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Psychosocial Interventions in Long-Term Care: A Critical Overview

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INTRODUCTION

This chapter presents a critical overview of psychosocial interventions currently advocated for use in institutionalized long-term care settings. Unfortunately, no clear consensus exists on when and why various interventions work, a problem compounded by the largely anecdotal empirical literature. Even so, changes in regulations and philosophy of care, and the increase in complexity of care nursing homes are expected to provide define a situation where psychosocial interventions will play an increasingly prominent role. A review of some of the empirical literature suggests that psychosocial interventions have the potential to play an important adjunct role in patient care. Further, they can serve as a vehicle for job enrichment for nursing staff, especially nurses aides, and lead to positive effects for staff. A major question that remains unanswered is the extent to which these benefits are due to the intervention or to more generic "non-specific therapeutic" effects. It is necessary for nursing home administrators and staff to commit to a programmatic and rigorous approach in developing, conducting, and evaluating psychosocial interventions and in training staff to deliver them.

PSYCHOSOCIAL INTERVENTIONS

We begin by drawing a distinction between clinical psychological, psychiatric, or formal counseling treatments, and psychosocial interventions. The former therapeutic efforts address acute pathological emotional and

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behavioral problems. While these treatments vary in their views of underlying cause of problems, for example, metabolic imbalance, environmental stress, and how to treat them (e.g., drug therapy, psychotherapy), they typically share a "medical model" approach to the delivery of care (Karuza, et al., 1990; Rabinowitz, Zevon, & Karuza, 1988). Trained and recognized health or allied health professionals are given the responsibility and authority to diagnose the problem and to implement a treatment plan. The goal of the treatment is the amelioration or control of the pathological behavior and the treatment itself is specialized, e.g., drug therapy, and in many ways is discontinuous from the normal everyday programming of the nursing home. In contrast, the latter psychosocial interventions address less dramatic "problems of adjustment" to nursing home life and/or functional impairments. These problems may be chronic, such as those associated with progressive dementia, or acute episodes of maladjustment, such as coping with a nursing home transfer. In any case, nursing home residents play a more active and central role in the intervention, with the nursing home staff members, possibly nurses aides or activities coordinators, taking on a more facilitating role. The goal of these interventions is not to "cure a problem" but to enhance or maintain the functioning level of the residents, with the interventions themselves frequently becoming a part of the daily routine of nursing home life.

Need for Nursing Home–Based Psychosocial Interventions

Psychosocial interventions are assumed to be good and useful. While there is an abundance of anecdotal published testimonials for using psychosocial interventions, reviews of the empirical research (e.g., Burckhardt, 1987) indicate a mixed pattern of effectiveness. The case remains to be made among administrators and health professionals for implementing psychosocial interventions within the nursing home.

Demographic and Epidemiological Trends

Democraphic trends create an environment that encourages the development and use of psychosocial interventions. The current and future nursing home resident population is at risk for emotional and behavioral problems. Estimates in the literature indicate a prevalence of mental health needs in 50–80% of nursing home residents (e.g., Newman et al., 1989; Rovner, et al., 1986). A study by Zimmer, Watson, and Treat (1984) indicates behavioral problems are present in 64.2% of New York nursing home residents. Of those residents, 66.5% had a diagnosis of organic brain syndrome and only 14% had a psychiatric diagnosis or a diagnosis of depression. This trend will accelerate as nursing home residents become older. Currently, 1.4 million

(22%) of those 85 years of age or older are institutionalized and this will balloon to 4.6 million in the year 2040 (U.S. Senate, 1987). This is significant, given the increased prevalence of mental health and cognitive disorders in later life. Another factor is the long-standing and continuing commitment to deinstitutionalization of psychiatric hospital patients. In the future, the nursing home industry will be serving a majority of clients with emotional and behavioral problems, many of whom will not have a primary psychiatric diagnosis.

