

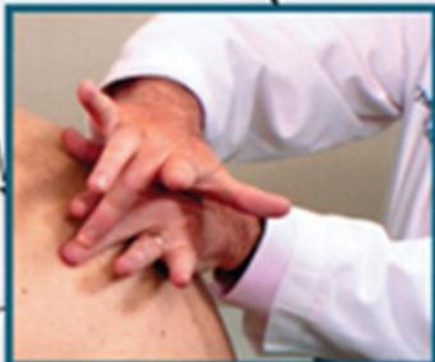
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Textbook of

PHYSICAL DIAGNOSIS

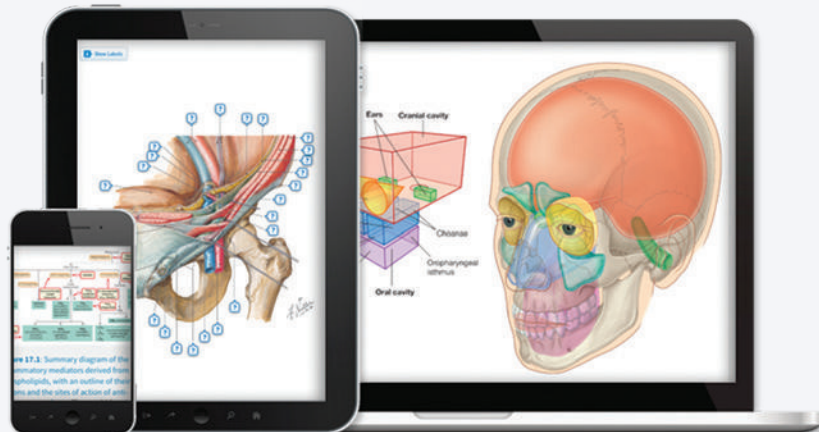
History and Examination

MARK H. SWARTZ



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EIGHTH EDITION

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DIAGNOSIS
History and Examination

Mark H. Swartz, MD, FACP

Professor of Medicine
State University of New York Downstate Medical Center
Brooklyn, New York

Adjunct Professor of Clinical Medicine
Albert Einstein College of Medicine
Bronx, New York

Professor of Medicine
New York College of Podiatric Medicine
New York, New York

President/CEO
C3NY—Clinical Competence Center of New York
New York, New York

Visiting Professor of Medicine
Taipei Medical University
Taipei, Taiwan

Lecture Professor of Medicine
Xiangya Hospital of Central South University
Changsha, China



Elsevier
1600 John F. Kennedy Blvd.
Ste 1600
Philadelphia, PA 19103-2899

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Content Strategist: Marybeth Thiel
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*One of the essential qualities of the clinician is interest in humanity,
for the secret in the care of the patient is in caring for the patient.*

Francis Weld Peabody (1881–1927)

To **Vivian Hirshaut, MD**, my wife, my life's companion, and my best friend,
for her love, patience, support, and understanding;

To **Talia H. Swartz, MD, PhD**, my loving and brilliant daughter,
for her encouragement and sustained devotion;

To **Ofer Nagar**, my wonderful son-in-law, who helped produce two
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so much joy in my life;

To the memory of my parents, **Hilda and Philip**;

and

To my **students**, from whom I am always learning.

This is the eighth edition of the *Textbook of Physical Diagnosis: History and Examination*, which, like its predecessors, has been written for students of health care who are learning to communicate effectively with patients, examine patients, and assess patients' medical problems. It's hard to believe that 30 years have passed since the publication of the first edition! This text, like its first edition in 1989, still offers a unique, comprehensive (but concise) approach to physical diagnosis. By discussing the pathophysiology of disease and emphasizing the humanistic element of health care, I attempt to show the importance of the old-fashioned doctor's approach to the patient. "The *primary* aim of this textbook," as stated in the preface to the first edition, "is to provide a framework for the clinical assessment of the patient in a *humanistic* manner." The book, then and now, focuses on the patient: his or her needs, problems, and concerns.

The history and physical examination must not be seen as procedures performed by a robot but rather as a process that requires interpersonal awareness and technical skill. In this era of extraordinary advances in diagnostic modalities, procedures and tests have been emphasized, whereas the importance of the history and physical examination has been minimized. It is well known, however, that among the most valuable and least costly medical evaluations are the history and physical examination. This book focuses on how to offer the best medical care through the art of effective interviewing and physical examination.

The eighth edition represents a **major revision** based on a complete review of the field of physical assessment. All chapters have been reviewed and modified, where appropriate, by experts in the fields. Extensive changes have been made to most chapters. The last edition of this textbook moved the chapters on nutrition, complementary and alternative medicine, and cultural diversity to the web-based version of the textbook. Now with this edition, all chapters appear in the print version of this textbook. As times change, so do standards of physical diagnosis. Several of the physical examination tests indicated in the previous editions have been either modified or eliminated, and several new chapters have been included in this edition.

There is now a growing scholarly literature about *implicit bias* in health care and its effect on the doctor-patient relationship and patient health outcomes. Implicit bias, also known as *unconscious bias*, can be defined, as cited by the National Center for State Courts (2012), as "the bias in judgment and/or behavior that results from subtle cognitive processes (e.g., implicit attitudes and implicit stereotypes) that often operate at a level below conscious awareness and without intentional control." Unconscious bias is significantly related to patient-provider interactions, treatment decisions, and treatment adherence. Unconscious bias is not limited to race; it can exist for characteristics such as age, gender, sexual orientation, gender identity, disability status, nationality, ethnicity, and physical appearances. These biases, which encompass both favorable and unfavorable assessments, are activated involuntarily and without an individual's awareness.

One must recognize and understand that almost everyone has some degree of implicit bias; it manifests as an automatic stereotypical response. Healthcare providers must learn to mitigate the effect of implicit bias in healthcare decision-making. I have therefore added a new section to the textbook entitled "*Valuing Diversity: Race, Gender, & Ethnicity*." I invited six experts in this field to write an entirely new chapter entitled, *Mitigating Racism and Bias in Clinical Medicine*.

Health care providers deal frequently with a great variety of perplexing medical ethical problems. The *Epilogue* of previous editions of this book has touched upon this important subject only briefly. In this edition, however, the subject has been enhanced into its own chapter entitled, *Clinical Ethics and Professionalism*. The basic elements of bioethical reasoning around issues such as principlism, ethics analysis, deontology, utilitarianism, casuistry, privacy and confidentiality, disclosure, decisional capacity, informed consent, and advanced directives are a few of the topics now included. An expert in the field of medical ethics assisted me in writing this important chapter.

The original chapter entitled, *Advancing Clinical Diagnostic Reasoning* has been entirely rewritten. The revised chapter, now entitled, *Precision, Accuracy, and Critical Thinking in Clinical Assessment*, is a more user-friendly chapter addressing basic clinical statistics and its application in critical thinking and diagnostic reasoning. References throughout have been completely updated and provide information for further study.

Online appendices include commonly abused drugs, signs and symptoms of deficiency states, conversion tables, English-to-Spanish translations, and recommended immunization schedules for children and adults. See instructions for accessing the online content on the inside front cover.

Online access includes more than 150 high-quality videos showing step-by-step demonstrations of the complete physical examination of male and female patients (see inside front cover for accessing online content). Other videos include the pediatric examinations of the newborn and the toddler and the neurologic evaluation of the toddler. Using standardized patients, other video presentations show interviewing techniques when discussing sensitive topics with geriatric patients. These sensitive topics include a discussion of advance directives (i.e., health care proxy determination and living wills), a mental status examination of a patient with a cognitive impairment, and a scenario showing how to give bad news. Finally, scenarios demonstrating the focused history and physical examination of a young man with abdominal pain; counseling a woman about health-related issues; and a pediatric telephone consultation are presented. These are very useful scenarios for preparing for the USMLE Step 2CS Examination. These videos compliment the text to provide a comprehensive clinical reference for the understanding of the organization and fluidity of the complete assessment of the patient.

Illustrations are an integral part of a physical diagnosis textbook. They help the reader better understand the

pathologic processes. As in the previous editions, the book is richly illustrated, with more than 1000 photographs and line art. More than 80% of the photographs of pathologic conditions are original; they have not been reprinted from other textbooks.

Any health care provider today must be able to synthesize basic pathophysiology with humanistic medical care. As the medical profession continues to be under greater scrutiny, we must emphasize an empathetic approach to patient care,

recognizing the role of culture in illness and using modern technology to *enhance* our clinical assessment, not to replace it. We must always remember that a patient is a *person* suffering from disease, not a vehicle for a disease!

I hope that you will find this eighth edition of *Textbook of Physical Diagnosis: History and Examination* to be reader friendly, comprehensive, and an exciting addition to your library.

Mark H. Swartz, MD, FACP

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Jimmy Chan, MD
PGY3 Resident of Orthopaedic Surgery
Icahn School of Medicine at Mount Sinai
New York, New York



Barbara Deli, MD
Assistant Professor of Obstetrics
Gynecology and Reproductive Science
Icahn School of Medicine at Mount Sinai
New York, New York



Vivian Hirshaut, MD
Assistant Professor of Ophthalmology
Icahn School of Medicine at Mount Sinai
Albert Einstein College of Medicine
New York, New York



Darwin Chen, MD
Assistant Professor of Orthopaedic Surgery
Icahn School of Medicine at Mount Sinai
New York, New York



Patrick D. Herron, DBE
Associate Professor of Family & Social
Medicine
Associate Professor of Epidemiology &
Population Health
Director of Bioethics Education
Albert Einstein College of Medicine
New York, New York



Joanne Hojsak, MD
Professor of Pediatrics and Medical
Education Pediatric Critical Care
Director, Pediatric Pain and Palliative Care
Co-Director, The Art & Science of Medicine
Years 1 & 2
Icahn School of Medicine at Mount Sinai
New York, New York



Jessica L. Israel, MD
Corporate Chair, Geriatrics and Palliative
Care
RWJ Barnabas Health
Director, The James and Sharon Maida
Geriatrics Institute at RWJ Barnabas
Health
Lakewood, New Jersey



Robert F. Kushner, MD
Professor of Medicine
Northwestern University Feinberg School of
Medicine
Chicago, Illinois



Farida Nentin, MD
Assistant Professor of Obstetrics
Gynecology and Reproductive Science
Icahn School of Medicine at Mount Sinai
New York, New York



Reena Karani, MD, MHPE
Senior Associate Dean for Undergraduate
Medical Education and Curricular
Affairs
Director, Institute for Medical Education
Professor of Medicine, Medical Education,
and Geriatrics and Palliative Care
Icahn School of Medicine at Mount Sinai
New York, New York



Giselle Lynch, MD
PGY-1 Preliminary Resident
Morristown Medical Center
Morristown, New Jersey



Ann-Gel S. Palermo, DrPH, MPH
Associate Dean for Diversity and Inclusion
in Biomedical Education
Program Director, Combined Internal
Medicine and Pediatric Residency
Icahn School of Medicine at Mount Sinai
New York, New York



Paul E. Phrampus, MD
 Professor of Emergency Medicine and
 Anaesthesiology
 Director of the Peter M. Winter Institute for
 Simulation, Education and Research
 (WISER)
 University of Pittsburgh School of
 Medicine;
 Medical Director of Patient Safety,
 University of Pittsburgh Medical Center
 Pittsburgh, Pennsylvania



Michelle Sainté, BS
 Associate Dean for Academic
 Administration
 Icahn School of Medicine at Mount Sinai
 New York, New York



Talia H. Swartz, MD, PhD
 Assistant Professor of Medicine (Infectious
 Diseases)
 Associate Director, Medical Scientist
 Training Program (MD/PhD)
 Icahn School of Medicine at Mount Sinai
 New York, New York



Hai Jung Helen Rhim, MD, MPH
 Assistant Professor of Pediatrics
 Albert Einstein College of Medicine
 New York, New York



Miriam Schechter, MD
 Associate Professor of Pediatrics
 Albert Einstein College of Medicine
 New York, New York



Joseph Truglio, MD, MPH
 Assistant Professor of Internal Medicine,
 Pediatrics and Medical Education
 Program Director, Combined Internal
 Medicine and Pediatrics Residency
 Icahn School of Medicine at Mount Sinai
 New York, New York

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Mark H. Swartz, MD, FACP

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Mastering the Art of Interviewing

The Interviewer's Questions

Mark H. Swartz

What is spoken of as a "clinical picture" is not just a photograph of a man sick in bed; it is an impressionistic painting of the patient surrounded by his home, his work, his relations, his friends, his joys, sorrows, hopes and fears.

Francis Weld Peabody (1881–1927)

BASIC PRINCIPLES

Good communication skills are the foundation of excellent medical care. Even with the exciting new technology that has appeared since 2000, communicative behavior is still paramount in the care of patients. Studies have shown that good communication improves health outcomes by resolving symptoms and reducing patients' psychological distress and anxiety. In the United States, 85% of all malpractice lawsuits are based on poor communication skills. It is *not* that the doctor didn't know enough; the doctor did not communicate well enough with his/her patient!

Technologic medicine cannot substitute for words and behavior in serving the ill. The quality of patient care depends greatly on the skills of interviewing, because the relationship that a patient has with a physician is one of the most extraordinary relationships between two human beings. Within a matter of minutes, two strangers—the patient and the healer—begin to discuss intimate details about a person's life. Once trust is established, the patient feels at ease discussing the most personal details of the illness. Clearly, a strong bond, a therapeutic alliance, must have been established.

The main purpose of an interview is to gather all basic information pertinent to the patient's illness and the patient's adaptation to illness. An assessment of the patient's condition can then be made. An experienced interviewer considers all the aspects of the patient's presentation and then follows the leads that appear to merit the most attention. The interviewer should be aware also of the influence of social, economic, and cultural factors in shaping the nature of the patient's problems. Other important aspects of the interview are educating the patient about the diagnosis, negotiating a management plan, and counseling about behavioral changes.

Any patient who seeks consultation from a clinician needs to be evaluated in the broadest sense. The clinician must be keenly aware of all clues, obvious or subtle. Although body language is important, the spoken word remains the central diagnostic tool in medicine. For this reason, the art of speaking and *active listening* continues to be central to the doctor–patient interaction. Active listening takes practice and involves awareness

of what is being said in addition to body language and other nonverbal clues. For the novice interviewer, it is very easy to think only about your next question without observing the entire picture of the patient, as described masterfully in the quote by Peabody that introduced this chapter. Once all the clues from the history have been gathered, the assimilation of those clues into an ultimate diagnosis is relatively easy.

Communication is the key to a successful interview. The interviewer must be able to ask questions of the patient freely. These questions must always be understood easily and adjusted to the medical sophistication of the patient. If necessary, slang words describing certain conditions may be used to facilitate communication and avoid misunderstanding.

The success of any interview depends on its being patient-centered and *not* doctor-centered. Encourage the patient to tell his or her story and follow the patient's leads to better comprehend the problems, concerns, and requests. Do not have your own list of "standard questions" as would occur in a symptom-focused, doctor-centered interview. Patients are not standard; don't treat them as such. Allow the patient to tell his or her story in his or her own words. In the words of Sir William Osler (1893), "Listen to your patient. He is telling you the diagnosis... The good physician treats the disease; the great physician treats the patient who has the disease." No truer words have been spoken.

Once the patient has told his or her story of the history of the present illness, it is customary for you to move from open-ended questions to direct, more focused questions. Always start by casting a wide net, using open-ended questions and then gradually close the net to develop your differential diagnosis. Start general and then get more specific to clarify the patient's story and symptoms.

USING AN INTERPRETER

Health care providers are increasingly treating patients across language barriers. When a person is speaking in his/her native language, it refers to the person's language that he or she learned from birth, often referred to as **mother tongue**. In 2015, there were 7102 living languages. Out of these, there were 23 mother

tongues (at least 50 million first-language speakers). In 2016, around 40.49 million people in the United States were speaking only Spanish as their mother tongue; 3.4 million were speaking Chinese; 1.7 million Tagalog; 1.5 million Vietnamese; 1.2 million Arabic; and 1.2 million French.

In 2013, approximately 61.6 million individuals, foreign and U.S. born, spoke a language other than English at home. While most of these individuals also spoke English with native fluency or very well, about 41 percent (25.1 million) were considered Limited English Proficient (LEP). LEP refers to anyone above the age of 5 who reported speaking English less than “very well,” as classified by the U.S. Census Bureau. Though most LEP individuals are immigrants, nearly 19 percent (4.7 million) were born in the United States, most to immigrant parents. Overall, the LEP population represented 8 percent of the total U.S. population ages 5 and older.

Lack of English proficiency can have deleterious effects. For any patient who speaks a language other than that of the health care provider, it is important to seek the help of a trained medical *interpreter*. Unless fluent in the patient's language and culture, the health care provider should always use an interpreter. The interpreter can be thought of as a bridge, spanning the ideas, mores, biases, emotions, and problems of the clinician and patient. The communication is very much influenced by the extent to which the patient, the interpreter, and the provider share the same understanding and beliefs regarding the patient's problem. The best interpreters are those who are familiar with the patient's culture. The interpreter's presence, however, adds another variable in the doctor-patient relationship; for example, a family member who translates for the patient may alter the meaning of what has been said. When a family member is the interpreter, the patient may be reluctant to provide information about sensitive issues, such as sexual history or substance abuse. It is therefore advantageous to have a disinterested observer act as interpreter. On occasion, the patient may request that a family member be the interpreter. In such a case, clinicians should respect the patient's wishes. Friends of the patient, although helpful in times of emergency, should not be relied on as translators because their skills are unknown and confidentiality is a concern. The clinician should also master a number of key words and phrases in several common languages to gain the respect and confidence of patients. When using an interpreter, clinicians should remember the following guidelines:

1. Choose an individual trained in medical terminology.
2. Choose a person of the same sex as the patient and of comparable age.
3. Talk with the interpreter beforehand to establish an approach.
4. When speaking to the patient, watch the patient, not the interpreter.
5. Do not expect a word-for-word translation.
6. Ask the interpreter about the patient's fears and expectations.
7. Use clear, short, and simple questions.
8. Use simple language.
9. Keep your explanations brief.
10. Avoid hypothetical questions using *if*, *would*, and *could*, because these require nuances of language.
11. Avoid idiomatic expressions.

The U.S. Department of Health and Human Services has put together a useful mnemonic (**INTERPRET**) for working with interpreters in a cultural setting:

I—Introductions

Make sure to introduce all the individuals in the room. During introductions, include information as to the role individuals will play.

N—Note Goals

Note the goals of the interview: What is the diagnosis? What will the treatment entail? Will there be any follow-up?

T—Transparency

Let the patient know that everything said will be interpreted throughout the session.

E—Ethics

Use qualified interpreters (not family members or children) when conducting an interview. Qualified interpreters allow the patient to maintain autonomy and make informed decisions about his or her care.

R—Respect Beliefs

LEP patients may have cultural beliefs that need to be incorporated as well. The interpreter may be able to serve as a cultural broker and help explain any cultural beliefs that may exist.

P—Patient Focus

The patient should remain the focus of the encounter. Providers should interact with the patient and not the interpreter. Make sure to ask and address any questions the patient may have before ending the encounter. If you don't have trained interpreters on staff, the patient may not be able to call in with questions.

R—Retain Control

It is important as the provider that you remain in control of the interaction and not allow the patient or interpreter to take over the conversation.

E—Explain

Use simple language and short sentences when working with an interpreter. This will ensure that comparable words can be found in the second language and that all the information can be conveyed clearly.

T—Thanks

Thank the interpreter and the patient for their time. On the chart, note that the patient needs an interpreter and who served as an interpreter this time.

Even with a trained translator, health care workers are ultimately responsible for ensuring safe and effective communication with their patients. An article ([Schenker et al., 2008](#)) describes a conceptual framework of when to call for an interpreter and what to do when one is not available.

When speaking with the patient, the interviewer must determine not only the main medical problems but also the patient's reaction to the illness. This is of great importance. How has the illness affected the patient? How has he or she reacted to it? What influence has it had on the family? On work? On social life?

