DISCUSSION 8 1

Prior to completing this discussion, read the required Roberto (2016) article, as well as Chapter 25 from the Lerner, Easterbrooks, Mistry, & Weiner (2013) *Developmental psychology* e-book.

Evaluate the issue of elder abuse being sure to define the types of abuse, the ages most susceptible to abuse, and other relevant information pertinent to this complex issue.Support your thoughts with the required reading, and one other source of scholarly perspective and research from the field. Additionally, propose two solutions for aging adults that would help them achieve successful aging and prevent elder abuse, as well as identifying two resources that would help active caregivers avoid elder abuse.

REFERENCE:
LERNER, R.M., EASTERBROOKS, M.A., MISTRY, J., & WEINER, I.B. (2013).

CHAPTER 25

Successful Aging

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What is *successful aging*? At first glance, this seems like an easy enough question. After all, don't we all want to be happy, healthy, wealthy, and beloved well into old age? However, taking into account that aging people likely encounter health-related problems, maybe healthy should be skipped from the list. Similarly, when people advance into very old age, the loss of their spouse or partner and of close friends is the norm rather than the exception. Considering this, "beloved" might take on a different meaning than in younger age groups. Finally, happiness seems such an elusive state that we might not want to make this the criterion for successful aging. Maybe, then, it is not so easy to answer the question of what successful aging is after all.

In this chapter, we will approach the concept of successful aging from three different perspectives. Specifically, we will discuss the following questions:

1. What are the characteristics of older people that differentiate old age from earlier phases in the lifespan?
2. How can "successful aging" be defined? What are the criteria for "successful aging"?
3. What are the processes and conditions fostering "successful aging"?

In the next section, we will focus on the context of old age. What are the external and internal changes that distinguish old age from younger age groups? What are the characteristics of old age that might render old age a time in life that is feared rather than hoped for? Why is it, as the saying goes, that everybody wants to *get* old but nobody wants to actually *be* old?

In the following section, we will then address the question of how to define "successful aging." There are primarily two reasons that render the term difficult to define:

1. The notion of "successful *aging*" could imply that there is some sort of discontinuity in developmental processes when people enter old age. If there was continuity, it would make more sense to speak more generally of "successful *development*." If, on the other hand, the term refers less to discontinuity of developmental processes, but to the specific age-related (internal and external) conditions of a phase in the life span, one would expect a compartmentalization into "successful childhood development," "successful adolescent development," "successful young adult development," and "successful midlife development." In agreement with a continuity model of developmental processes, we will use the term "successful aging" in this latter sense, and elaborate some characteristics that are specific to old age when compared to earlier phases in the life span.
2. The term "success" implies some sort of normative judgment on desirable and undesirable end states. This, in turn, raises two other problems: (1) what could be considered as a meaningful end state of development? and (2) which criteria should be employed to evaluate the desirability of those end states? The criteria for success are necessarily relative to social and cultural values. Whereas for certain cultures youthfulness might seem the most valued developmental state, for others, spiritual wisdom might be what people aspire to throughout their development. Not surprising, then,

there is no generally accepted definition of "successful aging." On an abstract level, however, there is agreement that successful development encompasses a simultaneous maximization of gains and minimization of losses. (Baltes, 1989; Brandtstädter, 1998)

In the final section of this chapter, we will discuss the currently most influential models of developmental regulation in old and very old age. These models shift the focus from a criteria-oriented approach addressing the question "*what* is successful aging?" to a more process-oriented approach addressing the question "*how* do people age successfully?" These models underscore that motivational processes of setting, pursuing, and maintaining personal goals are of central importance for understanding how individuals manage to age well.

CHARACTERISTICS OF OLD AGE

When is a person considered to be old? Old age, the final phase in life, is commonly thought to begin somewhere between the ages of 60 and 70. An often cited, somewhat arbitrary, threshold is the age of 65. For employees, retirement represents a cultural marker of entering old age. However, chronological age does not tell much about a person's *biological* (e.g., functional capacity), *psychological* (e.g., feelings, attitudes, interests, future perspectives), or *social* age (e.g., life activities, occupied roles; see Aiken, 1989). Even within a given person, aging is not a uniform process. Different organs and organ systems, as well as capacities in various functional and psychological domains, show differential patterns and rates of aging (Baltes, 1989). For example, the reproductive system usually ages more rapidly than the nervous system. Furthermore, other variables, such as poor nutrition, illness, or disuse, affect the rate and degree of aging-related decline (e.g., Aiken, 1989; Bales & Payne, 2009).

In other words, old age, like any other phase in life, is characterized by tremendous inter- and intraindividual variability. Nevertheless, in the subsequent sections, we will try to delineate some general characteristics of old age. Aging is a complex process, and it is beyond the scope of this chapter to attempt a comprehensive characterization of that life phase (for an overview see, for instance, P. Baltes, Staudinger, & Lindenberger, 1999; Birren & Schaire, 2006; Hofer & Piccinin, 2010). After characterizing aging as a "young" phenomenon, we will restrict our discussion to two broad domains of functioning that demonstrate marked age-related changes in old age: (1) physiology and health, and (2) cognition.

Old Age Is Still Young

Until relatively recently in human history, only a small proportion of people survived long enough to become old in today's sense (Vaupel, 1995). Up to about the beginning of the 19th century, life expectancy at birth (i.e., the average life span of persons born in a given year) was low for most populations, namely, only between 20 and 30 years. This was largely so because a large proportion of newborns (about one-third to one half) died before reaching the age of 5. Even for children surviving to age 5, the expected remaining lifetime was only 30 to 40 years. Only a small minority of people survived diseases, wars, and other life-threatening dangers to become 50. For them the remaining life expectancy was probably only about 10 to 15 years.

Only during the past two centuries has world life expectancy at birth increased from approximately 25 years at the beginning of the 19th century to approximately 68 years at the beginning of the 21st century (Riley, 2001; United Nations, 2009). Prior to 1950, the increase in life expectancy was largely due to reductions in death rates at younger ages and particularly in infant mortality. The continuing growth of life expectancy since 1950, in contrast, is attributable to the fact that older people live longer (see Oeppen & Vaupel, 2002).

In most countries, the increase in life expectancy has been co-occurring with a decline in fertility rates (i.e., a decrease in the average number of children per woman in child-bearing age). Both trends together (i.e., declining mortality *and* fertility rates) have drastically altered the population's composition—with the growth of the older population outpacing the total population's growth. Older people constitute increasingly large proportions of the world's (or a nation's) population. This trend will continue in the future, with the fastest expanding group being the "oldest-old" (United Nations, 2009).

This lengthening of the average human life might be viewed by many as one of the most precious achievements in recent human history. It does, however, also pose new challenges to cultural and societal developments. Societies need to develop policies that ensure, despite declining proportions of working-aged people, adequate income, housing, and health care as well as living conditions that provide opportunities for an independent, integrated life for a growing number of old people (Treas & Twyla, 2009). To meet these challenges, gerontology needs to provide information about conditions promoting positive aging and try to give answers to such questions as what represents adequate housing for the elderly or how to support independent living in old age. As a

first step in approaching the topic of successful aging, in the next section we will briefly outline the specific conditions of old age. We have selected two domains of functioning that have been identified as the strongest predictors of everyday competence in old age (Baltes, Maas, Wilms, Borchelt, & Little, 1999): (1) physiological or health-related functioning and (2) cognitive functioning.

Physiological and Health-Related Changes in Old Age

Aging is characterized by physiological changes that lead to progressive structural and functional decrements in all tissues and organs (for an overview see Kaiser, 2009). Most obvious to the lay observer are typical changes in appearance—for example, aging skin, graying or whitening hair, changes in body shape and stature, decreased muscular strength and endurance, increased stiffness in the joints, as well as a general slowing, increased sway and insecurity while walking or performing other motor tasks. Aging is also accompanied by impairments in the functioning of all the sense organs—vision, hearing, taste, smell, vestibular senses (necessary for the maintenance of posture and balance)—and sensitivity to touch, pain, and temperature. Physiological aging is furthermore characterized by gradual deterioration of internal organs, leading to a reduced efficiency of the body's vital systems. Age-associated changes in the various systems generally interact. Cardiovascular functions, for example, are influenced by age-associated changes in respiratory function, which in turn are influenced by changes in the musculoskeletal system (Fortin, Dubois, Hudon, Soubbi, & Almirall, 2007; Steinhagen-Thiessen, Gerok, & Borchelt, 1994).

Overall, the physiological changes accompanying aging result in reduced functional capacity, impaired biological resilience in the face of stress, lessened ability to physiologically adapt to environmental changes, prolonged phases necessary to physically recuperate from strenuous effort, and, most importantly, increased susceptibility to acute and chronic diseases (Rockwood & Mitnitski, 2007; Spriduso, Francis, & MacRae, 2005). However, age-associated physiological changes, although inevitable, do not represent a uniform biological process. The type and magnitude of age-related changes vary greatly from individual to individual. Furthermore, physiological changes interact, for example, with psychological, social, environmental, and lifestyle factors in determining the course and rapidity of aging (Bales & Payne, 2009; Fries, 1990). For example, attitudes and personality characteristics may influence the degree to which an old person seeks intellectual stimulation or engages in physical or social activities, which, in turn, decelerate and attenuate decline in relevant functional domains (Lövdén, Ghisletta, & Lindenberger, 2005). In this sense, physiological decline associated with aging is not entirely uncontrollable. Particularly lifestyle habits, such as regular exercise, balanced nutrition, and social and intellectual stimulation through active participation might, at least temporarily, postpone or attenuate physiological decrements associated with aging (Franklin & Tate, 2009). On the other hand, reduced mobility due to physiological impairment might obstruct such activities, precipitating further decline.

To summarize, physiological changes accompanying aging result in a reduction of the organism's functional capacity and an increased vulnerability to chronic and acute illnesses. These detrimental effects of physiological aging become particularly pronounced in very old age (85 years and beyond). Although unavoidable, physiological aging is no uniform progress. It is in part determined by lifestyle factors and, thus, particularly in young old age, temporarily and within boundaries, modifiable.

Cognitive Abilities in Old Age

Popular views on aging often seem to comprise the belief that cognitive abilities generally and drastically decline with age (Lachman, 2006). Older adults are expected to become more and more forgetful, have trouble learning new things, and to not think as clearly as younger persons. In contrast, most people believe that "wisdom" is a domain of older adults and is expected to increase with age (e.g., Goldberg, 2006). The story that psychological research tells about cognitive aging, however, is more complex and differentiated (Dixon, McFall, Whitehead, & Dolcos, this volume).

Building on the recognition that cognitive functioning is influenced by biological as well as cultural processes, two main categories of intellectual abilities have been distinguished—the *mechanics* and *pragmatics* of cognition (P. Baltes et al., 1999). The *mechanics* of cognition stand as metaphor for the largely neurophysiological basis of cognition as it evolved during biological evolution. They become evident in the speed, accuracy, and coordination of basic information-processing operations. The *pragmatics* of cognition, in contrast, comprise the culturally transmitted bodies of knowledge that individuals acquire in the course of their socialization. Typical examples of pragmatic abilities include reading, writing, language, or professional skills. Mechanics and pragmatics are assumed to determine intellectual functioning in their *interaction*: There would not be pragmatics without

mechanics, and vice versa; mechanics without pragmatics would lack the very medium in which to unfold.

There is a great deal of empirical evidence that the cognitive *mechanics* show a pattern of rapid growth during infancy and childhood into adolescence, followed by a monotonic and roughly linear decline during adulthood, and a further acceleration of decline in very old age (Craik & Bialystok, 2006; Taylor, 2005). Specific training can to some degree counteract this trajectory of loss in the cognitive mechanics. Training studies show that the majority of healthy older adults are able to improve performance in tasks reflecting mechanic abilities during training (for a review see Noack, Lövdén, Schmiedek, & Lindenberger, 2009). Such training gains, however, are highly task-specific. Transfer to related abilities or generalization to everyday functioning is unlikely (e.g., Noack et al., 2009). Lövdén and colleagues (Lövdén, Bäckman, Lindenberger, Schaefer, & Schmiedek, 2010) propose that, in order to maximize the generality or applicability of the intervention effect, cognitive interventions should train cognitive processes that involve those areas of the cognitive architecture and the brain that are relevant for a wide range of different cognitive tasks. The authors propose the executive system to be most important in this regard. The executive system controls and manages other cognitive processes and is responsible, for example, for planning, cognitive flexibility, abstract thinking, rule acquisition, action initiation and action inhibition, or selective attention. Initial evidence suggests that training of executive control might have the desired transfer effects to cognitive functioning in everyday life (Karbach & Kray, 2009).

Pragmatic abilities show a more favorable life span trajectory than the mechanics. They remain stable or increase well into "young" old age and only after that show some decline, the acceleration of which is much less pronounced than the decline in the cognitive mechanics (e.g., wisdom: see Baltes, Glück, & Kunzmann, 2002; complexity and differentiation of self-representation: see Diehl, 2006; skill-specific expertise: see Krampe & Charness, 2006). A prototypical example that many associate with a positive age-related trajectory in the cognitive pragmatics is *wisdom* (Clayton & Birren, 1980). The Berlin Wisdom Project (Baltes & Smith, 1990; Baltes & Staudinger, 1993) conceptualized wisdom as an expertise in the meaning and conduct of life that involves a mature insight into complex and uncertain problems of human affairs with usually no "clear cut" optimal solutions. Cross-sectional studies suggest that wisdom-related performance increases sharply during adolescence and young adulthood, and remains relatively stable during middle adulthood and young old age (Clayton & Birren, 1980; Staudinger & Pasupathi, 2003). Peak performances, however, seem to be more likely in middle and early old adulthood (i.e., in the fifth and sixth decade; e.g., Baltes, Staudinger, Maercker, & Smith, 1995). Empirical data (Baltes et al., 2002) suggest that wisdom-related performance may decline in very old age (beginning at around 75 years of age). This final decline has been attributed to age-related impairments in the mechanics of cognition. Thus, "being old" is not a sufficient condition for "being wise."

As mentioned before, mechanics and pragmatics *conjointly* influence cognitive performance in all age groups. Particularly important for understanding the development of cognitive abilities in *old* age are two observations:

1. Up to a certain threshold in impairment of the cognitive mechanics, pragmatic knowledge can be efficiently utilized to *compensate* for age-based losses in mechanics. Evidence for this has been provided by quasi-experimental studies on age- and skill-related differences in chess (e.g., Roring & Charness, 2007), bridge (e.g., Charness, 1987), and transcription typing (e.g., Salthouse, 1984). A classic illustration is a study on aging typists (Salthouse, 1984) where age was negatively related to typing speed, but positively related to eye–hand span. Older typists compensated the slowing of their typing (as an expression of cognitive mechanics) by looking further ahead in the to-be-typed text (i.e., a strategy pertaining to knowledge-based pragmatics). The idea that the knowledge-based pragmatics efficiently compensate mechanic decline in older adulthood is further supported by the finding that, compared to standard psychometric assessments using artificial and isolated cognitive tasks, negative age trajectories tend to be attenuated in familiar (i.e., knowledge-relevant) domains with everyday relevance, such as everyday problem solving (e.g., Blanchard-Fields, 2007; Willis, 1996) or memory in context (Hess & Pullen, 1996). Blanchard-Fields (2007) showed that older adults can even outperform younger adults in everyday problem solving, especially in emotionally salient and interpersonal problems. This advantage is based on the greater flexibility of older adults' use of problem-solving strategies (they tailor their strategies to the context of the problem, whereas young adults are more rigid in their strategy use) and an effective use of a combination of instrumental and emotion-regulation strategies (Blanchard-Fields, 2007).

2. If the mechanic information-processing capabilities fall below some critical threshold, they delimit the overall capability of cognitive integrity and, consequently, also impair intellectual functioning in the pragmatic domain (Baltes, 1997). Individuals reaching a *very advanced* age are, therefore, particularly vulnerable to attaining such levels of impairment in mechanic abilities that intellectual functioning in a more global manner is substantially diminished. This is supported by the observation that correlations among abilities both between and within the cognitive pragmatics and mechanics are higher in very old adults than in younger or middle-aged adults (e.g., Ghisletta & Lindenberger, 2003; but see Johnson, Logie, & Brockomole, 2010). Moreover, this "de-differentiation" in very old age appears to transcend the cognitive domain and also affects sensory and sensorimotor functioning (e.g., Ghisletta & Lindenberger, 2005). These findings point to the importance of domain-general processing constraints in very old age. This is furthermore supported by empirical evidence that in very old age, the differences in the directionality of the development of pragmatic and mechanic abilities seem to disappear and give way to negative age-gradients in *both* domains (Ghisletta & de Ribaupierre, 2005).

In sum, there is evidence for age-related decline in the biologically based cognitive mechanics. At least up to a certain point, this development can be compensated by culturally determined, knowledge-based cognitive pragmatics. Most older adults are cognitively well able to manage everyday life problems. In very advanced old age, however, a somewhat different picture emerges. Here, the cognitive mechanics might reach a level of impairment that the efficiency of intellectual functioning declines in a more global manner.

Conclusions: Physiological, Health-Related, and Cognitive Aging

We have characterized the life phase of old age regarding typical changes in physiological, health-related, and cognitive functioning. From this discussion, we infer, on a more abstract level, three central characteristics of old adulthood:

1. Aging is not a uniform process. There exists a large degree of heterogeneity both among and within persons. Different functional domains are differentially affected by aging processes.
2. Overall, with advancing old age, the balance of developmental gains and losses becomes increasingly negative.
3. Old adults in their 60s and 70s typically exhibit high levels of functioning in different life domains and, therefore, are not extremely different from middle-aged adults. In very old age (85 years and older), however, detrimental effects of aging become most pronounced. It is therefore necessary to differentiate between a "young old" and an "old old" age.

Having portrayed characteristics of old age in general, we will next turn to the question of whether and how one can characterize successful aging. Following that, we will review a number of theoretical approaches to successful aging, focusing on emotional and motivational processes proposed to help managing the changing balance of gains and losses across adulthood.

SUCCESSFUL AGING—DEFINITION AND CRITERIA

For several decades, gerontology has struggled to understand and define *successful aging*. As of yet, however, no commonly accepted definition delineating criteria characterizing successful aging exists. In general, there has been a shift away from defining successful aging solely in terms of adaptation to age-related changes in a given context (e.g., Havighurst, 1963) to emphasizing the balance between a person's needs and competence on the one hand and environmental demands and opportunity structures on the other (Lawton & Nahemow, 1973; Thomae, 1976). In accordance with life-span developmental approaches (e.g., Baltes, Lindenberger, & Staudinger, 1998; Brandtstädter, 1998; Lerner, 1998; Lerner & Busch-Rossnagel, 1981; Magnusson, 1996), these newer conceptualizations of successful aging assume that development is best described as an ongoing and dynamic interaction of a person with his or her environment. This implies that criteria for successful aging should not exclusively comprise factors within the person (e.g., happiness), but should also consider how well a person is doing in a given context (e.g., living in a nursing home).

Criteria of Successful Aging

Attempts to define criteria on how well an aging person is doing have—at least on a theoretical level—shifted from a monocriterion approach (mostly using subjective

well-being as the only criterion signaling successful aging) to a multicriteria approach (e.g., Bowling, 2007). The multiple criteria that have been proposed as characterizing successful aging comprise objective and subjective, short-term and long-term, domain-specific and general, static and dynamic criteria (see Table 25.1). Thus far, however, no consensus has been reached on the question which of these criteria have to be met and what their relative importance is for determining successful aging.

A straightforward way to investigate successful aging is to ask older adults directly how successfully they age. To the question of how strongly they agree or disagree with the statement "I'm aging successfully (or aging well)," 50.3% of older adults agreed strongly (Strawbridge, Wallhagen, & Cohen, 2002). In another study, even 75% of older adults rated themselves as aging "very well" or "well" (Bowling & Dieppe, 2005). While these results show that a large number of older adults subjectively feel that they are aging successfully, they do not reveal anything about the criteria respondents used for defining successful aging.