Complicating these trends are various financial and regulatory pressures that are pushing nursing homes to admit and treat elderly clients who are either more incapacitated or who have more complex medical conditions. Newman, et al. (1989), recently reported a statewide study of Utah nursing home residents. They discovered that among those who were considered appropriate for nursing home placement according to Health Care Financing Administration (HCFA) criteria, 79.6% of the residents had moderate to intense needs for mental health care. Intense medical and physical problems were significantly related to more intense psychosocial needs and, interestingly, primary psychiatric diagnosis was not predictive of the psychosocial problem intensity. Emerging data suggest that residents' mental health is associated with health care utilization (e.g., Koenig et al., 1989). To the extent that this data is reliable, resident mental health and behavioral problems can have an impact on the cost of care, not to mention the residents' quality of life. Controlling these costs by addressing residents' mental health care at all levels presents a promising direction to explore.

Holding aside psychiatric problems, nursing home residents with mental health needs fall into two general categories. First, are those residents who have chronic behavioral problems which are associated with dementia. Second, are residents that have acute problems of adjustment and coping, such as those arising from the stress of adjustment to a novel environment (e.g., Stein, Linn, & Stein, 1985) family conflicts (Brody, 1985), relocation trauma (Schulz & Brenner, 1977) or adaptation to changes in functional level. Psychosocial interventions can be especially well suited for these residents.

Rise of Geriatric-based Models of Nursing Home Care

Concurrently, nursing home care is being redefined by health care policymakers and health professionals in geriatrics. Approaches based on a geriatric medicine primary care model (e.g., Association of American Medical Colleges, 1983; Calkins, 1987; Katz & Calkins, 1989), are moving away from the medicalization of the nursing home and are increasingly sensitive to issues such as maintenance of functioning, enhancement of quality of life, and the role social and environmental factors play in normal aging and pathological processes. This can be seen in preliminary data from a recent

survey of New York State nursing homes we conducted ($n = 530$ with a response rate of 60%). Nursing home administrators endorsed a medical care model of nursing homes significantly less than models which stressed promotion of resident independence or protecting residents ($p < .001$). Focusing on mental health and behavioral problems, a "non toxic" approach, which features psychosocial interventions rather than medical model–based drug therapies, is seriously advocated by an increasingly larger number of geriatricians and geriatric nurses. While these trends are encouraging, support for a primary care approach in geriatrics is far from universal and strong pressures to medicalize aging processes still exists (Kane, 1989; Estes & Binney, 1989). The interdisciplinary approach, ideally a central component of the geriatric model in practice (Calkins, 1987; Calkins & Karuza, 1988), can facilitate the contributions of other disciplines such as psychology and social work in the diagnosis and treatment of mental health problems in the nursing home.

Legislative Mandates

Perhaps the most forceful impetus comes from recent legislative mandates, in particular, the Omnibus Budget Reconciliation Act of 1987 (OBRA). This federal legislation was in direct response to the report issued by the National Academy of Sciences. The report (Institute of Medicine, 1986), which was part of a study commissioned by the Department of Health and Human Services, found that nursing home care needed improvement and that regulatory reform offered a mechanism to achieve better care. The OBRA legislation specifically recognized the mental health problems in nursing home residents and has several key provisions dealing specifically with these issues. Among them is the requirement for preadmission screening of nursing home residents. For new residents, if there is a primary or secondary diagnosis of a mental disorder (other than dementia) or mental retardation, they must be referred to another site for "active treatment." If a resident is in a nursing home less than 30 months and develops a primary or secondary diagnosis of a mental disorder (other than dementia), he or she must be referred to another site for "active treatment." If the resident is in nursing home more than 30 months and has a mental disorder, he or she has a choice of seeking treatment in the nursing home or at another site.

In view of these changes, nursing homes will have to be more sensitive to mental health issues. At the very least, they must develop adequate screening of residents prior to admission. Further, they must develop an adequate mental health treatment response to those individuals who are residents for over 30 months. Administrators need to develop appropriate and effective clinical psychological and psychiatric treatment options for acute episodes. At the very least, this requires exploring the cost effectiveness of a variety of therapeutic approaches, both pharmacological and psychotherapeutic, and

the building of a responsive referral network. It is imperative that the administrator not stop here. Given the costs of paying for those therapeutic treatments, and the low levels of reimbursement currently available, the nursing home administrator would be wise also to examine psychosocial interventions *as primary prevention strategies.*