The best interview is conducted by an interviewer who is cheerful, friendly, and genuinely concerned about the patient. This type of approach is clearly better than that of the interviewer who acts like an interrogator shooting questions from

a standard list at the poor, defenseless patient. Bombarding patients with rapid-fire questions is a technique that should **not** be used.

IMPORTANT INTERVIEWING CONCEPTS

In the beginning, the patient brings up the subjects that are easiest to discuss. More painful experiences can be elicited by tactful questioning. The novice interviewer needs to gain experience to feel comfortable asking questions about subjects that are more painful, delicate, or unpleasant. Timing of such questions is critical.

A cardinal principle of interviewing is to permit patients to express their stories in their own words. How patients tell their stories reveals much about the nature of their illnesses. Careful observation of a patient's facial expressions, as well as body movements, may provide valuable nonverbal clues. The interviewer may also use body language such as a smile, nod, silence, hand gesture, or questioning look to encourage the patient to continue the story.

Listening without interruption is important and requires skill. If given the chance, patients often disclose their problems spontaneously. Interviewers need to *hear* what is being said. They must allow the patient to finish his or her answer even if there are pauses while the patient processes his or her feelings. All too often, an interview may fail to reveal all the clues because the interviewer did not listen adequately to the patient. Several studies have shown that clinicians commonly do not listen adequately to their patients. One study showed that clinicians interrupt the patient within the first 15 seconds of the interview. The interviewers are abrupt, appear uninterested in the patient's distress, and are prone to control the interview.

As mentioned earlier, the best clinical interview focuses on the patient, not on the clinician's agenda.

An important rule for improved interviewing is *to listen more, talk less, and interrupt infrequently*. Interrupting disrupts the patient's train of thought. Allow the patient, at least in part, to control the interview.

Interviewers should be attentive to how patients use their words to conceal or reveal their thoughts and history. Interviewers should be wary of quick, very positive statements such as, "Everything's fine," "I'm very happy," or "No problems." If interviewers have reason to doubt these statements, they may respond by saying, "Is everything really as fine as it could be?"

If the history given is vague, the interviewer may use direct questioning. Asking "how," "where," or "when" is generally more effective than asking "why," which tends to put patients on the defensive. Often replacing the word "Why ..." with "What's the reason ..." will allow for better, less confrontational dialogue. The interviewer must be particularly careful not to disapprove of certain aspects of the patient's story. Different cultures have different mores, and the interviewer must listen without any suggestion of prejudice.

Always treat the patient with respect. Do not contradict or impose your own moral standards on the patient. Knowledge of the patient's social and economic background will make the interview progress more smoothly. Respect all patients regardless

of their age, gender, beliefs, intelligence, educational background, legal status, practices, culture, illness, body habitus, emotional condition, or economic state.

Clinicians must be compassionate and interested in the patient's story. They must create an atmosphere of openness in which the patient feels comfortable and is encouraged to describe the problem. These guidelines set the foundation for effective interviewing.

The interviewer's appearance can influence the success of the interview. Patients have an image of clinicians. Neatness counts; a slovenly interviewer might be considered immature or careless, and his or her competence may be questioned from the start. Surveys of patients indicate that patients prefer medical personnel to dress in white coats and to wear shoes instead of sneakers or sandals.

As a rule, patients like to respond to questions in a way that satisfies the clinician to gain his or her approval. This may represent fear on the part of patients. The clinician should be aware of this phenomenon.

The interviewer must be able to question patients about subjects that may be distressing or embarrassing to the interviewer, the patient, or both. Answers to many routine questions may cause embarrassment to interviewers and leave them speechless. Therefore, there is a tendency to avoid such questions. The interviewer's ability to be open and frank about such topics promotes the likelihood of discussion in those areas.

Very often, patients feel comfortable discussing what an interviewer might consider antisocial behavior. This may include drug addiction, unlawful actions, or sexual behavior. Interviewers must be careful not to pass judgment on such behavior. Should an interviewer pass judgment, the patient may reject him or her as an unsuitable listener. Acceptance, however, indicates to the patient that the interviewer is sensitive. It is important not to imply approval of behavior; this may reinforce behavior that is destructive.

Follow the "rule of five vowels" when conducting an interview. According to this rule, a good interview contains the elements of *audition, evaluation, inquiry, observation, and understanding*. *Audition* reminds the interviewer to listen carefully to the patient's story. *Evaluation* refers to sorting out relevant from irrelevant data and to the importance of the data. *Inquiry* leads the interviewer to probe into significant areas in which more clarification is required. *Observation* refers to the importance of nonverbal communication, regardless of what is said. *Understanding* the patient's concerns and apprehensions enables the interviewer to play a more empathetic role.

Speech Patterns

Speech patterns, referred to as *paralanguage components*, are relevant to the interview. By manipulating the intonation, rate, emphasis, and volume of speech, both the interviewer and the patient can convey significant emotional meaning through their dialogue. By controlling intonation, the interviewer or patient can change the entire meaning of words. Because many of these features are not under conscious control, they may provide an important statement about the patient's personal attributes. These audible parameters are useful in detecting a patient's anxiety or

depression, as well as other affective and emotional states. The interviewer's use of a warm, soft tone is soothing to the patient and enhances the communication.

Body Language

A broad interest in body language has evolved. Body language, technically known as *kinesics*, is a significant aspect of modern communications and relationships. This type of nonverbal communication, in association with spoken language, can provide a more comprehensive picture of the patient's behavior. Your own body language reveals your feelings and meanings to others. Your patient's body language reveals his or her feelings and meanings to you. The sending and receiving of body language signals happens on both conscious and unconscious levels.

It is well known that the interviewer may learn more about the patient from the way the patient tells the story than from the story itself. A patient who moves about in a chair and looks embarrassed is uncomfortable. A frown indicates annoyance or disapproval. Lack of comprehension is indicated by knitted brows. Body language experts generally agree that hands send more signals than any part of the body except for the face. A patient who strikes a fist on a table while talking is dramatically emphasizing what he or she is saying. A patient who slips a wedding band on and off may be ambivalent about his or her marriage. A palm placed over the heart asserts sincerity or credibility. Many people rub or cover their eyes when they refuse to accept something that is pointed out. When patients disapprove of a statement made by the interviewer but restrain themselves from speaking, they may start to remove dust or lint from their clothing.

See <https://www.businessballs.com/self-awareness/body-language/>, which is a wonderful reference about body language.

Six universal emotional facial expressions are recognized around the world. The use and recognition of these expressions is genetically inherited rather than socially conditioned or learned. Although minor variations and differences are found among isolated people, the following basic human emotions are generally used, recognized, and part of humankind's genetic character:

- Happiness
- Sadness
- Fear
- Disgust
- Surprise
- Anger

Figure 1.1 shows some typical emotions. Of interest, Charles Darwin was first to make these claims in his book *The Expressions of the Emotions in Man and Animals*, published in 1872.

Smiling is an important part of body language. Generally, a genuine smile is symmetrical and produces creases around the eyes and mouth, whereas a fake smile tends to be a mouth-only gesture.

Arms act as defensive barriers when across the body, and conversely indicate feelings of openness and security when in open positions, especially combined with open palms. Arms are quite reliable indicators of mood and feeling, especially when interpreted with other body language. For example:

- Crossed arms may indicate defensiveness.
- Crossed arms and crossed legs probably indicate defensiveness.
- Crossed arms, crossed legs, frowning, and clenched fists definitely indicate defensiveness, and probably hostility.

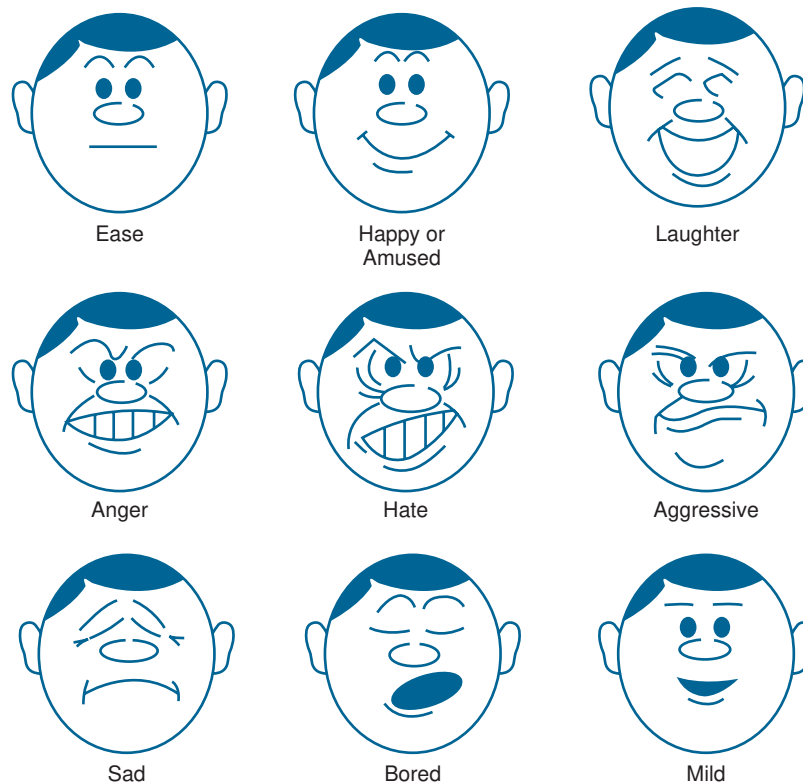


Fig. 1.1 Emotions. From Stephen Babu. Emotions and stress. In Babu S, Gayathri T: *Psychology for Nurses*, 2nd ed, Elsevier, 2018.

Proxemics is the technical term for the personal space aspect of body language. Personal space is defined as the amount of space that people find comfortable between themselves and others. It can be visual, auditory, or kinesthetic, to name a few. Personal space dimensions depend notably on the individual, cultural and living background, the situation, and relationships. Individuals reared in different cultures live in different personal spaces. What is more important is that they are generally unaware of the degree to which the worlds of personal space may differ.

Full interpretation of body language can be made only in the context of the patient's cultural and ethnic background because different cultures may have different standards for nonverbal behavior. The interviewer may use facial expressions to facilitate the interview. An appearance of attention demonstrates an interest in what the patient is describing. Attentiveness on the part of the interviewer is often indicated by leaning slightly forward toward the patient.

Body language in a certain situation might *not* mean the same in another. Occasionally, body language isn't what it seems. For example:

- Someone rubbing his or her eye might have an irritation, rather than being disbelieving or upset.
- Someone with crossed arms might be keeping warm, rather than being defensive.
- Someone scratching his or her nose might actually have an itch, rather than concealing a lie.

A single body language signal isn't as reliable as several signals. As with any system of evidence, groups of body language signals provide much more reliable indication of meaning than one or two signals in isolation. **Avoid interpreting only single signals.** Look for combinations of signals that support an overall conclusion, especially for signals that can mean two or more quite different things. It is important to recognize that body language is not an exact science.

Touch

Touching the patient can also be very useful. Touch can communicate warmth, affection, caring, and understanding. Many factors, including gender and cultural background, as well as the location of the touch, influence the response to the touch. Although there are wide variations within each cultural group, Latinos and people of Mediterranean descent tend to use a great deal of contact, whereas British, Asians, and people from India tend not to use contact. Scandinavians and Anglo-Saxon Americans are in the middle of this range. Be aware, however, that certain religious groups prohibit touching a person of the opposite sex. In general, the older the patient, the more important touch is. Appropriate placement of a hand on a patient's shoulder suggests support. **Never place a hand on a patient's leg or thigh, because this is a threatening touch.** An interviewer who walks with good posture to a patient's bedside can hope to gain the patient's respect and confidence. An interviewer who maintains eye contact with the patient conveys interest in the patient.

Depersonalization of the Doctor–Patient Relationship

In this age of biomedical advancements, a new problem has arisen: a depersonalization of the doctor–patient relationship. Health care providers may spend more time looking at a computer screen than looking at their patient. Clinicians may order computed tomography scans or sonograms without taking the appropriate time to speak with the patient about the tests. Both doctor and patient may feel increasingly neglected, rejected, or abused. Patients may feel dehumanized on admission to the hospital. Many find themselves in a strange environment, lying naked while clothed people march in and out of the room and touch them, tell them what to do, and so forth. They may be apprehensive because they have a problem that their health care provider considers too serious to be treated on an outpatient basis. Their future is filled with uncertainty. A patient admitted to the hospital is stripped of clothing and often of dentures, glasses, hearing aids, and other personal belongings. A name tag is placed on the patient's wrist, and he or she becomes “the patient in 9W-310.” This lowers the morale of the patient even more. At the same time, clinicians may be pressed for time, overworked, and sometimes unable to cope with everyday pressures. They may be irritable and pay inadequate attention to the patient's story. They may eventually come to rely on the technical results and reports. This failure to communicate weakens the doctor–patient relationship.

Inexperienced interviewers not only must learn about the patient's problems but also must gain insight into their *own* feelings, attitudes, and vulnerabilities. Such introspection enhances the self-image of the interviewer and results in the interviewer's being perceived by the patient as a more careful and compassionate human being to whom the patient can turn in a time of crisis. This is discussed further in Chapter 5, Mitigating Racism and Bias in Clinical Medicine.

A good interviewing session determines what the patients comprehend about their own health problems. What do the *patients* think is wrong with them? Do not accept merely the diagnosis. Inquire specifically as to what the patient thinks is happening. What kind of effect does the illness have on the patient's work, family, or financial situation? Is there a feeling of loss of control? Does the patient feel guilt about the illness? Does the patient think that he or she will die? By pondering these questions, you can learn much about patients, and patients will realize that you are interested in them as whole persons, not merely as statistics among the hospital admissions.

Medical Malpractice and Communication Skills

The literature indicates that malpractice suits have increased at an alarming rate. A good doctor–patient relationship is probably the most important factor in avoiding malpractice claims. As mentioned previously, most malpractice litigation is the result of a deterioration in communication and of patient dissatisfaction rather than of true medical negligence. The patient who is likely to sue has become dissatisfied with the clinician and may have lost respect for him or her. From the patient's point of view, the most serious barriers to a good relationship are the

clinician's lack of time; seeming lack of concern for the patient's problem; inability to be reached; attitude of superiority, arrogance, or indifference; and failure to inform the patient adequately about his or her illness. Failure to discuss the patient's illness and treatment in understandable terms is viewed as a rejection by the patient. In addition, the congeniality and competence of a physician's office staff can go a long way toward avoiding malpractice suits. Physicians who have never been sued orient their patients to the process of the visit, use facilitative comments, ask the patient for opinions, use active learning, use humor and laughter, and have longer visits. A doctor–patient relationship based on honesty and understanding is thus recognized as essential for good medical practice and the well-being of the patient.

It is sometimes difficult for a novice interviewer to remember that there is no need to try to make a diagnosis out of every bit of information obtained from the interview. Accept all the clues and then work with them later when trying to establish a diagnosis.

If during the interview you cannot answer a question, do not. You can always act as the patient's advocate; listen to the question and then find someone who can provide an appropriate answer.

Doctor–Patient Engagement

A very important task of communication is to engage the patient. A helpful way of building rapport with a patient is to be curious about the person as a whole. Ask, “Before we begin, tell me something about yourself.” When the patient returns, mention something personal that you learned from a previous visit—for instance, “How was your trip to Seattle to see your son?” Another part of engagement is to determine the patient's expectations from the visit; for instance, ask, “What are you hoping to accomplish today?” At the conclusion of the visit, ask “Is there anything else you are concerned about?” If the patient has several problems, it is acceptable to say, “We might need to discuss that problem at another visit. I want to be certain that we completely evaluate your main concern today.”

Privacy Standards

On April 14, 2003, the first federal privacy standards were put in place to protect the medical records and other health information of patients. The U.S. Congress asked the Department of Health and Human Services to issue privacy protection as part of the Health Insurance Portability and Accountability Act (HIPAA) of 1996. HIPAA regulations include provisions designed to encourage electronic transactions and to safeguard the security and confidentiality of health information. The final regulations cover health plans, health care clearinghouses, and health care providers who conduct financial and administrative transactions electronically. In short, these regulations regarding patient confidentiality limit the ways in which health care providers, health plans, pharmacies, hospitals, clinics, and other entities can use patients' personal medical information. These regulations ensure that medical records and other identifiable health information, whether on paper, in computers, or orally communicated, are protected. See [Chapter 30](#), Clinical Ethics and Professionalism,

and <https://www.hhs.gov/hipaa/index.html> for further information about privacy standards.

In summary, the medical interview is a blend of the cognitive and technical skills of the interviewer and the feelings and personalities of both the patient and the interviewer. The interview should be flexible and spontaneous and not interrogative. When used correctly, it is a powerful diagnostic tool.

SYMPTOMS AND SIGNS

The clinician must be able to elicit descriptions of, and recognize, a wide variety of symptoms and signs. *Symptom* refers to what the patient feels. Symptoms are described by the patient to clarify the nature of the illness. Shortness of breath, chest pain, nausea, diarrhea, and double vision are all symptoms. These labels help the patient describe the discomfort or distress that he or she is experiencing. Symptoms are not absolute; they are influenced by culture, intelligence, and socioeconomic background. As an example, consider the symptom of pain. Patients have different thresholds of pain.

Constitutional symptoms are symptoms that commonly occur with problems in any of the body systems, such as fever, chills, weight loss, or excessive sweating.

A *sign* is what the examiner finds. Signs can be observed and quantified. Certain signs are also symptoms. For example, a patient may describe episodes of wheezing; this is a symptom. In addition, an examiner may hear wheezing during a patient's physical examination; this is a sign.

The major task of the interviewer is to sort out the symptoms and signs associated with a specific illness. A major advantage that the seasoned interviewer has over the novice is a better understanding of the pathophysiologic processes of disease states. The novice operates under the limitation of not knowing all the signs and symptoms of the associated diseases. With experience and education, the novice will recognize the combination of symptoms and signs as they relate to the underlying illness. For any given disease, certain symptoms and signs tend to occur together. When there is only an isolated symptom, the interviewer must be careful in making a definitive assessment.

CONDUCTING AN INTERVIEW

Getting Started and Introduction

The diagnostic process begins at the first moment of meeting. You should be dressed appropriately, wearing a white coat with your name badge identifying you as a member of the health care team. Patients expect this standard of professional attire. Casual attire may signify condescension.

It is important to assess gender identity at the start of a patient encounter. This prevents assumptions of a patient's gender identity, mitigates potential biases, and normalizes discussions around gender identity for the patient. It is recommended that clinicians call their patient by first and last name until gender identity and preferred name and pronouns are established. This prevents using a salutation that does not align with a patient's gender identity (i.e., calling a patient who identifies as female

“Mr. Smith”). [Chapter 5](#), Mitigating Racism and Bias in Clinical Medicine, discusses this topic in more detail.

Introduce yourself, greet the patient by name, make eye contact, shake hands firmly, and smile. You may wish to say something like:

“Good morning, I’m Mary Jones; are you Francis Smith? [Pause and wait for answer.] I am a medical student at the XXX School of Medicine. I’ve been asked to interview and examine you in the next hour.”

or

“Good morning, I’m Mary Jones; please tell me how to pronounce your name? [Pause and wait for answer.] I am a medical student at the XXX School of Medicine. I’ve been asked to interview and examine you in the next hour.”

or

“Good morning, I’m Mary Jones, are you Francis Macaffy? Did I pronounce your name correctly? [Pause and wait for answer.] I am a medical student at the XXX School of Medicine. I’ve been asked to interview and examine you in the next hour.”

At the start of the encounter, ask the patient to clarify their gender identity and establish the patient’s preferred name and pronouns. A simple way to ask includes:

“I don’t like to assume anything about my patients, so I always start my initial encounters by asking how you would like to be addressed.”

