

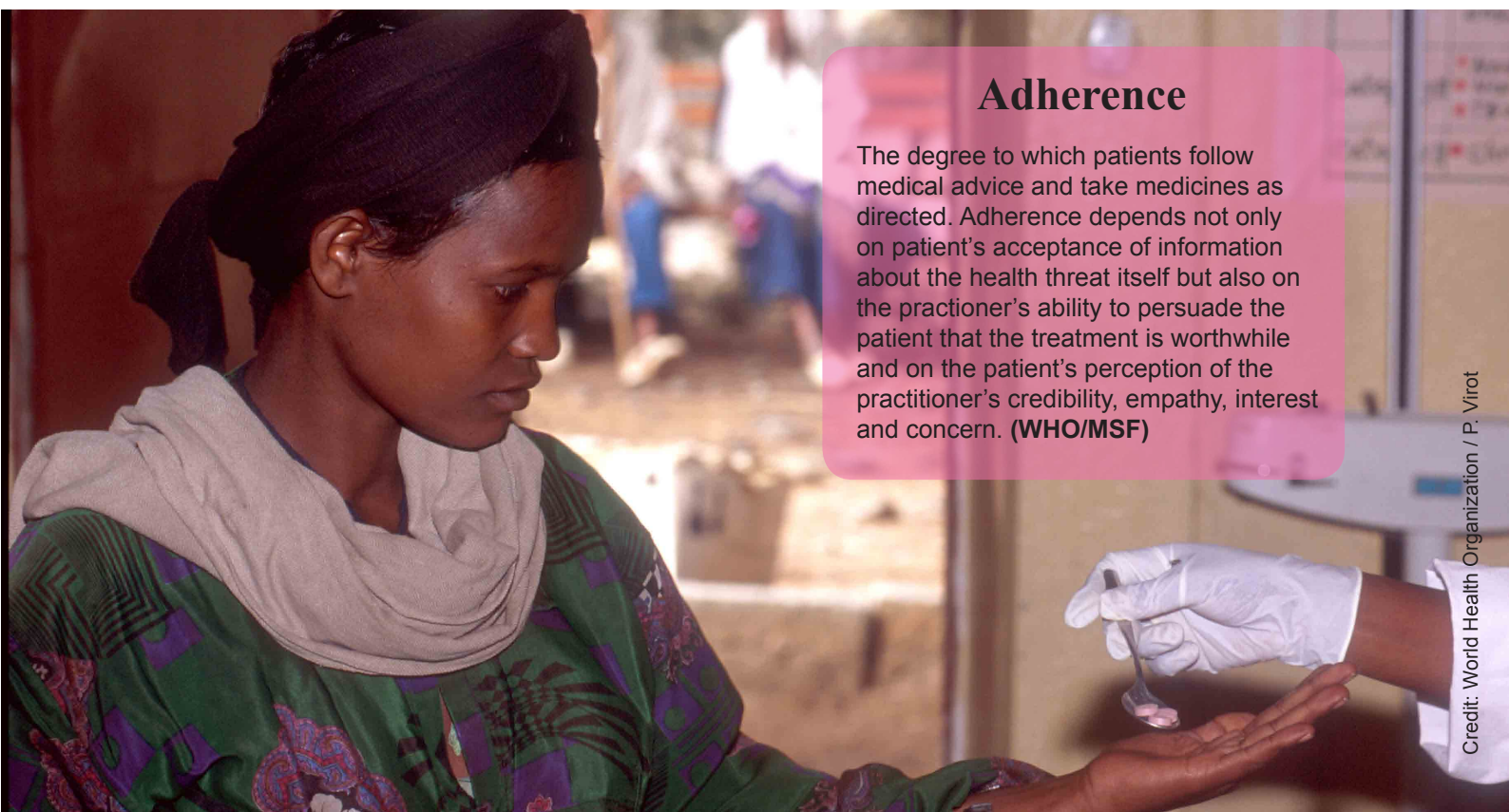
Practical Pharmacy For Developing Countries