Addressing the high prevalence of health-related problems in old age, Rowe and Kahn (1987, 1998) defined successful aging as the ability to maintain a low risk of disease and disease-related disability, high mental and physical function, and active engagement with life. Riley (1998) criticized this approach by arguing that it neglects social structures as an important aspect supporting successful aging. Results of recent studies (McLaughlin, Connell, Heeringa, Li, & Roberts, 2010; Strawbridge et al., 2002) show that Rowe and Kahn's definition of successful aging is very rigorous. Few older adults (only 11.9% in McLaughlin et al., 2010) meet the criteria put forth in Rowe and Kahn's definition. One might argue that even chronically ill older adults can age successfully if they use compensatory psychological and/or social mechanisms to maintain functioning and everyday competence (Young, Frick, & Phelan, 2009). Additionally, socially defined status (e.g., education) is predictive of successful aging, which underlines the importance of sociostructural factors for aging well (see also Pruchno, Wilson-Genderson, Rose, & Cartwright, 2010).

TABLE 25.1 Central Dimensions of Criteria for Successful Aging: Examples from Two Domains of Functioning Considered Important for Successful Aging (Well-Being, Health)

	Domains of Functioning	
Dimensions	Well-Being	Health
Objective	Household income	Number of medical diagnoses
Subjective	Satisfaction with financial situation	Subjective physical health
Short-term	Last week's happiness	Recovery from hip surgery
Long-term	Meaning in life	Progression of multiple sclerosis
General	Life satisfaction	General functional capacity
Specific	Marital satisfaction	Blood pressure
Static	One-time assessment of life satisfaction	Health status at a given point in time
Dynamic	Change in life satisfaction over time	Healthy lifestyle (e.g., exercise, balanced diet)

Recent approaches to successful aging emphasize the necessity of models that are multidimensional, use a continuum rather than dichotomous cut-offs for "success," and distinguish between predictors and constituent variables of successful aging (e.g., Bowling, 2007). Ryff and colleagues (e.g., Gruenewald, Mroczek, Ryff, & Singer, 2008; Ryff & Singer, 2009), for example, argued for integrating sociostructural, individual-level, and biological factors in this respect. They found multiway, nonlinear interactions of these factors in predicting affective experience in various phases of the adult lifespan (Gruenewald et al., 2008). For example, neuroticism interacted with work stress in young adulthood and with health status in older adulthood in predicting negative affect, respectively, and it interacted with marital quality in middle adulthood in predicting positive affect. Future empirical and theoretical work is needed to more clearly establish the interplay of such factors in predicting successful aging (Gruenewald et al., 2008).

This recent development is in line with the approach of Paul Baltes and Margret Baltes (1990), who argued for *integrating* objective (i.e., observable) and subjective (i.e., self-reported) criteria for defining successful aging. Integrating objective and subjective criteria, according to P. Baltes and Baltes (1990), is important because on the one hand, considering exclusively subjective criteria, such as self-reported well-being, might lead to a neglect of optimizing environmental conditions that support successful aging. On the other hand, a prescriptive definition specifying exclusively objective criteria for successful aging is based on the specific value system of the scientific community and might not be shared by the elderly person.

The approaches discussed above do not pay attention to the *proactive* and *agentic* role of the older person in interacting with his or her environment. Importantly, however, a person does not only passively adapt to environmental conditions, but proactively shapes his or her environment (Lawton, 1989). Proactive choices can have

long-term consequences in their effect on how well the environment fits personal demands. According to Lawton, one of the consequences of a good person–environment fit is subjective well-being and life satisfaction. Accordingly, Lawton (1989) proposed to define "the good life" (or, in a gerontological context, "successful aging") along four independent dimensions, including both subjective and objective criteria in different life-domains:

1. Perceived life-quality (subjective satisfaction with various life-domains, such as family, friends, housing, etc.)
2. Psychological well-being (happiness, optimism, congruence between desired and attained goals)
3. Behavioral competence (health, motor behavior, cognition)
4. Objective environment (such as income, living conditions, etc.).

There are several aspects in this definition of successful aging worth being pointed out. Note first that perceived life-quality is not conceptualized as a global evaluation of one's life as a whole, but rather as a multifaceted concept comprising satisfaction with various life-domains. Note second that psychological well-being, in Lawton's sense, is a broader concept than emotional well-being. It not only includes positive emotions (happiness), but also includes optimism, "the global expectation that good things will be plentiful in the future and bad things, scarce" (Peterson, 2000, p. 47). According to Seligman (1991), optimism is a generalized expectancy of the controllability of outcomes. Feeling in control of events might lead elderly persons to actually take more control over their lives and proactively shape their environments in a way that matches their needs. Note third, that, as in the definition of Rowe and Kahn, health is one of the criteria that Lawton lists for identifying successful aging. As Lawton, however, considers the interaction of a person with his or her environment as crucial for determining successful aging, impaired or sick elderly nevertheless have the potential for aging well. Even sick or impaired elderly can successfully interact with their environment by modifying their environment and/or their activities (i.e., environmental proactivity) and thereby enhance the person–environment fit. In this way, although it lists criteria for successful aging that might imply a static view, Lawton's model of successful aging represents a *dynamic* perspective focusing on the person–environment interaction.

Taking a similar approach, Baltes and Carstensen (1996) suggested addressing the problem of defining successful aging by going away from a criteria-oriented approach, which implies the assessment of an "end state," to a *process-oriented* approach. Focusing, for instance, on the achievement of long-term goals as a criterion for successful aging as proposed by Lawton, might neglect that goals—whether they will be achieved or not—have a positive function for individuals by organizing and guiding behavior over time and across situations (e.g., Emmons, 1996) and by giving life a purpose (e.g., Klinger, 1977; Scheier et al., 2006). Because they organize behavior and contribute to a sense of purpose in life, the very process of having and pursuing personal goals can be viewed as one aspect of successful aging, regardless of the actual achievement of the respective goals.

This adds a new dimension in defining criteria for successful aging, namely, the dimension of a static versus dynamic approach. According to Baltes and Carstensen, it is not only important to assess whether an elderly person has achieved positive outcomes (e.g., health, good living conditions, personal goals) but also whether the ongoing process of getting there is one that maximizes gains and minimizes losses. That is, the gains associated with achieving desired outcomes have to be balanced with the costs associated with its attainment (Freund, Li, & Baltes, 1999). If meeting a certain criterion (e.g., financial security) can only be achieved at high cost (e.g., suffering a number of years in an unfulfilling, boring job), this method of goal-pursuit cannot be regarded as being successful (Freund et al., 1999).

A *dynamic* approach to successful aging also points out another difficult question that has not yet been resolved in the literature: namely, the time window one should best consider when evaluating how successfully an individual is aging. Usually, "snapshots" of living conditions and well-being of elderly persons are taken with one-time assessments (see, e.g., Diener, Suh, Lucas, & Smith, 1999). Taking a static view on successful aging, such snapshots are sufficient to determine how well older people are doing and the relationship between living conditions and subjective well-being in the elderly at a given point in time. Taking a dynamic view on successful aging, however, only multiple assessments in various life domains over time can reveal whether a person interacts with his or her environment in a manner that promotes successful aging in the long run (Freund et al., 1999; Hoppmann & Riediger, 2009).

Taken together, on a very abstract and general level, successful aging can be defined as the simultaneous maximization of gains and minimization of losses. However, when it comes to differentiating concrete criteria indicating how well a person is aging, no generally accepted definition is available. As Pulkkinen (2000, p. 278) put it:

"Successful development is not uniform but polyform." Because successful development can take many different expressions, it seems more appropriate to specify criteria depending on the specific research question at hand than to propose a single, necessarily abstract, definition of successful aging. These specific criteria can vary along several dimensions, such as objective versus subjective, short-term versus long-term, domain-specific versus general, and static versus dynamic. In Table 25.1, we summarized these dimensions of criteria for successful aging, giving examples for two life-domains that are frequently considered as central to successful aging: well-being and health.

An alternative route to studying successful aging is to shift the focus away from attempting to define criteria as end-points of successful aging and toward identifying *processes* of developmental regulation in old age. Although such a process-oriented approach does not resolve the question of criteria of successful aging, it redirects the attention to the psychologically more interesting question of which developmental processes are central in the interaction of an aging person with his or her environment (Baltes & Carstensen, 1996). As elaborated by E. Kahana and Kahana (1996, p. 25), this question lies at the heart of the different models of developmental regulation in old age that we will discuss in the following sections, after setting the stage by reviewing recent evidence on emotional and motivational processes in adult development and aging.

PROCESSES RELATED TO SUCCESSFUL AGING

For a long time, the investigation of processes related to successful aging has been dominated by two opposed conceptions—disengagement theory (Cumming & Henry, 1961) and activity theory (e.g., Maddox, 1963). *Disengagement theory* posited that coinciding with a decrease in social roles in old age (e.g., because of retirement) and the anticipation of one's death, diminished energy would lead to a change in orientation away from activity and toward preoccupation with one's inner aspects, life review, and death. In contrast to disengagement theory, *activity theory* posited that the maintenance of social roles and activities were crucial for successful aging.

The debate on whether disengagement is the central process promoting successful aging or whether only those who continue to be actively involved in life are to be considered successful agers has been largely resolved in newer models and approaches, which we will discuss in more detail below. Despite differences among these approaches, they converge in emphasizing the central role of motivational processes for successful aging. Based on the assumption that people can take an active part in shaping their development, personal goals (i.e., future states a person desires to attain or wishes to avoid) are seen as playing an important role in a person's aging process. Personal goals motivate and organize behavior over time and across situations, giving directionality to development. Personal goals also serve as a standard of comparison, determining how well a person feels he or she is doing (e.g., Carver & Scheier, 1990). In this sense, the level of aspiration is also associated with subjective well-being—a fact that should be of particular relevance to aging when the likelihood of being confronted with unobtainable or permanently blocked goals increases. Here, as particularly Brandtstädter and Greve (1994) and Schulz and Heckhausen (1996) argue, adjustment of goal standards should help to protect older persons' psychological well-being.

Successful Aging: A Matter of Socioemotional Selectivity?

One of the currently most influential theories of successful aging, the *socioemotional selectivity theory* (SST) by Carstensen and her colleagues (Carstensen, 2006; Carstensen, Isaacowitz, & Charles, 1999) addresses the phenomenon of *reduced social contacts* in old age—a phenomenon that disengagement theory claims to be a sign of withdrawal from society toward life review and preparation for death, and that activity theory views as problematic for the elderly. Similar to disengagement theory, SST posits that reduced social contacts in old age are due to a limited time perspective; that is, to the fact that older people tend to perceive their remaining time to death as relatively limited. In contrast to disengagement theory, however, SST postulates that the reduced network size does not primarily result from a deliberate withdrawal from society, but from the specific motivation for particular types of social relations in situations where time perspectives are limited. An *extended* future time perspective is more strongly associated with knowledge-related goals for social interactions. A *limited* time perspective, in contrast, brings about a stronger presence-orientation involving goals related to feeling states, emotional meaning, and satisfaction. Emotional meaning and satisfaction, as well as emotion regulation, are easier established with familiar and close social partners than with unfamiliar or less important persons. The driving force for

reducing the number of social partners in old age, thus, is a predominance of the motivation for emotion regulation over knowledge acquisition, because of the older adults' limited future time perspective.

Several empirical studies have demonstrated that the reduction of social network size in old age is primarily due to focusing on the closest social partners, such as family and confidants (e.g., Field & Minkler, 1988; Lang & Carstensen, 1994; Lang, Staudinger, & Carstensen, 1998). The change in the ranking of knowledge-related and emotional goals in social relations, however, is only age-related, not age-caused. When younger people are faced with endings and future social opportunities are perceived as limited, the salience of emotion goals also increases. This has been shown experimentally when younger adults were asked to imagine a limited future and older adults to imagine an expansive future (e.g., Fredrickson & Carstensen, 1990) as well as in field studies with younger samples who actually experienced a very limited future time expansion, such as HIV-infected persons (Carstensen & Fredrickson, 1998) or residents of Hong Kong two months before the handing-over to the People's Republic of China (Fung, Carstensen, & Lutz, 1999). SST suggests that there is no universal process of continued activity or disengagement in old age, but that it is perceived time expansion that best explains whether older people prefer to focus on close, familiar social partners or are motivated to gain knowledge through novel and knowledgeable social partners.

Socioemotional selectivity theory has been frequently referred to as a theoretical basis for explaining age-related differences in emotional and motivational processes in adulthood and old age, which we will discuss next.

Emotional Processes Related to Successful Aging

Evidence is mounting that older adults' typical emotional well-being is as good as (e.g., Diener et al., 1999; Kunzmann, Little, & Smith, 2000) or better than (e.g., Carstensen, Pasupathi, Mayr, & Nesselroade, 2000; Charles, Reynolds, & Gatz, 2001; Mroczek & Kolarz, 1998; Riediger, Schmiedek, Wagner, & Lindenberger, 2009) that of younger age groups. Only with impending death does emotional well-being typically start to decline (beginning prototypically 3 to 5 years prior to death; Gerstorf et al., 2010). Overall, the empirical evidence thus suggests positive trajectories of emotional well-being, rather than decline, across adulthood and into old age. What are the processes underlying this positive adult development of emotional well-being?

Many attempts to explain adult trajectories in emotional well-being have focused on the notion of resilience; that is, on older adults' ability to adjust to losses and major life events (Staudinger, 2000). There is, however, also evidence that in addition to the ability to deal with *major* life events, age-related differences in *mundane* day-to-day experiences might also contribute to the high levels of emotional well-being in young-old age, and that motivational differences in everyday life may play an important role in this respect. Riediger and Freund (2008), for example, found that an age-related decrease in the frequency of day-to-day motivational-conflict experiences appears to be among the factors that contribute to a positive age trajectory of everyday emotional well-being. Motivational conflicts, such as feeling that one wants or should do something other than what one is doing, are accompanied by momentarily diminished emotional well-being. Older adults, however, experience fewer such motivational conflicts in their daily lives, and this appears to be among the factors that contribute to the higher average day-to-day emotional well-being of older as compared to younger adults.

Other explanatory attempts, too, focused on age-related motivational changes, but in the context of people's attempts to regulate or control their emotional experiences (Blanchard-Fields, 2007; Carstensen, 2006; Heckhausen & Schulz, 1995; Heckhausen, Wrosch, & Schulz, 2010). As discussed above, socioemotional selectivity theory (SST; Carstensen, 2006; Carstensen et al., 1999), for example, holds that "anticipated endings such as the sense that lifetime is running out give primacy to enhancing emotionally gratifying experiences in the moment as opposed to maximizing future rewards" (Scheibe & Carstensen, 2010; p. 135). Thus, emotion-regulation goals directed at maximizing one's emotional well-being in the here and now are assumed to gain in importance as people age. Riediger and colleagues (2009) indeed found in an extensive experience-sampling study investigating a heterogeneous sample ranging from adolescence to old adulthood that older adults more frequently reported prohedonic motivations of wanting to maintain positive affect and dampen negative affect in their daily lives than younger age groups did. Importantly, these age differences in prohedonic motivation could not be attributed to age-related differences in daily-life emotional experiences, activities, or social partners. This suggests that part of the positive emotionality that is characteristic for older adulthood might be intentionally sought and maintained by the individual.

In line with this idea, older adults have been found to report regulating their emotions more frequently than younger adults (e.g., John & Gross, 2004), and to report preferentially using efficacious and physiologically healthy emotion-regulation strategies, such as cognitive reappraisal (Gross, 2002; Gross & John, 2003). Evidence further suggests that older adults use a more diverse repertoire of problem-solving and emotion-regulation strategies than younger adults when facing emotional, interpersonal problems, and that they adjust these strategies to the context of the problem (e.g., Blanchard-Fields, 2007). There also is initial evidence suggesting that emotion regulation may be less effortful for older as compared to younger adults (Scheibe & Blanchard-Fields, 2009).

Other researchers have argued that the age-related improvement of emotional well-being is a consequence of cognitive decline (Cacioppo, Berntson, Bechara, Tranel, & Hawkley, 2011; Labouvie-Vief, 2003). The *dynamic integration theory* (Labouvie-Vief, 2003) poses that elderly adults compensate for a decrease in cognitive–affective complexity (i.e., coordination of feelings in the here and now with past and future feelings and with those of other people) with an optimization response. Declining complexity "implies reduced integration of negative affect so that as individuals age, they might find it more difficult to tolerate negative feelings" (Labouvie-Vief, 2003; p. 202). Supporting this view, Labouvie-Vief and colleagues (cf. Labouvie-Vief, 2003) found positive correlations between cognitive–affective complexity and negative affect. Moreover, complexity was positively correlated with cognitive functioning and declined with advancing age (Labouvie-Vief & Diehl, 2000).

The *aging brain model* (Cacioppo et al., 2011), using a neuroscience approach, comes to similar conclusion as the dynamic integration theory. Cacioppo and colleagues argue that age-related changes in amygdala structure and function lead to a diminished processing of negative information. According to dynamic integration theory, then, improved emotional well-being is a by-product of brain degradation. However, this idea is inconsistent with findings that the fewer cognitive resources older adults have, the less they are able to selectively attend to positive and avoid negative stimuli (e.g., Knight et al., 2007; Mather & Knight, 2005). Therefore, future research needs to combine behavioral and neuroscience approaches to link brain degradation and motivation in successful emotional aging (see Scheibe & Carstensen, 2010).

"Positivity/Negativity Avoidance" Effects in the Processing of Emotional Information

In line with the idea that older adults are motivated to regulate their emotions are findings on age-related differences in attending to, and processing, emotional information (Carstensen & Mikels, 2005). Various studies have shown that older adults tend to process more positive than negative information, whereas no such "positivity effect" appears to exist among younger adults. This has been found with respect to different forms of processing emotional information, such as attention to positive and negative stimuli (e.g., Isaacowitz, Toner, Goren, & Wilson, 2008; Isaacowitz, Wadlinger, Goren, & Wilson, 2006; Mather & Carstensen, 2003); memory for positive and negative information (e.g., Mikels, Larkin, Reuter-Lorenz, & Carstensen, 2005); increased true and false recognition for happy faces and more positive judgments for both happy and angry faces (e.g., Werheid et al., 2010); autobiographical memory for positive and negative events (e.g., Kennedy, Mather, & Carstensen, 2004); and memory for own positive and negative decisions (Mather, Knight, & McCaffrey, 2005; but see Murphy & Isaacowitz, 2008, for a meta-analysis of memory and attention tasks). Recent studies found the "positivity effect" also at the level of neural activation (Sammanez-Larkin & Carstensen, 2011). Although it is not clear if the effect is based on an enhanced focus on positive or a reduced focus on negative information, it has been argued that either way the *relatively* more positively tuned processing of emotional information of older adults as compared to younger age groups can benefit their well-being (e.g., Johnson, 2009; see also Scheibe & Carstensen, 2010). The "positivity/negativity avoidance effect" is diminished or disappears when older adults pursue information-gathering goals (Löckenhoff & Carstensen, 2007), in the face of threat (Mather & Knight, 2006), and when high-arousal as compared to low-arousal stimuli are to be processed (Kensinger, 2008), which might be adaptive exceptions to positivity (see Scheibe & Carstensen, 2010). Although the "positivity/negativity avoidance effect" is assumed to serve emotion-regulatory purposes (e.g., Carstensen, Mikels, & Mather, 2006), direct empirical evidence supporting this claim is still lacking.

In sum, research on emotional aging suggests that, on average, this is an area of functioning demonstrating positive developmental trajectories into old age. It needs to be noted, however, that there are interindividual differences in emotional functioning in old age. Not all aging individuals show the same positive development in emotional well-being. Regarding the experience of negative

emotions, for instance, individuals high in neuroticism do not exhibit declines in negative affect with advancing age (Charles et al., 2001). Regarding the "positivity effect," dispositional avoidance motivation predicts longer gaze times for angry and less longer for happy faces also for older adults (Nikitin & Freund, 2011). Emotion regulation, emotional experience, and emotional biases are currently highly active research areas and will bring about a more differentiated picture of interindividual as well as contextual factors impacting on emotional functioning in old age.

