

- Children and adolescents face a wide variety of physical illnesses that may impinge on their development and their emotional, cognitive, behavioral, and social functioning
- Illnesses can range from acute acquired conditions to chronic congenital disorders.
- The direct physical effects of an illness, as well as the resultant emotional and behavioral responses, may last hours to days to months to years

- The ramifications of physical illnesses affect not only a child or adolescent, but also parents, significant caregivers, siblings, relatives, friends, and teachers.
- Between 10 and 20 million American children are estimated to have an ongoing physical health condition
- Although most of these conditions are relatively mild and interfere little with a child's usual activities, at least 10% of children with physical illness have symptoms severe enough to have an impact on their daily lives

## Advances in the treatment of physical illnesses over the past few decades have resulted in improved health and prognosis. Whereas many youngsters previously died of severe physical illnesses, more than 90% now survive into adulthood.

 Children and their families are remarkably resilient in adapting to the challenges of a physical condition

#### Most physically ill children do not have identifiable emotional, behavioral, or educational difficulties

 Although most children with a chronic physical illness do not experience a major psychiatric disturbance, the overall risk of psychiatric disorder is somewhat greater than that in the general population of children with no chronic physical illness  Evidence suggests that psychiatric problems in children with chronic physical illnesses present primarily as internalizing syndromes and persist over time

 Psychiatric disorders in physically ill children can be conceptually organized by the perceived relation between the comorbid psychiatric and general medical conditions

- Coincidental comorbidity describes patients with seemingly unrelated psychiatric and physical illnesses
- causal comorbidity refers to instances in which the psychiatric disorder is considered to be a direct result of the physical illness (somatopsychic disorders), as might be seen in a child with hyperthyroidism who otherwise meets criteria for an anxiety disorder
- or the physical symptoms are attributed to the psychiatric illness (psychosomatic disorders), as represented by an adolescent with functional abdominal pain and an associated generalized anxiety disorder

 Contrary to expectations, physical illness severity does not seem to play a significant role in adjustment and vulnerability to psychiatric disorder, although the type of physical illness does seem to matter.

#### Numerous studies have found that among conditions that do not involve the brain (e.g., cystic fibrosis, diabetes mellitus, asthma), there is no relation between disease severity and psychosocial adjustment

 youngsters with illnesses that affect the central nervous system (e.g., epilepsy, cerebral palsy) have an increased risk for psychiatric disorder.

 Adolescents with multiple chronic physical conditions and/or long-term physical disability also seem to be at higher risk for psychological problems  There is evidence that a child's psychiatric illness may affect the physical disease process, not only by influencing adherence and lifestyle, but also by producing psychophysiological changes

• For instance, not only have youngsters with diabetes mellitus been found to be at risk for depressive disorders but also those who have comorbid depression are at increased risk for treatment nonadherence and repeated hospitalization as well as disease-related complications (e.g., diabetic retinopathy)

## Models of Adaptation and Coping

- The trend in the coping literature has been toward developing integrative models of adaptation to pediatric illnesses
- Thompson and Wallander and Varni have developed such models, which display the interconnectedness of child-parent adaptation and adjustment. Thompson uses an ecological-systems theory perspective to develop a transactional model of stress and coping
- Chronic illness is seen as a stressor to which the child and family must adapt, and the relation between illness and adjustment depends on biomedical, developmental, and psychosocial processes

### Wallander and Varni present a risk and resistance framework of responses to stress, in which children with chronic illnesses display adjustment problems because they are exposed to negative life events.

 These negative events stem from both their physical illness and associated circumstances as well as from other general life stressors that may or may not be related to the illness. Each of these models has guided a number of research studies

## Factors Affecting Adaptation to Illness

- Coping Style:
- Coping styles—the sets of cognitive, emotional, and behavioral responses to stressors—have been categorized in a number of ways
- Approach-oriented coping: refers to thoughts or behaviors directed at managing the stressor or feelings it elicits,
- avoidance-oriented coping:, describes efforts by a person to avoid the stressor
- · Problem-focused strategies are directed at altering the stressor,
- whereas emotion-focused strategies are aimed at regulating emotional responses to the stressor

- The important factor for a child facing an acute medical stressor is not which strategy is used, but rather whether the child is allowed to make use of his or her preferred coping style.
- There is some evidence to support the finding that problemfocused coping may be more adaptive for children with chronic physical illness
- The variety, flexibility, and frequency of adaptive coping increase with age, such that older children have access to a wider range of effective coping strategies

#### Developmental Factors:

- Developmental factors have a profound impact on adaptation because they affect coping resources, ability to process and benefit from health-related information, reasoning about illness causality and responsibility, and medical adherence.
- Preschool children are limited in their ability to comprehend and recall medical information, which can exacerbate emotional reactions to medical interventions. Although able to better comprehend information,
- school-aged children may experience loss of control, significant anxiety, and helplessness related to fears about harm to their bodies

 Physical illness can impinge on the adolescent's developmental challenges of individuation and emerging sense of autonomy, bodily integrity, and sexuality, particularly when illnesses involve potential or actual loss of function or alteration of appearance.

