



**Alexandria University
High Institute of Public Health
Department of Health Administration and Behavioral Sciences**

**ACCESS TO HEALTHCARE SERVICES AMONG USERS OF
FAMILY HEALTH FACILITIES AND THEIR HOUSEHOLDS
IN ALEXANDRIA**

**Thesis submitted to High Institute of Public Health
Alexandria University
In partial fulfillment of the requirements for the degree of**

Doctor of Public Health

**In
Health Management, Planning and Policy**

By

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Declaration

I declare that no part of the work referred to in this thesis has been submitted in support of an application for another degree or qualification of this or any other University or other Institution of learning.

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INTRODUCTION

Access is a shorthand term used for a broad set of concerns that center on the degree to which individuals and groups are able to obtain needed services from the medical care system. The Institute of Medicine (IOM) published a study of access to healthcare in United States with a focus on indicators to track changes in access over time. The IOM committee defined access as follows: the timely use of personal health services to achieve the best possible health outcomes. Importantly, this definition relies on both the use of health services and on health outcomes to provide yardsticks for judging whether access has been achieved and focuses on the individual patient and rates developed from individual encounters in the medical care system.⁽¹⁾ At a general level, access entails the ability to secure a specified set of healthcare services, at a specified level of quality, subject to a specified maximum level of personal inconvenience and cost, while in possession of a specified amount of information.⁽²⁾

The emphasis on use was supported by quotation from Donabedian: “The proof of access is use of service, not simply the presence of a facility.” Donabedian viewed accessibility as comprising the concept of degree of adjustment between resources and populations. The role of characteristics of health resources was highlighted in facilitating or impeding the use of services by potential users.⁽³⁾ Employing the utilization of healthcare services as an indicator of healthcare access has limitations. Some people are prone to overuse medical care, whereas others may underuse it for reasons that have little to do with access barriers. Others use more services because they need more. For example, the poor may use a greater amount of care because they are more likely to have health problems than those with higher-income levels.⁽¹⁾

Inequitable access means that less advantaged groups use and experience less healthcare than their needs require, resulting in personal, community and societal health losses.⁽⁴⁾ The inverse care law states the better-off tend to receive more and higher-quality health services even though the worst-off have greater need for care.⁽⁵⁾ Equity is an ethical and value-based concept, grounded in principles of fairness and distributive justice. Health equity is defined in negative terms as systematic differences in health that are not only unnecessary and avoidable but, in addition, are considered unfair and unjust, across populations or population subgroups who occupy different positions in the social hierarchy.⁽⁶⁾ The general equity principle is that healthcare should meet health needs, thus those with greater needs should access more care (vertical equity), but there should be equal access for equal need (horizontal equity).⁽⁷⁾

According to the World Health Organization (WHO), a key health system’s goal is to move towards Universal Health Coverage (UHC) with equity. Equitable universal coverage means creating access and providing effective coverage for the entire population “breadth”, for all necessary care “depth”, at affordable costs and under conditions that are not burdensome, as well as offering particular benefits to address the differential needs of the least well-off “height”.^(8,9) Universal health coverage is attained when people actually obtain the health services they need and benefit from financial risk protection. It involves coverage with good health services, from health promotion to prevention, treatment, rehabilitation and palliation, as well as coverage with a form of financial risk protection without risking financial hardship from unaffordable out-of-pocket payments. This coverage should be for everyone.⁽¹⁰⁾

Services must be physically accessible, financially affordable and acceptable to people if universal health coverage is to be attained. The requirement that services be physically accessible is fulfilled when these are available, of good quality and located close to people. Service readiness is said to exist when the inputs required to produce the services (e.g. buildings, equipment, health personnel, health products, technologies) are available and of good quality. Financial affordability can be improved by reducing direct, out-of-pocket payments through insurance prepayments and pooling. Social and cultural accessibility can be enhanced by ensuring that health workers and the health system more generally treat all patients and their families with dignity and respect. Addressing the broader social determinants of health will also improve access to health services; differences in access in particular will be ameliorated by reducing poverty and income inequalities. Improvements in education will raise the average income, make health services more affordable and equip people with the awareness needed to demand and obtain the health services.⁽¹¹⁾

Egypt faces a lot of health challenges regarding access issues and universal coverage. Based on World Health Organization (WHO) 2013 country report, about half of total health expenditure in Egypt comes from out-of-pocket (50%) at the point of service in public and private facilities.⁽¹²⁾ Out-of-pocket payments for healthcare are usually the most inequitable type of financing because they tend to hit the poor the hardest by being a barrier to healthcare or by denying individuals financial protection from catastrophic illness.⁽¹³⁾ According to World Bank and despite several gains in healthcare in previous decades, Egypt still has progress to make to ensure that social justice is realized in healthcare. While the “Right to Health” is recognized in the new Constitution, health outcomes continue to be unequally distributed and certain populations (defined by income, education, gender, or geography) remain excluded from gains in health outcomes, increases in financial protection, and improvements in healthcare quality.⁽¹⁴⁾

REVIEW OF LITERATURE

A. Conceptual Frameworks and Models of Access

Access to healthcare is central in the performance of healthcare systems around the world.⁽¹⁵⁾ Access is an important concept in the study of the organization, financing and delivery of healthcare services. It is also an important political symbol and policy goal.⁽¹⁶⁾ However, it remains a complex notion as exemplified by the varying interpretations of the access concept across the literature.^(17,18) Access has been conceptualized in numerous ways. Etymologically, access is defined as a way of approaching, reaching or entering a place, as the right or opportunity to reach, use or visit.⁽¹⁹⁾ Access to a service, a provider or an institution within healthcare, is always defined as the opportunity or ease with which consumers or communities are able to use appropriate services in proportion to their needs.^(6,17) Access to healthcare has been the subject of much study and there are multiple theories of how access is structured or works.^(1,20) The empirical research that has been driven by these frameworks often suffers from a similar failure to consider the full breadth of what might constitute “access” and often ignores the importance of time and experience and the feedback loops that exist in any access system.⁽¹⁶⁾