Motivational Processes in Old Age

Human development and aging cannot be understood adequately without considering ways in which individuals influence their own life course. Future-oriented motivation, that is, setting goals, plays an important role in this respect. Through the selection of goals, individuals bring direction to their lives. Shaping one's life course in aspired directions also requires goal-directed action.

Motivational processes are among the phenomena that show positive development throughout adulthood. For example, Sheldon and Kasser (1995, 2001) reported that older as compared to younger adults (a) tend to select their goals more with a sense of choice and self-expression and less because they would otherwise feel ashamed, guilty, or anxious; (b) aim their goals more toward intrinsic values (e.g., community involvement) and less toward extrinsic values (e.g., property); and (c) are more concerned with "mature" issues sensu (Erikson, 1959), namely, generativity and ego integrity, and less concerned with identity formation. Similarly, Bauer and McAdams (2004) reported that older adults are more likely to express in their goals the aspiration to grow personally than are younger adults.

The step from setting to realizing one's goals is often a big one. People work on some of their goals, but fail to work on others. The identification of motivational factors that contribute to the initiation and long-term maintenance of goal-directed behaviors thus has important implications for understanding the active role of the individual in shaping his or her environment and life course. Riediger and colleagues showed that facilitative relations among a person's goals, which result, for example, from instrumental relations between goals or from overlapping goal attainment strategies, are among the factors that are associated with the longer-term maintenance of goal-directed action (Riediger, 2007; Riediger & Freund, 2004). They also demonstrated that the transition from middle to later adulthood—a phase in life when resource limitations become increasingly pronounced—is characterized by a substantial increase in the extent of mutual facilitation among goals (Riediger & Freund, 2006; Riediger, Freund, & Baltes, 2005). This aging-related increase in intergoal facilitation is related to an increase in motivational selectivity in terms of focusing on subjectively central and similar goals, but not to an increase in motivational selectivity in terms of restricting the number of goals. Higher motivational selectivity in terms of focusing the content of goals thus appears to have an important behavioral function in a life phase that is characterized by an accelerated increase in aging-associated resource losses. It seems to allow older adults to stay involved in the pursuit of their goals, despite increasingly pronounced resource limitations, and thus to actively influence the direction of their own development (Riediger & Freund, 2006).

Goal-Orientation: Shifting from Optimizing Gains to Compensating for Losses Across Adulthood

As elaborated above, adulthood can be characterized as shift in the balance of resource gains to losses (Baltes, 1998; Baltes et al., 2006; Heckhausen, Schulz, & Wrosch, 1998; Staudinger, Marsiske, & Baltes, 1995). Is the shift in resources across adulthood reflected in the orientation of goals towards achieving gains or avoiding losses and their adaptiveness across adulthood?

Throughout the lifespan, accumulating and conserving resources is of high importance, as they are essential for survival and, going beyond mere survival, allow a more pleasurable and attractive lifestyle. However, one might argue that the importance of acquiring new gains versus maintaining resources and shielding them from losses might change across adulthood. Young adulthood typically provides environments that offer maximum access to resources and favor acquisition of skills and improvement of functions. Accordingly, younger adults might be more likely to be primarily motivated to strive for growth. Younger adults need to build up their potentials before they can invest in conserving them. A strong orientation toward growth allows them to generate new resources and to improve functioning, which is crucially important in their phase of life. A stronger orientation towards achieving new gains in young adults might help optimizing opportunities for improvement in young adulthood.

Compared to young adults, middle-aged and older adults may feel that they have already achieved many resources that are worth conserving. Loss of resources is highly aversive, as it can instigate a downward spiral (Hobfoll, 1989). For instance, losses in mobility due to health-related problems might prevent a person from

going to certain social events, which, in turn, might lead to more losses in social contacts. As threats of losses increase across adulthood, then, the motivation for maintenance and loss-avoidance should increase. Moreover, due to the decline in resources, it becomes increasingly difficult to acquire new ones, as the acquisition of new resources is often cost-intense (e.g., learning a new skill requires time, effort, and often also money and social support). Therefore, attempting to achieve new outcomes and improving functioning instead of investing in repairs of losses might be too costly for older adults. Taken together, then, in middle and later adulthood, a stronger orientation toward maintenance and prevention of loss might help overcoming and dealing with challenges to resources.

Testing the hypothesis of an age-related shift in the orientation toward optimizing gains or compensating for losses, a study by Li, Lindenberger, Freund, and Baltes (2001) demonstrated that, compared to younger adults, older adults make increasingly more use of compensatory aids when the system of performance is subject to experimentally induced losses in goal-relevant means. There is also converging evidence for a motivational shift in the literature on personal goals. Ogilvie, Rose, and Heppen (2001) found that motivational orientation toward maintenance was more frequent in the personal goals of older adults as compared to middle-aged adults or adolescents. Similarly, Heckhausen (1997) reports that younger adults hold more goals in life-domains associated with a gain orientation (e.g., professional goals) and fewer goals in domains associated with the avoidance of losses than middle-aged or older adults (e.g., health). Ebner, Freund, and Baltes (2006) also found clear evidence for a motivational shift across adulthood using self-rated goal orientation. Whereas younger adults rated their personal goals as primarily gain-oriented, maintenance and prevention of loss became more and more important across middle and older adulthood. Moreover, Ebner and colleagues could show that the shift in motivation is related to the perceived availability of resources. When younger adults perceived their resources as limited, they oriented their goals towards maintenance and avoidance of loss to the same degree as older adults.

Addressing the question of whether the shift in goal orientation is adaptive, Ebner and colleagues found that maintenance orientation is positively related to subjective well-being in older adults. In contrast, being highly motivated to prevent losses is negatively related to subjective well-being in younger adults. Going beyond subjective well-being as an indicator of adaptiveness, Freund (2006) investigated age-differential effects of goal-orientation on persistence in goal pursuit. Younger adults persisted longer in pursuing an experimentally induced optimization goal, whereas older adults were more persistent when counteracting experimentally induced losses. Together, these studies provide evidence that goal orientation not only reflects the changing balance of gains and losses in resources across adulthood but also shows that this shift in goal orientation is adaptive both in terms of subjective well-being and actual goal pursuit.

Goal Focus and Successful Development

People often pursue long-term goals, such as losing and maintaining weight, starting to work out regularly, or writing one's memoirs. Such long-term goals might be particularly important to successful aging, as they provide direction and meaning over time. However, the pursuit of such long-term goals is often difficult, as it requires self-regulation over extended periods of time. The pursuit of long-term goals necessitates the repeated initiation of goal-relevant actions, the monitoring of progress over time, resistance toward temptations that offer more immediate gratification (e.g., eating a tasty chocolate cookie instead of a cucumber), and coping with setbacks and failure on the way to the desired end-state. As has been shown by Baumeister and colleagues, self-regulation is resource demanding, particularly regarding cognitive control processes (Baumeister, Vohs, & Tice, 2007) that are in turn subject to age-related decline (see above). How, then, do older adults manage to successfully engage in long-term pursuit and maintenance?

There is some empirical evidence that a process focus might foster successful goal pursuit (e.g., Pham & Taylor, 1999) and help to cope with setback and failure (Houser-Marko & Sheldon, 2008). For instance, Hennecke and Freund (2010) found in a study with overweight women who all shared the goal of losing weight that focusing on the process (i.e., dietary behaviors) rather than on the outcome of dieting (i.e., weight loss) was associated with more successful goal pursuit and achievement over time. Process focus was related to successful self-regulation in the context of dieting and to weight loss.

Freund, Hennecke, and Riediger (2010) have argued that older adults might be at a motivational advantage as they focus more on the *process* than the *outcome* of goal pursuit. In a study with young and older exercise beginners, they assessed how much participants focused either on the outcome of exercising (e.g., "wanting to lose weight," "improving one's appearance") or on the process (e.g., "wanting to have fun," "socializing"). They found that older adults focused more on the process

of exercising, whereas younger adults focused more on the outcome. Importantly, a stronger process focus was longitudinally associated with exercise frequency, positive goal evaluations as well as positive well-being.

In sum, there is increasing evidence that motivational changes in goal orientation and goal focus help manage the changing ratio of gains and losses across adulthood. With increasing age and increasing losses in resources, goal orientation shifts from a primary gain orientation in younger adults to the increasing importance of maintenance and loss prevention in older adults. Moreover, older adults focus more on the process than the outcome of goal pursuit, which might contribute to the maintenance of emotional well-being in old age.

MODELS OF SUCCESSFUL AGING

In the final part of this chapter, we will turn to the discussion of three dominant life-span theories of successful aging. First, we will present a metatheoretical framework of successful development—the model of selection, optimization, and compensation (SOC) first formulated by Paul Baltes and Margret Baltes (e.g., 1990). Following that, we will discuss two important theories of successful development and aging that center around the notion of control: The theory of primary and secondary control by Heckhausen and Schulz (1995; Heckhausen et al., 2010), and the model of assimilative and accommodative coping by Brandtstädter and his colleagues (Brandtstädter, 2006; Brandtstädter & Greve, 1994; Brandtstädter & Rothermund, 2002). Both models suggest that under conditions of reduced controllability—such as those that occur in old age because of health-related reductions in functional capacity and activity radius—disengagement from, rather than persistence in, the pursuit of desired activities promotes successful aging.

Selection, Optimization, and Compensation: A Metamodel of Successful Aging

The model of selection, optimization, and compensation (SOC) provides a general framework for conceptualizing the processes of successful aging (P. Baltes & Baltes, 1990). The SOC model is based on the assumption that throughout the lifespan, individuals continually seek to successfully manage their lives through the orchestration of three processes of developmental regulation: *selection*, *optimization*, and *compensation*. As a metamodel, the SOC theory represents a framework for understanding developmental continuity and change across different periods of the life span (e.g., adulthood, aging), across different levels of analysis (e.g., individual, group), and across different domains of functioning (e.g., social, cognitive, physical). Selection, optimization, and compensation are proposed to be universal processes of developmental regulation that can vary greatly in their phenotypic expression depending on the sociohistorical and cultural context, domain of functioning as well as unit of analysis at hand (Baltes, 1997). The SOC model in its general formulation, therefore, does not designate any *specific* content or mechanisms to its proposed developmental regulatory principles. In this sense, the model represents a "relativistic" heuristic framework. To understand specific manifestations of the SOC processes in particular developmental domains, it is necessary to specify the SOC processes by linking the metamodel with more specific theories pertaining to the phenomena of interest. In our discussion of the processes of selection, optimization, and compensation below, we will use an action-theoretical specification (e.g., Brandtstädter, 1999) of the model to illustrate specific expressions of the general-purpose processes in the domain of personal goals.

Selection

Throughout the life span, biological, social, and individual opportunities and constraints both provide and limit the variety of developmental pathways a person can potentially take. The number of those options, however, is usually larger than the amount of resources available to the individual. *Selection*—that is, focusing one's resources on a subset of potentially available options—thus functions as a precondition for "canalization" and developmental specialization. In an action-theoretical framework, selection can be defined as developing, elaborating, and committing to personal goals. On this level of analysis, selection directs development, because personal goals guide and organize behavior across situations and time (e.g., Emmons, 1996). Successful goal selection requires that goals be developed and set in domains for which resources are available or can be attained and that match a person's needs and environmental demands (Freund, 1997; Heckhausen, 1999).

The SOC model distinguishes between two kinds of selection, *elective selection* and *loss-based selection*. Both aspects of selection differ in their specific developmental regulatory function. *Elective selection* denotes the delineation of goals in order to advance the match of persons' needs and motives with the given or attainable resources and opportunity structures. It aims at achieving higher

levels of functioning. In contrast, *loss-based selection* occurs as a response to losses in previously available goal-relevant means threatening the maintenance of a goal. Loss-based selection involves changes in goals or the goal-system, such as reconstructing one's goal-hierarchy by focusing on the most important goal(s), adapting standards, or substituting no longer achievable goals (see also our discussion of assimilative coping, Brandtstädter & Wentura, 1995, and, compensatory secondary control, Heckhausen, 1999, later in the chapter). The SOC model posits that loss-based selection is an important process of life-mastery. Loss-based selection allows the adaptive focus or redirection of resources when other means for the maintenance of positive functioning as a substitute for the loss (compensation) are either not available or would be invested at the expense of other, more promising goals (Baltes, 1996; Heckhausen, 1999). One of the central functions of selection is thus to efficiently utilize the limited amount of available resources. In old and very old age, when resources become more constrained, selection should hence be of particular importance. Consistent with this view, Staudinger and Freund (1998) found that selecting few life-domains on which to focus was particularly adaptive for older people with highly constrained resources.

The importance the SOC model places on the process of selection is consistent with Kanfer's resource model (e.g., Kanfer, 2005; Kanfer & Ackerman, 2004), which proposes that when resources decrease with age (e.g., fluid intelligence), so do the expected payoffs for investing effort into tasks requiring the decreasing resources. Hence, older adults are expected to invest less effort in tasks involving resources on the decline. In contrast, when older adults have sufficient or even increasing resources at their disposal (e.g., crystallized intelligence), the expected payoff for investing effort also increases. Effort, then, should be invested primarily into tasks involving resources that are increasing. In other words, older adults are expected to spend their resources wisely on goals for which they possess sufficient resources and that promise a good return on investments.

Optimization

Whereas selection is the first step towards positive functioning, the SOC model posits that for achieving desired outcomes in selected domains, it is crucial to acquire, apply, and refine goal-relevant means, a process referred to as *optimization*. Which means are best suited for achieving one's goals varies according to the specific goal domain (e.g., achievement versus social domain), personal characteristics (e.g., gender), and the sociocultural context (e.g., institutional support systems). It is possible, however, to identify a number of general processes involved in the acquisition, application, and refinement of goal-relevant means (see Baltes, 1997; Freund & Baltes, 2000; Freund et al., 1999). Below, we will briefly discuss some prototypical instances.

On the most general level, some sort of *monitoring* of the discrepancy between the actual and the desired state (goal) needs to take place (e.g., Carver & Scheier, 1990). This continuous monitoring, which might occur outside of conscious awareness (Wegner, 1992), allows a constant adaptation of goal-related action. Progress toward the goal motivates the continuation of the invested goal-relevant means, whereas lack of progress or even an increase in the distance to the goal indicates that other means might be better suited for achieving the respective goal. Another example of a general process related to optimization is the *delay of immediate gratification* for the sake of a more long-term payoff (e.g., Mischel, 1996). Long-term goals often require investing resources without immediate gains. Not giving in to temptations that offer short-term gratifications is thus a precondition for the persistent pursuit of a goal over an extended period of time. One of the most important general processes of optimization is *practice*. As has been shown in the expertise literature, deliberate practice is a key factor for acquiring new skills and reaching peak performance (Ericsson, 1996). Repeated practice leads to the refinement of skill components, their integration, and their automatization. So that the skill components thereby become less resource-demanding and free resources that can be devoted to other goal-related means.

In old age, optimization continues to be of great importance for life-management, because engaging in growth-related goals has, in general, positive regulative functions (as has been shown in a number of studies with younger adults, e.g., Coats, Janoff-Bulman, & Alpert, 1996; Elliot & Church, 1997; Emmons, 1996). In fact, data from the Berlin Aging Study supports the positive function of optimization in old age: Older people who reported engaging in optimization also reported more positive emotions and higher satisfaction with aging (Freund & Baltes, 1998).

Compensation

How do older people manage to maintain positive functioning in the face of health-related constraints and other losses in plasticity and reserve capacity? In old age, the limitation of resources and associated compensatory needs become more evident than in younger ages. This decline is also apparent in subjective reports on the nature of

life-span development. When adults are asked about their expectations of changes during the adult life span, the ratio of expected gains to losses becomes increasingly less favorable and less controllable with age (Heckhausen & Baltes, 1991). The maintenance of positive functioning in the face of losses is thus as important for developmental regulation in old age as a sustained growth focus.

One relevant strategy for the regulation of losses, loss-based selection, was mentioned earlier. When losses are not too pervasive, however, goals can often be maintained, even in the face of losses, by using alternative means. This process is referred to as *compensation*. Compensation denotes the acquisition and use of means to counteract loss or decline in goal-related means. Typical instances are the substitution of previously available goal-relevant means by acquiring new or activating unused internal or external resources (e.g., Bäckman & Dixon, 1992; Carstensen, Hanson, & Freund, 1995). On a general level, such aspects of self-regulation as delay of gratification, control beliefs, and practice play an important role in the acquisition and investment of compensatory means. Compensation, in contrast to optimization, aims at counteracting or avoiding losses rather than at approaching positive states. Because of the losses associated with increasing age, aging individuals have to allocate more and more of their resources to the maintenance of functioning and resilience against losses rather than into processes of growth (Staudinger et al., 1995). The negative effects of avoidance goals for younger age groups mentioned earlier (Coats et al., 1996; Elliot & Church, 1997; Emmons, 1996) might be less pronounced or even absent in old age, when a focus on maintenance might be experienced as something positive (Freund & Baltes, 2000; Heckhausen, 1999).

SOC and Successful Aging

Several studies using a self-report measure of SOC support the positive relationship of selection, optimization, and compensation with subjective indicators of successful development and aging. In young and middle adulthood, SOC helps managing successfully the multiple demands of work and family (Wiese, Freund, & Baltes, 2000, 2002), particularly in very demanding situations (Young, Baltes, & Pratt, 2007).

Although selection, optimization, and compensation are conceptualized as general processes of developmental regulation that function throughout the lifespan, these processes also undergo developmental changes. Regarding old age, one can make two predictions: On the one hand, older adults might become better at the use of SOC strategies because of a continued increase in life experiences. On the other hand, the use of SOC strategies itself is resource-dependent and effortful. As the resources available to older persons decrease, engagement in SOC-related behaviors might become more difficult. In old age, SOC-related behaviors might therefore decline. Consistent with the latter argument, cross-sectional data revealed a decrease in self-reported SOC with increasing age (Freund & Baltes, 2002). Despite such a decline in self-reported SOC behaviors, however, SOC was found to be positively related to everyday functioning (Baltes & Lang, 1997) and various subjective indicators of successful development throughout adulthood (Freund & Baltes, 2002) and even into very old age of adults aged between 72 and 102 years (Freund & Baltes, 1998). As was found for younger adults juggling work- and family-related demands (Wiese et al., 2000, 2002; Young et al., 2007), SOC was found to be particularly helpful for older people who have few resources at their disposal (Jopp & Smith, 2006; Lang, Rieckmann, & Baltes, 2002).

Interestingly, there is even evidence supporting the view that older adults become more skilled in the development and formulation of personal goals, in that they concentrate on goals related to life domains highly important to them and they select goals that are less conflicting and more converging than younger adults do (Freund & Riediger, 2006; Riediger et al., 2005).

In addition to the question of whether older people are *able* to use the SOC strategies, it is also important to know whether they *need* the strategies. Freund, Nikitin, and Ritter (2009) argued that due to the compensatory relationship between external regulation through social norms and expectations on the one hand and self-regulation on the other, self-regulation might be more important after retirement, when older adults are more involved in rather poorly defined life domains such as leisure and social relations. In contrast, young and middle-aged adults are confronted with social norms and expectations that strongly guide and direct the selection and pursuit of goals during these life phases. According to Freund and colleagues, self-regulation might be therefore more important in older adulthood, when there are fewer and less well-defined norms and social expectations.