It is appropriate to address patients by their preferred titles—“Mr.,” “Mrs.,” “Miss,” “Dr.,” “Ms.”—unless they are adolescents or younger. A formal address clarifies the professional nature of the interview. For a woman, the default always is “Ms.” unless you know positively that a woman wishes to be addressed as “Miss” or “Mrs.” Name substitutes such as “dear,” “honey,” or “grandpa” are *not* to be used. Also, avoid using “Sir” or “Ma’am.” “Ma’am” is mostly obsolete, with a few exceptions. It is commonly used to address any woman in the southern or southwestern areas of the United States. Use the patient’s name. If you are not sure about the pronunciation, ask the patient how to say his or her name correctly.

The patient may elect to use the interviewer’s first name. It is not correct for an interviewer to address the patient by his or her first name, because this changes the professional nature of this first meeting.

Prior to establishing the patient’s sexual orientation and practices, clinicians should use inclusive terminology that avoids assumptions. For example, use terms such as “partner,” as opposed to “husband or wife,” until the patient’s preferred terminology is established. Much more about this important subject is discussed in [Chapter 5](#), Mitigating Racism and Bias in Clinical Medicine.

The term *student doctor* should generally be avoided because patients may not actually understand this term; they may hear only the word *doctor*. The introduction also includes a statement of the purpose of the visit. The welcoming handshake can serve to relax the patient. It establishes a contract between the patient and the health care provider. Of course, we need to remember cultural and religious reasons for not shaking hands.

If the patient is having a meal, ask whether you can return when he or she has finished eating. If the patient is using a urinal or bedpan, allow privacy. Do not begin an interview in this setting. If the patient has a visitor, you may inquire whether the *patient* wishes the visitor to stay. Do not assume that the visitor is a family member. Allow the patient to introduce the person to you.

The interview can be helped or hindered by the physical setting in which the interview is conducted. If possible, the interview should take place in a quiet, well-lit room. Unfortunately, most hospital rooms do not afford such luxury. The teaching hospital with four patients in a room is rarely conducive to good human interactions. Therefore, make the best of the existing environment. The curtains should be drawn around the patient’s bed to create privacy and minimize distractions. You may request that the volume of neighboring patients’ radios or televisions be turned down. Lights and window shades can be adjusted to eliminate excessive glare or shade. Arrange the patient’s bed light so that the patient does not feel as if he or she is under interrogation.

You should make the patient as comfortable as possible. If the patient’s eyeglasses, hearing aids, or dentures were removed, ask whether the patient would like to use them. It may be useful to use your stethoscope as a hearing aid for hearing-impaired patients. The ear tips are placed in the ears of the patient, and the diaphragm serves as a microphone. The patient may be in a chair or lying in bed. Allow the patient the choice of position. This makes the patient feel that you are interested and concerned, and it allows the patient some control over the interview. If the patient is in bed, it is a nice gesture to ask whether the pillows should be arranged to make him or her more comfortable before the interview begins.

To Stand or to Sit?

Normally, the interviewer and patient should be seated comfortably at the same level. Often, it is useful to have the patient sitting even higher than the interviewer to give the patient the visual advantage. In this position, the patient may find it easier to open up to questions. If the patient is seated on the examination table, the interviewer should sit on the stool or in a chair, slightly off center, facing the patient to make good eye contact. Sitting down while speaking to the patient conveys the unspoken understanding that the interviewer is not in a rush and has time to spend with the patient. Sitting on the bed is too familiar and not appropriate. It is generally preferred that the interviewer sit at a distance of about 3 to 4 feet from the patient. Distances greater than 5 feet are impersonal, and distances closer than 3 feet interfere with the patient’s “private space.” The interviewer should sit in a relaxed position without crossing arms across the chest. The crossed-arms position is not appropriate because this body language projects an attitude of superiority and may

interfere with the progress of the interview. If the patient is lying on the examination table, it is preferable for the interviewer to stand, as it may be uncomfortable for the patient to turn his/her head to speak to the interviewer.

If the patient is bedridden, raise the head of the bed, or ask the patient to sit so that your eyes and the patient's eyes are at the same level. Avoid standing directly over the patient. Try to lower the bed rail so that it does not act as a barrier to communication and remember to put it back up at the conclusion of the session.

Regardless of whether the patient is sitting in a chair or lying in bed, make sure that he or she is appropriately draped with a sheet or robe.

The Opening Statement

Once the introduction has been made, the interview may begin with a general, open-ended question, such as "How may I help you?" or "What medical problem has brought you to the hospital?" or "I understand you are having... Tell me more about the problem." This type of opening remark allows the patient to speak first. The interviewer can then determine the patient's *chief complaint*: the problem that is regarded as paramount. If the patient asks, "Haven't you read my records?," it is correct to say, "No, I've been asked to interview you without any prior information." Alternatively, the interviewer could say, "I would like to hear your story in your own words."

Patients can determine very quickly if you are friendly and personally interested in them. You may want to establish rapport by asking them something about themselves before you begin diagnostic questioning. Take a few minutes to get to know the patient. If the patient is not acutely ill, you may want to say, "Before I find out about your headache, tell me a little about yourself." This technique puts the patient at ease and encourages him or her to start talking. The patient usually talks about happy things in his or her life rather than the medical problems. It also conveys your interest in the patient as a person, not just as a vehicle of disease.

The Narrative

Novice interviewers are often worried about remembering the patient's history. However, it is poor form to write extensive notes during the interview. Attention should be focused more on what the person is saying and less on the written word. In addition, by taking notes, the interviewer cannot observe the facial expressions and body language that are so important to the patient's story. A pad of paper may be used to jot down important dates or names during the session.

After the introductory question, the interviewer should proceed to questions related to the chief complaint. These should naturally evolve into questions related to the other formal parts of the medical history, such as the present illness, past illnesses, social and family history, and review of body systems. Patients should largely be allowed to conduct the narrative in their own way. The interviewer must select certain aspects that require further details and guide the patient toward them. Overdirection is to be avoided because this stifles the interview and prevents important points from being clarified.

Small talk is a useful method of enhancing the narrative. Small talk, also known as "chit-chat," is neither random nor pointless, and studies in conversation analysis indicate that it is actually useful in communication. It has been shown that during conversations, the individual who tells a humorous anecdote is the one who is in control. For example, if an interviewer interjects a humorous remark during an interview and the patient laughs, the interviewer is in control of the conversation. If the patient does not laugh, the patient may take control.

Be alert when a patient says, "Let me ask you a hypothetical question" or "I have a friend with ... ; what do you think about ... ?" In each case, the question is probably related to the patient's own concerns.

A patient often uses utterances such as "uh," "ah," and "well" to avoid unpleasant topics. It is natural for a patient to delay talking about an unpleasant situation or condition. Pauses between words, as well as the use of these words, provide a means for the patient to put off discussing a painful subject.

When patients use vague terms such as "often," "somewhat," "a little," "fair," "reasonably well," "sometimes," "rarely," or "average," the interviewer must always ask for clarification: "What does *sometimes* mean?" "How often is *often*?" Try to quantify a qualitative adverb. Even terms such as "dizzy," "weak," "diarrhea," and "tired" necessitate explanation. Precise communication is always desirable, and these terms, among others, have significant variations in meaning.

The interviewer should be alert for subtle clues from the patient to guide the interview further. There are a variety of techniques to encourage and sustain the narrative. These guidelines consist of verbal and nonverbal facilitation, reflection, confrontation, interpretation, and directed questioning. These techniques are discussed later in this chapter.

The Closing

It is important that the interviewer pace the interview so that adequate time is left for the patient to ask questions and for the physical examination. About 5 minutes before the end of the interview, the interviewer should begin to summarize the important issues that were discussed.

By the conclusion of the interview, the interviewer should have a clear impression of the reason why the patient sought medical help, the history of the present illness, the patient's past medical history, and the patient's social and economic position. At this time, the interviewer may wish to say, "You've been very helpful. I am going to take a few notes." If any part of the history needs clarification, this is the time to obtain it. The interviewer may wish to summarize for the patient the most important parts of the history to help illuminate the important points made.

If the patient asks for an opinion, it is prudent for the novice interviewer to answer, "I am a medical student. I think it would be best to ask your doctor that question." You have not provided the patient with the answer that he or she was seeking; however, you have not jeopardized the existing doctor-patient relationship by possibly giving the wrong information or a different opinion.

At the conclusion, it is polite to encourage the patient to discuss any additional problems or to ask any questions: "Is there anything else you would like to tell me that I have not already

asked?” “Are there any questions you might like to ask?” Usually, all possible avenues of discussion have been exhausted, but these remarks allow the patient the “final say.”

Thus, a good closure should consist of the following four parts:

- Provide a summary.
- Provide an opportunity for questions. Does the patient have any questions, and have you answered them?
- Provide reassurance only as appropriate. You could say, “It’s a good thing that you came in today; I will do everything possible to help you.” Patients like to know that they did the right thing to seek medical attention. Do not give false reassurances.
- What happens next? Instruct the patient to get dressed and leave; wait for the nurse to draw blood; wait for the technician to do an electrocardiogram; or other activity.

BASIC INTERVIEWING TECHNIQUES

The successful interview is smooth and spontaneous. The interviewer must be aware of subtleties and be able to pick up on these clues. The successful interviewer sustains the interview. Several techniques can be used to encourage someone to continue speaking, and this section discusses those interviewing techniques. Each technique has its limitations, and not all of them are used in every interview.

Questioning

The secret of effective interviewing lies in the art of questioning. The wording of the question is often less important than the tone of voice used to ask it. In general, questions that stimulate the patient to talk freely are preferred.

Open-Ended Questions

Open-ended questions are used to ask the patient for general information. This type of question is most useful in beginning the interview or for changing the topic to be discussed. An open-ended question allows the patient to tell his or her story spontaneously and does not presuppose a specific answer. It can be useful to allow the patient to “ramble on.” An open-ended question is a question that cannot be answered by saying “Yes” or “No.” Examples of open-ended questions are the following:

- “How may I help you today?”
- “What kind of medical problem are you having?”
- “How has your health been?”
- “Are you having stomach pain? Tell me about it.”
- “Tell me about your headache.”
- “How was your health before your heart attack?”
- “Can you describe your feelings when you get the pain?”
- “I’m curious about...”

Too much rambling, however, must be controlled by the interviewer in a sensitive but firm manner. This freedom of speech should obviously be avoided with overtalkative patients, whereas it should be used often with silent patients.

Direct Questions

After a period of open-ended questioning, the interviewer should direct the attention to specific facts learned during the open-ended questioning period. These *direct questions* serve to clarify and

add detail to the story. This type of question gives the patient little room for explanation or qualification. A direct question can usually be answered in one word or a brief sentence; for example:

- “Where does it hurt?”
- “When do you get the burning sensation?”
- “How do you compare this pain with your ulcer pain?”

Care must be taken to avoid asking direct questions in a manner that might bias the response.

Symptoms are classically characterized according to several dimensions or elements, including *bodily location*, *onset* (and *chronology*), *precipitating* (and *palliating*) *factors*, *quality*, *radiation*, *severity*, *temporal*, and *associated manifestations*. These elements may be used as a framework to clarify the illness. Examples of appropriate questions follow.

Bodily Location

- “Where in your back do you feel pain?”
- “Can you tell me where you feel the pain?”
- “Do you feel it anywhere else?”

Onset (and Chronology)

- “When did you first notice it?”
- “How long did it last?”
- “Have you had the pain since that time?”
- “Then what happened?”
- “Have you noticed that it is worse during your menstrual period?”

Precipitating Factors

- “What makes it worse?”
- “What seems to bring on the pain?”
- “Have you noticed that it occurs at a certain time of day?”
- “Is there anything else besides exercise that makes it worse?”
- “Does exercise increase the shortness of breath?”
- “Does stress precipitate the pain?”

Palliating Factors

- “What do you do to get more comfortable?”
- “Does lying quietly in bed help you?”
- “Does rest help?”
- “Does aspirin help the headache?”
- “Does eating make it better?”

Quality (Looking for Descriptors of Pain)

- “What does it feel like?”
- “Can you describe the pain?”
- “What do you mean by a ‘sticking pain’?”
- “Was it sharp (pause), dull (pause), or aching?”
- “When you get the pain, is it steady, or does it change?”

Radiation

- “When you get the pain in your chest, do you feel it in any other part of your body at the same time?”
- “When you experience your abdominal pain, do you have pain in any other area of your body?”

Severity (or Quantity)

- “On a scale from 1 to 10, with 10 the worst pain you can imagine, how would you rate this pain?”

“How has the pain affected your lifestyle?”¹
 “What do you mean by ‘a lot’?”
 “How many sanitary napkins do you use?”
 “How many times did you vomit?”
 “What kind of effect does the pain have on your work?”
 “How does the pain compare with the time you broke your leg?”
 “Can you fall asleep with the pain?”

Temporal

“Does it ever occur at rest?”
 “Do you ever get the pain when you are emotionally upset?”
 “Where were you when it occurred?”
 “Does the pain occur at any specific time of your menstrual cycle?”
 “Does it awaken you from sleep?”
 “Have you noticed any relationship of the pain to eating? Does it occur before meals, while eating, or after meals?”

Associated Manifestations

“Do you have any other symptoms?”
 “Do you ever have nausea with the pain?”
 “Have you noticed other changes that happen when you start to sweat?”
 “Before you get the headache, do you ever experience a strange taste or smell?”

The mnemonic O-P-Q-R-S-T, which stands for onset (chronology), precipitating (or palliative), quality, radiation, severity, and temporal, is useful in helping the interviewer remember these important dimensions of a symptom. The *setting* is also important to determine. Did the symptom occur when exposed to certain environmental conditions, during specific activities, during emotional periods, or under other circumstances?

Question Types to Avoid

There are several types of questions that should be avoided. One is the *suggestive* question, which provides the answer to the question. For example:

“Do you feel the pain in your left arm when you get it in your chest?”

A better way to ask the same question would be as follows:
 “When you get the pain in your chest, do you notice it anywhere else?”

The *why* question carries tones of accusation. This type of question almost always asks a patient to account for his or her behavior and tends to put the patient on the defensive; for example:

“Why did you stop taking the medication?”

“Why did you wait so long to call me?”

The answers to such questions, however, are important. As mentioned previously, try rephrasing, such as “What is the reason . . . ?” The “why” question is useful in daily life with friends and family, with whom you have a relationship different from that with your patients; do not use it with patients.

The *multiple* or *rapid-fire* question should also be avoided. In this type of question, there is more than one point of inquiry.

Don't barrage the patient with a list of questions. The patient can easily get confused and respond incorrectly, answering no part of the question adequately. The patient may answer only the last inquiry heard; for example:

“Have you had night sweats, fever, or chills?”

“How many brothers and sisters do you have, and has any one of them ever had asthma, heart disease, pneumonia, or tuberculosis?”

The other problem with multiple questions is that you may think you have asked the question, but the patient has answered only part of it. For example, in the first inquiry just mentioned, the patient may answer “No” to indicate “no chills,” but if you ask about the symptoms separately, you might find out that the patient does have a history of night sweats.

Questions should be concise and easily understandable. The context should be free of *medical jargon*. Frequently, novice interviewers try to use their new medical vocabularies to impress their patients. They may sometimes respond to the patient with technical terms, leaving the patient feeling confused or put down. By using medical jargon, the interviewer distances himself or herself from the patient. This use of technical medical terms is sometimes called *doctoresse* or *medicalese*. For example:

“You seem to have a homonymous hemianopsia.”

“Have you ever had a myocardial infarction?”

“We perform Papanicolaou smears to check for cervical carcinoma *in situ*.”

“I am going to order a CBC with differential.”

“The MUGA scan shows that you have congestive heart failure.”

Medical terminology, as a rule, should not be used in conversations with patients. Technical terms scare patients who are unfamiliar with them. Every medical and nursing student understands the term *heart failure*, but a patient might interpret it as failure of the heart to pump—that is, cardiac standstill, or death. Although patients should be given only as much information as they can handle, adequate explanations must always be provided. A partial explanation can leave the patient confused and fearful. Conversely, patients may try to use medical terms themselves. Do not take these terms at face value; ask patients to describe what they mean. For example, some patients may use “heart attack” to describe angina, “stroke” to describe a transient ischemic attack, “spells” to describe dizziness, or “water pills” or “heart pills” when referring to their medication.

A *leading* or *biased* question carries a suggestion of the kind of response for which the interviewer is looking. For example, “You haven't used any recreational drugs, have you?” suggests that the interviewer disapproves of the patient's use of drugs. If the patient has used recreational drugs, he or she may not admit it under this line of questioning. Instead, ask, “Do you use recreational drugs?” Questions should be asked in the positive or affirmative mode, not the negative. Questions asked in the affirmative or positive mode convey a nonjudgmental approach and encourage the patient to answer more candidly without the fear of being blamed for an action.

It is also incorrect to ask, “You don't have diabetes, do you?” or “You haven't been wheezing, have you?” Instead, the interviewer should ask in the positive affirmative mode, “Do you have diabetes?” or “Have you been wheezing?” A leading question may also invite a particular answer. For example, “Did you notice that the pain came on after you vomited?”

¹This is probably a better question than the first question since it eliminates cultural differences in describing pain.

In addition to avoiding certain types of questions, the interviewer should avoid certain situations. For example, patients may respond to a question in an unexpected manner, resulting in a period of unexpected silence on the part of the interviewer. This “stumped silence” can be interpreted by the patient in a variety of ways. The interviewer must be able to respond quickly in such instances, even if it means broaching another topic.

If a patient suggests that a test not be performed, perhaps because of an underlying fear of the test, the interviewer should never respond by stating, “I’m the doctor. I’ll make the decisions.” The interviewer should recognize the anxiety and handle the response from that point of view. He or she should ask the patient, “What are your concerns about taking the test?”

If a patient appears overweight, ask first whether there has been any change in the patient’s weight before asking whether he or she has tried to lose weight. The patient may have lost 30 pounds already but is still overweight. Never refer to an overweight person as obese.

The word “change” is your best friend in interviewing! Ask “Has there been a change in weight”; “a change in appetite”; “a change in your menstrual cycle”; “a change in your mood”; “a change in your diet”; “a change in your skin”; “a change in your bowel movements”; etc.

Finally, assume nothing about patients’ knowledge of their disease, their sexual orientation or experiences, their education, their family, or their knowledge of illness in general. People come from different backgrounds and have different beliefs based on culture, religion, and experience. It is incorrect to assume that if a medicine has been prescribed for an illness, the patient is taking it correctly or takes it at all. Do not even presume that a patient is happy or sad about an event in his or her life or in the lives of friends and family. It is much safer to ask questions in the following manner:

“How do you feel about it?”

“What do you know about ... ?”

“How often do you take this medication?”

“How do you remember to take this medication?”

“How does that make you feel?”

Silence

Silence is most useful with silent patients. Silence should never be used with overtalkative patients, because letting them talk continuously would not allow the interviewer to control the interview. This difficult type of communication, when used correctly, can indicate interest and support. Silence on the part of the patient can be related to hostility, shyness, or embarrassment. The interviewer should remain silent, maintaining direct eye contact and attentiveness. The interviewer may lean forward and even nod. After no more than 2 minutes of silence, the interviewer may say,

“What are you thinking about?”

“You were saying ... ?”

“These things are hard to talk about.”

“You were about to say ... ?”

If the patient remains silent, another method of sustaining the interview must be chosen.

The interviewer must use silence when the patient becomes overwhelmed by emotion. This act allows the patient to release

some of the tension evoked by the history and indicates to the patient that it is acceptable to cry. Handing the patient a box of tissues is a supportive gesture. It is inappropriate for the interviewer to say, “Don’t cry” or “Pull yourself together” because these statements imply that the patient is wasting the interviewer’s time or that it is shameful to show emotions.

It is important to use silence correctly. An interviewer who remains silent, becomes fidgety, reviews notes, or makes a facial expression of evaluation will inhibit the patient. The patient may perceive the frequent use of silence by the interviewer as aloofness or a lack of knowledge.

Facilitation

Facilitation is a technique of verbal or nonverbal communication that encourages a patient to continue speaking but does not direct him or her to a topic. A common verbal facilitation is “Uh huh.” Other examples of verbal facilitations include “Go on,” “Tell me more about that,” “And then?” and “Hmm.”

