



# The Enigma of Patient Behavior



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## Abstract

OPatient behavior is often described as disruptive behavior as they have an altered mental stage of fear of being sick, anxious about out of the pocket cost, alteration of lifestyle if suffered from a chronic illness. And the outcomes often faced by providers are inappropriate language, make unreasonable demands, and may even resort to physical abuse. The article comprises a few of this unusual behavior and a simple comparison between patients from developed world with those of the under-developed east.

**Purpose of the study:** Discussion and projection of behavior pattern, health seeking behavior and monitoring status in both developed and under-privileged countries. The pharmacists have a vital role to play which is discussed along with comparison.

**Findings:** Developed or under developed country, patients have a separate behavior pattern which develops and worsen with disease progression mostly. So many factors are behind but one thing clearly understood that the handling of such situation is a provider's function, a challenge they must face along with treatment intervention.

**Keywords:** Health beliefs and perception; Patient counseling; Patient comprehension and recall; Patient motivation; Patient feedback

## Materials and Methods

Research conducted a comprehensive year-round literature search, which included books, technical newsletters, newspapers, journals, and many other sources. Medicine and technical experts, pharma company executives, representatives, hospital nurses and even doctors' attendants paid their valuable advices. Projections were based on estimates such as patient attitude towards providers or prescribers and different types of attitude at different healthcare situations, their implication or consequences.

## Research limitations

Very few articles found in matters regarding along with a very less interest paid by general people to talk about healthcare matters. It was very difficult to bring out facts of irrational patient behavior, giving it a substantial figure to discuss in this article. However, the major limitation is the article could be a comparison of behaviors of developed and under-privileged countries which requires an enormous exposure and financial support. However, the sole focus was to detail mysterious patient behavior and a greater part is covered.

## Practical implication

The soul of this article was to detail about patient behavior, both in Bangladesh and developed countries. Along with students, researchers and professionals of different background and disciplines, e.g. Pharmacists, marketers, doctors, nurses, hospital

authorities, public representatives, policy makers and regulatory authorities must acquire much from this article.

## Social implication

Patient behavior is the soul of healing system and a scope for pharmacists and other healthcare providers to work with in both developed or under developed contries.as The article should contribute an integrated guideline for patient compliance, demand rational behavior and last but not the least a silvery lining to better pharmacists' dealings with them in near future.

## Introduction

The unusual patient behavior toward providers and towards themselves including medication taking is inevitable. If we think about human behavior, it differs in geographic region due to culture and sub-culture issues, gender and economic factors. Similarly, a few peculiarities found with their behavior, when they are seeking health service. An interesting fact is mostly patients avoid going to visit a doctor or pharmacists and when appeared for treatment their behaviors change dramatically which is still unexplained. A National Health Service survey reveals 30% patients never seek any care due to emotional distress of being ill and again nearly 60% fail to comply treatment guidelines as directed. Social phobia persists in women who need to go for an intervention for any gynecological disorder. Conversely children have phobia with the doctors and

hospital settings due to some unknown reason. When came late at an advanced disease state, the patient is already in a highly disturbed mental condition and a few situations raise, providers need to face another challenge to tolerate and mitigate them.

### Types of medication taking behavior

1) Compliance: Understanding how medication should be used and its benefit, with sufficient positive motivation, intentions and act accordingly.

2) Adherence: The extent to which a person takes medication as prescribed. Adherence is broadly viewed as related to instructions concerning medicine intake, use of medical device, diet, exercise, life style changes, rest and return for scheduled appointments.

3) Concordance: A process by which a patient and clinician make decisions together about treatment.

4) Persistence: A person's ability to continue medical advice for the intended course, which may range from few days to lifelong [1].