The trend to the higher importance of self-regulation in older age as compared to young and middle adulthood might be even amplified by increased longevity. Freund and colleagues (2009) posit that a longer future time perspective results in segmentation of the life course into phases of pursuing primarily work-related and family-related goals in early and middle adulthood, and goals

related to leisure and spending time with friends after retirement. If certain goals *can* be postponed until a later time, it might lead to the perception that they *should* be postponed. This idea is supported by empirical findings that both younger and older adults seem to associate retirement with more freedom and self-direction, fewer obligations, and chance to engage in interests and activities of their own choice (e.g., Keller, Leventhal, & Larson, 1989). Self-regulation might therefore gain in importance after retirement. First evidence for the increase in self-regulatory skills in older adults is provided by Hennecke and Freund (2010). In a study with young, middle-aged, and older overweight women who shared the goal of losing weight, these authors found that older adults are more successful in implementing important self-regulatory processes (e.g., follow the dietary requirements to lose weight, inhibit competing impulses, etc.) that, in turn, were related to successful goal achievement (here, weight loss). Older adults also reported engaging in more compensatory behaviors after having given in to temptations. Unfortunately, due to the cross-sectional nature of this study it cannot be ruled out that the effects might be due to cohort-related effects.

In the following, we will present two models of successful aging that are compatible with the SOC model but place a particular emphasis on the controllability of events: the model of primary and secondary control by Heckhausen and Schulz (1995; Heckhausen et al., 2010), and the model of assimilative and accommodative coping by Brandtstädter and colleagues (e.g., Brandtstädter & Renner, 1990).

The Model of Optimization in Primary and Secondary Control (OPS)

Converging with the SOC model, the model of optimization in primary and secondary control (OPS model) by Heckhausen and Schulz stresses the importance of selectivity and compensation for developmental regulation and successful aging (Heckhausen & Schulz, 1995, 1999; Schulz, 1986; for a recent review, see Heckhausen et al., 2010; Schulz & Heckhausen, 1996). Different from the SOC model, Heckhausen and Schulz (1998, pp. 55–56) "conceptualize optimization as a higher order regulatory process" balancing and maintaining selectivity and compensation. In the OPS model, selectivity denotes the focused investment of resources in selected goals, whereas compensation refers to strategies helping to attain a selected goal when internal resources are insufficient or when faced with failure or losses.

Focusing on the role of control in the regulation of ontogenetic change, Heckhausen and Schulz propose that the challenges of selectivity and failure/loss can be mastered by jointly employing two modes of control: primary and secondary control. According to their model, humans have an innate need to control their world. The primary way to achieve control is by employing instrumental efforts to modify the environment according to one's goals (i.e., primary control). The proposed adaptiveness of primary control implies that primary control striving has benefits for the individual. In line with this proposition, the beneficial effects of primary control have been shown to improve or maintain health and/or functional capacities (e.g., Wrosch & Schulz, 2008), reduce depressive symptoms (e.g., Wrosch, Schulz, & Heckhausen, 2002), and lower mortality risk (e.g., Gitlin, Hauck, Winter, Dennis, & Schulz, 2006), to name but a few.

If primary control strategies directed at the external world are not available or fail, an internal focus on changing one's goals and standards or engaging in self-protective attributions or social comparisons takes over (i.e., secondary control). The main function of secondary control is to focus and protect motivational resources for primary control. This is particularly important in old age, when losses become more prominent and less controllable, thereby depleting the potential for primary control (Schulz, 1986). Thus, in old age, secondary control strategies should gain more and more in importance for successful developmental regulation. In line with this proposition, secondary control striving increases with age. Older adults report using more goal disengagement, more downward goal adjustment, and more reinterpretations of events and failures that allow the individual to protect the self and its motivational resources (e.g., Heckhausen, 1997; Wrosch, Bauer, & Scheier, 2005; Wrosch & Heckhausen, 1999). Moreover, goal-disengagement seems to be positively related to change in positive affect over time in older adults but negatively in younger adults (e.g., Wrosch & Heckhausen, 1999).

To specify how the cycles of goal engagement and disengagement with developmental goals unfold over a lifetime, the OPS model was expanded by the action-phase model of engagement and disengagement (Heckhausen, 2000; see also Heckhausen et al., 2010). According to the model, when people make a goal choice, their mode of functioning shifts to goal engagement. During goal engagement, secondary control strategies enhance the effectiveness of primary control strategies. When the goal pursuit is perceived as too costly, people shift to goal disengagement (especially when an alternate

goal can be pursued). During goal disengagement, compensatory secondary strategies are involved. Finally, information processing is biased to support function of either goal engagement or goal disengagement. Empirical evidence for these propositions is still rare. Research has begun to address questions regarding information processing related to goal engagement and disengagement (e.g., visual fixation and incidental memory; Light & Isaacowitz, 2006; Wrosch & Heckhausen, 1999), the effective use of control strategies for goal engagement and disengagement (e.g., downward social comparisons and causal attributions avoiding self-blame; Bauer, Wrosch, & Jobin, 2008), and processes involved in the shift from one phase to the other (e.g., the facilitating availability of alternative or substitutive goals for goal disengagement; Duke, Leventhal, Brownlee, & Leventhal, 2002). Evidence to date supports many of the propositions of the action-phase model (for a summary, see Heckhausen et al., 2010).

The Model of Assimilative and Accommodative Coping

Brandtstädter and his colleagues (Brandtstädter & Greve, 1994; Brandtstädter & Renner, 1990; Brandtstädter & Wentura, 1995; Brandtstädter, Wentura, & Rothermund, 1999) proposed a model that addresses the question of what processes can explain the "paradox" of stability in well-being despite the many losses and constraints older persons encounter. According to their model, people use primarily two distinct, complementary forms of coping to achieve "a match between actual developmental outcomes or prospects and personal goals and ambitions" (Brandtstädter et al., 1999, pp. 375–376), namely, assimilation and accommodation. *Assimilation* refers to tenacious goal-pursuit by modifying the environment or the circumstances so that they fit personal goals. The assimilative mode involves actional (i.e., intentional) neutralization of a mismatch between the current and the desired states. In contrast, *accommodation* denotes processes of flexible goal adjustment by changing, downgrading, or discarding personal goals, or lowering one's level of aspirations so that they fit the circumstances. The accommodative mode, then, is characterized by mental neutralizations of a mismatch between actual and desired state that work primarily on a nonintentional, unconscious level.

Brandtstädter (e.g., Brandtstädter et al., 1999) posits that people first use assimilative strategies to cope with loss; that is, they will first try to overcome obstacles blocking their goals by actional neutralizations. If goals remain blocked despite assimilative attempts, however, a gradual shift to the accommodative mode occurs. The gradual shift from the assimilative to the accommodative mode is theorized to occur in the following order: When attempts at altering the situation do not succeed, auxiliary activities will be activated or acquired. When these auxiliary attempts do not lead to the desired outcomes, external aids or support systems might be engaged (the concept of "proxy control" by Bandura, 1982). When all of these instrumental actions do not help to alter the situation in the desired way, people will, according to Brandtstädter, feel helpless and depressed. This state, however, is only temporary and marks the shift to accommodative processes, such as disengagement from goals or adjustment of standards. Note, however, that Brandtstädter and colleagues (1999) pointed out that the shift from assimilative to accommodative coping does not always follow this fixed temporal pattern, but depends on personal and situational factors.

With regard to aging, Brandtstädter and colleagues predict a general shift from assimilative to accommodative coping. When losses begin to occur, people should first respond with assimilative coping directed at actively counteracting losses. When, with increasing age, losses begin to become more widespread and hence both the probability of success and the resources to engage in assimilative actions decline, accommodative coping should gain in importance. This theoretically expected pattern, which has been empirically confirmed (Brandtstädter & Renner, 1990; Brandtstädter, Rothermund, & Schmitz, 1997), is seen as important for successful aging. Brandtstädter and Renner (1990) could show that accommodative tendencies, such as flexible goal-adjustment, buffer the negative association between perceived developmental deficits and life satisfaction, as well as the negative effect of health-related problems on subjective well being (Brandtstädter, Wentura, & Greve, 1993).

CONCLUSIONS

Old age is a relatively new phenomenon, as life expectancy has only fairly recently extended into old age. This has a number of consequences that are detrimental for old age: As argued by Paul Baltes (1997; see also Baltes, Lindenberger, & Staudinger, 2006), the evolutionary selection benefits decrease with age. This leads to less effective genetic material, mechanisms, and expressions for developing or maintaining high levels of functioning in old age. Moreover, the recency of longer

life expectancy did not give the culture enough time to provide opportunity structures to the elderly comparable to those for children. This leads to the paradoxical effect that in old age, a time when culture would be most needed to compensate for the biologically based decreases in functioning, it provides the least support. Moreover, there is a decreased efficiency of cultural support in old age (i.e., older people can make lesser use of the provided support). Taken together, these processes imply that the balance of growth (gains) and decline (losses) becomes less favorable with increasing age.

Given this unfavorable ratio of gains to losses, the term *successful aging* sounds like an oxymoron. This leads us to the question of how to best define successful aging. Presumably because of the inherent judgmental aspect of trying to delineate a set of criteria for successful aging, there is no generally accepted criterion-based definition of successful aging. On an abstract level, however, successful aging can be defined as the simultaneous maximization of gains and minimization of losses. What exactly constitute gains and losses, however, has to be specified depending on the specific research question at hand.

Shifting the focus away from a criterion-centered approach to defining successful aging to a more process-oriented approach to studying developmental regulation in old age, the role of proactive processes in aging has been emphasized. A basic assumption underlying this notion is that development is a dynamic process of both reacting to and proactively shaping one's environment as well as oneself (e.g., Lawton, 1989; Lerner & Busch-Rossnagel, 1981).

Models of successful aging stress the role of motivational processes for understanding developmental regulation in old age, such as the model of selection, optimization, and compensation (SOC model; P. Baltes & Baltes, 1990; Freund et al., 1999), the model of assimilative and accommodative coping (e.g., Brandtstädter & Greve, 1994; Brandtstädter & Renner, 1990), and the model of primary and secondary control (e.g., Heckhausen & Schulz, 1995; Heckhausen et al., 2010). According to these models, an important way in which individuals play an active role in their development is by choosing, committing to, and pursuing personal goals. By adapting goals and standards to the changing availability of resources, older people can maintain their well-being and a certain degree of control.

At this point in time, most of the research on processes of developmental regulation in old age is primarily concerned with understanding how and under what conditions these processes contribute to successful aging. Hopefully, however, identifying the central processes of successful aging will help to develop prevention or intervention programs that enhance the quality of older persons' lives.

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The Complexities of Elder Abuse

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Elder abuse is a growing societal concern, affecting at least 1 in 10 older Americans. Researchers and practitioners alike consistently assert that a dramatic discrepancy exists between the prevalence rates of elder abuse and the number of elder abuse cases reported. As a field of study, recognition and understanding of elder abuse is still emerging. Comparing findings of a small, but growing, body of literature on perceived and substantiated cases of elder abuse is challenging because there is no uniform term or agreed-upon definition used among state governments, researchers, health care and service providers, and advocates. This article summarizes current understanding of elder abuse, including what constitutes elder abuse, risk factors for elder abuse, perpetrators of elder abuse, and outcomes of elder abuse. Issues associated with the detection of elder abuse and intervention strategies for victims of abuse are addressed. In the final section, potential roles and contributions of psychologists for advancing elder abuse research, professional practice, and policy development are highlighted.

Keywords: elderly, detection, interventions, mistreatment, perpetrators

Since first identified in the mid-1970s as "granny bashing" (A. A. Baker, 1975), elder abuse has become a pressing concern throughout much of the world. Most recent estimates based on *The National Elder Mistreatment Survey* (Acierno, Hernandez-Tejada, Muzzy, & Steve, 2009) suggest that at least 10% of community-dwelling older adults in the United States, or approximately 4.3 million older persons, experience one or more forms of elder abuse annually (Kaplan & Pillemer, 2015). Prevalence rates among survey respondents were highest for self-reported financial abuse by a family member (5.2%), potential neglect by a caregiver (5.1%), and emotional abuse (4.5%). Substantially lower rates were found for self-reported physical abuse (1.6%) and sexual abuse (0.6%).

Researchers and practitioners alike consistently assert that a dramatic discrepancy exists between the actual prevalence of elder abuse and the number of elder abuse cases encountered by health and service providers as well as criminal justice authorities. Underestimation of elder abuse occurs because older victims do not discuss their situation with others and rarely report incidences to the authorities. For example, of the 4.5% of older adults in the national prevalence study who reported experiencing emotional abuse, 8% of the individuals reported the event to the police (Acierno et al., 2009). Reasons older adults give for not disclosing abuse include embarrassment (Kosberg, 2014), belief that they are responsible for what happened (Moon & Benton, 2000), worry that the perpetrator might harm them even more (Ziminski Pickering & Rempusheski, 2014), fear of being placed in a nursing home (Jackson & Hafemeister, 2014), not believing that help is available if they expose the abuse (DeLiema, Navarro, Enguidanos, & Wilber, 2015), acceptance of a long-standing abusive situation as one that must be tolerated (Teaster, Roberto, & Dugar, 2006), and not recognizing their situation as an abusive one (Dakin & Pearlmutter, 2009). Community members' reluctance to recognize elder abuse as a problem and hesitance to get involved, particularly when options for intervention are perceived to be lacking, also contributes to the underreporting of elder abuse (Roberto, Teaster, McPherson, Mancini, & Savla, 2015).

Acknowledging this widespread and growing social issue, the 2015 White House Conference on Aging (2015) included elder abuse, neglect, and financial exploitation as one of its four priority topics. The purpose of this article is threefold: (a) to summarize current understanding of elder abuse including what constitutes elder abuse, risk factors for elder abuse, perpetrators of elder abuse, and outcomes of elder abuse; (b) to describe current assessment and intervention strategies to address elder abuse; and (c) to identify

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gaps in and future directions for elder abuse research, professional practice, and policy development. Primary attention is given to abuse of older adults living in the community. Elder abuse in long-term care settings (see Post et al., 2010) and elder self-neglect (see Dong, Simon, Mosqueda, & Evans, 2012), while of significant concern, are beyond the scope of this article.

Definitions of Elder Abuse

There is no consensus on the definition of elder abuse or standard term for elder abuse consistently used by the scientific and practice communities, advocates, or state and local governments. The lack of a uniformed definition of elder abuse stems back to when elder abuse first was being recognized and there were no federal mandates or incentives to compel states to use common definitions (Anetzberger, 2012). Although terms such as "elder abuse" (World Health Organization, 2002), "elder mistreatment" (Bonnie & Wallace, 2003), and "elder maltreatment" (World Health Organization, 2011) are often used interchangeably, the parameters of both the abuse and persons covered vary widely (Roberto, 2016). Such discrepancies create confusion in discriminating what is elder abuse, limits generalizing findings across studies, and prohibits identifying common courses for effective intervention (Henderson, Buchanan, & Fisher, 2002).

Regardless of terminology used, most definitions of elder abuse recognize five types of abuse: (a) *physical abuse*—use of physical force that may result in bodily injury, physical pain, or impairment; (b) *sexual abuse*—nonconsensual sexual contact of any kind; (c) *psychological and emotional abuse*—infliction of anguish, pain, or distress through verbal or nonverbal acts; (d) *financial abuse and exploitation*—illegal or improper use of an older person's funds, property, or assets; and (e) *neglect and abandonment*—intentional or unintentional refusal or failure to fulfill any part of a person's obligations or caregiving duties to an older adult (American Psychological Association, 2012; Table 1). Current scientific investigations tend to address either one or more types of abuse collectively or narrowly focus on one specific subtype of abuse (e.g., psychological abuse, sexual abuse). Yet evidence embedded within the research literature and practitioner reports suggest that older adults often experience more than one type of abuse simultaneously, that is, polyvictimization (Ramsey-Klawsnik & Heisler, 2014). In addition, behaviors associated with each type of abuse vary (National Center on Elder Abuse [NCEA], n.d.-b, Table 2) and are included selectively and inconsistently across studies of elder abuse.

Risk Factors Associated With Elder Abuse

A number of interacting factors contribute to a person's vulnerability to abuse in late life, including age, gender, race, ethnicity, living arrangements, cultural beliefs and values, as well as physical and cognitive impairments, social isolation, and loneliness. Much of the research on risk factors for elder abuse relies upon small, cross-sectional studies; does not include comparison groups; and does not differentiate type of abuse, identify discrete contributions of individual risk factors, or address how risk factors interacts to increase susceptibility to elder abuse (Roberto, 2016). As a result, empirical evidence for most risk factors for elder abuse is mixed (Johannesen & LoGiudice, 2013).

Age and Gender

National findings suggest that older adults aged 60 to 69 were more susceptible to abuse than older age groups (Acierno et al., 2009), whereas investigations focused on specific types of abuse (i.e., financial) identified adults age 75 and older as being particularly susceptible to abuse (Metlife Mature Market Institute, 2011). One possible reason for the different findings is that younger old adults more often live with a spouse or with adult children, the two groups that are the most likely abusers (Lachs & Pillemer, 2015). Conversely, living with a larger number of individuals other than a spouse is associated with an increased risk of abuse, especially financial abuse (Peterson et al., 2014). The association between age and risk of abuse also may be linked to a decline in functional health, which often occurs later in life and results in a greater dependence on others for care and a higher level of individual vulnerability (Amstadter, Cisler, et al., 2011a).

Although women are more often identified as victims of elder abuse than are men (Laumann, Leitsch, & Waite,

Table 1
Types of Elder Abuse and Frequently Associated Indicators of Abuse

Type of elder abuse	Indicators of elder abuse
Physical abuse	Bruises or grip marks around the arms or neck
	Rope marks or welts on the wrists and/or ankles
	Repeated unexplained injuries
	Dismissive attitude or statements about injuries
	Refusal to go to same emergency department for repeated injuries
Verbal/emotional/psychological abuse	Uncommunicative and unresponsive
	Unreasonably fearful or suspicious
	Lack of interest in social contacts
	Evasiveness or isolation
	Unexplained or uncharacteristic changes in behavior
Sexual abuse	Unexplained vaginal or anal bleeding
	Torn or bloody underwear
	Bruised breasts or buttocks
	Venereal diseases or vaginal infections
Financial abuse/exploitation	Life circumstances do not match what is known about the individual's financial assets
	Large withdrawals from bank accounts, switching accounts, unusual ATM activity
	Signatures on checks do not match elder's signature
Caregiver neglect	Lack of basic hygiene, adequate food and water, or clean and appropriate clothing
	Sunken eyes or loss of weight
	Person with dementia left unsupervised
	Untreated pressure bed sores
	Lack of medical aids (glasses, walker, teeth, hearing aid, medications)

Note. Adapted from *Elder Abuse and Neglect: In Search of Solutions* by the American Psychological Association (2012). Retrieved from http://www.apa.org/pi/aging/resources/guides/elder-abuse.aspx.

2008), greater longevity resulting in associated age-related changes and dependencies may contribute to older women's risk for abuse. The higher likelihood of experiencing family violence (Wisconsin Coalition Against Domestic Violence, 2009) may increase older women's risk for abuse, particularly physical and sexual abuse (Acierno et al., 2010). Recently, Kosberg (2014) argued against a gender bias in elder abuse, stating that older men have been deemed "invisible," in part because of the failure of older men to acknowledge and report abuse. Research focused specifically on elder abuse of older men (see Kosberg, 2007) suggests that elder abuse is not only a problem for older women—it adversely affects the lives of older men as well.

