## **1.10.18 Biocultural Aspect of Drug Therapy Outline**

### **Objectives:**

- Explore the influence of cultural beliefs on drug therapy.
- Identify cultural influences on health care.
- Describe pharmacogenetics in relation to drug activity in the body.
- Explain the symbolic meaning of various drug classifications.

### **Cultural background:**

A Set of learned values, beliefs, customs and behaviors of the client that influences health beliefs and various practices that related to pharmacology.

### **Health beliefs:**

- The perceptions of susceptibility to a disease or condition.
- The consequences of contracting the disease or condition.
- The benefits of care, and barriers to preventive behavior.
- Internal or external stimuli that result appropriate health behavior.

### **Ethnic group/ethnicity:**

A category of people who identify with each other based on similarities such as common ancestry, language, society, culture or nation.

### **Racial:**

Social construct of race

***Race is associated with biology, whereas ethnicity is associated with culture.***

### **What we need to understand about health beliefs?**

- There are differences between the health beliefs of the health care providers and the health beliefs of the clients
- Understand the various cultures and avoid stereotyping.
- Being sensitive to the traditional health beliefs and practices of clients.

### **Ethnic Disparities in Health Care**

- It exist/negative outcomes.
- Occur on a historic and contemporary social and economic inequality/discrimination.
- Many sources (health system, health care providers, and clients) contribute to these disparities.
- Bias, stereotyping, prejudice may contribute to these disparities.

### **Nurse's role in Ethnic Disparities in Health Care;**

- Examining the biocultural aspect of drug therapy
- Understanding of the predominant cultural influence health needs
- Communication of culturally appropriate interventions.
- Measuring outcomes of drugs regimens requires an understanding of the Pharmacogenetics of various ethnic and racial groups.

### **Assessment of Cultural Indications (Box 6-1)**

- History
- Value Orientation
- Interpersonal relationship
- Demeanor / Attitude
- Communication
- Religion/ beliefs
- Social system
- Diet and food habits
- Health and illness beliefs system

### **Cultural Values and Cultural Care Meaning and Action Modes (table 6-1)**

- African American culture
- Anglo- American culture
- Mexican American cultural
- North American Indian culture

### **What about Arab/ Muslim Culture? (Discussion question)**

#### **Article 1:**

“The Arab Muslim population is one of the dramatically increasing minorities in the United States. In addition to other factors, religion and cultural background influence individuals' beliefs, behaviors, and attitudes toward health and illness. The author describes health beliefs and practices of the Arab Muslim population in the United States. That population is at an increased risk for several diseases and faces many barriers to accessing the American health care system. Some barriers, such as modesty, gender preference in healthcare providers, and illness causation misconceptions, arise out of their cultural beliefs and practices. Other barriers are related to the complexity of the health care system and the lack of culturally competent services within it. Nurses need to be aware of these religious and cultural factors to provide culturally competent health promotion services for this population. Nurses also need to integrate Islamic teachings into their interventions to provide appropriate care and to motivate healthy behaviors.” (Yousf, 2008)

#### **Article 2:**

“The relationship between Middle Eastern patients and populations of Arab origin with western health care professionals are by no means free of cultural misunderstandings. The relationship is often strained by mutual cultural misunderstanding as well as communicative and linguistic hardship. Even though

people from the Middle East do vary racially, they do have shared values and behavior. This can include the importance of family cohesion, and interactive attitudes toward ailments and health. Some issues and concerns in providing health care could vary from attaining adequate information to communicated suggested behavioral change by a patient. Culturally and linguistically appropriate guidelines are warranted to provide an understanding of the cultural distinctiveness of Arab Eastern patients by shortening the gap between the Arab cultures with the western medical culture thus improving their healthcare needs." (Aboul-Enein, 2010)

### **Ethnic and racial differences in drug responses:**

#### **Pharmacogenetics:**

The study of impact of genetics on drug action. Usually refers to how variation in one single gene influences the response to a single drug.

Genetics variation may be related to changes in receptors configuration, receptor quantity, or intercellular proteins that interact with receptors.

- Metabolic rates (Chines found to be less to metabolizes Codeine and required increase dosage compared to whites)
- Clinical drug response (African descent are less responsive to B-blocking agents "Propranolol")
- The adverse effects of drug (Chines require lower doses of Valium, Xanax, tricyclic antidepressant because there were an increase in adverse effects compared to whites)

#### **Symbolic Meaning of Drug to Clients:**

- Every drug has a symbolic meaning and a potential psychological effect.
- Medications tend to be more effective when;
  - Individuals believe in their capacity to get well
  - When they have strong desire to get well
  - When they believe that the health care personal expect the medication to be effective.
- Clients past and present experiences to drugs, illness and health care providers are determinant factors in responses to the drugs.
- Medications symbolic of help
- Medications symbolic of danger
- Ambivalent feeling about medications.
- Medication is too weak/ strong

#### **Reference:**

Leda M. McKenry, , Ed Tessier, and Mary Ann Hogan. *Mosby's Pharmacology in Nursing*, 22nd Edition.