NOTE TO OUR READERS: The goal of Practical Pharmacy is to provide accessible, objective and accurate information on medicines issues for front-line health workers who may not have had any pharmaceutical training. Medicines are important in helping people get better and improve the quality of their lives. The safe and appropriate use of medicines is a shared responsibility amongst prescribers, dispensers and users. Improving the use of medicines requires healthcare workers to put effort into developing and nurturing trusting relationships with their patients or clients; similarly, people who use medicines must ensure they have sufficient information about their medicines. In this issue of Practical Pharmacy we address the issue of adherence to medicines.

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We welcome your feedback to know if we have been successful in achieving our goal with this issue. Contact us at practical_pharmacy@gmail.com

Factors that contribute to poor adherence



Adherence

The degree to which patients follow medical advice and take medicines as directed. Adherence depends not only on patient's acceptance of information about the health threat itself but also on the practitioner's ability to persuade the patient that the treatment is worthwhile and on the patient's perception of the practitioner's credibility, empathy, interest and concern. (WHO/MSF)

Credit: World Health Organization / P. Viroit

A woman with tuberculosis in Alem, Ethiopia, receives one of her daily treatment doses.

A. Medication related factors

Studies have found that patients on once daily regimens are much more likely to adhere than patients who are required to take their medicines multiple times a day. The number of medicines

that the person takes has a negative impact on adherence. This is a big problem especially for older patients who often take more than four medicines for multiple illnesses.

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Factors that contribute to poor adherence



Credit: HAI Africa

Medicines in a pharmacy. Health workers must help encourage good patient adherence.

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B. Patient-related factors

1. Perception about the nature and severity of the illness. Patients with a disease that requires short term treatment (acute illness) such as malaria or diarrhea adhere better than those who require long term treatment (chronic illness) such as asthma, diabetes, or high blood pressure.

2. Denial of the illness and the need to take medicines. In Africa, patients who suffer from terminal illnesses such as cancer have often resorted to traditional healers, neglecting conventional medicines.

3. Assumption that once symptoms improve he or she can discontinue medication. This is a common occurrence in malaria patients who often feel better after the first dose of medicine as the high fever quickly subsides.

4. Limited appreciation about the value of using medicines properly. People who receive medicines without adequate explanation about how to use them are more like to non-adhere. For example, people who should take a medicine 4x daily may just take it all at once if they don't understand why the doses need to be spread out.

5. Acceptance of taking medicines for preventive purposes or for symptomless conditions. Patients who suffer from chronic conditions such as diabetes or cardiovascular disease may be less likely to adhere to treatment once the symptoms are gone.

6. Worries of social stigma when taking certain medicines. With treatment illiteracy, significant stigma and a variety of misunderstandings about the epidemic of HIV in sub-Saharan Africa, non-adherence is a risk for many people on treatment.

7. Fear of side effects. This fear may affect adherence for various people, such as women on family planning pills, and people on ARVs. Many people do not know that side effects may be short-lived, manageable and often not as intense as feared.

8. Fear of needles and the need for self injections. Some people with diabetes who are on insulin require multiple injections and may feel they cannot manage.

9. Media influence regarding safety or risk issues associated with particular medicines. For example in Africa, therapeutically equivalent generic medicines manufactured in Asia are often

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Compliance

Patient does not have a say in their treatment but just follows instructions of their health care provider

Concordance

It focuses on consultation process in which a health worker and a patient agree on treatment decisions that incorporate their respective views. The patient is supported in taking the medicine.

Some reasons for poor patient adherence

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perceived by the media to be inferior compared to those manufactured in US and Europe.

C. Prescriber-related factors

1. In most national and regional referral hospitals where doctors often have to see large numbers of patients every day, there is inadequate time to explain to patients the treatment, dosing and side effects. This may lead to poor adherence because the patient may not understand how to take their medicines properly.