Race, Ethnicity, and Culture

Although racial or ethnic minority status is a frequently identified risk factor for elder abuse (Lachs, Williams, O'Brien, Hurst, & Horwitz, 1997), analysis of national data did not reveal significant race- and ethnicity-based differences in the prevalence of abuse (Hernandez-Tejada, Amstadter, Muzzy, & Acierno, 2013). Evidence exists that cultural norms and beliefs about abuse and tolerance for abusive behaviors intersect with race and ethnicity (Horsford, Parra-Cardona, Schiamberg, & Post, 2011; Moon & Benton, 2000) and socioeconomic status (Dakin & Pearlmutter, 2009) to increase risk for elder abuse. Focus group

Table 2
Examples of Abusive Behaviors

Type of elder abuse	Abusive behaviors
Physical abuse	Hitting; slapping; pushing; shoving; kicking; pinching; burning; biting; beatings; restraining with ropes or chains
Sexual abuse	Unwanted touching; making the person look at pornography; forcing sexual contact with a third party; coerced nudity; unwanted sexualized behavior; rape; sodomy
Verbal/emotional/psychological	Name calling; yelling, swearing, insulting, disrespectful, or threatening comments; threats; intimidation; isolating the person from others
Financial abuse/exploitation	Misuse of funds; taking money under false pretenses; forgery; forced property transfers; purchasing expensive items with the older person's money without that person's knowledge or permission; denying the older person access to his or her own funds; embezzlement
Caregiver neglect/abandonment	Withholding appropriate attention; failure to provide food, water, clothing, medications, and assistance with activities of daily living; failing to meet the physical, social, or emotional needs of the older person

Note. Adapted from *Types of Elder Abuse* by the National Center on Elder Abuse (n.d.-b). Retrieved from http://www.ncea.aoa.gov/FAQ/Type_Abuse/index.aspx.

data revealed that African American and White older women with high socioeconomic status, as well as Latina older women, did not identify financial abuse as a type of elder abuse, whereas working-class White women did not identify verbal abuse as elder abuse (Dakin & Pearlmutter, 2009).

Cognitive Impairment

Cognitive impairment is perhaps the most agreed-upon risk factor for elder abuse. As cognitive abilities decline, the risk of all forms of elder abuse increases significantly (Dong, Simon, Rajan, & Evans, 2011). Financial capacity, defined as the ability to manage one's financial affairs in a manner consistent with self-interest, begins to diminish very early in the trajectory of cognitive impairment (Okonkwo, Wadley, Griffith, Ball, & Marson, 2006), placing older adults at risk particularly for financial abuse and exploitation. Compromises in judgment and decision-making capacity and the tendency to judge others' trustworthiness less stringently than younger individuals (Charles & Carstensen, 2010) may also increase older adults' susceptibility to undue influence, a tactic used by many perpetrators of elder abuse.

Social Support

Older adults' positive perceptions of, and engagement with, their informal social network has the potential to reduce the influence of other risk factors of abuse (Luo & Waite, 2011). Perceptions of low social support more than triple the likelihood that older adults reported any form of abuse (Acierno et al., 2009). Social isolation and negative social interactions have been associated with increased risk of elder abuse (Dong & Simon, 2008; Fulmer et al., 2005), whereas positive social support and social participation moderated the risk of abuse (Luo & Waite, 2011). Most recently, Schafer and Koltai (2015) provided additional evidence for the significance of social embeddedness for deterring elder abuse. They found that older adults with dense social support in which members knew one another had a lower risk of elder abuse, even when perpetrators were found within these close networks.

Perpetrators of Elder Abuse

The relationships between older adults and potential perpetrators of elder abuse is often cited as a contributing factor leading up to abuse (Roberto, 2016). Older adults typically know their perpetrators, who are usually family members (e.g., spouse, adult child, grandchildren, nieces/nephews), friends, and others they trust and rely upon for help and services. Outsiders often perceive alleged perpetrators as primary sources of support for older adults rather than individuals who are causing them harm. Beyond basic descriptive information, the empirical literature provides little information about perpetrators and their motivations for the abuse.

Spouse/partner abuse in late life can be viewed on a continuum from longstanding abuse within a single relationship to abuse that begins with a new relationship in later life. It often involves multiple forms of abuse, including physical harm, sexual assault, and psychological humiliation or intimidation. In longstanding abusive relationships, physical violence tends to decline with age, often replaced with new or intensified types of psychological and emotional abuse endured in earlier years (Mezey, Post, & Maxwell, 2002; Teaster et al., 2006). National prevalence studies support this contention, with spouses/partners identified in one fourth or more of situations involving verbal or emotional abuse (Acierno et al., 2009).

Interdependencies within late-life parent–child relationships may place the older adult at risk for abuse. Adult children who are abusive are often dependent on their parents for shelter, finances, and emotional support (Jackson & Hafemeister, 2012). Salient factors underlying dependency in adulthood includes addiction to alcohol, pain medications, or recreational drugs (Jogerst, Daly, Galloway, Zheng, & Xu, 2012); a history of mental or emotional illness (Acierno et al., 2009); and chronic unemployment (Jackson & Hafemeister, 2011). It is unlikely that any one of these factors precipitates elder abuse, but rather abuse within these relationships stems from a combination of multiple personal struggles. Conversely, when older persons are dependent on an adult child for their care, the potential for abuse also may escalate. The overwhelming majority of adult children provide appropriate care for their older parents; however, caregiving can become stressful and lead to potentially harmful or abusive behaviors (Amstadter, Zajac, et al., 2011b; Beach et al., 2005). However, compared with overwhelmed caregivers who often seek help to improve the situation, perpetrators with narcissistic and domineering personalities tend to be quick to espouse justifications for their abusive actions (Ramsey-Klawsnik, 2000).

Paid caregivers and other professionals in which a trusting relationship is expected (e.g., guardians, lawyers, investment counselors) also are perpetrators of elder abuse. These perpetrators are good at cultivating relationships; they are charming and attentive, while waiting to take advantage of the trusting relationship they establish with the older person. For example, in cases of financial abuse and exploitation presented in the media (Metlife Mature Market Institute, 2011), some perpetrators purported that, in return for providing assistance and care for the older adult, they were entitled to additional compensation (e.g., money, possessions). Other perpetrators had access to older adults' money and assets, and when an occasion presented itself, they availed themselves to the older adults' resources.

Outcomes of Elder Abuse

Elder abuse, in all its forms, has a profound impact on the health and psychological well-being of late-life victims. Although some markers of elder abuse are instantly obvious, such as injuries ranging from bruises and sprains, to broken bones and lost teeth, to severe brain trauma (Friedman, Avila, Tanouye, & Joseph, 2011), older victims often experience numerous adverse health effects that may not be immediately evident and persist long after the abuse has stopped (Bonomi, Anderson, Rivara, & Thompson, 2007). The long-term effects of elder abuse include new or exacerbated health problems and hospitalizations (Dong & Simon, 2013), premature institutionalization (Rovi, Chen, Vega, Johnson, & Mouton, 2009), and a hastened death (M. W. Baker et al., 2009; Dong et al., 2011).

The impact of sexual abuse, perhaps the most egregious and underreported type of elder abuse (Teaster & Roberto, 2004), has received less attention in the research literature than other types of abuse. In addition to the physical remnants of being sexually abused (e.g., genital injuries; human bite marks; bruising on the thighs, buttocks, breasts), older sexual abuse victims often exhibited substantial psychosocial indicators of trauma, including symptoms of posttraumatic stress disorder (Ramsey-Klawsnik, 2004). Bonomi et al. (2007) found that sexual intimate-partner violence exposure, alone or in combination with physical abuse, resulted in numerous adverse health effects that "persisted for many years after the abuse stopped" (p. 993), including a high likelihood of depression and poor social and mental functioning.

Psychological and emotional abuse is one of the most underreported yet damaging forms of elder abuse. The intangible nature of psychological abuse makes it difficult to quantify and often means it goes unrecognized, even by older victims themselves. Older adults who experience chronic emotional mistreatment often internalize their abuser's verbal aggression, which leads to increased physical health symptoms and behaviors indicative of anxiety and depression (Begle et al., 2011). While acknowledging that physical and sexual abuse impact victims' psychological health, Cisler, Begle, Amstadter, and Acierno (2012) suggested that emotional abuse may have a more potent and direct effect on mental health. Accounting for other known correlates of poor mental health in late life, they found psychological mistreatment to be a significant predictor of late-life negative emotional symptoms and functional impairment.

Often referred to as the "Crime of the 21st Century," financial abuse and exploitation costs older Americans nearly 3 billion dollars annually (Metlife Mature Market Institute, 2011). But the loss of financial resources and valued possessions of older victims extend far beyond the savings and material goods that are not easily recouped late in life. Financial abuse and exploitation "engenders health care inequities, fractures families, reduces available health care options . . . increases rates of mental health issues among elders [and] . . . invariably results in losses of human rights and dignity" (Metlife Mature Market Institute, 2011, p. 4).

Detection of Elder Abuse

Psychologists and others working in clinical practice often struggle with identifying whether an older client has experienced abuse and when to report suspected abuse (Mosqueda & Olsen, 2015). To date, there is no single gold-standard test to ascertain abuse, with numerous tools employed by both researchers and clinicians. A review of 26 empirical articles found that modified versions of the Conflict Tactics Scale (CTS; Straus, 1979) was the most commonly used measure to identify elder abuse (Sooryanarayana, Choo, & Hairi, 2013). The CTS has strong psychometric properties and focuses on the use of negotiation, physical assault, and psychological aggression in relationships. Reviews of measures for use primarily in clinical practice (Anthony, Lehning, Austin, & Peck, 2009; Fulmer, Guadagno, Bitondo Dyer, & Connolly, 2004; Pisani & Walsh, 2012) identified a number of screening and assessment instruments, none of which have gained widespread use. Moreover, the reliability and validity of most of the measures identified has yet to be established (Cooper, Selwood, & Livingston, 2008). Taking a more informal approach, Mosqueda and Olsen (2015) suggested that psychologists and other health care providers ask their older clients whom they suspect may be involved in an abusive situation a series of questions (e.g., "Are you afraid of anyone?" or "Is anyone mistreating you?"). The client's response will help clinicians determine the need to report suspected abuse or to pursue another course of therapeutic action (Zeranski & Halgin, 2011).

As mandatory reporters in most states—and in keeping with the American Psychological Association's (2010) ethics code's general principles of beneficence and nonmaleficence, and respect for people's rights and dignity—psychologists are responsible to report suspected elder abuse when they have "reasonable" cause to believe that an older adult is experiencing abuse or neglect (p. 296). However, the decision to take action and report any suspected case of elder abuse is a challenging balancing act between protecting the clients' personal well-being and respecting their dignity and self-determination to make their own decisions about their lives (Scheiderer, 2012; Zeranski & Halgin, 2011).

Once a report of suspected abuse is made, psychologists are not responsible for identifying ways in which to remedy the situation, but they do have continued responsibility to their client regardless if the client is the victim, perpetrator, or other party involved in the situation (Mosqueda & Olsen, 2015). Psychologists must strive to preserve the therapeutic

relationship while taking action to protect the vulnerable older adult (Zeranski & Halgin, 2011). Although reporting suspected abuse is a legally mandated breach of confidentiality, determining if anyone else (e.g., client, family member) should be informed requires careful consideration (Mosqueda & Olsen, 2015).

Elder Abuse Interventions

Whenever a potential abusive situation is identified, either by the victim or by a third party, in most states, Adult Protective Services (APS) is the principle public agency responsible for investigating the situation occurring in the community (NCEA, n.d.-a). When APS receives a report of elder abuse, workers investigate and, if warranted, take action to ameliorate the situation with legal, medical, psychological, and social services. In nonemergency cases, APS cannot investigate alleged abuse without consent from the older individual or his or her caregiver or legal guardian, a court order, or a search warrant (Roby & Sullivan, 2001). If consent is denied, APS can petition the court for assistance upon showing of probable cause. Once abuse is substantiated, APS provides overall management of the case along with law enforcement and, in some cases, the judiciary system. Immediate response to the abusive situation may involve removing either the older victim or the perpetrator from the home and securing medical care, supportive services, and mental health services.

Mental Health Services

Once the situation is stabilized, older victims who are receptive to receiving help may benefit from psychological interventions to address the trauma, anxiety, and stress associated with abuse. A recent pilot study provided preliminary evidence for the feasibility of providing evidence-based psychotherapy for anxiety and depression at the same time that older adults were receiving mistreatment resolution services (Sirey et al., 2015). Most eligible clients (69 of 81; 85%) were willing to accept mental health services.

Therapeutic interventions used for postabuse treatment of elder abuse have included individual counseling, psychoeducational support groups, case management, and volunteer victim assistance services (Ploeg, Fear, Hutchison, MacMillan, & Bolan, 2009). Early studies often reported no differences between treatment and control groups, and in some cases, interventions were reported to have negative impacts for older victims (Davis & Medina-Ariza, 2001). Differences also have been reported in the effectiveness for different modes of intervention. For example, approximately 67% of older victims who received individual counseling primarily for psychological abuse self-reported improvements in their ability to cope with their situation, whereas no change was reported for 31% of the older adults; deterioration occurred for less than 2% of the participants (Alon & Berg-Warman, 2014). Conversely, 50% of support group participants self-reported better coping abilities, whereas the other participants did not. Methodological issues may explain some of the mixed findings across and within studies, including inclusion of small, selective samples; limited use of rigorously designed randomized clinical trials; lack of established and agreed upon outcome measures; and use of descriptive and bivariate evaluation strategies (Ploeg et al., 2009).

Multidisciplinary Teams

Many communities have created multidisciplinary teams (MDTs) comprising local professionals (e.g., physicians, social workers, law enforcement, APS workers) to work with, or on behalf of, older victims. Such teams offer an integrative and holistic approach to elder abuse by actively engaging multiple professional disciplines and perspectives in the prevention and intervention process. The primary function of MDTs is to offer expert consultation to service providers, identify service gaps and systems problems, advocate for change, provide training events, and coordinate investigations or care planning (Teaster, Nerenberg, & Stansbury, 2003). Although published information about MDTs is mostly anecdotal and descriptive, a recent empirical evaluation of a multidisciplinary model suggested that these models are indeed effective (Rizzo, Burnes, & Chally, 2015). Specifically, an examination of 250 randomly selected cases of elder abuse found that older adults' gender (female), marital status (married), and living arrangement (living with the perpetrator) were significant covariate predictors of unfavorable mistreatment status at case closure. Taking these variables into account, older persons who received intervention services from an integrated legal and social services team compared with outcomes of a social-work-only intervention had a greater reduction in mistreatment risk at case closure.

State and National Initiatives

State and national initiatives also have implemented interventions to prevent and alleviate elder abuse, yet vary considerably according to state and federal priorities. For example, the AARP Foundation's Elder Watch Colorado (AARP Foundation, n.d.) is a program in which the Attorney General Office addresses financial exploitation by providing information to, and coordinating efforts by, the state's law enforcement offices, adult protection and mental health agencies, and service organizations assisting older adults. With support from the Administration for Community Living's Administration on Aging unit, the NCEA (Administration for Community Living, n.d.) serves as a national resource center dedicated to the prevention of elder

abuse, and operates as a multidisciplinary consortium of collaborators with expertise in elder abuse, neglect, and exploitation. The NCEA disseminates information to professionals and the public about elder abuse, and it provides technical assistance and training opportunities for professionals. The Training Resources on Elder Abuse (USC Department of Family Medicine and Geriatrics and the NCEA, n.d.) is a searchable web-based database of elder-abuse-related training materials. It features a variety of materials and resources created by organizations throughout the country, including a library of videos appropriate for training purposes.

Federal legislation and policy initiatives also have been put forth to support intervention efforts to prevent and respond to elder abuse. The most comprehensive federal bill to shed light on interventions for elder abuse is the Elder Justice Act of 2009 (2010). The intent of the Elder Justice Act intent is to provide federal resources to prevent, detect, treat, understand, intervene in, and, when appropriate, prosecute elder abuse, neglect, and exploitation. Specifically, the act provides for the establishment of the Elder Justice Coordinating Council, an advisory board, and forensic centers, as well as funding for improvements to long-term care, APS, and the long-term care ombudsman program. In 2014, the Departments of Justice and the Department of Health and Human Services issued the Elder Justice Roadmap (Departments of Justice & Department of Health and Human Services, 2014). Developed with input from hundreds of public and private stakeholders from across the country, this first national strategic plan for elder justice identifies the most critical direct services, education, policy, and research priorities and concrete opportunities for greater public and private investment and engagement in elder abuse issues.

New Directions for Psychological Science and Practice in Elder Abuse

Eradicating elder abuse requires multiple solutions—it needs to be a priority of psychologists working together on intervention efforts utilizing multiple players (e.g., general public, professional communities, government policymakers) in multiple settings (i.e., community, long-term care facilities). To date, elder abuse research has been hampered by methodological issues and other challenges associated with the complexity of elder abuse, including human subject protection rules, mandatory reporting obligations, participant access and recruitment, agency cooperation, and a paucity of federal and private funding (Pillemer et al., 2011).

To develop effective elder abuse preventive measures and intervention programs and services requires researchers and practitioners from the psychological sciences need to band together and collaborate with members of other disciplines. It will take concerted and sustained efforts from all professionals in the elder abuse space to resolve these issues and:

1. Develop a universally accepted definition of what constitutes elder abuse that will provide greater understanding of the magnitude of elder abuse. Age needs to be considered as part of the definition. There currently is no standard age parameters for elder abuse, which impedes both the generalization of knowledge generated and the delivery of services.

2. Disentangle the individual, relational, cultural, and societal factors that place older adults at risk for elder abuse, particularly for ethnic and racial minority elders and other vulnerable groups (e.g., rural elders, older adults with cognitive impairment, frail elders), and identify the pathways of not only vulnerability for abuse but also protective factors that prevent elder abuse from occurring. Without meaningful risk factor data, the development of intervention strategies will languish.

3. Expand efforts to increase understanding about the perpetrators of elder abuse beyond demographic characteristics and descriptions of personal behaviors. This information is needed in order to develop, implement, and evaluate intervention protocols. Ultimately, reducing elder abuse requires better identification and treatment of its perpetrators.

4. Document the full range of costs and consequences of elder abuse for older adults, families, communities, and the nation. Elder abuse threatens the physical, psychological, social, and economic well-being of all involved, individually and collectively. But without documentation of the outcome of abuse, efforts to eliminate elder abuse will remain elusive.

5. Gather comprehensive, evidence-based data to determine which intervention strategies work best for specific groups of older adults and the cost-effectiveness of current and newly developed programs. This information is essential not only for older persons who experience abuse, but for the training of new clinicians and practitioners and for advocates seeking state and federal support for their implementation.

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DISCUSSION 2:

You are working at an area hospital dealing primarily with end-of-life decisions and palliative care. For this discussion, you will be reviewing the PSY605 End-of-Life Case Scenarios document and making recommendations based on the information provided in the scenarios.

All end-of-life choices and medical decisions have complex psychosocial components, ramifications, and consequences that have a significant impact on suffering and the quality of living and dying. The issues involved in this process of decision making are based on issues of developmental stage, gender, race, ethnicity, culture, health, family, and physical, cognitive, and psychosocial states. For your initial post, you will apply concepts from developmental psychology to create your recommended courses of action for either Roger or Geri.

To begin, carefully review the PSY605 End-of-Life Case Scenarios document, select one of the cases, then create a recommended course of action for the scenario selected by addressing the following questions:

- What is the best recommended course of action for the client at this time, and why?
- What potential effects would themes such as the client's culture, ethnicity, family, education, and gender have on the situation and recommendation(s)?
- How does the client's developmental stage factor into your recommendation?
- How do the client's physical, cognitive, and psychosocial states affect your recommendation(s)?
- How might the developmental stage(s) of the client's family member(s) affect your recommendation?
- How will you present your recommendation(s) to both the patient and family member(s)?
    - What consideration(s) would affect your manner of presentation?
- Are there considerations that cannot be processed at this time because of lack of information in the written scenario?

Next, analyze and comment on the ethical considerations related to the scenario. Note how the APA's Ethical Principles of Psychologists and Code of Conduct (Links to an external site.)Links to an external site. might provide guidance.

Remember to evaluate the unique scholarly perspectives presented in your reading to support your recommended course of action and analysis of ethical considerations.

PSY605 End-of-Life Case Scenarios

Case 1: Roger is a healthy 62-year-old African American male with a wife and four grown children. While out on his morning jog two weeks ago, he was hit by a drunk driver. Roger has been left paralyzed from the neck down, and he is no longer able to perform basic life-sustaining functions such as eating or breathing without the help of machines. Because he can no longer talk or use his hands to write, his communication is limited to moving his head in simple "yes" or "no" responses when asked a question. His living will was last updated 25 years ago when his youngest child was born. The will indicates that Roger would like to receive life-saving treatments in these types of events. However, when prompted by doctors, nurses, and the hospital-appointed social worker regarding his current wishes, he seems to be communicating that he does not want to continue living in his current state.