There is one dominant and several lesser known theories of access.⁽¹⁶⁾ The most important and most often cited is what was originally called the “Behavioral Model of Health Services Use” developed by Ronald Andersen in the late 1960s as part of his dissertation and subsequently published with other colleagues as a study of “Societal and Individual Determinants of Medical Care Utilization in the United States”,⁽²¹⁾ and as a “Framework for the Study of Access to Medical Care.”⁽²²⁾ Access was called “more of a political than an operational idea” but that it had “for some time been an expressed or at least an implicit goal of health policy.”⁽²²⁾ That description of the place of access in policy continues to hold and given the general acceptance of the Andersen, Aday, Newman framework for access, the concept has taken hold in research as an organizing framework which is often used to influence policy making. The initial behavioral model of the 1960s suggests that people's use of health services is a function of their predisposition to use services, factors which enable or impede use, and their need for care. The key thing that Andersen and his colleagues noted was that earlier concepts of use of healthcare focused on 2 major alternative dimensions: the characteristics of the population versus the characteristics of the delivery system. They also noted that it was the use of service and outcomes of the use process that could be used to measure access.⁽²⁰⁾(Fig. 1)

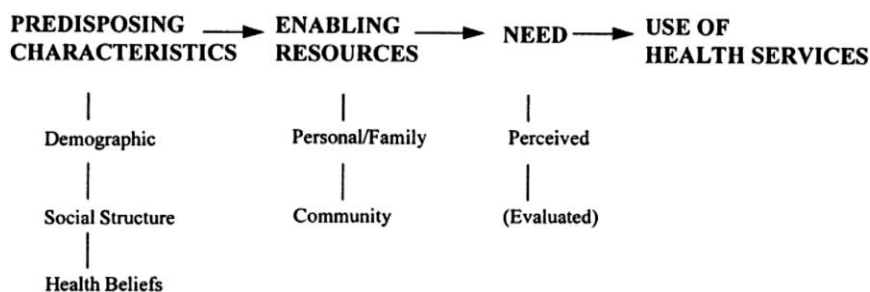


Figure 1: Phase 1 of the Behavioral Model of Health Service Use (1960s) ⁽²⁰⁾

Andersen conceptualized utilization as realized access. Anderson viewed use of health services as another form of human behavior that was affected by learning.⁽²³⁾ Utilization was determined by population characteristics and health systems' characteristics. Population characteristics include predisposing, enabling and need factors. Predisposing factors include an individual's perception of an illness, as well as population-specific cultural, social, and epidemiological factors. These properties exist prior to the onset of illness episodes. They include such things as age, sex, race, religion, and values concerning health and illness.^(20,22) Among the predisposing characteristics, demographic factors such as age and gender represent biological imperatives suggesting the likelihood that people will need health services.⁽²⁴⁾ Social structure is measured by a broad array of factors that determine the status of a person in the community, his or her ability to cope with presenting problems and commanding resources to deal with these problems, and how healthy or unhealthy the physical environment is likely to be. Traditional measures used to assess social structure include education, occupation, and ethnicity.^(20,22) Enabling factors include the means available to individuals for using health services. Both community and personal enabling resources must be present for use to take place. First, health personnel and facilities must be available where people live and work. Then, people must have the means and know-how to get to those services and make use of them. Income, health insurance, a regular source of care, and travel and waiting times are some of the measures that can be important here. The biological imbalance of individuals was termed "need" and was also considered an important component of the core conceptualization. The need component refers to illness level, which is the most immediate cause of health service use. The need for care may be either that perceived by the individual or that evaluated by the delivery system.⁽²²⁾

The model of health services' use originally focused on the family as the unit of analysis, because the medical care an individual receives is most certainly a function of the demographic, social and economic characteristics of the family as a unit. However, in subsequent work it was shifted to the individual as the unit of analysis because of the difficulty of developing measures at the family level that take into account the potential heterogeneity of family members; e.g., a summary measure of "family health status." It is generally more efficient to attach important family characteristics to the individual as the unit for analysis.⁽²⁰⁾ The overall framework included causal links and paths between and among the elements that led to an outcome of "appropriate utilization."⁽¹⁶⁾

The early users of this access concept attempted to create global indicators of access that focused on both process and outcomes. The process indicators were what have become the "usual" measures of having a "regular source of care"; the travel time to care; ability to get an appointment in a reasonable time; and in office waiting time. These have persisted as access measures and are regularly included in national surveys in USA fielded by the Centers for Disease Control and Prevention (CDC) in their Behavioral Risk Factor Surveillance Survey (BRFSS);^(25,26) by the Agency for Healthcare Research and Quality's (AHRQ) Medical Expenditure Panel Survey (MEPS),⁽²⁷⁾ and the Center for Studying Health System Change and their Community Tracking Survey (CTS).^(28,29) The development of outcome measures in Anderson model of access focused on utilization and, later, consumer satisfaction. Appropriate utilization was felt as a key indicator of access. Based on this logic, 2 ratios were proposed: the Symptoms- Response-Ratio (SRR) which means whether person saw doctor more or less often for symptoms than doctor thought necessary, and the Use-Disability Ratio (UDR) which means number of physician visits per 100 days of disability experienced.⁽³⁰⁾ These ratios were used in large evaluations of programs intended to expand access to primary care.⁽¹⁶⁾