 In contrast to acute illnesses, the age of children with chronic illnesses does not seem to have a significant relation to behavioral or self-esteem problems

- History of Illness and Medical Experience:
- Difficult, painful, or unsuccessful medical procedures can fuel future expectations of similar experiences, leading the child to become more anxious.
- This creates a difficult situation; distress due to negative prior experiences may lead to the avoidance of timely medical care, thereby increasing the likelihood that medical problems will develop that require more intensive and potentially invasive attention

• Temperament:

 Child temperament can affect adjustment to acute medical stressors directly, or it may moderate their preferences toward particular ways of coping

 More anxious children may choose distraction techniques to avoid experiencing an acute stressor, whereas less anxious children may be more likely to seek information about the stressor.

- Avoidance, in turn, may manifest itself as treatment nonadherence. There is evidence suggesting that the fit between temperament and environmental influences may be important in determining adjustment.
- Temperamental difficulties have been found to predict poorer long-term behavioral and emotional adjustment in children with physical illnesses

- Parent and Family Factors:
- Parental anxiety has been associated with parental distress during procedures, which, in turn, can interfere with the parents' abilities to respond to their child's emotional needs, with their abilities to help their child generate effective coping strategies, and with both immediate and long-term outcomes
- Parental psychopathology, including depression, anxiety, and posttraumatic stress reactions, has been shown to play important roles in long-term child adjustment.

# • The mental health clinician working with physically ill children should work toward establishing effective collaborations with primary care physicians and other medical professionals (pediatric health care team). The clinician must demonstrate flexibility and adaptability to perform several roles:

· evaluation, advocacy, support, and education

 By collaborating with the pediatric health care team and the family to clarify the reasons for and purposes of the referral, the mental health clinician is better positioned to frame an effective intervention

 Mental health referrals may be generated from primary care physicians, pediatric specialists, nurses, social workers, childlife specialists, other health care providers, or parents

#### Before assessing the physically ill child, the clinician should seek answers to the following questions:

- (1) Who is requesting the referral?
- (2) What is the reason for the referral?
- (3) When was the request made?
- (4) What is the time frame within which to respond?
- (5) Why is the request being made at this time?
- (6) Have the reasons for and value of the consultation been discussed with the child and family?

- There are typically three overlapping types of responses requested of the clinician by a pediatric health care team:
- diagnostic (e.g., differential diagnosis of somatoform illness, depression, delirium, anxiety), management (e.g., procedural distress, disruptive behavior, pain management, nonadherence, parental adjustment to illness, medication), and disposition (e.g., suicide assessment and psychiatric hospitalization). The relative importance to the medical professionals of each response varies on a case-to-case basis

- Mental health clinicians should be aware that emotional and behavioral symptoms (e.g., anxiety, depression, aggression) may be direct manifestations of a physical illness and/or its treatment.
- It is not uncommon for psychiatric symptoms to be attributed to the "stress" associated with a chronic physical illness, particularly when there are other notable psychosocial issues.
- Generally, each child has both indirect and direct physical illness effects, with the clinician facing the challenge of determining the relative importance of each to the child's current symptomatology

Mood and Anxiety Symptoms;

 Clinicians should be aware that mood and anxiety symptoms may present secondary to a general medical condition or its treatment The depressive symptoms weight loss, appetite changes, sleep problems, fatigue, loss of energy, difficulty thinking, loss of libido, and psychomotor agitation can overlap with numerous physical illnesses

- Common manifestations of psychological distress related to the indirect effects of physical illnesses include:
- somatic symptoms (e.g., malaise, pain, irritability, sleep disturbances, appetite changes),
- increased attachment behavior (e.g., clinginess), regression (e.g., loss of a developmental milestone),
- passivity (e.g., helplessness, powerlessness),
- frightening fantasies about illness or procedures (e.g., ideas of punishment, fear of bodily harm), anxiety, depression,
- mobilization of defenses (e.g., denial, phobic symptoms, conversion phenomena), and/or aggravation of premorbid psychiatric symptoms