An important nonverbal facilitation is nodding the head or making a hand gesture to continue. Moving toward the patient connotes interest. Be careful not to nod too much, as this may convey approval in situations in which approval may not be intended.

Often, a puzzled expression can be used as a nonverbal facilitation to indicate, “I don’t understand.”

Confrontation

Confrontation is a response based on an observation by the interviewer that points out something striking about the patient’s behavior or previous statement. This interviewing technique directs the patient’s attention to something of which he or she may or may not be aware. The confrontation may be either a statement or a question; for example:

“You look upset.”

“Is there any reason why you always look away when you talk to me?”

“You’re angry.”

“You sound uncomfortable about it.”

“What is the reason you are not answering my questions?”

“You look as though you are going to cry.”

Confrontation is particularly useful in encouraging the patient to continue the narrative when there are subtle clues given. By confronting the patient, the interviewer may enable the patient to explain the problem further. Confrontation is also useful to clarify discrepancies in the history.

Confrontation must be used with care; excessive use is considered impolite and overbearing. If correctly used, however, confrontation can be a powerful technique. Suppose a patient is describing a symptom of chest pain. By observing the patient, you notice that there are now tears in the patient’s eyes. By saying sympathetically, “You look very upset,” you are encouraging the patient to express emotions.

Interpretation

Interpretation is a type of confrontation that is based on inference rather than on observation. The interviewer interprets the patient’s behavior, encouraging the patient to observe his or her own role in the problem. The interviewer must fully understand

the clues the patient has given before he or she can offer an interpretation. The interviewer must look for signs of underlying fear or anxiety that may be indicated by other symptoms, such as recurrent pain, dizziness, headaches, or weakness. Once these underlying fears have been discovered, the patient may be led to recognize the inciting event during future interviews. Interpretation frequently opens previously unrecognized lines of communication. Examples are the following:

"You seem to be quite happy about that."

"Sounds as if you're scared."

"Are you afraid you've done something wrong?"

"I wonder whether there's a relation between your dizziness and arguments with your wife."

Interpretation can demonstrate support and understanding if used correctly.

Reflection

Reflection is a response that mirrors or echoes that which has just been expressed by the patient. It encourages the patient to expound further on details of the statement. The tone of voice is important in reflection. The intonation of the words may indicate entirely different meanings. For example:

Patient: *"I was so sick that I haven't worked since October 2016."*

Response: *"Haven't worked since 2016?"*

In this example, the emphasis should be on "2016." This asks the patient to describe the conditions that did not allow him or her to work. If the emphasis is incorrectly placed on "worked," the interviewer immediately puts the patient on the defensive, implying, "What did you do with your time?" Although often very useful, reflection can hamper the progress of an interview if used improperly.

Support

Support is a response that indicates an interest in or an understanding of the patient. Supportive remarks promote a feeling of security in the doctor–patient relationship. A supportive response might be "I understand." An important time to use support is immediately after a patient has expressed strong feelings. The use of support when a patient suddenly begins to cry strengthens the doctor–patient relationship. Two important subgroups of support are *reassurance* and *empathy*.

Reassurance

Reassurance is a response that conveys to the patient that the interviewer understands what has been expressed. It may also indicate that the interviewer approves of something the patient has done or thought. It can be a powerful tool, but false reassurance can be devastating. Good examples of reassurance are the following:

"That's wonderful! I'm delighted that you started in the rehabilitation program at the hospital."

"You're improving steadily."

"That's great that you were able to stop smoking."

"It's understandable why you are so upset after your accident."

"It's good you came in today. We will do everything to help you."

The use of reassurance is particularly helpful when the patient seems upset or frightened. Reassurance must always be based

on fact. Reassurance is very important because it tells the patient that his or her fears are understandable and real.

False reassurances restore a patient's confidence but ignore the reality of the situation. Telling a patient that his or her "surgery will be successful" clearly discounts the known morbidity and mortality rates associated with it. The patient *wants* to hear such reassurance, but it may be false.

Never tell a patient to relax or calm down! Patients are often nervous and are entitled to be upset or worried. It is inappropriate to tell a patient how they should feel! Try to instill confidence in your patient instead of trying to talk the patient out of being nervous. These comments may be counterintuitive. Telling a patient to be calm may send the message that *you* are uncomfortable with their problem or that *you* do not really understand the problem's severity.

Empathy

Empathy is a response that recognizes the patient's feeling and does not criticize it. It is understanding, *not* an emotional state of sympathy. You try to put yourself in the shoes of the patient. The empathic response is saying, "I hear what you're saying." The use of empathy can strengthen the doctor–patient relationship and allow the interview to flow smoothly. Studies have shown that high levels of empathy have been linked to better patient outcomes!²

Examples of empathy are the following:

"I'm sure your daughter's problem has given you much anxiety."

"The death of someone so close to you is hard to take."

"I guess this has been kind of a silent fear all your life."

"You must have been very sad."

"I know it's not easy for you. I'm delighted to see that you're trying to eat everything on your tray."

"That's wonderful that you have stopped smoking."

The last two examples illustrate an important point: it is critical to give credit to patients to encourage *their* role in their own improvement.

It is impossible, however, to put yourself in the shoes of the patient because of a difference in age, gender, life experiences, education, culture, religion, and other factors. An extremely empathic statement, which sounds counterintuitive, is "It's impossible for me to fully understand how you are feeling, but how can I help you? How can we work together to get past this difficult problem?"

Empathetic responses can also be nonverbal. An understanding nod is an empathetic response. In certain circumstances, placing a hand on the shoulder of an upset patient communicates support. The interviewer conveys that he or she understands and appreciates how the patient feels without actually showing any emotion.

Transitions

Transitional statements are used as guides to allow the patient to understand better the logic of the interviewer's questioning

²Riess H. The science of empathy. In: Frankel RM, ed. *J Patient Exp*. 2017;4(2):74–77. doi:10.1177/2374373517699267.

and for the interview to flow more smoothly from one topic to another. An example of a transitional statement might be, after learning about the current medical problem, the interviewer's statement, "Now I am going to ask you some questions about your health history." Other examples while the history is documented might be, "I am now going to ask you some questions about your family," and "Now we are going to talk about your lifestyle and your activities in a typical day."

Usually, the line of questioning being pursued is obvious to the patient, so transitions are not always needed. Transitioning to the sexual history, however, often requires a transitional statement. As an example, a transitional statement such as "I am now going to ask you some routine questions about your sexual health" may bridge to this area comfortably for both the patient and interviewer. An alternative transitional statement might be, "To determine your risk for several diseases, I am now going to ask you some questions about your sexual health [or sexual activity, or sexual habits]." Avoid phrases such as "personal habits," "personal life," or "personal history," because these expressions send the message of what the interviewer considers these habits to be ("personal"); the patient may be more open to discuss this area and may not consider it "personal." It is better to ask about "sexual habits," "sexual activity," or "sexual health" rather than "sexual life." Other words to be avoided include "like to," "want to," "need to," or "have to" (e.g., "I would now like to ask you some questions about your sexual habits" or "I now have to ask you some questions about your sexual habits"). As will be discussed in subsequent chapters, always use specific language. Refer to the genitalia with explicit terms such as vagina, penis, uterus, and so on; do not use the term "private parts."

FORMAT OF THE HISTORY

The information obtained by the interviewer is organized into a comprehensive statement about the patient's health. Traditionally, the history has been obtained by using a *disease-oriented* approach emphasizing the disease process that prompted the patient to seek medical advice. For example, a patient may present with shortness of breath; the interview would be conducted to ascertain the pathologic causes of the shortness of breath.

An alternative approach to obtaining the history is a *patient-oriented* one. This entails evaluating the patient and his or her problems more holistically. By using this approach, the health care provider can elicit a more complete history, keeping in mind that other symptoms (e.g., pain from arthritis, weakness, depression, anxiety) may affect the patient's shortness of breath. For example, if a patient has arthritis and cannot walk, shortness of breath may manifest as less severe than if the patient were able to walk and experienced shortness of breath with minimal activity. In this way, the entire patient is taken into account.

The major traditional sections of the history, with some patient-oriented changes, are as follows:

- Source and reliability
- Chief complaint
- History of the present illness and debilitating symptoms
- Past medical history
- Health maintenance
- Occupational and environmental history
- Biographic information
- Family history
- Psychosocial and spiritual history
- Sexual, reproductive, and gynecologic history
- Review of systems

Source and Reliability

The source and reliability section contains identifying data—source of the history, and, if appropriate, the source of the referral. The identifying data consist of the age and gender of the patient. The source of information is usually the patient. If the patient requires a translator, the source is the patient and the translator. If family members help in the interview, their names should be included in a single-sentence statement. The source could also be a medical record.

The reliability of the interview should be assessed. Is the patient competent to provide a history? Often, determination of orientation to person, time, and place (discussed in [Chapter 21](#), The Nervous System) is done early in the interview to assess the cognitive function of the person. If the patient is not oriented to person, time, and place, a statement such as, "The patient is a 76-year-old white man with a moderate cognitive impairment as manifested by a lack of orientation to person, time, and place who presents with..." This indicates that the rest of the history needs to be taken with "a grain of salt" or that some or all the history that follows may be inaccurate. The date and time of the interaction is also vital for the record.

Chief Complaint

The chief complaint is the patient's brief statement explaining why he or she sought medical attention. **Try to fully quote the patient's own words.** It is the answer to the question, "What is the medical problem that brought you to the hospital?" or "How can I help you today?" The chief complaint might then be:

"I've been having chest pain for the past 5 hours."

"I have had terrible nausea and vomiting for 2 days."

"I've got a splitting headache for the last few days."

"I'm here for my routine examination for school."

"I just don't feel well."

Patients sometimes use medical terms. The interviewer must ask the patient to define such terms to ascertain what the patient means by them.

History of Present Illness and Debilitating Symptoms

The *history of the present illness* refers to the recent changes in health that led the patient to seek medical attention at this time. It describes the information relevant to the chief complaint. It should answer the questions of *what, when, how, where, which, who, and why*. It provides a clear, chronologic explanation of the patient's symptoms accounting for the reason the patient has sought medical attention.

Chronology is the most practical framework for organizing the history. It enables the interviewer to comprehend the sequential development of the underlying pathologic process. In this

section, the interviewer gathers all the necessary information, starting with the first symptoms of the present illness and following its progression to the present day. To establish the beginning of the present illness, it is important to verify that the patient was entirely well before the earliest symptom. Patients often do not remember when a symptom developed. If the patient is uncertain about the presence of a symptom at a certain time, the interviewer may be able to relate it to an important or memorable event, for example, "Did you have the pain during your summer vacation?" In this part of the interview, mainly open-ended questions are asked because these afford the patient the greatest opportunity to describe the history.

In the patient-centered evaluation, the interviewer must determine whether any debilitating symptoms are also present and what effect they have on the patient. These symptoms include pain, constipation, weakness, nausea, shortness of breath, depression, and anxiety.

The effect of the symptom or condition on the patient's life must be assessed. One can simply ask, "How has your problem interfered with your daily life?"

Pain

Pain is one of the most debilitating symptoms and has traditionally been under-recognized. Unrelieved pain is very common and is one of the most feared symptoms of illness. Surveys indicate that 20% to 30% of the U.S. population experiences acute or chronic pain, and it is the most common symptom experienced by hospitalized adults. More than 80% of patients with cancer and more than two thirds of patients dying of noncancer illnesses experience moderate to severe pain. There are approximately 75 million episodes of acute pain per year resulting from traumatic injuries and surgical procedures. Acute pain is caused by trauma or medical conditions, is usually brief, and abates with resolution of the injury. Chronic pain persists beyond the period of healing or is present for longer than 3 months.

The effect of pain on the quality of life is important to understand. Untreated or undertreated pain impairs physical and psychological health, functional status, and quality of life. In particular, pain may produce unnecessary suffering; decrease physical activity, sleep, and appetite, which further weakens the patient; may increase fear and anxiety that the end is near; may cause the patient to reject further treatment; may diminish the ability to work productively; may diminish concentration; may decrease sexual function; may alter appearance; and may diminish the enjoyment of recreation and social relationships. In addition, pain has been associated with increased medical complications, increased use of health care resources, decreased patient satisfaction, and unnecessary suffering. In the United States, the economic costs of undertreated pain approach \$80 billion per year in treatment, compensation, and lost wages.

Because of health care providers' lack of knowledge about analgesics, negative attitudes toward the use of pain control, and lack of understanding about addiction, and because of drug regulations and the cost of effective pain management, patients often suffer unnecessarily from inadequate pain control. A study of medical inpatients and the use of narcotic analgesics revealed that 32% of patients were continuing to experience

"severe" distress despite the analgesic regimen, and 41% were in "moderate" distress. [Breitbart and colleagues \(1996\)](#) also revealed that pain was dramatically undertreated in ambulatory patients with acquired immune deficiency syndrome (AIDS). Of patients experiencing severe pain, only 7.3% received opioid analgesics at the recommended doses. Approximately 75% with severe pain received no opioid analgesics at all. The Study to Understand Prognoses and Preferences for Outcomes and Risks of Treatment (1995) indicated that 50% of conscious patients who died in a hospital suffered "moderate-severe" pain during their last week of life.

Whatever the cause of pain, health care providers must ask repeatedly about the presence of pain and the adequacy of its control:

"Are you having pain?"

"Have you had pain in the past week?"

"Tell me where your pain is located."

"How has the pain affected your life?"

"Are you satisfied with your pain control?"

"Tell me a little more about your pain."

It is often useful with geriatric patients to say, "Many people have pain. Is there anything you want to tell me?" In cognitively impaired patients, the interviewer should ask about the real-time assessment of pain: pain now, *not* pain in the past 3 days.

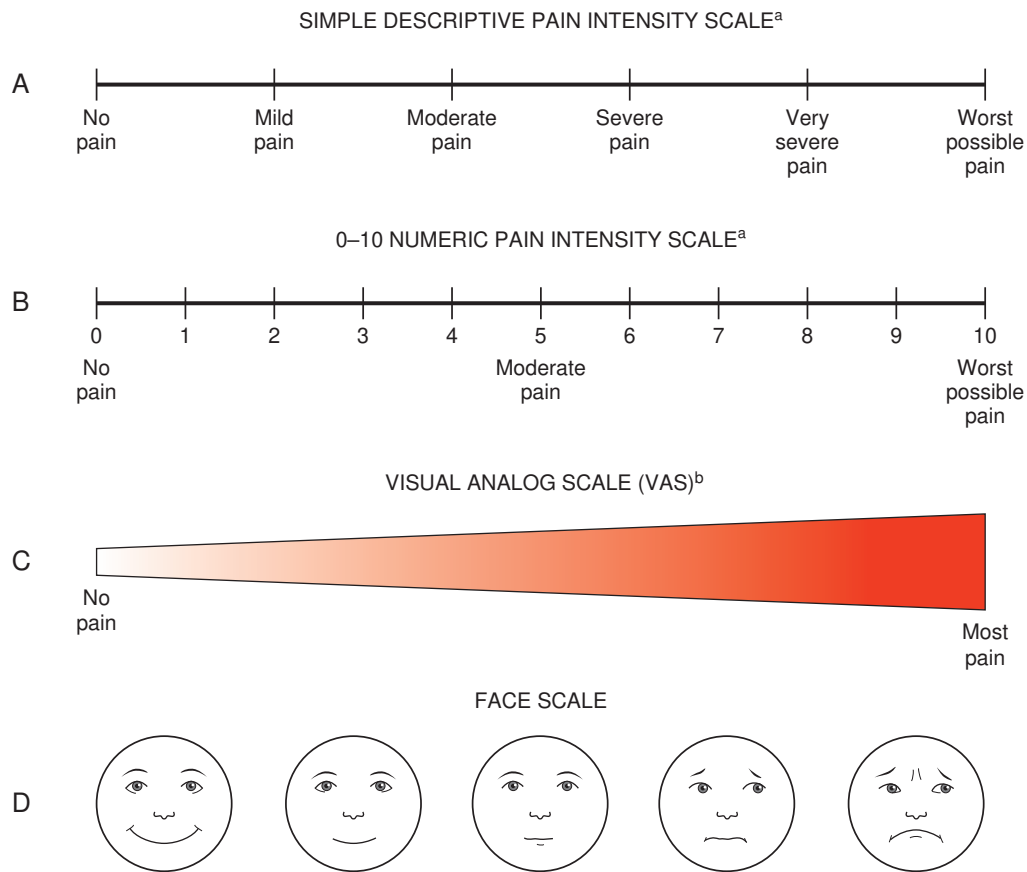
Patients must be able to assess pain with easily administered rating scales and should document the efficacy of pain relief at regular intervals after the initiation or modification of treatment. In addition, it is vital to teach patients and their families how to promote effective pain management at home. The interviewer should ask patients to quantify their pain and should try using some form of pain rating scale. There are four commonly used scales:

- Simple Descriptive Pain Intensity Scale
- 0 to 10 Numeric Pain Intensity Scale
- Visual Analog Scale
- Face Scale

These scales are illustrated in [Fig. 1.2](#). International pain scales are also very common, as shown in the simplified Chinese version in [Fig. 1.3](#). On the back of the scale are grounding statements for each of the 10 points of pain. I saw this scale while lecturing at the Xiangya Hospital of Central South University in Changsha, China.

In addition to individual descriptions of the severity of pain, many studies have also indicated cultural differences in the description of pain. There is considerable evidence demonstrating substantial ethnic disparities in the prevalence, treatment, progression, and outcomes of pain-related conditions.³ Campbell and Edwards describe "the experience of pain differentially activates stress-related physiological responses across various ethnic groups, members of different ethnic groups appear to use differing coping strategies in managing pain complaints, providers' treatment decisions vary as a function of patient ethnicity and pharmacies in predominantly minority neighborhoods are far less likely to stock potent analgesics." Culture shapes many

³Campbell CM, Edwards RR. Ethnic differences in pain and pain management. *Pain Manag.* 2012;2(3):219–230. doi:10.2217/pmt.12.7.



^aIf used as a graphic rating scale, a 10-cm baseline is recommended.

^bA 10-cm baseline is recommended for VAS scales.

Fig. 1.2 Examples of Pain Scales. (A) Simple descriptive pain intensity scale. (B) 0 to 10 Numeric pain intensity scale. (C) Visual analog scale. (D) Face scale.

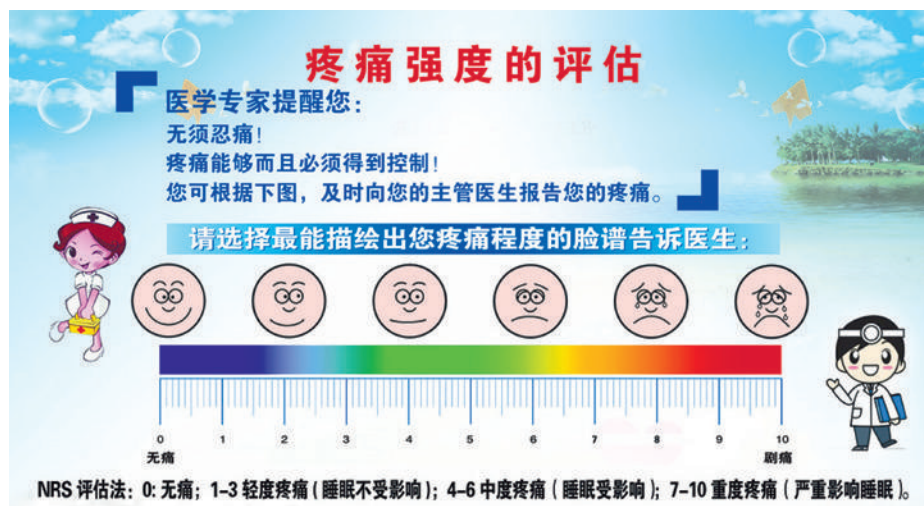


Fig. 1.3 International Pain Scales in Simplified Chinese. Courtesy of Xiangya Hospital of Central South University, Changsha, China.

aspects of the experience of pain, including pain expression, lay remedies, social roles, expectations, perceptions of the medical system, when/how/where to seek care, health care practices, illness beliefs and behaviors, and receptivity to medical care interventions.⁴

Cleeland and associates (1997) reported that members of ethnic minority groups are likely to receive inadequate treatment for pain. Their study showed that minority patients were 3 times more likely to be undertreated for pain. Sixty-five percent of minority patients did not receive guideline-recommended analgesic prescriptions. Latino patients reported less pain relief than did African American patients. Morrison and colleagues (2000) investigated the availability of commonly prescribed opioid analgesics in pharmacies in New York City. They found that 50% of a random sample of pharmacies surveyed did not stock sufficient medications to treat patients with severe pain adequately. Pharmacies in predominantly nonwhite areas were less likely to stock opioid analgesics than were pharmacies in predominantly white neighborhoods.