### Types of patient behavior

a) Health behavior that is preventive in nature generally is referred to as preventive health behavior. Expanding on the original definition, preventive health behavior is defined as actions taken to prevent illness and maintain physical, emotional, intellectual, spiritual, and social well-being. Examples of preventive health behaviors include

- i. participation in health screening programs,
- ii. following healthy diet recommendations,
- iii. participation in relaxation and cardiovascular exercises, and
- iv. creating and maintaining close personal relationships.

b) Illness behavior is any activity undertaken by individuals who perceive themselves to be ill that defines the state of their health and aids in discovering a suitable remedy.

i. Illness behavior is the way persons respond to bodily indications that they experience as abnormal; thus, it involves the way persons monitor their bodies, define and interpret their symptoms, and seek health care.

ii. Individuals attempt to ascribe cause and meaning to their illness symptoms and may self-diagnose and treat.

iii. Alternatively, individuals may visit a doctor or another prescriber and a pharmacist in order to obtain a prescription drug.

c) Treatment behavior is actions taken to restore health or halt disease progression traditionally have been referred to as sick-role behaviors and now are referred to as treatment behaviors [2].

### Model of health services utilization suggested that three main factors affect an individual's use of health services

1) Predisposing factors: are those factors that vary an individual's inclination to use services. These predisposing factors include demographic variables such as age and gender; social structure variables such as education, occupation, and ethnicity; and health beliefs about medical care, physicians, disease, and medication use.

2) Enabling factors: those factors influencing the individual's ability to use services, thus they reflect the fact that an individual's ability to use services depends on individual family and community resources.

3) Need factors: those factors related to the individual's belief in the seriousness of illness symptoms and the necessity of intervention. Need factors are separated into two categories, perceived need and evaluated need.

### Factors That Influence Patient Behavior

#### Patient factors

a. Age: Older people tend to use health services more than younger people, they account for 34% of total pharmaceutical expenditures. Nearly 40% of the elderly have three or more chronic conditions, while about 1/3rd of the nonelderly have at least one chronic condition. Younger patients were more likely than older patients to know how their prescribed drugs worked, when it started working, common side effects, how to manage side effects, and how long their physician wanted them to take the medication.

b. Sex: Women tend to use health services more than men. The self-reported use of OTC medications in the rural older population also shows that women take more OTC medications than men. Sex also makes a difference in psychotropic medication use. Women take anxiolytics nearly 40% and antidepressants more than 80% than men. Men receive more consultation from pharmacists. If considering the children, girls are encouraged to express their pain, whereas boys are encouraged to deny their pain and avoid feminine or sissy-like behaviors.

c. Socio-economic level: Higher levels of both income and education are associated with lower rates of mortality.

d. Ethnic background: Jewish and Italian patients tended to have a more emotional response to pain; they felt freer to discuss their pain, complain about it, groan and cry, and ask for relief. In contrast, patients from other backgrounds tried to deny their pain and appear more stoic. The primary chronic health problem among Mexican Americans in the US is non-insulin-dependent diabetes mellitus.

i. Communication Barriers, Financial Problems, And Cultural Barriers.

ii. Latino patients are often very polite to doctors, so polite that rather than discuss their diabetes care, the patients nod their heads and agree with the doctor.

iii. Patients often do not believe that the medication supplies are free and therefore do not take the necessary diabetic supplies as often as needed.

iv. Other patients believe that receiving government assistance in medical supplies will decrease chances of US citizenship.

v. For the families that do pay for medical supplies, a different problem arises. Expenses for a woman's needs often are considered secondary to the good of her family, and therefore expenditures for diabetes medications and supplies are considered less important than other family necessities.

vi. Finally, traditional folk remedies, such as aloe, cactus, and garlic, compete with the use of prescribed diet and medications, because patients (and possibly providers) are not aware that treatments can be combined.

vii. Emotional Factors: Concern when the patient has been diagnosed with a terminal illness, an illness with a social stigma, or an illness that requires change in daily behavior.