PRESCHOOL	Fear of being alone, bad dreams	Patience and tolerance
	Speech difficulties	Provide reassurance (verbal and physical)
	Loss of bladder/bowel control, constipation, bed-wetting	Encourage expression through play, reenactment, story-telling
	Change in appetite	Allow short-term changes in sleep arrangements
	Increased temper tantrums, whin-	Plan calming, comforting activities before bedtime
	ing, or clinging behaviors	Maintain regular family routines
		Avoid media exposure

SCHOOL-AGE (agees 6-12)	Irritability, whining, aggressive behavior  Clinging, nightmares  Sleep/appetite disturbance  Physical symptoms (headaches,	Patience, tolerance, and reassurance  Play sessions and staying in touch with friends through telephone and Internet  Regular exercise and stretching  Engage in educational activities (workbooks, educational games)
	Stomachaches  Withdrawal from peers, loss of interest  Competition for parents' attention  Forgetfulness about chores and new information learned at school	Participate in structured household chores  Set gentle but firm limits  Discuss the current outbreak and encourage questions. Include what is being done in the family and community  Encourage expression through play and conversation  Help family create ideas for enhancing health promotion behaviors and maintaining family routines  Limit media exposure, talking about what they have seen/heard including at school  Address any stigma or discrimination occurring and clarify misinformation

	Physical symptoms (headaches, rashes, etc.)  Sleep/appetite disturbance	Patience, tolerance, and reassurance  Encourage continuation of routines  Encourage discussion of outbreak experience with peers, family (but do not
ADOLESCENT (ages 13-18)	Agitation or decrease in energy, apathy  Ignoring health promotion behaviors  Isolating from peers and loved ones  Concerns about stigma and injustices  Avoiding/cutting school	Stay in touch with friends through telephone, Internet, video games  Participate in family routines, including chores, supporting younger siblings, and planning strategies to enhance health promotion behaviors  Limit media exposure, talking about what they have seen/heard including at school  Discuss and address stigma, prejudice and potential injustices occurring during outbreak

## Psychotherapeutic Management Should Consider Multiple Treatment Modalities

- Individual Psychotherapy:
- Psychotherapy provides a time and place where patients can effectively voice feelings of fear, anger, and sadness Common elements of the interaction include support, reassurance, suggestion, explanation, and introspective exploration of the causes of a patient's feelings of demoralization
- The bereavement model has been used to help conceptualize the process of adaptation to a physical illness and to guide treatment intervention. The emotional responses to physical illness or disability can be viewed as a process that begins with shock and denial and proceeds through feelings of anguish and frustration toward an assimilation of illness information and adjustment. Several models of individual psychotherapies are used with physically ill children.

 Supportive psychotherapy aims to reduce emotional distress through ego support, enhancement of coping mechanisms, and protection of self-esteem. The goal is to provide education, encouragement, and support by pointing out strengths and correcting misconceptions

 Narrative therapy or "the story that children tell" regarding their physical illnesses provides opportunities for children and their families to share, organize, process, and validate their experiences

#### Cognitive-behavioral therapy (CBT):

 provides concrete structure to augment the sense of mastery and control, alter maladaptive patterns of thinking, improve problem-solving and social skills, and modify physiological responsesCognitive-behavioral therapy uses behavioral activation, cognitive restructuring, and problem-solving skills to change maladaptive cognitions and coping strategies

#### Behavior Modification:

• Behavior modification interventions target improvements in functional ability and decrease attention to complaints or negative behaviors. Systematic desensitization may be implemented for anxiety symptoms. Behavioral programs with appropriate incentives and an effective system of monitoring and rewards can be tailored for individual patients to reinforce desired behaviors (e.g., medication adherence). Biofeedback, relaxation training, imagery, and hypnosis are based on the premise that decreasing emotional distress and autonomic arousal may improve not only the child's emotional outlook, but also the physical condition

- Procedural Preparation and Play Strategies. Children are exposed to multiple invasive medical procedures. Prevention strategies have focused either on identifying risk factors or on preparing patients for procedures or hospitalizations.
- Preparatory interventions generally are designed to provide information relevant to their illnesses or treatment (e.g., preadmission programs, bibliotherapy, or support groups), combined with the modeling of and permission for adverse affective responses (e.g., fear, anger)

 Coping strategies during procedures can include breathing, deep muscle relaxation, distraction, behavioral rehearsal, positive reinforcement, modeling, visual imagery, and hypnosis These interventions have consistently been shown to reduce distress and improve cooperation

 Play can provide a medium to address reactions related to medical procedures, treatments, or hospitalization

#### Group Therapy:

 Group therapy has been found to be beneficial in patients who have shared diagnoses or illness-related issues as well as in patients with various physical illnesses. In addition to sharing common experiences, coping strategies, lifestyle changes, and resources, children and families are surprised by how much they offer to others, thereby enhancing their own self-esteem.