Case 2: Geri is a 38-year-old single mother. Her son, Gabe, is 17 years old and a junior in high school. After experiencing some headaches and changes in mood over the past several weeks, Geri finally visited a neurosurgeon a week ago. During that visit, it was discovered that she has an inoperable brain tumor. Her life expectancy is 6 to 8 months. In addition to fears about her own impending death, Geri is very worried about how to best provide for and take care of her son. She cannot decide if she should continue working full-time to make sure that Gabe's expenses are taken care of, or if it is best to take this remaining time off to enjoy with her son. Once she is gone, she does not know if she should send Gabe to live with an aunt who lives several states away for his final year of high school, or if she should allow him to live with a friend in their neighborhood and grant custody to that parent so Gabe could continue living and going to school where he is most comfortable. She is also at a loss as to how to explain this situation to Gabe in a way that he will understand so that both of them will be able to move forward.

Fact Sheet on End-of-Life Care

AMERICAN PSYCHOLOGICAL ASSOCIATION

What Are Older Adults' Mental Health Needs Near the End of Life?

The US Supreme Court agreed that Americans should expect palliative care, which combines active and compassionate therapies to comfort and support individuals and families nearing the end of life. End of life is defined as that time period when health care providers would not be surprised if death occurred within about 6 months. Older Americans with chronic illness think about how they would prefer their lives to end, and want a "good death" without burdensome pain, symptoms and technology.

Most deaths (70%) occur in those aged 65 and older. Older adults want better discussions, information, and a chance to influence decisions about their care—whether to be at home or in the hospital and to have CPR (cardiopulmonary resuscitation) (Foley, 1995). Most Americans die in hospitals (63%), and another 17% die in institutional settings such as long-term care facilities (Foley, 1995; Isaacs & Knickman, 1997). In addition, most people are referred too late to hospice or palliative care, so they are unable to get the most benefit possible from these specialized services.

What Do Older Adults Fear Most?

People fear that their pain, symptoms, anxiety, emotional suffering, and family concerns will be ignored. Many critically ill people who die in hospitals still receive unwanted distressing treatments and have prolonged pain. Many fear that their wishes (advance directives) will be disregarded and that they will face death alone and in misery. Physicians may use confusing or vague medical terms and talk briefly about treatment options when the patients are too sick to participate. Most people want to discuss advance directives when they are healthy and often want their families involved.

Caregivers reported that a third of 1227 elderly individuals were in unnecessary pain during the 24 hours before their death. Studies show that two thirds of elderly patients have pain in the last month of life (Foley, 1995). Although palliative/comfort care could relieve most of this pain and suffering, patients typically spend 8 days in ICU (an intensive care unit) comatose or on a ventilator and 30% of patients spend at least 10 days in ICU before they die (Isaacs & Knickman, 1997).

When discussing a good end of life with a patient, physicians in one study talked about 5-6 minutes, spoke for 2/3 of this time, and did not consider the patient's values or preferences (Tulsky, Fischer, Rose & Arnold, 1998). If patients were too sick to make decisions, most wanted their family to be given choices about treatment and only 41% wanted the physician to make treatment decisions without consulting them. In 91% of cases in which physicians discussed end of life treatment options, they did so in scenarios in which most patients would not want to be treated, whereas only 48% asked patients about their preferences in reversible scenarios when there was some chance of recovery.

Culture makes a difference in use of advance directives and in decisions about end of life care. Caucasians and Asians use advance directives more than other ethnic groups. Often people who do not complete advance directives think they are a good idea but are not urgently needed and their family or physician will somehow know their wishes (Caralis, Davis, Wright, Marcial, 1993; Miles, Koeppe & Weber, 1996; Weissman, Bloch, Blank, Cain, Cassem, Danoff, Foley, Meir, Schyve, Theige, & Wheeler, 1999).

SaysWho?

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→ Over

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What are the Obstacles to a Good Death?

Physicians want to preserve hope. They have difficulty saying when a cure is not possible and many are uncomfortable asking about a patient's choices (e.g., hospital or home treatment, breathing machines or feeding tubes, and comfort care). Many are not experts in symptom management and emotional support. Others believe that they must do everything to prolong life regardless of the pain and suffering involved and fear that offering comfort care may suggest they have given up or failed. Medical education has often not included palliative or comfort care and compassionate care near the end of life. Talking about end of life is difficult for many physicians and their patients and has been a taboo topic in society generally.

The Institute of Medicine (Field & Cassel, 1997) indicated that formal medical education should include palliative care. Lo, Quill, and Tulsky (1999) suggest that palliative care is the standard of care for dying patients.

Our knowledge of how culture influences choices about end of life is scant [Phillips, True, Pomerantz, 2000; Ersek, Kagawa-Singer, Barnes, Blackhall & Koenig, 1998). Inadequate knowledge of patients' cultures, preferences for communication, palliative care, decision-making, and choices at end of life inhibits care. Unless their preferences are known, patients may undergo unwanted, distressing, and costly treatments that impair their quality of life, increase suffering, and distress loved ones. The sociocultural values of many culturally diverse groups conflict with the values on which the use of advance directives is based.

Clinicians may lack sensitivity to the sociocultural beliefs that influence decisions affecting end-of-life care and may not have the knowledge to increase flexibility in practices and standards in the application of advance directives (Ersek, et al, 1998).

What is Working?

An expert such as a clinical or counseling psychologist trained in palliative care can help improve communication, explain end-of-life choices, and identify resources (e.g., home care, hospice care, pain management experts, spiritual support). Clinical or counseling psychologists are skilled in helping the health care team understand the patient's concerns and values and in helping families talk to each other. The psychologist can help people understand confusing medical terms and put their choices on paper, including decisions about feeding tubes or breathing machines and restarting the heart (CPR). Psychologists can also help treat the anxiety, depression, and other mental health distress that may result from your disease or stress near the end of life. Psychologists work with other professional caregivers such as nurses, social workers, and chaplains who also have important roles to play in helping provide compassionate care near the end of life.

Patients can plan ahead, write down their choices, and share these with loved ones and physicians. Advance planning for health care helps people determine their own futures, often with the support of significant others (Barry & Henderson, 1996). Respect for patient autonomy has been included in the medical codes of ethics and in United States law (Benbassat, Pilpel, & Tidhar, 1998). Since 1990, The Patient Self Determination Act (PSDA) has required health care providers to document advance directives and educate patients about their rights to accept or refuse treatment.

What Needs to be Done?

Researchers and service providers need a better understanding of how to provide compassionate care near the end of life to older adults from diverse cultures and backgrounds and of the role of cultural, religious, and socioeconomic factors influencing end-of-life decisionmaking. Improving healthcare providers' education, communication skills, and cultural sensitivity, conducting research, and creating policies that improve end of life care are recommended.

Reproduction of this text is encouraged. However, copies may not be sold. Comments and questions about this material should be directed to John Anderson, PhD, Staff Liaison to APA Ad Hoc Committee on End-of-Life Issues (Phone: (202) 336-6051; E-mail: janderson@apa.org).

Prepared by Sharon Valente, RN, PhD, FAAN, in collaboration with the other members of the APA Ad Hoc Committee on End-of-Life Issues

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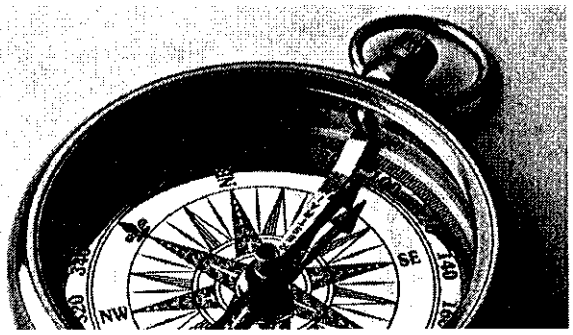

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Including 2010 and 2016 Amendments

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Introduction and Applicability

Preamble

General Principles

Section 1: Resolving Ethical Issues

Section 2: Competence

Section 3: Human Relations

Section 4: Privacy and Confidentiality

Section 5: Advertising and Other Public Statements

Section 6: Record Keeping and Fees

Section 7: Education and Training

Section 8: Research and Publication

Section 9: Assessment

Section 10: Therapy

History and Effective Date

Amendments to the 2002 "Ethical Principles of Psychologists and Code of Conduct" in 2010 and 2016

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Additional Resources

- 2018 APA Ethics Committee Rules and Procedures (PDF, 197KB)
- Revision of Ethics Code Standard 3.04 (Avoiding Harm)
- APA Ethical Principles of Psychologists and Code of Conduct (2017) (PDF, 272KB)
- 2016 APA Ethics Committee Rules and Procedures
- Revision of Ethical Standard 3.04 of the "Ethical Principles of Psychologists and Code of Conduct" (2002, as Amended 2010) (PDF, 26KB)
- 2010 Amendments to the 2002 "Ethical Principles of Psychologists and Code of Conduct" (PDF, 39KB)
- Compare the 1992 and 2002 Ethics Codes

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Psychological Issues in End-of-Life Care

SUSAN D. BLOCK, M.D.

ABSTRACT

This paper provides a systematic, evidence-based review of the psychological issues confronted by patients at the end of life, drawing on recent literature. The epidemiology, approach to clinical assessment, clinical presentation, and therapeutic options related to common psychological issues that arise in end-stage illness are described. The spectrum of normal and dysfunctional reactions are identified, and approaches to enhancing coping and quality of life are emphasized. The learner will be able to describe: (1) normal coping responses of patients at the end of life; (2) epidemiology of common psychiatric disorders at the end of life; (3) the approach to clinical assessment of psychological distress at the end of life; and (4) therapeutic approaches to common psychological problems at the end of life.

INTRODUCTION

PSYCHOLOGICAL SUFFERING is a virtually universal experience for patients at the end of life and their families. Suffering exists on a continuum and has many sources: grief about current and anticipated losses, fear and uncertainty about the future, unresolved issues from the past, and concerns about loved ones. Preexisting and new psychiatric disorders (depression, anxiety, posttraumatic stress disorder (PTSD), personality disorders, substance abuse, other major psychiatric disorders), difficult family dynamics, inadequate social support and/or coping resources, personal vulnerabilities related to past experiences, and existential and spiritual concerns may also amplify suffering. Physical symptoms, difficulties in relating to the health care team, financial concerns, and other practical matters may also contribute to patients' and families' distress. All physicians caring for the dying must be expert in assessing and differentiating the major types of psychological distress in the dying and their families, including common psychiatric illnesses arising at the end of life, and in treating these sources of suffering. In addition, in order to provide optimal care to the dying patient and his/her family, the expert palliative care physician will understand the personal impact of caring for the dying, as well as the impact of this work on clinical staff, and will be expert in addressing self-care and staff support.

Data quality and sources

Our understanding of the psychological issues experienced by patients at the end of life derives primarily from studies of patients with cancer and patients with acquired immune deficiency syndrome (AIDS), and from the elderly; however, little research is focused specifically on the terminal phase of illness. There is also a scant literature on the end-of-life psychological assessment and care of patients with cardiac, pulmonary, re-

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nal, and neurologic disease. Data presented in this report, except where indicated, primarily represent level 2–5 evidence. For reference, level 1 evidence represents strong evidence from at least one systematic review that synthesizes data from multiple high-quality clinical studies (including randomized controlled trials); level 2 evidence requires at least one randomized controlled trial; level 3 evidence is based on well-designed nonrandomized experimental studies, including cohort, case-control, and time series studies; level 4 evidence derives from well-designed nonexperimental studies, and collective expert opinion; level 5 evidence represents expert opinion (⟨www.cebm.net/levels_of_evidence. asp⟩).

In this paper, I provide an overview of normal responses to and common psychological issues associated with terminal illness, the epidemiology of psychiatric disorders in the palliative care setting, and the assessment, clinical presentation, and management of common psychiatric disorders in the palliative care setting.

THE SPECTRUM OF NORMAL RESPONSES

Feelings of grief, sadness, despair, fear, anxiety, loss and loneliness are present, at times, for nearly all patients facing the end of their lives. Yet, in spite of such painful feelings, many patients, even those with significant vulnerabilities, are able to achieve a high degree of equanimity and acceptance of their illness and its prognosis. The usual conditions for effective coping and the attainment of a degree of peace at the end of life include good communication and trust among patient, family, and clinical team, the ability to share fears and concerns, as well as meticulous attention to physical comfort and psychological and spiritual concerns. Each patient brings a characteristic mode of coping and an array of strengths and vulnerabilities to the experience of a life-threatening illness. Thus, each individual's psychological experience with a terminal illness will be unique and will be affected by multiple different factors.

All patients with a life-threatening illness benefit from a comprehensive psychological, social, and spiritual assessment, as well as evaluation of physical symptoms. Systematic psychological assessment allows the clinician to support effective coping, to identify persons at risk of experiencing high levels of difficulty during their illness, and to proactively address vulnerabilities. The basic domains of a psychosocial and spiritual assessment are:

- Developmental issues
- Meaning and impact of illness
- Coping style
- Impact on sense of self
- Relationships
- Stressors
- Spiritual resources
- Economic circumstances
- Physician–patient relationship

While there is a substantial literature on many of these areas, there are few intervention studies designed to evaluate strategies to treat problems in these domains. Most of the recommendations in this section represent Level 3–5 evidence.

Developmental issues

The developmental stage of the patient has a significant impact on psychological responses to life-threatening illness. The issues are particularly apparent in pediatrics, but the emotional issues for adults differ dramatically over the life cycle. Young adults with a life-threatening illness, in the midst of separating from their families and establishing their own identities, commonly struggle with ambivalence about being thrust back into dependence on parents or other adult figures (including physicians), with anger about the unfairness of the illness, with sorrow and grief about all the experiences they will not have. For parents with young children, the overriding concern is usually about the impact of their illness and possible death on their offspring, how to maintain routine and normalcy, how to share and how much to share of information about their illness, and the sense of loss and anxiety about not having the opportunity to watch their children grow up. Some parents will submit themselves to extremely rigorous treatment regimens, even when the odds of success are low. For older adults, satisfaction or unhappiness with personal and professional achievements can mitigate or exacerbate emotional distress; worries about a spouse are often prominent, and a sense of "being robbed" of an opportunity to retire and enjoy the fruits of one's hard work are often frustrations. Patients

who have reached an advanced age may view the approach of death as a relief, or not, depending on whether they are able to be at peace with the life they have led, and on the kind of attachments that still provide a sense of vitality and connection with life. An appreciation of these life-cycle issues will help the clinician to listen for and enquire about concerns and emotions, to normalize patient responses, and to explore areas of distress. The following types of questions can be useful in exploring developmental issues: *What is it like to be at this point in your life [finishing college, with young children, facing retirement, having lost your spouse] and facing a serious illness? What do you feel is the toughest loss for you at this stage in your life?*

Meaning, hope, and the impact of illness

Each illness has its own set of practical challenges, as well as emotional meanings.[1] A patient with cancer may have to tolerate the side effects of chemotherapy and radiation, and may expect to die from the disease from the onset; another patient with heart disease may have to contend with major limitations in activity and repeated frightening hospitalizations but may never appreciate that heart disease will cause death. Each disease, too, has a unique emotional meaning for each patient. An understanding of what the meaning of the illness is to the patient and how the patient believes she or he got the illness, an appreciation of past experiences with similar illnesses in others and expectations of what is ahead with the illness allows the clinician to identify concerns, proactively address fears, provide focused reassurance, and to help the patient plan for the future.[2] Furthermore, the opportunity to share these meanings is, for most patients, therapeutic in itself.

Finding a sense of meaning in life, and in an illness arises from the belief that one's life has a purpose, that life is a gift, and that one has a responsibility to work towards personal growth, peace, and transcendence through connection with something beyond the self.[3] Others describe the process of seeking to understand the meaning of events (e.g., illness) as a way of coping and a general life orientation.[4] Some patients are able to achieve an enhanced sense of meaning, purpose, and peace in life as a result of a serious illness.[5] Others experience a loss of a sense of meaning. Being able to find and maintain a sense that life has purpose and meaning is associated with ability to tolerate physical symptoms and satisfaction with one' s quality of life,[6] and appears to protect against depression and desire for hastened death.[7,8,9]

Meaning is closely allied with hope for patients with advanced illness. Hopes, whether they can be fulfilled or not, reflect what is important to the patient, what they are wishing for, and how they understand their illness.[10] Exploration of hopes and wishes provides, not only an opportunity to understand personal values and expectations of the illness, but also concerns and goals for the future. For example, a patient saying,"I am hoping to be there for my daughter's graduation, but I'm not sure I'll make it" is expressing a wish, a goal, her uncertainty about her prognosis, as well as an indication of her values and her concern about her anticipated illness trajectory.

Specific questions that are useful to explore illness meanings and hopes include: *How have you made sense of why this is happening to you? Do you have a theory about why you got sick? What is it? What do you think is ahead? What are you hoping for? What are the things that are most important to you as you think about the future?*

Coping style

When confronted by a serious emotional challenge, such as life-threatening illness, a person is required to make psychological adjustments to preserve equilibrium. Coping, according to Avery Weissman, a distinguished psychoanalyst who studied this phenomenon extensively, is "a strategic effort to master a problem, overcome an obstacle, answer a question, dissipate a dilemma—anything that impedes our progress." Examples of coping responses include: seeking information, keeping busy, redefining options, resigning one's self, examining alternatives, expressing feelings.[11] Effective coping takes place when the patient is able to use active problem-solving strategies to deal with problems.[12] A recent preliminary study suggests that as patients become sicker, their ability to perform cognitive tasks and process information may decline,[13] reducing one of the resources people rely on for coping. This study, if confirmed, has important ramifications for our understanding of the way patients respond to illness, and the resources that are (and are not available) to them in coping with a significant illness. While many researchers have

examined whether certain coping styles are associated with improved or worsened outcomes, results of these studies are equivocal. A recent meta-analytic review that examined "fighting spirit" and helplessness/hopelessness as predictors of recurrence and mortality in patients with cancer found no evidence of an effect of these different coping styles.[14]

In other situations, the patient may defend against the new realities of illness by avoiding them. While coping tends to move a problem towards resolution, defending tends to avoid the problem, primarily to fend off emotional distress.[12] These defenses may be either adaptive (by reducing stress and allowing time for fuller psychological adjustment) or maladaptive (preventing necessary adjustments). Most patients use a combination of these responses, coping with what they can, defending when they become overwhelmed. There is a dynamic tension between coping and defending. When there are new and overwhelming realities (e.g., when the patient receives ominous news about the presence of new brain metastases), defending may predominate; when the patient has some time to live with and process the news, he or she may be able to invoke more effective coping strategies. In general, patients' defenses are at a height when they are most stressed; generally, under these circumstances, such defenses should be supported. When the crisis has passed, it may then be more appropriate to try to work through the defenses towards a more effective adaptation.