Regardless of a patient's demographic characteristics, health-care providers must focus on appropriate pain therapy and one's potential personal bias that may influence inequitable treatment decisions as well as the importance and our inherent obligation to take appropriate action when faced with an individual suffering in pain.

Although no patient should be denied relief from pain, one must always remember that pain medications can be addictive! Opioid pain relievers are generally safe when taken for a short period of time and as prescribed by a doctor, but because they produce euphoria in addition to pain relief, they can be misused. Regular use, even as prescribed by a physician, can lead to dependence and, when misused, opioid pain relievers can lead to addiction, overdose incidents, and death.

Opioid medications are a class of drugs that include the illegal drug heroin, synthetic opioids such as fentanyl, and pain relievers available legally by prescription, such as oxycodone (OxyContin), hydrocodone (Vicodin), codeine, morphine, and many others.

Since the 1990s, opioids have been increasingly used to treat chronic pain. In the late 1990s, pharmaceutical companies reassured the medical community that patients would not become addicted to prescription opioid pain relievers, and health care providers began to prescribe them at greater rates. This subsequently led to widespread diversion and misuse of these medications before it became clear that these medications could indeed be highly addictive. Opioid overdose rates began to increase. In 2017, more than 47,000 Americans died as a result of an opioid overdose. That same year, an estimated 1.7 million people in the United States suffered from substance use disorders related to prescription opioid pain relievers, and 652,000 suffered from a heroin use disorder.

Every day, more than 130 people in the United States die after overdosing on opioids. The misuse of, and addiction to, opioids is a serious national crisis that affects public health as well as

social and economic welfare. The Centers for Disease Control and Prevention estimates that the total "economic burden" of prescription opioid misuse alone in the United States is \$78.5 billion a year, including the costs of health care, lost productivity, addiction treatment, and criminal justice involvement.

Past Medical History

The past medical history consists of the overall assessment of the patient's health before the present illness. It includes all the following:

- General state of health
- Past illnesses
- Prior injuries and accidents
- Hospitalizations
- Surgery
- Allergies
- Immunizations
- Substance abuse
- Diet
- Sleep patterns
- Current medications
- Complementary and alternative therapies

General State of Health

As an introduction to the past medical history, the interviewer may ask, "How has your health been in the past?" If the patient does not elaborate about specific illnesses, but says only "Excellent" or "Fair," for example, the interviewer might ask, "What does 'excellent' mean to you?" Direct questioning is appropriate and allows the interviewer to focus on pertinent points that need elaboration.

Past Illnesses

The record of *past illnesses* should include a statement of childhood and adult problems. Recording childhood illnesses is obviously more important for pediatric and young adult interviewees. All patients should nevertheless be asked about measles, mumps, whooping cough, rheumatic fever, chickenpox, polio, and scarlet fever. Older patients may respond, "I really don't remember." It is important to remember that a diagnosis given to the interviewer by a patient should never be considered absolute. Even if the patient was evaluated by a competent clinician in a reputable medical center, the interviewer may have misunderstood the information given.

Prior Injuries and Accidents

The patient should be asked about any *prior injuries* or accidents: "Have you ever been involved in a serious accident?" The type of injury and the date are important to record.

Hospitalizations

All *hospitalizations* must be indicated, if not already described. These include admissions for medical, surgical, and psychiatric illnesses. The interviewer should not be embarrassed to ask specifically about psychiatric illness, which *is* a medical problem. Interviewer embarrassment inevitably leads to patient embarrassment and reinforces the "shame" associated with psychiatric illness. Student interviewers should learn to ask direct questions

⁴Lasch KE. Pain: Clinical Updates (Volume X Issue 5) International Association for the Study of Pain; WA, USA: 2002. Culture and pain.

in a sensitive manner. The interviewer might ask, “Have you ever been in therapy or counseling?” or “What nervous or emotional problems have you had?” Another way to ask about psychiatric hospitalizations is to ask, “Have you ever been hospitalized for a nonmedical or nonsurgical reason?”

Surgery

All *surgical procedures* should be specified. The indication, type of procedure, date, hospital, and surgeon’s name should be documented, if possible.

Allergies

All *allergies* should be described. These include environmental (including insects), ingestible, and drug-related reactions. The interviewer should seek specificity and verification of the patient’s allergic response. “How do you know you’re allergic?” “What kind of problem did you have when you took ... ?” The specific symptoms of an allergy (e.g., rashes, nausea, itching, anaphylaxis) should be clearly indicated.

Immunizations

It is important to determine the *immunization history* of all patients. Tetanus and diphtheria immunity is present in fewer than 25% of adults, and fewer than 25% of targeted groups receive influenza vaccines yearly. Tetanus and diphtheria are preventable, and the current recommendation is to use the combined toxoid whenever either immunization is considered. Any patient who has never received this toxoid receives an initial injection and follow-up doses at 1 month and 6 to 12 months. A booster dose is required every 10 years.

During the 2017–18 influenza season, more than 80,000 people died from flu-related illnesses in the United States—the highest death toll in more than 40 years! According to the CDC, 172 American children and teenagers under the age of 18 died from the flu during this season.⁵ Approximately 80% of these young individuals had not received a flu vaccine! Influenza vaccinations save lives. Everyone 6 months and older is recommended for annual influenza vaccination, with rare exceptions. Different influenza shots are approved for people of different ages. Some vaccines are only approved for adults. For example, the recombinant influenza vaccine is for people aged 18 years and older, and the adjuvanted⁶ and high-dose inactivated vaccines are for people aged 65 years and older. Fluzone High-Dose vaccine contains 4 times the amount of antigen contained in regular flu shots. The additional antigen is intended to create a stronger immune response. Influenza shots are recommended also for pregnant women. All patients with chronic cardiovascular, pulmonary, metabolic, renal, or hematologic disorders and patients with immunosuppression should be vaccinated yearly against influenza.

Each year in the United States, pneumococcal disease causes thousands of infections, such as meningitis, bloodstream infections, pneumonia, and ear infections. The CDC recommends pneumococcal vaccination for all children younger than 2 years

old and all adults 65 years or older.⁷ Pneumococcal vaccines are very good at preventing severe disease and death. However, vaccination is not guaranteed to prevent infection and symptoms in all people. There are two kinds of pneumococcal vaccines available: *pneumococcal conjugate vaccine* and *pneumococcal polysaccharide vaccine*. The *pneumococcal conjugate vaccine* (PCV13 or Prevnar 13) protects against 13 types of pneumococcal bacteria. The CDC recommends PCV13 for use in infants and young children and adults 65 years or older. Older children and adults younger than 65 years old who are at increased risk for getting pneumococcal disease may also need a dose of PCV13. The *pneumococcal polysaccharide vaccine* (PPSV23 or Pneumovax) protects against 23 types of pneumococcal bacteria. The CDC recommends pneumococcal polysaccharide vaccine for all adults 65 years or older, people 2 through 64 years old with certain medical conditions, and adults 19 through 64 years old who smoke cigarettes. In addition, patients with multiple myeloma, lymphoma, alcoholism, cirrhosis, and functional or anatomic asplenia should receive the vaccine. This vaccine usually provides lifelong immunity. Revaccination every 6 years is necessary only in asplenic patients because they are at high risk for pneumococcal infection.

Hepatitis A is one of the most common vaccine-preventable infections acquired during travel. Hepatitis A is a liver disease caused by the hepatitis A virus. Hepatitis A can affect anyone and is transmitted by the fecal–oral route. In the United States, hepatitis A can occur in situations ranging from isolated cases of disease to widespread epidemics. Good personal hygiene and proper sanitation can help prevent hepatitis A. Vaccines are also available for long-term prevention of hepatitis A virus infection in persons 12 months of age and older. The first dose of hepatitis A vaccine should be administered as soon as travel to countries with high or intermediate endemicity is considered. One month after receiving the first dose of monovalent hepatitis A vaccine, 94% to 100% of adults and children have protective concentrations of antibody. The final dose in the hepatitis A vaccine series is necessary to promote long-term protection. Immune globulin is available for short-term prevention of hepatitis A virus infection in individuals of all ages.

Hepatitis B vaccine should be given to all health care providers, staff of institutions for developmentally disabled patients, intravenous drug abusers, patients with multiple sexual partners, hemodialysis patients, sexual partners of hepatitis B carriers, and patients with hemophilia. Complete immunization necessitates three injections: an initial dose and follow-up doses at 1 month and at 6 to 12 months. Booster doses are not required. For best results, persons at high risk of exposure (especially medical, dental, and nursing students) should receive immunization before possible exposure.

Haemophilus influenzae type B (Hib) vaccine is now used routinely in children to prevent invasive *H. influenzae* diseases. In 2005, Hib was estimated to have caused 3 million cases of serious disease, notably pneumonia and meningitis, and 450,000 deaths in young children. Meningitis and other serious infections caused by Hib disease can lead to brain damage or death. Hib

⁵<https://www.cdc.gov/flu/spotlights/reported-flu-children-deaths.htm>

⁶An adjuvant, like MF59, is an ingredient added to a vaccine that helps create a stronger immune response to vaccination.

⁷<https://www.cdc.gov/pneumococcal/vaccination.html>

disease is preventable by immunizing all children younger than 5 years with an approved Hib vaccine. Several Hib vaccines are available. The general recommendation is to immunize children with a first dose at 2 months of age and to follow with additional doses according to the schedule for the vaccine being used. Three to four doses are needed, depending on the brand of Hib vaccine used. Hib vaccine should never be given to a child younger than 6 weeks, because this might reduce his or her response to subsequent doses.

For the prevention of shingles,⁸ it is recommended that two doses of recombinant zoster vaccine (RZV) (Shingrix) are given 2 to 6 months apart to adults aged 50 years or older, regardless of past episodes of herpes zoster or receipt of zoster vaccine live (ZVL) (Zostavax).

Between 1991 and 1992, there was a 75% decrease in the number of cases of measles, mumps, and rubella (MMR), presumably because of the use of the MMR vaccine. This vaccine is now typically given in childhood, but it should also be given to adult health care providers who have not had the diseases. Because the vaccine contains a live virus, it should not be given to pregnant patients, those with generalized malignancies, those receiving steroid therapy, those with active tuberculosis, or those receiving antimetabolites.

Since 2017, cases of measles have been increasing in several countries around the world, with a 300% rise in measles cases globally over the same period in 2018, according to the World Health Organization. The countries most affected are Ukraine, Madagascar, India, Pakistan, Philippines, Yemen, and Brazil. As of April 2019, Madagascar's health officials recorded more than 69,000 measles cases and 1,200 related deaths in the largest-ever measles outbreak in that nation. Ukraine has experienced 72,000 cases, and the Philippines 19,000 cases.

The reasons for outbreaks differ in each country, from vaccine hesitancy⁹ to problems with health care access or access to vaccines, to civil unrest and low awareness about the need to vaccinate. What is common in all these cases is the decreasing rate of vaccination.

Measles had been eliminated in the United States in 2000, but is now back. According to the latest measles numbers from the Centers for Disease Control and Prevention, health officials recorded 971 cases in the first five months of 2019. That's the largest number of cases since 1992. The number of cases is greatly increased compared to 2018, when 372 cases were reported in the entire year.

The outbreaks in the United States have been concentrated in four states: New York, New Jersey, Washington, and California. The vast majority of these cases (more than 600 of the 971 cases) occurred in Orthodox Jewish communities. There, a minority of people who are vaccine skeptics have been opting out of the vaccinations for their children, driving vaccine rates down and creating the space for the highly contagious virus to spread.

The Advisory Committee on Immunization Practices annually reviews the recommended adult immunization schedule to ensure

that the schedule reflects the current recommendations for the licensed vaccines. It is advisable for the health care worker to review these guidelines regularly. The *Recommended Immunization Schedule for Adults Aged 19 Years or Older, United States* may be found on the Centers for Disease Control and Prevention website at <https://www.cdc.gov/vaccines/schedules/hcp/adult.html>.

Substance Abuse

A careful review of any *substance abuse* by the patient is included in the past medical history. Substance abuse includes cigarette smoking and the use of alcohol and recreational drugs. In the United States in 2017, an estimated 46 million people (20.8% of the population) were smokers. Approximately 23% of men and 19% of women smoke. As many as 30% of all deaths related to coronary heart disease in the United States each year are attributable to cigarette smoking; the risk is strongly dose related. Smoking also nearly doubles the risk of ischemic stroke. Smoking acts synergistically with other risk factors, substantially increasing the risk of coronary disease. Smokers are also at increased risk for peripheral vascular disease, cancer, chronic lung disease, and many other chronic diseases. Cigarette smoking is the single most alterable risk factor contributing to premature morbidity and mortality in the United States, accounting for approximately 430,000 deaths annually.

The interviewer should always ask whether the patient smokes and for how long: "Do you use nicotine in any form: cigarettes, cigars, pipes, chewing tobacco?" A *pack-year* is the number of years a patient has smoked cigarettes multiplied by the number of packs per day. A patient who has smoked 2 packs of cigarettes a day for the past 25 years has a smoking history of 50 pack-years. If the patient answers that he or she does not smoke now, the interviewer should inquire whether the patient ever smoked. If the patient has quit smoking, indicate for how long.

It has been estimated that the incidence of hazardous alcohol drinking in the United States ranges from 4% to 5% among women and 14% to 18% among men. In primary care settings, the prevalence rates range from 9% to 34% for hazardous drinking. Although studies have shown the beneficial effects of moderate alcohol consumption (one to two drinks daily), these effects are lost at higher doses. Heavy alcohol consumption is associated with many medical problems (e.g., hypertension, decreased cardiac function, arrhythmias, hemorrhagic stroke, ischemic stroke, liver disease, increased risk of breast cancer), as well as behavioral and psychiatric problems. According to the American Psychiatric Association and the National Institute on Alcohol Abuse and Alcoholism, "moderate drinking" for men is defined as less than two drinks per day; for women and persons older than 65 years, it is defined as less than one drink per day.¹⁰

The history of alcohol consumption and dependency should be integrated into the general history immediately after the interviewer inquires about less threatening subjects such as smoking. It is easy to miss alcohol dependency unless specific direct questions are asked. It is acceptable to broach the topic of alcoholism by asking, "Please tell me about your drinking of

⁸<https://www.cdc.gov/vaccines/vpd/shingles/public/index.html>

⁹A reluctance or refusal to be vaccinated or to have one's children vaccinated.

¹⁰<https://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/what-standard-drink> discusses "What is a standard drink?"

alcohol.” The interviewer should focus not on the quantity of alcohol consumed but rather on the adverse effects of drinking. By asking, “How much do you drink?” the interviewer may put the patient on the defensive. This type of question may also create an unnecessary power struggle between patient and interviewer. You might ask instead, “How much *can* you drink?” which puts the patient and interviewer in a position of alliance. Most individuals who drink heavily also underestimate the quantities they consume. The interviewer can often learn more about the quantity of alcohol consumed by asking about the patient’s feelings and interpersonal relationships than by asking directly about the amount. The interviewer should determine whether the patient drives while intoxicated, has suffered amnesia of events that occurred during drinking, neglects or abuses his or her family, or has missed work as a result of alcohol consumption.

Ewing and Rouse (1970) developed the CAGE questionnaire as a formal screening instrument to help identify patients in primary care with alcohol problems. The acronym CAGE helps the interviewer remember the four clinical interview questions that focus on the social and behavioral aspects of alcohol problems: the effect alcohol has on one’s lifestyle. Once it is established that a patient drinks alcohol, the following questions (CAGE) should be asked:

“Have you ever felt you should *Cut down on your drinking?*”
 “Have people *Annoyed* you by criticizing your drinking?”
 “Have you ever felt *bad or Guilty* about your drinking?”
 “Have you ever taken a drink first thing in the morning (*Eye-opener*) to steady your nerves or get rid of a hangover?”

Since its introduction, the CAGE questionnaire has been shown to be one of the most efficient and effective screening devices for detecting alcoholism. In a primary care setting, CAGE scores of 2 (two positive responses) have a sensitivity of 77% to 94% and a specificity of 79% to 97% for a current diagnosis of alcohol abuse. One positive CAGE response has a sensitivity of 21% to 71% and a specificity of 84% to 95%. The history of alcohol consumption and dependency can be further assessed by using the sets of questions referred to by the acronyms HALT, BUMP, and FATAL DT.

The HALT questions are as follows:

“Do you usually drink to get *High?*”
 “Do you drink *Alone?*”
 “Do you ever find yourself *Looking forward to drinking?*”
 “Have you noticed whether you seem to be becoming *Tolerant of alcohol?*”

The BUMP questions are as follows:

“Have you ever had *Blackouts?*”
 “Have you ever used alcohol in an *Unplanned*¹¹ way?”
 “Do you ever drink alcohol for *Medicinal*¹² reasons?”
 “Do you find yourself *Protecting*¹³ your supply of alcohol?”

The final acronym reminds the interviewer about other major associations with alcoholism.

The FATAL DT questions are as follows:

“*Is there a Family history of alcoholic problems?*”
 “*Have you ever been a member of Alcoholics Anonymous?*”
 “*Do you Think you are an alcoholic?*”
 “*Have you ever Attempted or had thoughts of suicide?*”
 “*Have you ever had any Legal problems related to alcohol consumption?*”
 “*Do you ever Drive while intoxicated?*”
 “*Do you ever use Tranquilizers to steady your nerves?*”

These questions provide the interviewer with a useful, thoughtful, and organized approach to the interview strategy designed to identify patients with a drinking problem.

In the late stages of alcoholism, a person may suffer delirium tremens (DTs). DTs are completely different from the hallucinations that occur in the earlier stages of alcoholism. During hallucinations, the patient may see or hear “things.” DTs occur 24 to 96 hours after withdrawal from alcohol; occasionally patients hallucinate or have convulsions, but all patients tremble. DTs are the most severe form of withdrawal and are fatal in one of every four cases.

The interviewer must ask all patients about the use of other drugs. People who use recreational drugs often engender negative feelings or anger in the interviewer. These feelings are almost unavoidable. The interviewer must not allow these feelings to interfere with empathetic interviewing. A useful way of approaching the topic of recreational drugs is to ask,

“Have you ever used drugs other than those required for medical reasons?”
 “Do you use drugs other than those prescribed by a physician?”
 “Have you abused prescription drugs?”

If the answer to any of these questions is affirmative, the interviewer should determine the types of drugs used, the routes of administration, and the frequency of use. In contrast to alcohol abusers, drug abusers are more likely to magnify their use. The interviewer must ask all patients with a history of drug abuse the following questions:

“What type of drugs do you use?”
 “At what age did you start using drugs?”
 “What was your period of heaviest use?”
 “What is your recent pattern of use?”
 “Are larger doses necessary to get the same effect now?”
 “What do you feel when you take the drug?”
 “Have you ever tried to quit? What happened?”
 “Have you ever had any convulsions after taking the drug?”
 “Do you use more than one drug at a time?”
 “Do you use drugs on a continuous basis?”
 “Have you been in trouble at work because of drug use?”
 “Have you ever had withdrawal symptoms as a result of your use of drugs?”