2. In Sub-Saharan Africa, especially rural areas, the medical profession has been infiltrated by quacks masquerading as doctors, pharmacists and other health workers. These people have been prescribing inappropriately, and people have lost trust in the process of getting medical attention.

3. There is poor communication between prescribers, pharmacists and patients. This may lead to medication errors and poor adherence.



D. Pharmacy-related factors

1. Attitude of patients and pharmacists. Because of the technical nature of the profession, pharmacists have historically taken to simply telling patients what to do, expecting the patient to simply follow instructions. This has not been an effective attitude; most patients faced with such instructions often left the pharmacy without an opportunity to ask questions or clarify instructions, again contributing to poor adherence.

2. The operational aspect of pharmacy practice. Pharmacy education in most of the Sub-Saharan African countries has tended to concentrate on community pharmacy as opposed to pharmacists in the broader health care delivery system. This has led to many pharmacists operating independently of other clinical professions, depriving them of (a) important professional / patient interactions and (b) involvement in treatment decisions and care plans.

E. Government-related barriers

1. Regulation on medicine promotion (advertisement). Most medicines' regulatory agencies do not have a robust regulatory framework to combat unethical medicines promotion. This leads to patients receiving biased information directly from the pharmaceutical industry instead of objective, independent information which can help them understand and better adhere to their treatment.

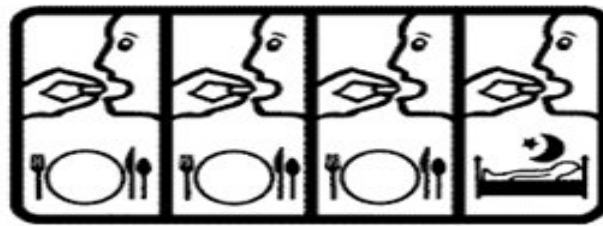


2. Frequent stock-outs of key essential medicines in public health facilities in the region have caused the public to lose confidence in government health facilities. Patients are often forced to go to private pharmacies and clinics which may be run by people who do not have the time (or make the effort) to interact with patients about their medicines. This may contribute to non-adherence by patients.

3. Human resource related factors such as underpaid, overstretched and demoralized health workers are another impediment to effective interactions with patients.

Improving medical adherence

- Health care professionals are urged to educate their patients about medicines: why they are taking them, what the medicines look like, what time they should be taken, their potential side effects, what to do if a side effect is experienced, and regular testing that may be required.
- Change in dosing schedule. Taking medicines once or twice daily improves adherence, so whenever possible, such regimens should be established. For ARVs, adherence has increased with the emergence of fixed dosed combination tablets which combine two or three ARVs into one pill, to be taken once or twice daily.
- Monitoring adherence with every patient visit to the prescribing health care provider or pharmacist.
- Providing information verbally and reinforcing



Pictograms (top) and pill organizers help patients to take their medicines as prescribed.

these instructions through giving the patient useful written information in language that clearly explains how the patient can manage their medicines. This information may be presented in pictures and should include the exact time the medicine should be taken, why and how long to take it and common side-effects.