Denial is a common defense in life-threatening illness. Denial refers to the negation of difficult information. Its purpose is to preserve psychological equilibrium. Patients may refuse to accept the possibility of death, disbelieve their physicians about their prognosis, focus on unrealistic treatment goals, or fail to make necessary legal, financial, and health care arrangements. On the other hand, denial can also be a highly adaptive defense, allowing patients to live in the present, to enjoy times when they feel well, and to appreciate the time they do have. In this form of adaptive denial, patients recognize that they have a terminal illness, or a serious life-threatening illness, but choose consciously to set that awareness aside in favor of living. Maladaptive denial, in contrast, is characterized by rigidity of belief that one is not seriously ill, and by a form of denial that is not an active choice. While milder denial may offer some short-term benefits, in allowing patients time to cope with painful realities, intense forms of denial may impair adjustment and distort care[15] and can be an indicator of depression. Recent research suggests that severe denial occurs in 10% of hospitalized patients with advanced cancer, with more moderate levels of denial occurring in an additional 18% of patients. When extreme, denial may also be a marker for depression.[16] The following questions can be useful in understanding coping and defenses: *How have you coped with hard times in the past? What has worked? Not worked? What are the times you feel most overwhelmed by your illness? What tends to help you cope at those moments?*

Impact on sense of self

Serious illness has a profound impact on the sense of self; continuing to feel like one's self is highly valued by patients at the end of life.[17] The physical and psychological losses that often are part of illness challenge one's sense of wholeness and integrity, which are key ingredients of emotional health.[18] Being independent and in control are characteristics that some patients value highly and become important elements of a person's identity; illness challenges these personal values profoundly, and may contribute to requests for hastened death in patients with life-threatening illness. The constructs of control and independence have been brought together in the literature under the concept of "dignity," or " the quality or state of being worthy, honored, or esteemed." Multiple constructs of dignity have evolved in the literature, subsuming such varied topics as autonomy and self-determination, personhood and self-worth, bodily integrity and hygiene, and continuity of relationships.[19] Chochinov and colleagues,[20,21] describe a model of dignity that is related to illness-related concerns (symptoms, psychological distress, uncertainty, death anxiety, and independence), as well as the individual's own psychological and spiritual milieu (ability to preserve a sense of self, to preserve valued roles and pride, hopefulness, control, generativity, acceptance, resilience), and the social factors that impinge on the self (privacy, support, concerns about being a burden, care tenor, and concerns about loved ones after death). Interventions to support and enhance the sense of dignity in the terminally ill are currently being developed and evaluated.

A key goal of palliative care is helping a patient continue to feel like him- or herself all the

way until death. Understanding the impact of illness on the patient's sense of him- or herself can allow the clinician to develop strategies that support the patient's wholeness. For example, a woman who has prided herself on her caretaking of others may only be willing to accept care from her children if accepting care is framed as an opportunity for her to help her children by allowing them to care for her. A CEO who is used to calling the shots may benefit from being presented with several different options among which he is able to choose, rather than being told what to do. Supporting patients' sense of themselves, while also encouraging them to consider the possibilities that illness represents a new opportunity for growth and self-reflection can help patients negotiate these challenging issues. Useful probes for exploring these issues include: *How is your illness affecting your sense of yourself? Are you able to notice ways you are changing inside yourself in response to your illness? How can we best honor who you are and what is important to you as we take care of you? As someone who has clearly invested herself in showing her children how to live, I wonder whether you see yourself as also having an important role in teaching them how a person can die in a dignified way that honors her connections. What do you think?*

Relationships

Life-threatening illness changes relationships. Illness can both create strain on relationships, as well as enhanced appreciation of the importance of loved ones and a wish to connect more deeply.

Worries about family members are a major feature of life-threatening illness for most patients. In one study of terminally ill patients with cancer, between 92% and 97% rated the following domains as extremely or very important: "feeling appreciated by my family," "saying good-bye to people closest to me," "expressing my feelings to my family," and "knowing that my family will be all right without me."[22] Family caregivers also experience significant strains related to their roles, including an adverse impact on work and finances,[23] as well as elevated rates of depression.[24] Helping the family cope with these severe stressors is not only a humane component of end-of-life care, but is also an important step in facilitating a good death for the patient. Attending to the caregiver's experience and concerns is associated with reduced rates of depression and enhanced coping.[24] Furthermore, preparation of family members for the patient's death appears to be associated with reductions in rates of psychiatric disorder, as well as mortality in bereaved survivors, demonstrating an important linkage between the patient's experience and outcomes of survivors, and attesting to the critical importance of considering patient and family as the unit of care.[25,26]

The clinician can explore relationship issues through direct questioning and observation of family interaction in the clinical context. Useful questions include: *Who are the most important people in your life? How are they dealing with your illness? How much are you able to communicate with the important people in your life about your illness and what might be ahead? What are your worries about your (wife/husband/children) now and after you are gone? It is sometimes helpful for patients to participate in preparing loved ones for the possibility that they will die. What kinds of thoughts have you had about this?*

Stressors

Because life-threatening illness represents such a major adaptational challenge, the presence of other stressors, superimposed on the illness, has a major impact on how an individual copes. For example, psychosocial stressors enhance the likelihood that a person will become depressed.[27] Stresses related to relationships, work, finances, housing, transportation, legal matters, etc., are likely to impair the individual's ability to cope with serious illness. Patients, over the course of a lifetime, develop their own characteristic ways of dealing with stress; an understanding of how the patient has coped with stress and hardship at other times of life can yield important information for the clinician that can be applied to the palliative care context. Several questions can help identify major stresses that can impact psychological well-being: *What are the things that are causing the most stress in your life right now? How well do you feel you are able to manage them? How do you usually cope with stress? What do you do when things just feel like they are too much?*

Spiritual resources

Religion, faith, spirituality, and/or a personal belief system represent important sources of

strength for some people as they face a life-threatening illness. In addition to belief systems that derive from religious teachings or a personal spirituality, individuals may have other ways of making sense of their experiences, and in particular, coming to terms with suffering. Some persons invoke a belief in science, in relationships, or individualized blends of the above constructs that give meaning to their lives. Other patients may also experience significant suffering related to religious and spiritual issues. Feelings of spiritual emptiness, being abandoned by or angry at God, or that one is being punished by God, or that one's spiritual practices are not working to maintain a sense of peace can create great inner turmoil that can amplify psychological distress.[28,29] Spiritual care is addressed in depth in a future article in this series. Questions that can be useful in beginning an exploration of these issues include: *What role does faith or spirituality or a personal belief system play in your life? Are you able to find comfort in your faith or belief system as you deal with your illness? Do you have times where you wish you were closer to your faith or to God?*

Economic circumstances

Life-threatening illness can have a major impact on family economic circumstances. Conversely, a family's economic resources will influence stress levels, availability of medical care and support in the home, access to medications, etc. Researchers have demonstrated that serious illness often results in a decline in family economic well-being.[30] In the SUPPORT study, Covinsky et al.[23] found that 20% of family members of seriously ill adult patients had to make a major life change (including quitting work) to provide care for their loved one, and that 31% of families lost all or most of their savings in the process of caring for their ill relative. An understanding of patients' and families' concerns about financial issues is a basic element of a psychosocial assessment. Basic questions to open a conversation about these topics include: *How much of a concern are financial matters for you right now and for the future? Are there any ways in which your financial situation is acting as a barrier for you to get help you need?*

Physician–patient relationship

The physician–patient relationship frames the patient's and family's experience with life-threatening illness. Through providing honest information that sustains a sense of realistic hope, demonstrating competence, dependability, and commitment, eliciting and responding to concerns, treating the patient as a whole person and involving the family in the care process, anticipating problems and proactively identifying solutions, and showing care and connection, the physician creates the conditions for the patient and family to cope effectively with serious illness. An understanding of how the patient views the relationship with his/her primary physician and/or team will allow the palliative care clinician to serve as a liaison to the primary team, to address unmet needs, and to help the patient better negotiate his/her illness and treatment. Questions that can be helpful in eliciting information about the status of the physician–patient relationship include: *How secure are you that your medical needs are being met? How do you want me, as your physician to help you? How can we best work together?*

With an appreciation of some of the factors influencing psychological well-being in patients at the end of life, we will turn our focus to a discussion of the common psychiatric disorders arising in patients at the end of life. These include depression, anxiety, substance abuse, PTSD, personality disorders, and schizophrenia and bipolar disorder. Delirium, a critical psychiatric syndrome that is common at the end of life, is addressed elsewhere.

EPIDEMIOLOGY OF PSYCHIATRIC DISORDERS IN THE TERMINALLY ILL

The literature on prevalence rates of psychiatric disorders or distress should be scrutinized to evaluate: (1) does the entity being studied (e.g., depression) have distinctive phenomenology, risk factors, correlates, and response to intervention); (2) are the diagnostic criteria for the disease clearly specified?; (3) are the patients studied similar in terms of diseases and stages?; (4) are populations studied broadly representative in terms of race, ethnicity, socioeconomic status?; (5) are patients studied using self-report questionnaires, or rigorous structured clinical interviews with demonstrated reliability? Answers to these questions will allow the reader to interpret the data presented and assess its applicability to his or her setting. While conditions 1 and 2 are usually met,

few epidemiologic studies of psychiatric disorders in palliative care include broadly representative patient populations, focus on patients with advanced disease, and use rigorous evaluation methods, such as structured clinical interviews.

Depression

Prevalence rates of depression in patients with cancer range widely, depending on diagnostic criteria used and patient population studied. Rates of depression range from 3%–38% among patients with cancer.[31,32,33] The wide variability in reported rates is explained by the lack of agreement on appropriate criteria for diagnosis of depression, differences in patient populations (both in relation to disease and staging), and variation in assessment methods used.

Research by Derogatis and colleagues[34] showed that 47% of patients with cancer (all types, all stages) fulfilled diagnostic criteria for psychiatric disorders. Of those 47%, 68% had adjustment disorders with depressed or anxious mood, 13% had major depression, and 8% had organic mental disorders. Akechi et al.,[35] in a prospective study in a Japanese palliative care setting, found that, using the Structured Clinical Interview for DSM, 16% of patients had adjustment disorder, 7% had major depression, and none had PTSD. They also found that 31% of patients in their study either developed a new diagnosis of adjustment disorder and/or major depression, or experienced a remission in follow-up with a median of 58 days. More recent data, using the Structured Clinical Interview for DSM-IV, and including diverse patient populations, showed that 39% of advanced cancer patients either fulfilled criteria for a major psychiatric disorder and/or utilized mental health services for psychological distress after the cancer diagnosis. Twelve percent of the patients met criteria for a major psychiatric disorder: 7% major depression, 3% generalized anxiety, 5% panic disorder, 2% PTSD. An additional 11% of patients fulfilled criteria for minor depression. Over one third of patients with a psychiatric diagnosis met criteria for two or more diagnoses.[36] Prevalence rates appear to increase as patients become sicker.[37,38] The highest rates of depression are seen in patients with cancers of the pancreas, oropharynx, and breast.[39] Recent data suggest that depression is associated with an elevated risk of death in patients with cancer.[40,41,42] In addition, depression is associated with decreased adherence to treatment, prolonged hospital stays, and reduced quality of life[43,44]; it is a major risk factor for suicide and for requests to hasten death[45] and influences will to live in patients with cancer receiving palliative care.[46] As many as 59% of patients requesting assisted suicide are depressed.[47] Lloyd-Williams[48] carried out a prospective study to evaluate incidence of suicidal ideation in a palliative care population, mostly with very late stage disease, and found that 3% had such thoughts often, 10% experienced them sometimes, 17% hardly ever experienced them, and 70% never had thoughts of self-harm. Younger patients were more likely to report suicidal thoughts.[49] Several studies suggest that the prevalence of depression in cancer has declined over the past twenty years, perhaps related to improvements in medical care and outcomes, and destigmatization of the diagnosis of cancer.[50]

Similarly, patients with other medical illnesses, also appear to have elevated rates of depression.[51,52] Patients seeking to stop dialysis have rates of depression of between 5% and 25%[53]; those with end-stage heart disease are reported to have prevalence rates of 36% for major depression and 22% for minor depression.[54] Fewer than half received treatment for depression.[55] Depression in patients with heart failure is associated with elevated hospital readmission and mortality.[56]

Anxiety

Significant anxiety symptoms are found in approximately 25% of patients with cancer[34]; recent research shows that 3% of patients with advanced cancer meet diagnostic criteria for generalized anxiety disorder and 5% meet those for panic disorder.[36] Elevated rates of anxiety are found, as well, in patients with heart failure.[57] Anxiety and depression commonly coexist[58]; other syndromes, including adjustment disorder, obsessive-compulsive disorder, phobias, delirium, panic disorder, and PTSD, also may be manifested as anxiety.[59]

PTSD, substance abuse, personality disorder, schizophrenia, and bipolar disorder

PTSD refers to an anxiety disorder caused by exposure to a traumatic stimulus, usually in-

volving the threat or experience of death, injury, or loss of physical integrity; traumatic stimuli include diagnosis with a life-threatening illness.[60] Symptoms of PTSD (intrusive thoughts, reexperiencing of distressing events, avoidance of reminders of the traumatizing event, high levels of emotional arousal, etc.) may occur in patients with cancer; rates range from 2% to 35%, with lower rates in studies using *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-IV*) criteria as opposed to studies based on symptoms that do not meet full diagnostic criteria and on self-report.[36,61,62,63] Studies of adult patients with cancer using the Structured Clinical Interview for DSM (SCID) show rates of PTSD of 3%–10%.[64] The relationship between disease stage and PTSD has not been adequately evaluated. In patients at the end of life, reexposure to traumatizing stimuli, for example pain,[65] may lead to more intrusive thoughts; similarly, cancer recurrence that reawakens emotions associated with the original diagnosis is thought to lead to increased PTSD symptoms in patients with advanced disease.[66] Both classic conditioning and instrumental learning are thought to mediate the relationship between fear responses and anxiety. Avoidance, a common symptom of PTSD, as well as distrust of health professionals who may be seen as the "inflictors" of emotional distress may delay help-seeking and treatment; high levels of anxiety may impair proactive planning for end-of-life care needs, and may be distressing for family members who are caring for loved ones with PTSD. Previous trauma is thought to be a significant risk factor for PTSD in the presence of cancer, social support is thought to be a protector in patients undergoing bone marrow transplant[67] (please see ⟨www.nci.nih.gov/cancertopics/pdq/supportivecare/post-traumatic-stress/HealthProfessional⟩ for an up-to-date evidence review on this topic in cancer.)

The prevalence of alcoholism ranges between 7% and 27% in studies in different palliative care clinical settings.[68,69] Unrecognized alcohol withdrawal has been postulated, based on a small number of case reports, as a contributor to terminal delirium at the end of life.[70] Few data are available about the prevalence of other forms of substance abuse in palliative care.

Reliable data are not available about the prevalence of personality disorders in patients with medical illness. However, in a 2001–2002 representative national sample, 14.8% of community-dwelling adults met diagnostic criteria for at least one personality disorder: 8% had obsessive-compulsive disorder, 4% paranoid personality disorder, 4% antisocial personality disorder, 3% schizoid personality disorder, 2% avoidant personality disorder 2% histrionic personality disorder, and .5% had dependent personality disorder.[71] The population of patients receiving palliative care can be expected to demonstrate similar prevalence rates of personality disorders.

Patients with major psychiatric disorders (e.g., schizophrenia, bipolar illness), when medically ill, may be at special risk of psychiatric decompensation; however, some of these patients may also do surprisingly well. Little is known about how patients with major mental illness face the end of life. Patients with chronic mental illness have elevated rates of serious medical illness and premature death[72]; often illness is detected late.

Other syndromes

In recent years, Kissane[73] has proposed that demoralization syndrome be considered a separate entity. He characterizes demoralization as "incompetence through loss of meaning or purpose"; additional proposed criteria for demoralization include existential distress, pessimism, helplessness, hopelessness, absence of drive, isolation and lack of support. However, evidence in support of this as a distinct syndrome is lacking.

Rates of mental health service use

A small number of studies have examined how clinicians assess and manage mental health issues in patients with advanced disease. Lawrie et al.[74] found that 73% of palliative care physicians routinely assess patients for depression, and that 75% prescribed selective serotonin reuptake inhibitors (SSRIs), 25% prescribed tricyclic antidepressants, 6% prescribed psychostimulants, and 3% prescribed St. John's wort. When asked whether they would prescribe complementary or psychological therapies for depression, 35% reported that they would refer patients for aromatherapy, and only 8% would refer for counseling. Kadan-Lottick et al.[37] found that nearly half of patients who met criteria for psychiatric illness did not receive mental health services, and that nonwhite patients were significantly less likely to receive mental health services than white patients.

ASSESSMENT AND CLINICAL PRESENTATION OF PSYCHIATRIC DISORDERS IN THE TERMINALLY ILL

In addition to the general elements of psychosocial assessment described above, the palliative care physician is also responsible for assessing patients for the presence or absence of psychiatric disorder. While anxiety and depression are the most commonly encountered psychiatric syndromes in this setting, the expert palliative care clinician will also be familiar with the general approach to assessment and treatment of patients with PTSD, substance abuse disorder, personality disorders, and major psychiatric illness (e.g., schizophrenia and bipolar illness) in the palliative care setting.

Depression

Depression impairs the patient's ability to enjoy life, interferes with connection, is associated with feelings of emptiness and meaninglessness, causes anguish to family and friends, interferes with treatment adherence, shortens life span in some diseases, and is a major risk factor for suicide.[75] Differentiating depression from grief is a major clinical challenge in palliative care. Characteristics of grief and depression are presented in Table 1.

There is considerable overlap between the neurovegetative symptoms of depression and those associated with any serious illness. Different approaches to diagnosis have been espoused; most experts agree that for clinical purposes, using an "inclusive" set of diagnostic criteria that incorporates both neurovegetative and psychological symptoms of depression is most appropriate for this patient population.[76,77] Asking patients directly about depressed mood has been shown to be sensitive and specific for the diagnosis of depression, although there are differences across populations.[77,78,79] Some patients may readily verbalize that they are depressed; others, no matter how despairing, may never acknowledge it, or may call it something else (e.g., nervousness). Although some clinicians may be concerned that exploration of feelings of depression may worsen

TABLE 1. CHARACTERISTICS OF GRIEF AND DEPRESSION

	Grief	*Depression*
Definition	Feelings and behaviors that result from a particular loss[153]	Depressed mood, decreased interest and pleasure, appetite and sleep disturbance, psychomotor agitation or retardation, decreased concentration, loss of energy, feelings of worthlessness, guilt, hopelessness, helplessness, and thoughts of death with impairment of functioning lasting at least two weeks
Symptoms and signs	Somatic distress, sleep and appetite disturbance, diminished concentration, social withdrawal, sighing	Hopelessness, helplessness, anhedonia, worthlessness, guilt, suicidal ideation most useful diagnostic clues Somatic distress, sleep and appetite disturbance, diminished concentration, social withdrawal, sighing are also common
Other differentiating factors	Patient retains capacity for pleasure	Nothing is enjoyable
	Comes in waves	Constant
	Passive wishes for death	Intense, persistent suicidal thoughts
	Able to look forward to the future	No sense of anything to look forward to

patient distress, recent research suggests that this is not the case.[80] Hopelessness, helplessness, worthlessness, guilt, lack of pleasure, and suicidal ideation are the key psychological symptoms of depression. In addition, social withdrawal, irritability, and anxiety may also be present. Pain, as well as a personal or family history of substance abuse, depression, or bipolar illness, are major risk factors for depression.[81] Similarly, treatment with particular medications, for example, interferon, corticosteroids, cyclosenrine, L-asparaginase, tamoxifen, vinblastine,[82] also predispose to the development of depression. Prophylaxis with antidepressant medication has been shown to be effective in dramatically reducing the incidence of depression in patients receiving interferon.[83] Recent research suggests that depression in patients with cancer may be part of a larger "sickness syndrome" that involves depression, pain, fatigue, and sleep disturbance, and that is believed to be associated with chronic immune activation.[76]

In addition to these diagnostic criteria, other clues to the presence of depression are: insomnia (particularly with early morning awakening), intractable pain and/or other symptoms, excessive somatic preoccupation, disability out of proportion to the patient's medical condition, and hopelessness, aversion, or lack of interest in the clinician.[84] Poor adherence or treatment refusal have also been associated with depression[85,86] however, other studies have shown increased adherence to cancer treatment in depressed patients.[87] The use of complementary therapies by patients with cancer may also be an indicator of feelings of desperation, fear, hopelessness, depression, and increased symptom burden as patients recognize advancing illness.[88,89,90]

Recent data suggest that palliative care clinicians and oncologists tend to underrecognize and underestimate the severity of patients' depression.[91,92]

Anxiety

Anxiety is often seen as a natural consequence of confrontation with or awareness of mortality. Manifestations of anxiety may include autonomic hyperactivity, hypervigilance, worry, apprehension, insomnia, and somatic symptoms including diarrhea, sweating, palpitations, and dyspnea.[93,94,95] High levels of anxiety that create intense distress or interfere with functioning are clearly problematic. Low levels of anxiety, however, can energize the patient and spur adaptation and coping.