It is important to use simple words and expressions when inquiring about recreational drugs. It may also be more appropriate to use slang than to use more formal terms. For example, “Do you ever shoot up or snort coke?” may be better understood than “Have you ever taken cocaine intravenously or by insufflation?” With experience, the interviewer acquires relevant knowledge about recreational drugs. Knowing the local street names for drugs can be as important as knowing the pharmacologic effects

¹¹Drink more than you intended or have an additional drink after you decided you had had enough.

¹²As a cure for anxiety, depression, or the “shakes.”

¹³Buying enough alcohol just in case “company” arrives.

and may provide a means of better communication. It should be recognized that these street names are often different from place to place and change from time to time. [Appendix A](#), Commonly Abused Drugs, lists their street names and the major symptoms and signs associated with each of them.

It should also be recognized that *any* medication can be abused. Drugs such as propranolol and metoprolol (β -blockers used in the treatment of hypertension) are not usually considered recreational drugs. They are, however, frequently abused by the acting community to relieve performance anxiety, or stage fright.

Diet

In questioning a patient about *diet*, it is useful to ask the patient to describe what he or she ate the day before, including all three meals plus any snacks. How many fish meals does he or she have each week? What is the proportion of red meat in the diet in comparison with fish or poultry? How much saturated fat is there in the diet? Does the patient add salt when he or she cooks, and does he or she add salt at the table? Has his or her diet changed recently? What kinds of foods does the patient like or dislike, and why? Are there any food intolerances? Does the patient eat foods with a high fiber content, such as whole-grain breads and cereals, bran, fresh fruits, and vegetables? Does the patient eat high-fiber snack foods (which include sesame bread sticks, date-nut bread, oatmeal cookies, fig bars, granola bars, and corn chips)? What is the consumption of sodium? Pickled foods, cured meats, snack foods, and prepared soups have a high sodium content. The consumption of caffeine-containing products such as coffee, tea, sodas, and chocolate is important to determine. Caffeine ingestion may produce a variety of symptoms, including heart palpitations, fatigue, lightheadedness, headaches, irritability, and many gastrointestinal symptoms. The symptoms associated with caffeine ingestion are discussed at length in [Chapter 7](#), Assessment of Nutritional Status. The interviewer should also ascertain the amount of exercise the patient gets.

Sleep Patterns

It is important to know a patient's *sleep patterns* because this may provide information about the patient's psychological problems. Sleep-related complaints such as insomnia and excessive daytime somnolence impair the lives of 20% to 50% of Americans. Obstructive sleep apnea is a common and important health problem. It is discussed in [Chapter 12](#), The Oral Cavity and Pharynx.

More than 60% of patients with psychiatric problems complain of disturbed sleep patterns. Eighty percent of patients with depression complain of disturbed sleep. The most common problem in patients with posttraumatic stress disorder is disturbed sleep; more than 50% of patients with chronic pain experience sleep problems.

An estimated 200,000 automobile accidents a year are caused by excessive sleepiness on the part of drivers; 20% of drivers report that they have fallen asleep behind the wheel. The following questions should be asked:

"When do you go to bed?"

"Do you have trouble falling asleep?"

"Do you stay asleep the whole night, or do you awaken in the middle of the night, unable to go back to sleep?"

"Do you go to bed only when sleepy?"

"Do you adhere to a regular waking time?"

"Do you snore?"

"Has anyone told you that you have episodes of stopping breathing during the night?"

Medications

All current medications should be noted. The following questions should be asked:

"Do you use any prescription medications?"

"Do you use any over-the-counter medications?"

"Do you use any herbal medications or vitamins?"

"Do you use any recreational drugs?"

The name (generic or trade), dose, route of administration, and frequency of use need to be recorded. If possible, the patient should show the interviewer the bottles and demonstrate how the medications are taken. The interviewer should note whether the patient is taking them according to the directions on the bottle. Frequently, patients consider over-the-counter medications such as vitamins, laxatives, antacids, or cold remedies not worth mentioning; the interviewer should ask specifically about each of these types of drugs. The interviewer should determine the type of contraception used, if any, and whether a woman has used or uses birth control pills.

Alternative Therapies

The use of *alternative therapies* is extremely common, as discussed in [Chapter 3](#), Understanding Complementary and Alternative Medicine. The patient and the health care provider must be comfortable with how questions about these therapies are asked. Avoid using the terms *unorthodox therapy* or *unconventional medicine*. These labels may be perceived as judgmental and could inhibit free discussion. You might start by saying, "Many patients frequently use other kinds of therapy when they have the symptoms you described. Have you used or thought about using massage, herbs, chiropractic, acupuncture, vitamin, or other different therapies for your problem or for any other reasons?"

Health Maintenance

Clinicians can play a key role in the identification and management of medical, social, and psychiatric problems. Counseling skills include building a supportive therapeutic relationship with the patient and family. A patient's family is often helpful in confirming the diagnosis and developing the treatment plan. Health maintenance consists of three main areas: disease detection, disease prevention, and health promotion.

Ask patients whether they have regular doctors and routine medical checkups. When was their last dental examination? Do they get their eyes checked periodically? Are they aware of their cholesterol levels? Do they do anything for exercise? If the patient is a woman, does she see a gynecologist regularly? Does she perform breast self-examination? When were her last mammogram and her last Papanicolaou smear obtained? If the patient is a man, does he perform routine testicular self-examination?

Tobacco use is probably the main avoidable cause of morbidity and mortality in the world, with nearly 6 million deaths per year.¹⁴ In the United States alone, tobacco use is responsible for more than 480,000 deaths each year from cancer, heart disease, stroke, and lung disease. This figure includes more than 41,000 deaths from secondhand smoke exposure.¹⁵ This is approximately one in every five deaths annually, or 1300 deaths every day! Smokers die 10 years earlier than nonsmokers.¹⁶ There are more than 16 million Americans living with diseases caused by smoking. If smoking continues at the current rate among youth in the United States, 5.6 million of today's Americans younger than 18 years of age are expected to die prematurely from a smoking-related illness. This represents about 1 in every 13 Americans aged 17 years or younger who are alive today.¹⁷

Despite these facts, however, tobacco use is still prevalent. The Centers for Disease Control and Prevention estimates that 25% of all Americans still smoke and that more than 3000 children and adolescents become regular users every day. It is estimated that the cost of medical care for tobacco-related illness in the United States is more than \$300 billion annually,¹⁸ and the cost of lost productivity and forfeited wages resulting from disability is an additional \$156 billion per year. Despite these staggering statistics, health care providers often fail to treat tobacco use effectively. Health care providers have unique access to patients who use tobacco, and yet studies show that fewer than half of individuals who use tobacco reported being urged to quit by their physicians.

Health care providers must determine and document the tobacco use status of all patients. If patients use tobacco, they should be offered smoking cessation treatment at every office visit. It has been shown that a discussion of only 3 minutes per visit can be effective. More intensive treatment with other medical therapies, social support, and other specific skills is more effective in producing long-term results. In addition to nicotine replacement therapy, such as nicotine patches, nicotine gum, nicotine lozenges, nicotine nasal spray, and nicotine inhalers,

varenicline (Chantix) has been introduced to help people quit smoking. It is non-nicotine prescription medicine specifically developed to help adults quit smoking. Varenicline, approved by the U.S. Food and Drug Administration in 2006, contains no nicotine, but it targets the same receptors as nicotine. It is believed to block nicotine from these receptors. Studies have demonstrated that at the end of 12 weeks of varenicline therapy, 44% of patients were able to quit smoking. It also helped reduce the urge to smoke.

It also has been demonstrated, however, that there are times when patients are unreceptive or even resentful if the issue is broached. According to the “stages of change” model, success is most likely when the health care provider is sensitive to the patient's stage. Stage 1 is the precontemplation stage in which the smoker is in denial about the hazards of smoking and is not willing to stop. Stage 2 is the contemplation stage, when the patient acknowledges a willingness to quit but has not determined when that will occur. Stage 3 is the action stage, during which the patient has prepared for a change, is engaged in changing behavior, and has a plan for smoking cessation. Stage 4 is the maintenance stage, during which the health care provider needs to encourage the patient about the experience of quitting. Stage 5 is the relapse. Smokers generally make three or more attempts to quit smoking before permanent success is achieved.

Patients should be told in clear, strong language that it is in their best interest to quit smoking. Say, “I think that it is important for you to quit smoking, and I will help you. I need you to know that quitting smoking is the most important thing you can do to protect your current and future health.”

Also remember to ask the questions about alcohol consumption discussed in the previous section.

Counseling is very important, but interviewers must remember that a patient must *want* to change his or her behavior. If he or she does not, interviewers should indicate to the patient that they will provide support when the patient is ready.

Finally, do not forget to ask all patients whether they wear seat belts in cars or use helmets if they ride bicycles or motorcycles.

Occupational and Environmental History

The occupational and environmental history concerns exposure to potential disease-producing substances or environments. Occupational exposures account for an estimated 50,000 to 70,000 deaths annually in the United States. More than 350,000 new cases of occupational disease are recognized each year. These diseases can involve every organ system. Because they often mimic other diseases, occupational diseases may be incorrectly ascribed to some other cause. One of the important barriers to the accurate diagnosis of occupational and environmental diseases is the long latency between exposure and appearance of the illness.

Many occupational diseases have been well described over the years: malignant mesothelioma in workers exposed to asbestos; cancer of the bladder in workers exposed to aniline dye; malignant neoplasms of the nasal cavities in woodworkers; pneumoconiosis in coal miners; silicosis in sandblasters and quarry workers; leukemia in those exposed to benzene; hepatic angiosarcoma in workers exposed to vinyl chloride; byssinosis in cotton industry workers; skin cancer in those chronically exposed to the sun,

¹⁴World Health Organization. WHO Report on the Global Tobacco Epidemic, 2011. Geneva: World Health Organization, 2011. Accessed February 2, 2019.

¹⁵U.S. Department of Health and Human Services. The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. Assessed February 2, 2019.

¹⁶Jha P, Ramasundarahettige C, Landsman V, et al. 21st century hazards of smoking and benefits of cessation in the United States. *N Engl J Med*. 2013;368:341–50. Assessed February 2, 2019.

¹⁷U.S. Department of Health and Human Services. The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. Assessed February 2, 2019.

¹⁸Xu X, Bishop EE, Kennedy SM, et al. Annual healthcare spending attributable to cigarette smoking: an update. *Am J Prev Med*. 2014;48(3):326–333. Assessed February 2, 2019.

such as sailors; ornithosis in bird breeders; toxic hepatitis in solvent users and workers in the plastics industry; and chronic bronchitis in individuals exposed to industrial dusts. It has been shown that there is an association between sterility in men and women and exposure to certain pesticides and an association between dementia and exposure to certain solvents.

The environment is also responsible for significant morbidity and mortality rates. Lead, radon, pesticides, and air pollution cause illness and death. Examples include Chernobyl, with its widespread high levels of radiation; Minamata Bay in Japan, with its mercury poisoning; Hopewell, Virginia, with its poisoning pesticide chlordecone; and Bhopal, India, where a leak at an industrial plant exposed hundreds of thousands of people to toxic methyl isocyanate gas. In India, thousands died shortly after exposure, and more than 200,000 people have suffered illness from the gas. The long-range effects of these agents have yet to be determined.

A careful occupational and environmental history is the most effective means of properly diagnosing occupational and environmental diseases. It is important to inquire about all occupations and the duration of each. The history should include more than just a listing of jobs. The duration and precise activities must be ascertained. The use of protective devices and cleanup practices, as well as work in adjacent areas, must also be determined. The job title (e.g., electrician, machine operator) is important, but actual exposure to hazardous materials may not be reflected in these descriptions. Industrial work areas are complex, and it is important to ascertain the actual location of work in relation to other areas in which hazardous materials are used. It is well known that just living near areas of industrial toxins is linked to the development of disease many years later. It is therefore relevant to inquire whether the patient resides or ever resided near mines, farms, factories, or shipyards. The following questions regarding occupational and environmental exposure should be asked of all patients:

“What type of work do you do?”

“How long have you been doing this work?”

“Describe your work.”

“Are you exposed to any hazardous materials? Do you ever use protective equipment?”

“What kind of work did you do before you had your current job?”

“What was your wartime employment, if any?”

“Where do you live? For how long?”

“Have you ever lived near any factories, shipyards, or other potentially hazardous facilities?”

“Has anyone in your household ever worked with hazardous materials that could have been brought home?”

“What types of hobbies do you have? What types of exposures are involved?”

“Do you now have, or have you previously had, environmental or occupational exposure to asbestos, lead, fumes, chemicals, dusts, loud noise, radiation, or other toxic factors?”

Attention must be paid to any temporal relationship between the onset of illness and toxic exposure in the workplace. Did the symptoms start after the patient began a new job? Did the symptoms abate during a vacation and then recur when the patient resumed work? Were the symptoms related to the implementation

of any new chemical or process? Is there anyone else at work or are there any neighbors with a similar illness?

Biographic Information

Biographic information includes the date and place of birth, sex, race, and ethnic background. **Make no assumptions!** It is important to assess gender identity at the start of a patient encounter. Race can be defined as a social construct as opposed to a biological fact. That is, race is defined by political, social, economic, and historical values of a time/era and geographical location. You might ask, “How would you best describe your race, or racial identity?”

Family History

You can start the family history by asking about the patient's ancestry. Possible questions about a patient's ancestry might be:

“Tell me about your family.”

“You mentioned you identify as an African American. Tell me more about your family's history?”

The family history provides information about the health of the entire family, living and dead. Pay special attention to possible genetic and environmental aspects of disease that might have implications for the patient. Is the patient aware of any genetically determined disease in the family? Is there a history of cancer, specifically colon, breast, ovarian, or prostate? Is there a history of premature cardiovascular disease? Is there a history of diabetes; thyroid, liver, lung, blood, or renal disease; or rheumatologic disorders?

Determine the age and health of all the immediate family members. If a family member is deceased, record the age of the person and the cause of death. This information can be indicated on a pedigree, or family chart, showing each immediate relative, including parents and grandparents, siblings, children, and grandchildren. It is important to inquire how a family member's illness affects the patient psychologically.

It is important to inquire where the patient's parents were born. Where were the grandparents born? In what setting, urban or rural, did the patient grow up? In what country did the parents grow up? If the patient was born in another country, at what age did he or she come to the United States? Does the patient maintain contact with other family members? Was the original family name changed? If the patient is married, is the spouse of the same ethnic background as the patient? What is the patient's native language?

The answers to these questions provide valuable information as a heritage assessment.

Psychosocial and Spiritual History

The psychosocial history includes information on the education, life experiences, and personal relationships of the patient. This section should include the patient's lifestyle, other people living with the patient, schooling, military service, religious beliefs (in relation to the perceptions of health and treatment), and marital or significant-other relationships. You can start by asking one of the following questions:

“Tell me a little about yourself: your background, education, work, family.”

“Who are the important people in your life?”

“What do you do for fun?”

“How do you feel about the way your life is going?”

A statement regarding the patient’s knowledge of symptoms and illness is important. Has the illness caused the patient to lose time from work? What kind of insight does the patient have about the symptom? Does he or she think about the future? If so, how does it look? An excellent question that can elicit a vast amount of information is “What is your typical day like?”

A spiritual history provides information about what gives meaning to the patient’s life. Spirituality helps patients cope with serious illnesses, debilitation, and dying. This part of the medical history provides excellent insight into the patient’s spiritual needs and belief systems. Meditation and prayer can complement medical care. Spirituality can offer hope to those with chronic disease and may even provide new meaning to their suffering. Several studies have revealed the beneficial effect of spirituality in stress reduction, recovery from illness, mitigation of pain, and faster recovery from surgery. Puchalski¹⁹ suggested that a spiritual history might begin with introductory questions such as:

“Do you consider yourself spiritual or religious?”

“How important are these beliefs to you, and do they influence how you care for yourself?”

More questions about the spiritual history are discussed in [Chapter 5](#), Mitigating Racism and Bias in Clinical Medicine.

Sexual, Reproductive, and Gynecologic History

The sexual history has traditionally been part of the psychosocial history or review of systems. However, because the sexual, reproductive, and gynecologic history is so vital for the complete evaluation of the patient, these histories are now considered a separate part of the interview.

There are several reasons for documenting a sexual history. Sexual drive is a sensitive indicator of general well-being. Anxiety, depression, and anger may relate to sexual dysfunction; however, many physical symptoms can lead to sexual problems. In addition, it is critical to identify risk behaviors. A well-documented sexual history enables the examiner to establish norms of sexuality for the patient. Expanding the interview to issues of sexuality allows the interviewer to educate the patient about human immunodeficiency virus (HIV)-related illnesses, sexually transmitted diseases, and pregnancy prevention. It is an excellent opportunity to provide useful information to the patient.

It is important to ask about sexual activity in children, as well as in older adults. Child abuse is very common, and the interviewer must identify it as early as possible. Interviewers must not assume that a senior citizen is sexually inactive. Sexuality is a part of normal life, and many older adults enjoy sexual contact.

Tailor your questions and terms to each specific interview. Can vernacular terms be used in the interview? Patients and interviewers may fear the use of these terms because of their emotional charge. Sometimes patients, because of embarrassment

about using these terms, may try to express their symptoms with inaccurate medical terminology. Often the use of street language leads to a more relaxed and informative discussion, especially with younger adults.

The interviewer must inquire about sexual relationships in a nonjudgmental manner. Direct questions regarding vaginal, oral, and anal sex; sexual contacts; and sexual problems are very important for specific patients. Patients are frequently less inhibited than are novice interviewers when discussing sexual behavior. The term *partner* rather than a gender-specific term (i.e., husband, wife) is appropriate until the patient’s preferred terminology is established. There is no easy way to ask about sexual preference, but it is vital to know. Asking the patient whether he or she has had any contact with individuals with AIDS or AIDS-related illness is appropriate. The term *homosexual* as an adjective for gender (e.g., “homosexual man”) should be avoided; it is a term describing sexual relations between individuals of the same sex.

There are several general questions that can help broach the topic of sexual activity. In general, the best way to introduce the sexual history is to say, “Now I am going to ask you some questions about your sexual health and practices.” Because the question, “Are you sexually active?” can be ambiguous, it is better to ask, “Have you ever had intimate physical contact with anyone?” If the answer is “Yes,” the next question should be “Did that contact include sexual intercourse?” The interviewer should also then ask, “Are your partners male, female, or both?”

It is not acceptable to ask whether the person has “had sex” or is “sexually active,” because there is great variability in the way individuals define these phrases. In one study,²⁰ 599 college students attending a major midwestern university were asked, “Would you say you ‘had sex’ with someone if the most intimate behavior you engaged in was ... (mark ‘yes’ or ‘no’ for each behavior).” There were 11 behavioral items on the list, including “deep kissing,” “oral contact on your breasts/nipples,” “you touch other’s genitals,” “oral contact with other’s genitals,” and “penile–vaginal intercourse.” Although 99.5% agreed that penile–vaginal intercourse qualified as “had sex,” 19% did *not* believe that penile–anal intercourse meant “had sex”; that is one out of five polled. Only 40% felt that they “had sex” if oral–genital contact was their most intimate behavior (60% would not). The study suggests that Americans hold widely divergent opinions about what behaviors do and do not constitute as having “had sex.” Therefore, a better question to ask is “What is the most intimate physical contact you have had with someone else?”

Some of the following questions about specific sexual behaviors and satisfaction may also be helpful in acquiring a sexual history:

“Are you having any sexual problems?”

“Are you satisfied with your sexual performance?” “Do you think your partner is?” If not, “What is unsatisfactory to you (or your partner)?”

“Have you had any difficulty achieving orgasm?”

“How frequently does it occur that your partner desires sexual intercourse and you do not?”

¹⁹Puchalski C: Spiritual assessment in clinical practice. *Psychiatr Ann*. 2006;36:150.

²⁰Sanders SA, Reinisch JM. Would you say you “Had sex” if ... ? *JAMA*. 1999;281(3):275–277. doi:10.1001/jama.281.3.275.