1. Factors of concern to patients include ~
2. Uncertainty of what to expect with this new illness or symptom;
3. On providers to give the best treatment and on family to help with daily life;
4. Fear of change and death; pain and discomfort;
5. Lack of privacy in physical examinations;
6. Loss of identity as a healthy person;

Isolation from usual support systems such as coworkers, teammates, and friends; conveying social support also is important, because people are more likely to trust or respond positively to another person if they have an emotionally satisfying relationship with that person.

### Drug factors

Drug regimens can be complex. The complexity of a drug regimen often is measured in the ~

1. Total number of medications taken daily,
2. Number of daily doses,
3. Duration of treatment,
4. The extent to which the regimen is tailored to daily routines,
5. The side-effect profile [3].

Medications may require special behaviors, for example:

- 1) Having to take a dose 1hr. Before or 2hr. After a meal,
- 2) Avoiding foods that are common in the diet,
- 3) Taking doses three or more times in a day,
- 4) Refrigerator storage, or skill in administration.
- 5) In addition, just learning the name of the drug prescribed, purpose of the drug, proper dose, when to begin taking it, frequency of dosing, and when to stop treatment is complex.
- 6) The complexity of a therapeutic regimen may prevent patients from adhering completely. Complex regimens may produce information overload.
- 7) Alternatively, medications requiring behaviors that are difficult to fit into regular daily activities are less likely to be taken as prescribed by a patient.

### Environmental factors

Patients given more autonomy and opportunities for self-determination tend to show greater health and morale improvements. The structural layout of many community pharmacies does not include an area for private consultation and dialog between the patient and the pharmacist. In addition to this lack of privacy, pharmacists often experience other environmental barriers to meaningful interaction with their patients, including

- 1) Insufficient supportive personnel.
- 2) A heavy workload and backlog.
- 3) People waiting to present prescriptions or receive pharmacist assistance.
- 4) Incoming phone calls and requests for information or help from coworkers.
- 5) Interns, and other staff.
- 6) Inadequate computer technology, software.
- 7) Preparation for new consultation roles.

### Provider patient interaction

Patients use three main sources of information when making decisions about their illness and treatment:

- 1) Their personal experience with the illness and various treatments.
- 2) Information obtained from family, friends, and the larger culture.
- 3) And their interaction with health professionals.

Scientific studies have found that the quality of provider-patient communication about drugs varies greatly and that efforts to improve communication can affect the patient's health behavior and quality of life in multiple ways, suggesting new goals and models of communication. Providers who adopt an autocratic approach assume a dominant or controlling role, speaking with an

authoritarian tone and giving directions without seeking patient input. In contrast, providers who adopt a participatory approach collaborate with the patient to develop a mutually acceptable treatment plan, providing decisional support or guidance without ignoring patient views and demanding compliance with a certain therapeutic plan.

### Provider instruction on patient comprehension and recall

Physicians and pharmacists continue to be the main sources of drug information and advice given to patients. Patients often receive information about the drug name and recommended dose and dosage frequency, but most patients still receive no specific oral counseling about the purpose of therapy, how long to take their medication, side effects, other precautions, and when the medication will begin to work. In fact, the quality of medication instruction by a provider is a better predictor of patient comprehension and recall than the patient's age and education. Research also has shown that there are substantial gains in patient comprehension and recall when providers use

- 1) Written reinforcement and visual aids, including printed leaflets or information sheets.
- 2) Expanded prescription labels and stickers.
- 3) Calibrated liquid measuring devices.
- 4) And special containers or calendars that indicate exactly when each dose is to be taken.

The difficulty and length of informational materials can interfere with the patient's ability to comprehend and recall advice. In general, patients have fewer difficulties if providers simplify instructions by avoiding medical jargon and using shorter words and sentences. In fact, the patients who received the difficult leaflet made nearly the same number of medication errors as those who received no information.

### Provider support on patient motivation and evaluation of care

Being ill and undergoing treatment can involve

- 1) a variety of stresses, practical problems.
- 2) other concerns that adversely affect patients' evaluations of treatment and their motivation to perform difficult tasks such as changing an unhealthy life-style, taking multiple medications, tolerating adverse events, and maintaining a positive self-image and outlook.