However, it is also critical for the clinician to recognize that anxiety in palliative care may also be the result of a preexisting anxiety disorder, substance abuse, medications, delirium, or undertreated symptoms, especially pain. In the palliative care setting, multiple drugs can contribute to anxiety. Phenothiazines and butyrophenones frequently used to control delirium and nausea and vomiting, and metoclopramide are common, and frequently unrecognized predisposing factors to anxiety symptoms through causing akathisia. Precipitous withdrawal of opioids, corticosteroids, anticonvulsants, benzodiazepines, nicotine, and clonidine can also precipitate anxiety.[95] Insomnia is a common symptom in terminal illness; about one third of patients ascribe their insomnia to worry or anxiety, often about the future, about family, and about death; insomnia is also highly associated with depression, and its presence should alert the clinician to carry out a thorough assessment for undertreated anxiety and depression.[96]

Concerns about future pain control and the course of the disease, the impact of the illness on family members, separation from loved ones, unfamiliar caretakers, loneliness and isolation may be significant factors that contribute to anxiety. Stiefel[97] has developed a typology of anxiety syndromes in patients with life-threatening illnesses; these include situational anxiety, organic anxiety, psychiatric anxiety, and existential anxiety.

Anxious patients often cannot take in information they have been offered and ask the same questions over and over again. They may overreact to symptoms or treatments, or behave unexpressively and stoically. Their behavior may seem inconsistent and impulsive. They may seek detailed information or not ask reasonable questions. They may be suspicious of the physician's recommendations or not ask questions because of regression or high levels of fear.

PTSD, substance abuse, personality disorders, schizophrenia, and bipolar illness

Patients with preexisting psychiatric illness may present unique management challenges. A patient with a history of substance abuse may be extremely reluctant to use pain medications for

appropriate indications; a patient who is actively using substances may overmedicate himself/herself as a way of coping.[98] Denial is a prominent feature of patients with substance abuse problems.[99] Patients with personality disorders may distort information and misinterpret the actions and behaviors of others, creating distress in those around them. A patient with major mental illness, such as schizophrenia, may not adhere to treatment recommendations, frighten staff, or make decisions that are influenced by unusual beliefs or fears. Patients with PTSD may show high levels of anxiety and be difficult to reassure, or may fail to develop a trusting relationship with the physician. To assess psychiatric vulnerabilities, the clinician should ask questions about past experiences with psychiatric illness and treatment. The use of a screening instrument for alcohol abuse, such as the CAGE or AUDIT questionnaires, is useful in identifying patients with substance abuse problems.[100,101] Personality disorders are usually appreciated through observation and interaction. These individuals have been described by some as "hateful" patients, reflecting their ability to create ill-feeling in their caregivers.[102] They may interact in unpleasant ways, behaving manipulatively, demandingly, impulsively, angrily, or disruptively. Patients with personality disorders may seem to be complaining, while rejecting help; blaming, while avoiding personal responsibility; and self-involved, without awareness of the impact of their actions on others. They are also identified through the often intense negative responses of others to them, as well as by the externalization of responsibility for problems (e.g., "There is nothing wrong with me, it is just that everyone else is causing all of the difficulties I am experiencing . . .").

Physician responses

Each clinician tends to have a characteristic response to different kinds of patients. For example, an anxious patient with a new diagnosis and detailed and repeated questions about pages of information that he or she has tracked down on the Internet might be particularly troublesome to a clinician who prefers a high degree of control of the clinical encounter. A patient who berates staff and questions their competency while asking for special favors will irk almost every clinician, but the intensity of the clinician's response and his or her ability to set appropriate limits on the patient's behavior will be influenced by past experiences with similar persons. Over time, the expert clinician learns how she or he characteristically responds to different types of patients, and can use these personal responses as valuable data about the patient.

Over time, the expert palliative care physician gains an appreciation of the patterns of psychological responses that characterize these distinct psychiatric syndromes, and also recognizes how presentations of these syndromes may interact and overlap.

THERAPEUTIC OPTIONS: GENERAL ISSUES

The primary therapeutic response to psychological distress at the end of life is to listen, using standard communication techniques (using open-ended questions, following up on affectively intense comments made by the patient, tracking with patient associations and expressed concerns, reflecting on patient emotions, etc.) The physician, through offering the patient an opportunity to explore fears, concerns and feelings, to reflect on important relationships, past experiences with loss, and hopes for the future, and to share the unique meanings of illness, can provide the patient with a sense of being understood. Being heard and understood, even in sharing the darkest thoughts and feelings, provides a way for the patient to mourn losses, to counteract the existential isolation of serious illness, to connect with past strengths and coping resources, and to gain a sense security and mastery.

Multiple models of psychotherapeutic support for patients at the end of life have been proposed, including the psychodynamic life narrative,[103] supportive psychotherapy,[104] insight-oriented psychotherapy,[105] cognitive-behavioral therapy,[106] interpersonal therapy,[107] existential therapy,[108] and dignity-conserving psychotherapy.[20,21] Current research does not support the value of one approach over others.[109] In general, however, most terminally ill patients benefit from an approach that combines emotional support, flexibility, appreciation of the patient's strengths, a warm and genuine relationship with the therapist, elements of life-review, and exploration of fears and concerns. The physician's ability to communicate that there are possibilities for meaning, connection, reconciliation, and closure at the end of life may facilitate the

patient's ability to accept the approach of death, and to use remaining time well. Profoundly depressed patients, however, may not be able to effectively engage in any of these therapeutic tasks; antidepressant medication is often necessary to mobilize a depressed patient to do psychotherapeutic work.

OVERALL ASSESSMENT OF EVIDENCE FOR PSYCHOLOGICAL INTERVENTIONS IN PALLIATIVE CARE

Level 1 evidence demonstrates that psychosocial interventions reduce depressive symptoms, particularly among patients who had high preintervention levels of depression.[110,113] Earlier data from Spiegel[112] suggesting a survival advantage in patients undergoing supportive group therapy were not confirmed in the recent and more robust study by Goodwin and colleagues,[112] although both studies demonstrated positive effects on quality of life. The study by Goodwin and colleagues showed effects on both mood and pain perception, especially in the most seriously distressed patients. Bordeleau et al.[111] found that supportive-expressive psychotherapy did not have an effect on health-related quality of life, as measured by the EORTC QLQ-C30. Other studies suggest the benefits of opportunities for open expression of feelings, direct confrontation with fears and concerns (as opposed to avoidance and denial), and active coping, rather than passive acquiescence.[111,114] Only a small number of randomized controlled trials comparing antidepressants to placebo have been reported in the literature; there is a trend towards support for the value of antidepressant therapy, but these data are limited by small sample size, short follow-up, and diversity of outcome measures. Several meta-analyses of psychological interventions for depression have been reported; cumulatively, their results are equivocal.[115]

Depression

Contrary to much popular and professional opinion, depression is a treatable condition, even in patients who are terminally ill. Effective treatment of depression in the context of distressing symptoms, however, is difficult; thus, the first step in treating depression is effectively controlling physical symptoms. Some patients may be concerned that being labeled as "depressed" will lead their physicians to take their physical problems less seriously, to treat them less aggressively, or to stigmatize them; it is often essential for the physician to address these issues before the patient will be willing to accept treatment. A combination of antidepressant medication, supportive psychotherapy, and patient and family education are viewed as the gold standard of treatment.[116]

Because antidepressant therapy is usually relatively well-tolerated, a recent expert consensus statement recommends having a low threshold for initiating treatment.[115] Psychostimulants, SSRIs, and tricyclic antidepressants are the main pharmacologic treatment modalities for depression at the end of life. Evidence about the effectiveness of antidepressants in patients at the end of life is poor; although one study describes some effectiveness in as many as 80% of patients with cancer,[117] the lack of clear criteria for effectiveness and appropriate study design significantly compromise these data. There are no randomized, controlled trials of antidepressants in the palliative care setting; thus, trials from the primary care, geriatrics, general oncology, and human immunodeficiency virus (HIV) evidence base provide much of what we know about antidepressant effectiveness in palliative care.

Randomized controlled trials in primary care have demonstrated the effectiveness of mirtazapine and paroxetine.[118] Randomized controlled trials in geriatric settings demonstrate the effectiveness of combined modalities (community-based psychosocial interventions and antidepressant medication) for major and minor depression[119,120]; the results of these studies have been incorporated in recent treatment guidelines and algorithms for geriatric depression.[121,122,123] Several randomized controlled trials comparing antidepressants to placebo for depression in patients with cancer suggest a benefit of treatment[124,125,126]; high dropout rates and narrow patient populations (women with breast and gynecologic cancers) limit generalizability. A recent randomized controlled study of paroxetine in an ambulatory oncology population demonstrated effectiveness for fatigue and depression.[127] A trial of a simple two-question symptom screening tool for depression followed by fluoxetine treatment for depressed patients demonstrated improvement in patients' quality of life and depressive

symptoms. A recent meta-analysis of SSRIs for the treatment of HIV-associated depression suggested some therapeutic benefit and acceptable tolerability, but did not identify any agent(s) as particularly effective.[128] Other investigators have demonstrated effectiveness of treatment with sertraline, paroxetine, mirtazapine, and citalopram in open-label trials.[129,130,131]

Several nonrandomized studies document the effectiveness of methylphenidate in patients with cancer.[132,133] In patients with HIV, a randomized controlled trial has shown stimulants to be effective in patients with low energy and apathy.[134] Another recent randomized, double-blinded, controlled trial of psychostimulants for fatigue in patients with HIV showed statistically significant improvements in fatigue, quality of life, and psychological distress (including depression), with minimal side effects.[135] A recent open-label study of HIV-positive patients that evaluated modafinil as a treatment for fatigue showed evidence of effectiveness for both fatigue and depression.[136]

Because of their rapid onset of action, psychostimulants (methylphenidate, dextroamphetamine, pemoline) deserve special consideration in treating depression near the end of life.[137] Therapeutic benefits can be achieved within 24–48 hours of starting medication. SSRIs are also valuable drugs in the palliative care setting and may be used alone, or in combination with a psychostimulant. Choosing among SSRIs is not yet an evidence-based decision in this setting. Tricyclic antidepressants are not first-line agents for depression in the terminally ill because they are not as well-tolerated as SSRIs, because of autonomic and sedating effects. Electroconvulsive therapy is a highly effective treatment for depression and should be considered in patients with psychotic depression, those who cannot tolerate antidepressant medications, or treatment-resistant depression who have a prognosis of several months or more.[138,139]

In general, patients with suicidal ideation, treatment-resistant depression, diagnostic uncertainty, comorbid psychiatric disorder (e.g., anxiety, substance abuse, etc.) should be referred to a psychiatrist.[140] Refractory, treatment-resistant depression may occur in the palliative care setting. Appropriate treatment planning for such patients requires not only an intensive interdisciplinary dialogue including a psychiatrist, but involvement of the patient and his/her family, in defining appropriate care. Very occasionally, in spite of state-of-the-art medication, psychotherapy, and palliative care, depression may be intractable; in such circumstances, clinicians are called upon to respond to depression as a terminal illness that is causing profound suffering. In these rare circumstances, limitation of further aggressive intervention, as well as other standard palliative care approaches (e.g., palliative sedation, voluntary cessation of eating and drinking) to the patient with extreme and irremediable suffering, should be considered.

Table 2 describes antidepressants commonly used in palliative care.

Anxiety

Most patients with mild to moderate anxiety can be treated effectively with supportive psychotherapeutic interventions.[94] Higher levels of anxiety, or anxiety that does not respond to psychotherapeutic interventions is usually best treated with an SSRI or benzodiazepine.[59] SSRIs are highly effective agents for anxiety, particularly when accompanied by depressive symptoms. Clonazepam (0.5 mg orally three times daily) is a useful agent, at low doses, for treatment of chronic, high levels of anxiety. Other medications, including atypical antipsychotics (e.g., olanzapine, risperidone) have also been recommended, but have not been adequately evaluated.[141,142] Patients with cancer with relatively good functional status (Karnofsky performance scores >60), in a randomized controlled trial comparing alprazolam with progressive muscle relaxation, experienced significant improvements in anxiety symptoms with both modalities.[143] A recent Cochrane review concluded that there is no systematic evidence of the effectiveness of pharmacologic treatment of anxiety in the palliative care setting.[59]

Guidelines for the management of anxiety in the critical care setting have been promulgated.[144] Benzodiazepines, especially lorazepam, are recommended as the drugs of choice for anxiety with an anticipated duration of more than 24 hours; for shorter term use, propofol or midazolam are the recommended agents.

PTSD, substance abuse, personality disorders, schizophrenia, and bipolar illness

While patients with major psychiatric disorder can sometimes cope well with end-stage illness, the clinician managing such patients should be

TABLE 2. ANTIDEPRESSANTS FOR USE IN TERMINALLY ILL PATIENTS

Class of agent	*Quality of evidence*	*Advantages*	*Disadvantages*	*Onset of action*	*Starting dose*	*Usual daily dose*	*Maximal dose*	*Side effects*	*Schedule*
Psychostimulants	Anecdotal reports, retrospective case reviews, small controlled perspective trials, RCT in HIV[154,155]	Rapid onset of action; well tolerated in elderly and debilitated patients; effective adjuvant analgesics, [156,157]counter opioid-induced fatigue; improve appetite[158] and energy; effectiveness 70%[159] to 82%[160]; useful in treating cognitive impairment in AIDS[161,162]	Cardiac decompensation can occur in elderly patients, patients with heart disease; confusion in old or cognitively impaired patients); tolerance may develop, but occurs infrequently Hepatocellular injury and choreoathetosis; hepatic function must be monitored regularly; use with caution in patients with renal failure	<24 hours	Start low, titrate upwards q 1–2 days until therapeutic response, side effects, or maximal dose reached			Mean % side effects =11%: restlessness, dizziness, nightmares, insomnia, palpitations, arrhythmia, tremor, dry mouth; psychosis rare; Pemoline produces minimal cardiac stimulation	8 am and 12 noon Once daily
Methylphenidate					2.5–5 mg	10–20 mg	60–90 mg/d		
Dextroamphetamine				<24 hours	2.5 mg	5–10 mg	60–90 mg/d		
Pemoline				1–2 days	18.75 mg	37.5 mg	150 mg/d		
SSRIs	Controlled, double-blinded studies demonstrate superiority over placebo in depression,[164] HIV-related depression,[163] depression with heart disease[165]; SSRIs are as safe and effective as TCAs[166]; no controlled studies in terminal illness; RCTs and controlled trials show no single agent superiority,[167] although recent data	Safe and effective with few side effects; Little orthostatic hypotension, urinary retention, sedation; no effects on cardiac conduction; easy to titrate. Anxiolytic effects. All except venlafaxine available as liquids (mirtazapine as oral disintegration tablet)	Inhibit P4502D6 causing interactions with other drugs; fluoxetine has long half-life[169]	2–4 weeks				Paroxetine and sertraline better tolerated than fluoxetine; nausea, GI distress, insomnia, headache, sexual dysfunction, anorexia;	Once daily
Sertraline					12.5–25 mg	50–100 mg	200 mg/d		
Citalopram					10 mg	20–40 mg	80 mg/d		
Escitalopram					10 mg	20–40 mg	80 mg/d		Once daily
Fluoxetine					5–10 mg	20–40 mg	100 mg/d		Once daily
Paroxetine					10 mg	20–40 mg	100 mg/d		
Non-SSRIs									
Mirtazapine		Promotes sleep and weight gain, earlier response,[170] less sexual side effects[171]	Somnolence						

Venlafaxine (selective serotonin and noradrenergic reuptake inhibitor (SNRI))	suggest superior efficacy of SNRI (venlafaxine)[168]	Little potential for drug interactions; Positive effects on pain[172]	Can raise BP at higher doses[173]	2–3 weeks	50–75 mg	75–225 mg	250 mg/d	GI distress, agitation hypertension,	
Wellbutrin				2–4 weeks	75–100 mg	200–300 mg	300 mg/d	GI distress, agitation seizures	
Tricyclics	Multiple studies demonstrate efficacy in depressed medically ill pts,[174] but none are controlled	Therapeutic response often seen at low dose; Effective for treatment of neuropathic pain;[175] can be given parenterally or compounded for rectal administration; drug levels can be monitored[176]; nortriptyline available as liquid	Nortriptyline and desipramine better toleated than amitryptiline and imipramine; amitriptyline and doxepin can be used as sleep meds	2–4 weeks				Adverse effects occur in as many as 34% of cancer patients[80]; Not well tolerated in terminally ill due to anticholinergic side effects (dry mouth, delirium, constipation etc.); cardiac conduction abnormalities, orthostasis	
Amitriptyline					10–25 mg	25–100 mg	150 mg/d		Qhs
Imipramine					10–25 mg	25–100 mg	150 mg/d		Qhs
Doxepin					10–25 mg	25–100 mg	150 mg/d		Qhs
Desipramine					10–25 mg	25–100 mg	150 mg/d		Qhs
Nortriptyline					10–25 mg	25–75 mg	125 mg/d		qhs

RCT, randomized controlled trial; HIV, human immunodeficiency virus; AIDS, acquired immune deficiency syndrome; SSRI, selective serotonin reuptake inhibitors; TCA, tricyclic antidepressant; BP, blood pressure; GI, gastrointestinal.

prepared for patients to need extra psychotherapeutic and psychopharmacologic support. Although some patients with major psychiatric illness may lack decision-making capacity for decisions about end-of-life care, psychiatric illness should not be viewed as a justification for ignoring or failing to elicit patients' end-of-life care wishes and values.[145] If possible, ongoing involvement and contact with the patient's mental health provider and/or community resources is helpful.

Little is known about treatments for patients with PTSD and advanced illness. "Debriefing" interventions have been widely used to treat PTSD and the psychological sequelae of traumatic events. However, a recent Cochrane review concluded that there was no basis for continuing this practice, as no improvements in psychological morbidity, depression, or anxiety were found.[146] Antidepressants, antianxiety, and antipsychotic agents are sometimes used to manage intense symptoms. Support groups and psychoeducational approaches are also often used, but evidence of their effectiveness in this setting is lacking.

Terminally ill patients with active substance abuse problems represent a significant management problem, particularly because many of them also have comorbid psychiatric illness (e.g., personality disorder, major depression). Collaboration among palliative care and mental health professionals, as well as involvement of community resources such as Alcoholics Anonymous is usually essential to successful management of these complex patients. Key management strategies include repeated assessments of pain and analgesic use, contracts, frequent follow-up, cautious drug selection, and urine toxicology as needed.[147,148] Patients with personality disorders require targeted treatment strategies.[149] Even the best strategies are frequently ineffective. Often, goals of treatment are constrained by the patient's psychopathology, and clinicians need to accept limitations on their ability to provide optimal medical treatment. All clinicians managing such patients are helped by having a team, including a mental health clinician, with whom to share the challenges and frustrations of caring for such patients, as well as a safe setting in which to reflect on the personal emotional responses evoked by the patient. While medications and psychotherapy can both be helpful, involvement of a mental health clinician is usually necessary to help identify appropriate interventions. In recent years, several randomized controlled trials have supported the benefits of dialectical behavior therapy for patients with borderline personality disorder.[150] Patients with schizophrenia and bipolar illness are best managed in collaboration with a psychiatrist to assure appropriate use of medications, as well as psychological support for the patient; other resources (e.g., community mental health programs) may also be necessary.

CONCLUSIONS

All patients with progressive life-threatening illness require attention to psychological issues. Compassionate listening, expert assessment, and skillful intervention will reduce suffering, enhance quality of life, and create the conditions for growth at the end of life.[151] While these issues are beginning to emerge as core clinical concerns of palliative care, there is an urgent need for intervention research to better delineate optimal psychological treatment strategies for patients at the end of life.

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