"Are there any questions pertaining to your sexual performance that you would like to discuss?"

"Most people experience some disappointment in their sexual function. Can you tell me what disappointments you might have?"

"Many people experience what others may consider unusual sexual thoughts or wish to perform sexual acts that others consider abnormal. We are often bothered by these thoughts. What has been your experience?"

"Do you have protected sex?"

"Have you ever had a sexually transmitted disease?"

"Have you been tested for HIV?" If yes, "What was the result?"

Asking a patient "How many sexual partners do you have or have you had?" is rather intrusive and does not help very much. It is much better to determine whether a person routinely uses protection with condoms, if appropriate. It is true, however, that studies have shown that the more sexual partners a woman has had, the greater is the chance that she will develop cervical carcinoma.

It is less appropriate to ask "What activities and positions does your sexual contact include?" than to ask *specifically* about oral–genital, penile–vaginal, or penile–anal contact *tailored specifically* to the individual patient.

Although it may seem innocuous to ask a person in the United States about their marital status, it should not be done. Since 2015, by a Supreme Court ruling, same-sex marriages have been allowed in 50 states. This ruling was hailed as a milestone decision and a huge victory that would see discrimination crumble and provide equality for lesbian, gay, bisexual, and transgendered couples and for their children. Therefore, ***finding out that a person is married tells you nothing of the gender of the spouse.*** A man married to another man has a husband; a woman married to another woman has a wife.

Health care providers, regardless of their sexual orientation, must provide the highest standard of care to all patients. They must reconcile their own fears and prejudices about homosexuality. In 1978, only one third of Americans believed that they knew a gay man or lesbian; in 1996, approximately two thirds of Americans reported that they knew someone who was gay or lesbian. Despite this fact, there is a significant degree of homophobia in society. By definition, *homophobia* is the "irrational fear of, aversion to, or discrimination against homosexuality or homosexuals." The medical and psychological effects of homophobia can pose a significant health hazard to gay and lesbian patients and can be detrimental to establishing a strong doctor–patient relationship. If a gay or lesbian patient senses this discrimination, he or she may become alienated from the health care system and not use standard screening modalities, thus risking higher mortality and morbidity from disease. One study revealed that 98% of gay and lesbian patients believed that it was medically important to inform their physicians of their sexual orientation, but 64% believed that in doing so, they risked receiving substandard care. In the same study, 88% of the patients reported that their physicians made disparaging remarks about gay and lesbian patients. Because homophobia is widespread in society, a gay or lesbian patient should have the confidence to speak candidly with his or her physician. The term *gay* may soon be replaced with the expression "men having sex with men."

Much more information about the sexual history is presented in [Chapter 5](#), Mitigating Racism and Bias in Clinical Medicine.

Violence and Abuse

Domestic violence, rape, child abuse, sibling violence, and elder abuse are rampant and have reached staggering proportions. Of all domestic violence victims, 90% to 95% are women, and the perpetrators are mostly men. Every year, women experience 4.8 million intimate partner-related physical assaults and rapes. The violence is often a combination of physical, sexual, and psychological abuse, and the signs and symptoms may be subtle or obvious. It is therefore important to ask all patients whether they have ever been emotionally, physically, or sexually abused.

Much of the violence against women is perpetrated by their intimate partners or in relationships that are commonly protective, such as that of father and daughter. U.S. Department of Justice studies indicate that a woman is more likely to be raped, assaulted, or murdered by a male partner or ex-partner than by a stranger. Up to 45% of abused women are beaten during pregnancy. Four percent of all male homicide victims are killed by spouses or female partners. As many as one per seven women seen in emergency departments has symptoms related to abuse. A national survey indicated that more than 2 million women are severely beaten by their male partners each year. It is recognized that such violence is vastly underreported; the actual number of cases is probably double the number reported. Clinicians frequently treat the injuries only symptomatically and often fail to recognize the abuse. Forty-four percent of rape victims are under the age of 18 years; 80% percent are under the age of 30 years. It has been estimated that every 2 minutes, someone in the United States is sexually assaulted, and each year there are about 207,754 victims of sexual assault. Only 46% of sexually assaulted individuals report it to the police. Approximately two thirds of assaults are committed by someone known to the victim.

Although many women who are victims of abuse do not volunteer any information, they often discuss the incidents if asked simple, direct questions in a nonjudgmental way and in a confidential setting. Be aware of the possibility of domestic violence in any woman with multiple medical visits for sexual dysfunction; multiple, unexplained bruises; chronic pelvic pain; fatigue; chest pain; gastrointestinal disturbances; headaches; depression; anxiety; panic attacks; eating disorders; substance abuse; suicidal attempts; and abdominal pain.

Because the perpetrator often accompanies the victim to the interview, ask any other person present to leave while you speak to the patient. Begin with the following direct question: "Since domestic violence is so common, I've begun to ask about it routinely. At any time, has your partner hit, kicked, or otherwise hurt or frightened you?" If the patient answers in the affirmative, encourage her to talk about it. Alternatively, you may ask, "Do you feel safe in your relationship?" Always listen nonjudgmentally to encourage the patient to continue talking about the episode. Showing support is very important. A statement such as "You are not alone" or "Help is available for you" shows empathy. It is crucial to assess the danger to the patient as quickly as possible before she leaves the medical facility. If the patient is in imminent danger, determine whether she can stay with friends or family.

A shelter for battered women may be an alternative. Finally, provide the patient with the telephone number of the local domestic violence hotline.

If the patient answers “no” to your introductory query and you suspect some form of domestic violence, be aware of the clinical findings that may indicate abuse:

- Injury to head, neck, breasts, abdomen, or genitals
- Multiple injuries that seem inconsistent with the patient’s story
- Delay in seeking treatment
- Unusual explanation for the injury
- Injury during pregnancy
- Repeated vaginal infections
- Fear of pelvic examination
- Vaginal bruises or lacerations
- Chronic pain syndrome
- Psychological distress
- A partner who seems overly protective and doesn’t want to leave the room

Any of these injuries must have a plausible explanation. If there is none, it is appropriate to ask further questions, but the partner must not be present. You might say, “It looks as if you’ve been hurt. Can you tell me how it happened?” Another approach could be “Sometimes when people feel the way you do, it’s because they may have been abused. Is this happening to you?” Even if a patient is in an abusive setting and she fails to acknowledge it once you have provided an opportunity, allow her to return to discuss it later. Serious injury and homicide often result once a person attempts to leave an abusive partner. Allow her to make the decision to leave. You will have indicated your support.

The global prevalence of child sexual abuse has been estimated at 19.7% for females and 7.9% for males, according to a 2009 study published in *Clinical Psychology Review* that examined 65 studies from 22 countries. According to the National Child Abuse and Neglect Data System (2018),²¹ the number and rate of victims have fluctuated during the past 5 years. Comparing the national rounded number of victims from 2012 (656,000) to the national estimate of victims in 2016 (676,000) shows an increase of 3.0 percent. For 2016, a nationally estimated 1750 children died of abuse and neglect at a rate of 2.36 per 100,000 children in the national population. Seventy percent of all child fatalities were younger than 3 years. Boys had a higher child fatality rate than girls; 2.87 per 100,000 boys in the population, compared with 2.11 per 100,000 girls in the population. Eighty-seven percent (87.4%) of child fatalities were White (45.1%), African American (28.5%), and Hispanic (13.8%). The rate of African American child fatalities (4.65 per 100,000 African American children) is 2.2 times greater than the rate of White children (2.08 per 100,000 White children) and nearly 3 times greater than the rate of Hispanic children (1.58 per 100,000 Hispanic children). Most perpetrators were caregivers of their victims. More than three-quarters

(78.0%) of child fatalities involved parents acting alone, together, or with other individuals.

A history of childhood sexual abuse is nearly always associated with enduring physical and psychological sequelae. There are many somatic disorders that may result after abuse. These include eczema, sleep disorders, sexual dysfunction, substance abuse, eating disorders, headaches, “mystery” pain, depression, asthma, and a wide variety of phobias. Health care providers have an ethical and legal responsibility to report all cases of suspected child abuse and to protect the child from further abuse. Any injury that cannot be adequately explained should raise concern about either nonaccidental injury or neglect. Injuries to the skin are seen in 90% of abused children. Multiple injuries in various stages of healing almost always indicate repeated beatings.

Male rape is also on the rise. According to the National Sexual Violence Resource Center, 1 in 71 men will be raped at some point in their lives.²² Fifty-two percent of male victims report being raped by an acquaintance and 15.1% by a stranger. Every year, men experience 2.9 million assaults. Most male rape victims are raped by other men, in the sense that they are forced to submit to anal intercourse, masturbation of the offender, oral sex, or other sex acts. Information about male rape is scarce because male victims, like their female counterparts, feel humiliation and shame and are reluctant to report it. Many men believe that if they have been raped by another man, it implies that the victim has homosexual tendencies.

Reproductive and Gynecologic History

The *reproductive and gynecologic history* obtains information about a woman’s age at menarche, regularity of menstrual flow, and duration of periods. In addition, the number of pregnancies, number of deliveries, number of abortions (spontaneous or induced), and complications of pregnancies are included in this part of the history. It is also vital to determine whether the woman was exposed to diethylstilbestrol through her mother’s use during pregnancy. This is particularly important in any woman born before 1975. Other important questions are discussed in [Chapter 19](#), Female Genitalia.

In the reproductive history for a man, it is important to inquire about sexual interest, function, satisfaction, and any sexual problems. Has the man been unable to procreate? If so, is he aware of the reason? Other questions for men are discussed in [Chapter 18](#), Male Genitalia and Hernias.

Review of Systems

The *review of systems* summarizes in terms of body systems all the symptoms that may have been overlooked in the history of the present illness or in the medical history. By reviewing the list of possible symptoms in an orderly manner, the interviewer

²¹U.S. Department of Health & Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children’s Bureau. (2018). Child maltreatment 2016. Available from <https://www.acf.hhs.gov/cb/research-data-technology/statistics-research/child-maltreatment>

²²Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., Stevens, M. R. (2011). The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 summary report. Retrieved from the Centers for Disease Control and Prevention, National Center for Injury Prevention and Control: http://www.cdc.gov/ViolencePrevention/pdf/NISVS_Report2010-a.pdf

can specifically check each system and uncover additional symptoms of “unrelated” illnesses not yet discussed. The review of systems is best organized from the head down to the extremities, and the questions can be asked during the physical examination of that body area. Patients are told that they are going to be asked whether they have ever had a particular symptom and should answer “yes” or “no.” If they answer in the affirmative, further direct questioning is appropriate. The interviewer need not repeat questions that were previously answered, unless clarification of the data is necessary.

Table 1.1 is the review of systems and which questions should be asked of all patients. The questions should be understandable to the patient. For example, a question regarding paroxysmal nocturnal dyspnea should be asked in this manner:

“Do you ever awaken in the middle of the night with sudden shortness of breath or sudden difficulty in breathing?”

Each of the organ- and system-specific chapters that follow discusses the review of symptoms in more detail. Hints about specific questioning and pathophysiologic features of the symptoms are also provided.

Sometimes, a patient may answer all the questions in the affirmative. If the interviewer detects that this is occurring, it may be useful to ask a question about a physiologically impossible condition. For example, if a patient answers “yes” when asked, “Do your stools glow in the dark?” the interviewer should not continue with the review of systems. The interviewer can state in the written history or in the verbal presentation that “the patient has a positive review of systems.”

Because the goal of the medical history is to acquire as much information about each illness as possible, other specific questions related to a particular patient may be indicated. Look at the patient shown in Fig. 1.4. Note the large jaw and nose. If you saw such a patient, you might try to determine when the facial changes occurred. In such a case, you could ask the man whether he has noticed a change in his hat or baseball cap size and when he first noticed it.



Fig. 1.4 Acromegaly: Facial Characteristics.

Look at Fig. 1.5, in which the right hand of the same patient (on the right) is compared with the right hand of a normal individual. Asking about a change in glove size would be useful with this particular patient. It would be appropriate to inquire whether there has been a change in shoe size as well.

A useful bit of information may be an old photograph of the patient to help determine when the suspected changes occurred. Compare Fig. 1.4 with the photograph in Fig. 1.6 (of the same patient taken 20 years earlier). Notice the bulging forehead and the prominent jaw in the later photograph. The patient has acromegaly, a condition of abnormal, excess growth hormone secreted by a pituitary tumor. The changes are insidious, occurring over many years. The photograph was helpful in determining the changes in bone and soft tissue structure.



Fig. 1.5 Acromegaly: Characteristics of Hands. Note the stubby fingers of the patient on the right, compared with the fingers of a normal hand on the left.

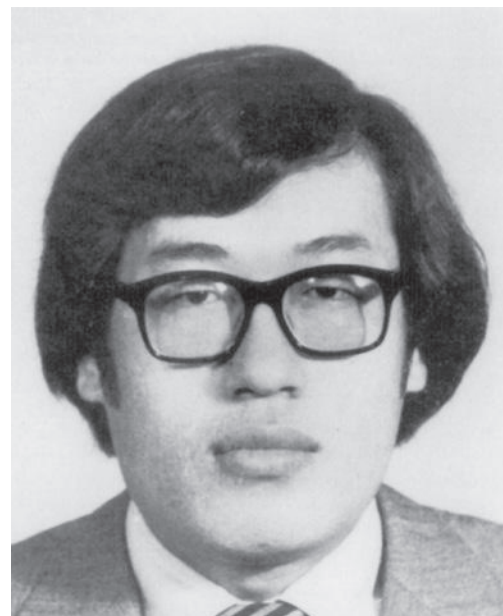


Fig. 1.6 Photograph of the patient shown in Fig. 1.4, taken 20 years earlier. Compare the facial features (i.e., nose and chin) in the two photographs.

TABLE 1.1 Review of Systems

General	Skin	Chest	Cardiac
<ul style="list-style-type: none"> • Usual state of health • Fever • Chills • Usual weight • Change in weight • Weakness • Fatigue • Sweats • Heat or cold intolerance • History of anemia • Bleeding tendencies • Blood transfusions and possible reactions • Exposure to radiation 	<ul style="list-style-type: none"> • Rashes • Itching • Hives • Easy bruising • History of eczema • Dryness • Changes in skin color • Changes in hair texture • Changes in nail texture • Changes in nail appearance • History of previous skin disorders • Lumps • Use of hair dyes • Head “dizziness” 	<ul style="list-style-type: none"> • Cough • Pain • Shortness of breath • Sputum production (quantity, appearance) • Tuberculosis • Asthma • Pleurisy • Bronchitis • Coughing up blood • Wheezing • Most recent x-ray film • Most recent test for tuberculosis • History of bacille Calmette-Guérin (BCG) vaccination 	<ul style="list-style-type: none"> • Chest pain • High blood pressure • Palpitations • Shortness of breath with exertion • Shortness of breath when lying flat • Sudden shortness of breath while sleeping • History of heart attack • Rheumatic fever • Heart murmur • Most recent electrocardiogram • Other tests for heart function
Mouth and Throat	Neck	Nose	Breasts
<ul style="list-style-type: none"> • Condition of teeth • Date of most recent dental appointment • Condition of gums • Bleeding gums • Frequent sore throats • Burning sensation of tongue • Hoarseness • Voice changes • Postnasal drip 	<ul style="list-style-type: none"> • Lumps • Goiter • Pain on movement • Tenderness • History of “swollen glands” • Thyroid trouble 	<ul style="list-style-type: none"> • Nosebleeds • Infections • Discharge • Frequency of colds • Nasal obstruction • History of injury • Sinus infections • Hay fever 	<ul style="list-style-type: none"> • Lumps • Discharge • Pain • Tenderness • Self-examination
Vascular	Neurologic	Musculoskeletal	Urinary
<ul style="list-style-type: none"> • Pain in legs, calves, thighs, or hips while walking • Swelling of legs • Varicose veins • Thrombophlebitis • Coolness of extremity • Loss of hair on legs • Discoloration of extremity • Ulcers 	<ul style="list-style-type: none"> • Fainting • “Dizziness” • “Blackouts” • Paralysis • Strokes • “Numbness” • Tingling • Burning sensation • Tremors • Loss of memory • Psychiatric disorders • Mood changes • Nervousness • Speech disorders • Unsteadiness of gait • General behavioral change • Loss of consciousness • Hallucinations • Disorientation 	<ul style="list-style-type: none"> • Weakness • Paralysis • Muscle stiffness • Limitation of movement • Joint pain • Joint stiffness • Arthritis • Gout • Back problems • Muscle cramps • Deformities 	<ul style="list-style-type: none"> • Frequency • Urgency • Difficulty in starting the stream • Incontinence • Excessive urination • Pain on urination • Burning sensation • Blood in urine • Infections • Stones • Bed-wetting • Awakening at night to urinate • History of retention • Urine color • Urine odor
Male Genitalia	Female Genitalia	Gastrointestinal	Headaches
<ul style="list-style-type: none"> • Lesions on penis • Discharge • Erectile dysfunction • Pain • Scrotal masses • Hernias • Frequency of intercourse • Ability to enjoy sexual relations • Fertility problems • Prostate problems • History of venereal disease and treatment 	<ul style="list-style-type: none"> • Lesions on external genitalia • Itching • Discharge • Date of most recent Pap smear and result • Pain on intercourse • Frequency of intercourse • Birth control methods • Ability to enjoy sexual relations • Fertility problems • Hernias • History of venereal disease and treatment • History of diethylstilbestrol (DES) exposure • Age at menarche • Interval between periods • Duration of periods • Amount of flow • Date of last period • Bleeding in between periods • Number of pregnancies • Abortions/miscarriages • Term deliveries • Complications of pregnancies • Descriptions of labor • Number of living children • Menstrual pain • Age at menopause • Menopausal symptoms • Postmenopausal bleeding 	<ul style="list-style-type: none"> • Appetite • Excessive hunger • Excessive thirst • Nausea • Swallowing • Constipation • Diarrhea • Heartburn • Vomiting • Abdominal pain • Change in stool color • Change in stool caliber • Change in stool consistency • Frequency of bowel movements • Vomiting blood • Rectal bleeding • Black, tarry stools • Laxative or antacid use • Excessive belching • Food intolerance • Change in abdominal size • Hemorrhoids • Infections • Jaundice • Rectal pain • Previous abdominal x-ray films • Hepatitis • Liver disease • Gallbladder disease 	<ul style="list-style-type: none"> • Pain • Fainting • History of head injury • Stroke • Eyes • Use of eyeglasses • Current vision • Change in vision • Double vision • Excessive tearing • Pain • Recent eye examinations • Pain when looking at light • Unusual sensations • Redness • Discharge • Infections • History of glaucoma • Cataracts • Injuries • Ears • Hearing impairment • Use of hearing aid • Discharge • “Dizziness” • Pain • Ringing in ears • Infections

TAKING NOTES

As a novice interviewer, you may feel compelled to take down all the history for fear that you might forget some important parts. It is best to jot down only short phrases and specific dates and write the entire history up later; do not concentrate more on the notes than on what the patient is saying and his or her body language. If you are using electronic medical records, try to face the patient as you write your note on the computer screen to maintain eye contact.

A summary is extremely useful to help you keep the story accurate. By summarizing, you also inform the patient that you were listening carefully to his or her story, and you have the details correct. If not, the patient may then correct you, which is fine. A summary allows you also to clarify aspects of the history. You can summarize at different points in the interview: after the history and before the physical examination, or after the history and physical examination. A summary can also help you should you draw a blank during the interview.

CONCLUDING THOUGHTS

A medical history must be dynamic. Every history is different. All patients are asked the standard questions, but each patient should be evaluated individually. There is no limit to the questions to be asked.

The *written history* is a permanent, legal document of the patient's health history. The information that is recorded must be accurate and objective. Based on all the information gleaned from the patient's history, the interviewer carefully summarizes all the data into a readable format. Anything that is written in a patient's record could be presented to a court of law. Only objective data should be included. Opinions or statements about previous care and therapy *must* always be avoided.