Patients also develop more positive attitudes and achieve better treatment outcomes when their caregivers make a systematic effort to reinforce the value of therapy. This reinforcement can take multiple forms, such as

- a) giving feedback to patients about their conditions during follow-up medical and pharmacy visits.
- b) encouraging patients to monitor their own conditions with special devices or making home visits to increase family

support and reinforcement. For example, experimental studies in hypertension management have documented substantial gains in patient adherence and clinical outcomes if patients receive regular blood pressure monitoring and feedback about their condition from a pharmacist or nurse.

### Provider monitoring on patient feedback and satisfaction

Surveys suggest that patients experience a wide variety of subjective and objective problems and concerns that contribute to nonadherence, dissatisfaction with care, and treatment dropout. These barriers to treatment adherence include

- 1) doubts about the physician's diagnosis or need for treatment.
- 2) misunderstandings about the regimen.
- 3) difficulties remembering each dose.
- 4) doubts about the effectiveness of the prescribed drug for their condition.
- 5) concerns about side effects and other bothersome features of a drug, and fears about the long-term effects of treatment or social stigma associated with certain conditions or treatments.

### Behavior: An East West Comparison

#### Health beliefs, perceptions, and expectations in western countries

a. Patients receiving treatment for depression, positive patient beliefs at the beginning of treatment were the best predictor of continued antidepressant use and a positive evaluation of the medication at follow-up.

b. The meaning of insulin treatments differs for patients and providers. For example, surveys suggest that most Hispanic patients recognize positive aspects of insulin treatment, but virtually all report negative effects, and nearly one third believe that receiving a prescription for insulin indicates that the disease has advanced into a very serious stage. Nearly 50% of patients were concerned that insulin causes serious health problems. In fact, 25% of Hispanic patients report fear that insulin causes blindness. Patients need information that may not appear obvious to providers.

c. Patient expectations of pharmacist care affects patient behavior. Pharmacy clients may not ask pharmacists questions because of client embarrassment or because they are not aware that it is appropriate to seek information from pharmacists. Clients may not realize that pharmacists check for drug interaction and that patient consultation is required by law in some states, while an offer to counsel is required in others.

#### Misbeliefs, superstitions and therapeutic compliance in Bangladesh

Common disease of under five children are gastroenteritis, pneumonia, diarrhea, skin infection, helminthiasis, abdominal pain, dental problem & chronic suppurative otitis media [4]. Among them diarrhea and pneumonia cause death of more than ten lac children every year. Majority parents seek treatment from homeopaths, PCs,

retailers or non-qualified allopath. A social phobia prevents women from standard treatment interventions. Antenatal care situation is also in a worse situation. Half of the pregnant women reported one or more life threatening complications, among them three fourth had convulsion or bleeding, only one third of them sought treatment from qualified prescriber. The principal reason was medication cost and social disparity in both rural and urban Bangladesh [5]. The reports on therapeutic compliances are even worsening:

a) Patients with Rheumatic Heart Disease: Therapeutic compliance among patients with rheumatic heart disease in NCCRH, Dhaka, Bangladesh reveals compliance in 50% patients which was less than level determined by an aboriginal community in Harrington, Australia.

b) Compliance to Anti-hypertensive Medications: A WHO multicenter shows around 50% Indian and Bangladeshi elderly suffers from hypertension, among 50% of them are aware of disease and only 10% are compliant. In the year 2007 a study done in Rajdhani, Bangladesh revealed that 85% of the hypertensive patients either do not checkup regularly or non-adherent to their antihypertensive medications [6].

c) Type 2 Diabetes Mellitus Patients' Compliance: A study in BIRDEM, Dhaka found that among

the diagnosed Type 2 people insulin intake was high in urban area due to cost and availability of the drug in local market and nearly 25% respondents was found took herbal medications for controlling diabetics which is lower in cost [7].