Ways to get children to take their medicine



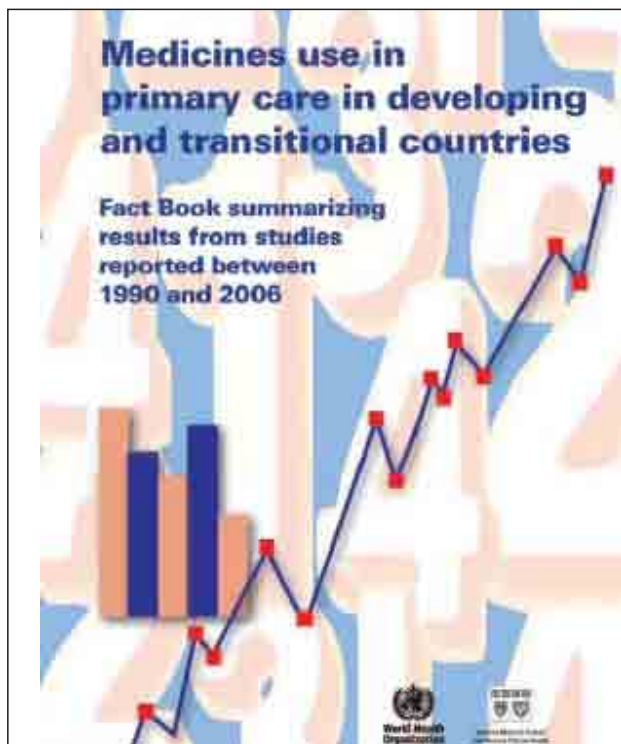
Credit: World Health Organization / P. Viroit

A child receives a dose of medicine.

Babies/infants

- Use a syringe to drop the medicine into the inside cheek of the baby's mouth where there are no bitter taste buds.
 - Mix the medicine with a small amount of formula or breast milk. Avoid using large quantities as the baby may not finish the formula/milk and will not get the correct dose.
- ### Children
- Praise your child on being a good medicine taker.
 - Offer a "chaser" (e.g. breast feed) to get rid of the medicine taste.
 - Get the child to hold his/her nose while taking the medicine to dull the sense of taste.
 - Reverse psychology – tell your child it is a very "special" medicine that can only be taken three to four times a day.
 - Let your child choose their own spoon or cup to take the medicine. This gives your child some control over their medicine taking.

Key policies and regulations on rational use of medicines in Sub-Saharan Africa



The following are the main guidelines that have aspects of promotion of Rational Use of Medicines.

1. National drug policy
2. Essential Medicines list
3. Standard Treatment Guidelines
4. Clinical guidelines

The links below have recently updated relevant publications that measure the implementation of policies and regulations on rational use of medicines in Sub Saharan Africa:

<http://collections.infocollections.org/whocountry/en/cl/CL2.1/>

http://www.who.int/medicines/publications/who_emp_2009.3/en/index.html

Critical information for patients

- What condition the medicine was prescribed to treat
- What the medicine is, why it is needed and how it works in the body
- Why the medicine was selected
- The dosage schedule and related instructions about how to take the medicine (before eating, with food, etc)
- Whether the medicine will work safely with other medicines being taken (both prescription and nonprescription medicines)
- What to do if doses are missed or delayed
- The common adverse effects that may occur and what to do about them
- How to monitor whether the medicine is having its intended effect (are lab tests or blood work necessary; if so, how often)



Credit: HAI Africa

Various medicines in a pharmacy

- Serious adverse effects to look out for and what to do if they occur
- What action to take when the prescription is about to run out

Points to remember when prescribing medicines

- Be warm and caring and respect the patient's concerns;
- Talk to patients directly about the need for adherence;
- Probe patients about their medicine taking habits and health beliefs;
- Obtain agreement from the patient on the specifics of the regimen, including the medical treatment goals;
- Communicate the benefits and risks of treatment in an understandable way that fosters the perception that the patient has made an informed choice about his or her care; and
- Probe for and help resolve patient concerns up front so they do not become hidden reasons for poor adherence.

Tailoring medications for different patients



Credit: HAI Africa

Medicines stacked on the shelves of a pharmacy in Nairobi, Kenya.

- Decreasing the number of daily doses to once or twice a day;
- Eliminating unnecessary or redundant medications or using combination products when possible;
- Changing the route of administration, such as using oral medications or transdermal patches; and
- Decreasing the overall cost of the medication regimen if affordability is a barrier to adherence.



Credit: HAI Africa

Workers in a pharmacy

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Enhancing Prescription Medicine Adherence: A National Action Plan
National Council on Patient Information and Education August 2007 from http://www.talkaboutrx.org/documents/enhancing_prescription_medicine_adherence.pdf

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