By convention, when the review of systems is stated or written, all symptoms that the patient has experienced are indicated first. Symptoms never experienced are indicated afterward. The *pertinent positive symptoms* are symptoms that have possible relevance to the present illness. *Pertinent negative symptoms* are symptoms that are not present but are often related to the present illness.

If information in the review of systems has been described previously—in the history of present illness, for example—it is correct to indicate under the systems review of that symptom, “see history of present illness.”

As you proceed with the interview, you may sense that it is not going well. Is the patient comfortable? Is there a language barrier? Did you say or do something to interfere with the rapport? Is the patient intimidated? Is the patient concerned about

confidentiality? Is the patient reluctant to talk in the presence of family members? Is the patient able to express his or her feelings? These issues reflect just a few of the common reasons for lack of progression of an interview. If you can alleviate the problems, do so. If you notice that the patient has suddenly become less communicative, you could say, “Is there anything that I have said or have asked that has made you upset?” Perhaps interviewing the patient on another day but using the same approach will be more successful.

Putting the Patient at Ease

The key to success in an interview is the ability to put the patient at ease. To do so, the interviewer must be relaxed. What techniques are available to the interviewer and patient to relax? One useful approach is the visualization of color; for example, if the interviewer were to say, “Close your eyes and visualize the color blue,” the patient would feel a definite response in body as well as in mind. If the patient were then to let that image dissolve, take a few breaths, close the eyes again, and visualize the color red, he or she would notice that the response to this color is quite different. Red creates a different state of mind than do blue, green, yellow, and so forth.

Whether this is entirely a result of psychological association is irrelevant to this discussion. The point is that because people respond strongly to color, interviewers can influence the state of mind of patients and themselves by suggesting an atmosphere of color that calms, warms, cheers, cools, and so forth, depending on what is called for in the situation. Because color can help a patient relax, it can have beneficial effects on blood pressure, heart rate, and other bodily functions.

The same is true of the visualization of environments that are pleasant, beautiful, and peaceful. Having the patient take a few moments, with eyes closed, to imagine himself or herself in a garden or a quiet pine forest can substantially lessen nervousness and tension. The connection between relaxation and health is becoming more widely understood and accepted. According to studies in behavioral medicine, the practice of meditation has a beneficial effect in the treatment of hypertension, some heart problems, depression, and anxiety, among other illnesses.

Many visualization techniques are far from new. In the Tibetan approach to medicine, a system that developed between the fourth and twelfth centuries, there is a direct connection between the state of a person's mind and the state of his or her health.

In the next chapter, the patient's responses to the questions are investigated, and the influence of background and age on those responses is observed.

The bibliography for this chapter is available online at StudentConsult.com.

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The Patient's Responses

Mark H. Swartz

It is our duty to remember at all times and anew that medicine is not only a science, but also the art of letting our own individuality interact with the individuality of the patient.

Albert Schweitzer (1875–1965)

RESPONSES TO ILLNESS

Health is characterized by a state of well-being, enthusiasm, and energetic pursuit of life's goals. Illness is characterized by feelings of discomfort, helplessness, and a diminished interest in the future. Once patients recognize that they are ill and possibly face their own mortality, a series of emotional reactions occurs, including anxiety, fear, depression, denial, projection, regression, anger, frustration, withdrawal, and an exaggeration of symptoms. These psychological reactions are general and are not specific to any particular physical illness. Patients must learn to cope not only with the symptoms of the illness but also with how life is altered by the illness.

Conflict

Conflict is an important medical and psychological concept to understand. Patients live with conflict. What is conflict? Conflict exists when a patient has a symptom and wants to have it evaluated by a member of the health care team, but the patient does not want to learn that it represents a “bad” disease process.

Conflict is widespread in medical practice. It is very common for patients to wait until the very end of the consultation to say something like, “Oh, doctor, there is one other thing I wanted to tell you!” That information is often the most important reason the patient sought consultation. The patient may have taken time off from work, paid the appropriate fees, and now does not want to return home without finding out the reason for the symptom. The patient may have hoped the clinician would bring up the subject because it is often too painful for the patient to discuss it. One example of conflict occurs when patients with acute myocardial infarction suffer chest pain for several weeks before the actual event. They convince themselves that it is indigestion or musculoskeletal pain; they do not seek medical attention because they do not want to receive a diagnosis of coronary heart disease. Another example of conflict is a woman with no family history of breast cancer who finds a breast mass during regular self-examination and does not seek medical attention for several months for fear that the diagnosis is cancer; she *wants* to find out what the mass is, but the conflict is that she does *not*

want to find out that the mass is cancer, although statistics indicate it may be benign. The health care provider must be able to identify conflict, which is often a precursor of denial, to facilitate care of the patient.

Anxiety

Anxiety is a state of uneasiness in which the patient has a sense of impending danger. It is the fundamental response to stress of any kind, such as separation, injury, social disapproval, or decreased self-esteem. Anxiety and fear are common reactions to the stress of illness. The terms *anxiety* and *fear* are often used interchangeably. However, there are two important differences. First, fear tends to be specific and is triggered by a specific event or object; in contrast, anxiety tends to be more diffuse, often occurring without a specific trigger. Second, fear is more acute and tends to appear rapidly, whereas anxiety develops more slowly and takes longer to resolve. The feelings of loss of control, guilt, and frustration contribute to the patient's emotional reaction. Illness makes patients feel helpless. Recognizing the body's mortality leads patients to an intense feeling of anxiety. In addition to the emotional reaction, fear can be manifested physiologically by restlessness, gastrointestinal problems, or headaches. Other common symptoms of anxiety include difficulty falling asleep, nightmares, urinary frequency, palpitations, fatigue, vague aches and pains, paresthesias, sweating, trembling, nausea, a feeling of choking, chills, hot flashes, dizziness, and shortness of breath. It is not uncommon for patients to feel as if they are “falling apart.”

Anxiety disorders can be manifested in many forms:

- *Generalized anxiety disorder*—lacks specific traumatic event or focus for concern
- *Panic disorder*—recurrent, unexpected attacks of fear or discomfort that develop abruptly and peak within 10 minutes
- *Agoraphobia*—anxiety about being in a place or situation from which escape may be difficult
- *Phobias*—uncontrollable fear about the presence or anticipation of something
- *Obsessive-compulsive disorder*—associated with obsessions and compulsions that cause marked distress or anxiety

- *Acute stress disorder*—symptoms occur within 4 weeks of the event and last from 2 weeks to a month
- *Posttraumatic stress disorder (PTSD)*—persistent reexperiencing of an event “outside the range of usual human experience” and lasts for months to years (discussed later in this chapter)

The young man who has been stricken with a heart attack feels helpless. As he lies in his intensive care unit bed, he begins to recognize that he really is mortal. The patient believes that he must depend on everyone and everything: the nurse, the doctor, the intravenous line, even the monitor. His anxiety, based on helplessness, is a normal response to his illness. His sudden illness and the threat of possible death oppose his belief that he is indestructible.

A 72-year-old man who has lived alone for years since his wife's death is admitted to a hospital for a transurethral prostatectomy. He is anxious that he may become dependent on his children. He may be more threatened by his fear of dependency than by the illness itself.

The hospitalized patient who is brought to the radiology department for a routine chest x-ray film and is forced to wait for 2 hours for a transporter to bring her back to her room suffers anxiety. She is angry that she has been left waiting and perhaps has missed some visitors, but she says nothing. Her anxiety is based on the fear of expressing anger to the nurses and staff members on the floor. She believes that if she were to express her anger, the hospital personnel might interfere with her medical care.

Some hospitalized patients cannot accept the love and care expressed by family or friends. This inability to accept tenderness is a common source of anxiety. Such patients feel threatened by these affectionate acts because they serve to reinforce their dependency.

All patients who are admitted to a hospital experience anxiety. The patients must put their most important commodity, their lives, into the hands of a group of strangers who may or may not be competent to assume responsibility for the patients' survival.

It is most important for the interviewer to identify the causes or roots of a patient's fear or anxiety, as well as to acknowledge the existence of the patient's feelings without expressing judgment. Whenever possible, the interviewer should provide some information to allay the patient's fear or anxiety.

Depression

Depression is a term used to describe a symptom of a chronic state of lowering of mood. Some patients have a predilection for depression, but depression is a common state, occurring in more than 20% of all patients with major illnesses, particularly cancer and cardiovascular disease.

In its chronic state, depression affects more than 8% of the United States population, or 15 million people, and is the leading cause of disability in the United States for people ages 15 to 45. Depression is twice as common in women as in men.

Depression is a common psychological response to a *loss of any kind*: death of a loved one, a relationship, health, autonomy, self-esteem, finances, a job, or even a hormone (such as thyroid). Certain degrees of depression probably accompany every chronic

illness. There are many types of depression: reactive, neurotic, manic, melancholic, and agitated are only a few types. In general, patients with depression have pessimistic tones in speech and a downcast facial expression. They may express feelings of futility and self-accusation. They respond to questions with brief answers. Their speech is slow, their volume is low, and their pitch is monotonous. Depressed patients feel inadequate, worthless, and defeated. They also suffer profound feelings of guilt. A remark such as “You look sad” invites these patients to talk about their depression. Although many depressed patients cannot cry, crying can relieve some severe depressive feelings, even if only momentarily, and thus enables patients to continue their story. Although crying may be brought on by patients' concern for their own illness, crying usually occurs when patients think of an illness or death of a loved one or of a potential loss. They often have much hostility and resentment and suffer from rejection and loneliness. Self-accusative and self-deprecating delusions can occur in severely depressed patients. When these delusions are present, the feelings of worthlessness are so overwhelming that patients may believe that suicide is the only way out.

Depression may be the most common reaction to illness, as well as the most frequently overlooked. The most important diagnostic symptoms of depression are the following:

- Markedly diminished interest or pleasure in almost all activities (*anhedonia*)
- Insomnia
- Change in appetite or weight
- Fatigue or loss of energy
- Low self-esteem
- Agitation
- Feelings of guilt or worthlessness
- Decreased ability to think or concentrate
- Thoughts of death or suicide

As an example of severe depression, consider the following case of a 23-year-old law student. He is engulfed by anxiety when he is diagnosed with acquired immune deficiency syndrome (AIDS). When his friends and family learn of the illness, he is immediately excluded from all relationships. He has extreme feelings of guilt and low self-esteem. He is found later hanged in his parents' attic. His only way of coping with his illness has been through suicide.

Suicide is a major public health concern. Approximately 40,000 people die by suicide each year in the United States. More people die by suicide annually than by homicide. In 2016, there were 44,965 recorded suicides,¹ up from 42,773 in 2014, according to the Centers for Disease Control and Prevention's (CDC's) National Center for Health Statistics (NCHS). On average, adjusted for age, the annual U.S. suicide rate increased 24% between 1999 and 2014, from 10.5 to 13.0 suicides per 100,000 people, the highest rate recorded in 28 years.² In 2015, suicide was the seventh

¹2016, United States: Suicide Injury Deaths and Rates per 100,000. (All Races, Both Sexes, All Ages). Retrieved March 3, 2018—via WISQARS Fatal Injury Reports—CDC.

²Tavernise S. U.S. suicide rate surges to a 30-year high. *NYTimes.com*; April 22, 2016.

leading cause of death for males and the 14th leading cause of death for females.³

Suicide is often committed out of despair, the cause of which can be attributed to a mental disorder such as depression, bipolar disorder, schizophrenia, alcoholism, or drug abuse. Suicide ranks as the 11th leading cause of death in the United States. It is the second leading cause among 25- to 35-year-olds and the third leading cause among 15- to 24-year-olds. In 2010, more than 13% of all U.S. high school students reported that they had contemplated suicide in the preceding year. There are an estimated 10 to 20 million nonfatal attempted suicides every year.

Among students in grades 9 to 12 in the United States during 2013,⁴ 17.0% of students seriously considered attempting suicide in the previous 12 months (22.4% of females and 11.6% of males), and 13.6% of students made a plan about how they would attempt suicide in the previous 12 months (16.9% of females and 10.3% of males). Eight percent of students attempted suicide one or more times in the previous 12 months (10.6% of females and 5.4% of males), and 2.7% of students made a suicide attempt that resulted in an injury, poisoning, or an overdose that required medical attention (3.6% of females and 1.8% of males).

The risk of suicide is greater if a behavior is new or has increased and if it seems related to a painful event, loss, or change. The following signs may mean someone is at risk for suicide:

- Talking about wanting to die or to kill themselves
- Looking for a way to kill themselves, such as searching online or buying a gun
- Talking about feeling hopeless or having no reason to live
- Talking about feeling trapped or in unbearable pain
- Talking about being a burden to others
- Increasing the use of alcohol or drugs
- Acting anxious or agitated; behaving recklessly
- Change in sleeping pattern
- Withdrawing or isolating themselves
- Showing rage or talking about seeking revenge
- Displaying extreme mood swings

Suicide is tragic, but it is often preventable. Knowing the risk factors for suicide and who is at risk can help reduce the suicide rate. **Interviewers must not ignore any talk of suicide.** If patients bring up suicidal thoughts, interviewers must get the assistance of someone experienced in the field *immediately*.

Denial

Denial is a coping mechanism that consists of acting and thinking as if a part of reality is not true. It gives one time to adjust to distressing situations, but staying in denial can interfere with treatment and the patient's ability to tackle challenges. Denial is one of the most common psychological mechanisms of defense

and can occur in both patients and health care providers. Denial is often an emotional response to inner tension and prevents a painful conflict from producing overt anxiety. It is actually a form of self-deception. Denial is often observed in patients with terminal illnesses or with chronic, incurable diseases. In general, the more acute the illness, the greater is the patient's acceptance; the more insidious, the greater the denial.

If a patient is in denial, he or she is not being realistic about something that's happening in his or her life, although it might be obvious to those around the patient. A patient dying slowly from cancer can observe his or her weight decreasing and the side effects of medications. Frequent visits to the hospital for chemotherapy or radiation therapy confirm the severity of the illness; yet in spite of all this, the patient may continue to deny the illness. He or she makes plans for the future and talks about the time when he or she will be cured. Denial is the psychological mechanism that keeps this patient going. The interviewer should not confront the patient's denial, despite its apparent absurdity. Telling such a patient to "face the facts" is cruel. Breaking down denial in such a patient serves only to add to the dying patient's misery. However, the patient's family must understand and accept the poor prognosis.

When a patient is in denial, he or she will:

- Refuse to acknowledge a stressful problem or situation.
- Avoid facing the facts of the situation.
- Minimize the consequences of the situation.

In its strictest sense, denial is an unconscious process. Denial can sometimes obstruct proper medical care. A woman presents to a breast clinic with an orange-sized mass in one breast. The mass has already started to ulcerate, with a resultant foul-smelling infection. When asked how long she has had the mass, she responds that she noticed it "just yesterday." When a patient is in denial, it is often best to interview a reliable informant in addition to the patient.

Patients can be in denial about anything that makes them feel vulnerable or threatens their sense of control, such as:

- A chronic or terminal illness
- Depression or other mental health conditions
- Addiction
- Financial problems
- Job difficulties
- Relationship conflicts
- Traumatic events

Patients can be in denial about something that is happening to them or to someone else.

Fig. 2.1 illustrates another example of the tragic sequelae of denial. This man has a basal cell carcinoma of the face. As is discussed in Chapter 8, The Skin, basal cell carcinomas are very slow growing and rarely metastasize; they are locally invasive. Had the patient sought medical attention when the lesion first appeared (and was very small), he would have been totally cured. A person's denial can be so deep that it prevents him or her from seeing reality and seeking medical attention. Therefore it is important for the health care provider to be sensitive to this very powerful psychological mechanism. For another example of denial, see the unfortunate patient with inflammatory breast carcinoma shown in Fig. 16.8.

³Centers for Disease Control and Prevention (CDC). Web-based Injury Statistics Query and Reporting System (WISQARS) [Online]. (2013, 2011) National Center for Injury Prevention and Control, CDC (producer). Available from <http://www.cdc.gov/injury/wisqars/index.html>.

⁴Kann L, Kinchen S, Shanklin SL, et al. Youth Risk Behavior Surveillance—United States, 2013. *MMWR*. 2014;63(ss04):1–168. <http://www.cdc.gov/mmwr/preview/mmwrhtml/ss6304a1.htm>.



Fig. 2.1 A Portrait of Denial. This man has a locally invasive basal cell carcinoma.

Projection

Projection is another common defense mechanism by which people unconsciously reject an unacceptable emotional feature in themselves and “project” it onto someone else. It is the major mechanism involved in the development of paranoid feelings. For example, hostile patients may say to interviewers, “Why are you being so hostile to me?” In reality, such patients are projecting *their* hostility onto the interviewers.

Projection is one of the defense mechanisms identified by Freud. According to Freud, projection is when someone is threatened by or afraid of their own impulses, so they attribute these impulses to someone else. Patients commonly project their anxieties onto doctors. For example, a person in psychoanalysis may insist to the therapist that he knows the therapist wants to rape some women, when in fact the client has these awful urges to rape. Patients who use projection are constantly watching a doctor's face for subtle signs of their own fears.

As another example of projection, a 42-year-old woman with a strong family history of death from breast cancer has intense fears of developing the disease. During the inspection portion of the physical examination, the patient may be watching the clinician's face for information. If the clinician frowns or makes some type of negative gesture, the patient may interpret this as “The doctor sees something wrong!” The clinician may have made this expression thinking about the amount of work still to be done that day or what type of medication to prescribe for another patient. The patient has projected her anxiety onto the clinician. The clinician must be aware of these silent “conversations.”

In some instances, projection may have a constructive value, saving the patient from being overwhelmed by the illness.

Regression

Regression is a common defense mechanism by which the patient with extreme anxiety attempts unconsciously to return to earlier, more desirable stages of development. During these periods, the individual enjoyed full gratification and freedom from anxiety. Regressed patients become dependent on others and free themselves from the complex problems that have created their anxiety.

Behaviors associated with regression can vary greatly depending on which stage the person is fixated at:

- An individual fixated at the oral stage might begin eating or smoking excessively or might become very verbally aggressive.
- A fixation at the anal stage might result in excessive tidiness or messiness.

For example, consider a middle-aged married man who has recently been told that he has inoperable lung cancer that has already spread to his bones. He is stricken with grief and intense anxiety. There are so many unanswered questions. How long will he live? Will his last months be plagued with unremitting pain? How will his wife be able to raise their young child by herself? How will she manage financially without his income? Through regression, the patient can flee this anxiety by becoming childlike and dependent. The patient becomes withdrawn, shy, and often rebellious; he now requires more affection.

Another example is a teenager who learns that the cause of his 6-month history of weakness and bleeding gums is acute leukemia. He learns that he will spend what little time he has left, in the hospital undergoing chemotherapy. His reaction to his anxiety may be regression. He now needs his parents at his bedside around the clock. He becomes more desirous of his parents' love and kisses. His redevelopment of enuresis (bed wetting) is part of his psychological reaction to his illness.

A final example is a 25-year-old woman with inflammatory bowel disease who has had many admissions to hospitals for exacerbations of her disease. She fears the future and the possibility that a cancer may have already started to develop. She is engulfed by a feeling of terror and apprehension. She fears that some day she may require a colostomy and that she will be deprived of one of her most important functions: bowel control. She acts inappropriately, has temper tantrums, and is indecisive. Her dependency on her parents is a manifestation of regression.

RESPONSES TO THE INTERVIEWER

Much of the enjoyment of medical practice comes from talking with patients. Each patient brings a challenge to the interviewer. Just as there are no two identical interviews, there are no two people who would interview the same patient in the same manner. This section describes a few characteristically troubling patient “types” and indicates some strategies for how the interview may be modified in each case.

Many of the patients to be described can arouse intensely negative feelings in the interviewer; as such, these patients have been collectively called “the hateful patient.” The interviewer should recognize these feelings and deal with them directly so that they do not interfere with the interaction. The interviewer must recognize early in the interaction the general characteristics