d) Cost of non-compliance among diabetes patients: In this cross-sectional study of patients with diabetes clinics in Mirpur, Bangladesh shows dim vision or blindness nearly 70 %, poor wound healing and dizziness nearly 30% and sexual dysfunction in nearly 15% of men [8].

e) Antibiotic Resistance: A recent study shows that half of the antibiotics are sold without prescription, people prefer self-medication rather than visiting a doctor. Rural people do not always do what the prescribers advise them to do. Financial ability was not the sole cause. Antibiotic resistance found due to inappropriate prescription, poor consulting period and expense behind drugs [9].

## Pharmacists Role

### Pharmacists role in improving patient behavior

- 1) Establish a relationship
- 2) Improve the patient and caregiver knowledge base
- 3) Utilizing digital health technology tools.
- 4) Providing incentives
- 5) Involve the caregiver

### Importance of patient counseling

Patient counseling is necessary to reduce medication errors and improve patient healthcare. This leads to several potential benefits:

- 1) Improved therapeutic outcomes and decreased adverse effects
- 2) Improved patient adherence to the treatment plan
- 3) Decreased medication errors and misuse
- 4) Enhanced patient self-management by involving the patient in designing the therapeutic plan
- 5) Potential for decreased health care costs due to appropriate use of medications and prevention of adverse events. The pharmacist also benefits in this process. Potential benefits to the pharmacist in this process include:
- 6) Enhanced professional status in the view of patients and other health care providers
- 7) Establishment of an essential component of patient care that cannot be replaced by technicians or automation
- 8) Enhanced job satisfaction through improving patient outcomes
- 9) A value-added service to offer patients
- 10) Revenue generation through payment for counseling services- limited at present but growing
- 11) In short, it ensures positive outcomes on the management of disease, including improved drug compliance, better treatment endpoints, and patient satisfaction.

### Benefits of patient compliance

The improvement of compliance will result in a situation in which all parties benefit. Most importantly patients benefit from the enhancement of the efficacy and safety of their drug therapy [10]. Pharmacists benefit because there is an increased recognition and respect for the value of the advice and service that they provide. Pharmaceutical manufacturers benefit from the favorable recognition that accompanies the effective and safe use of their drugs as well as from the increased sales resulting from the larger number of prescriptions being dispensed. Finally, society and the health care system benefit as a result of fewer problems associated with noncompliance. Although an increase in compliance will result in more prescriptions being dispensed and a higher level of expenditures for prescription medications, this increase in costs will be more than offset by a reduction in costs (e.g., physician visits, hospitalizations) attributable to problems due to noncompliance [11].

### Conclusion

The comparative study shows different perspective of patient behavior in modern world and in Bangladesh. Reasons are found to cultural and economic differences. Pharmacists and other healthcare providers also have different strategies to promote patient behavior change, spent times with patients. High patient activity change support system should validate their efficiency and professionalism. But reality is that no graduate pharmacist is working in retail pharmacies or Government hospitals of

Bangladesh except very few tertiary private hospitals. To attain the ideal healthcare service doctor, pharmacist, nurse and other healthcare professionals must work together. It is noteworthy to mention that any interruption in the team work will disrupt the whole health system and patient care service will never be achieved. At the same time, physicians and pharmacists do not always ask patients about their medication concerns, beliefs, understandings, and behaviors. While these patient concerns can have detrimental effects on the patient's behavior, many patients are reluctant to complain or ask their providers about their medications. Providers who ask carefully designed, open-ended questions about patient concerns and adherence will be more likely to receive accurate patient feedback than those who wait for their patients to volunteer this information.

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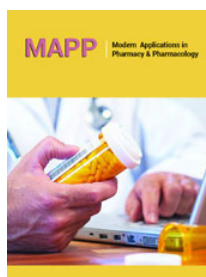
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