A second relevant facet of the legislation is concerned with staff training. All nurse's aides are required to undergo 75 hours of training in basic nursing skills, personal care skills, basic restorative services, residents' rights, and *recognition of mental health needs.*

The importance of addressing mental health needs of the residents in the training can be seen in the following clarification from HCFA (1988):

> Mental health and social service needs: The nurse's aide will demonstrate basic skills by modifying his/her own behavior in response to residents' behavior; identifying developmental tasks associated with the aging process, and using task analysis and segmenting of those tasks to increase independence; providing training in and the opportunity for self care according to residents' capabilities; demonstrating principles of behavior modification by reinforcing appropriate behavior and causing inappropriate behavior to be reduced or eliminated; demonstrating skills supporting age-appropriate behavior by allowing the resident to make personal choices; providing and reinforcing other behavior consistent with residents' dignity; and, utilizing residents' family as a source of emotional support. (HCFA, 1988, pp. 11–12)

The implication of this aspect of the legislation is that nursing homes will be required to train staff in psychosocial interventions and rely on them to conduct those interventions. Realistically speaking, this mandated regulation is leading to the "professionalization" of nurse's aides, traditionally lowest ranking members of the nursing staff hierarchy.

REVIEW OF SOME TYPICAL PSYCHOSOCIAL INTERVENTIONS

This section will review several of the prevalent and accepted psychosocial intervention strategies that are used in nursing home settings. The following review is not a comprehensive critique of the literature, but is designed to provide a working overview of some of the more common psychosocial interventions reported in the literature.

Disciplinary based therapies and interventions with formal certification, such as art therapy, are not included. Other reviews that may be of some interest include Burckhardt (1987) and Gugel (1989). Before starting, we would like to focus on some general issues in implementing any psychosocial intervention in a nursing home.

First, on basis of several research reviews, there is no single universally optimal psychosocial intervention (e.g., Burckhardt, 1987). The task before the administrator and staff is effectively to develop flexible psychosocial programming for the residents.

Second, effective psychosocial programming must be sensitive to the individual differences in skills and interests of residents. In several evaluations of psychosocial interventions it is clear that residents' characteristics such as mental competence (e.g., Goldwasser, Auerbach, & Harkines, 1987), attitudes toward the nursing home (e.g., Berghorn & Schafer, 1986), and age (e.g., Fallot, 1979) can moderate the effectiveness of the intervention.

Third, nursing homes also vary in characteristics, such as, staffing levels, the case mix of residents, and the physical layout (Maas, 1988), which may make some psychosocial interventions more or less practical.

This leads to a fourth point, that the development of psychosocial interventions requires the satisfactory matching of interventions to residents. Lawton and Nahemow's (1973) discussion of person-environment transactions offers a useful model to adopt in charting a psychosocial intervention program. As seen in Figure 1.1, adaptive functioning of a resident is the product of two factors, his or her competence level and the environmental pressures or demands. Maladaptive behavior and emotional reactions occur when the environmental demands are *too strong*, or *too weak* relative to the abilities and competencies of the individual. Adaptive functioning occurs when there is a match of competence to demands with maximal performance occurring when the demands of the situation are slightly challenging to the individual. There is an implicit recognition in the psychosocial intervention literature that interventions vary in the demands they place on individuals. In selecting psychosocial programming an individual should be matched to the psychosocial intervention's demands. An important corollary of this model, is that providing too simple a psychosocial intervention to a more competent resident can be just as deleterious as providing too demanding and stressful an intervention to a less competent resident.

A fifth point to consider is that adequate assessments of residents are essential in the effective psychosocial programming, even if a psychiatric primary diagnosis is excluded. In keeping with the person-environmental transaction model, these assessments must provide sufficient information to determine the competency levels and should be multidimensional. The purpose of these assessments is not so much to provide a diagnosis of a mental or behavioral problem but to determine the applicability of the intervention to the resident. The dynamics of most of these interventions is not to actively prescribe a treatment for the residents, but to allow ongoing opportunities for residents to maximize their functioning and to better adjust to their lives. Assessments should include evaluations of cognitive functioning, perceptual acuity, linguistic ability, and functional level. Since many of these inter-
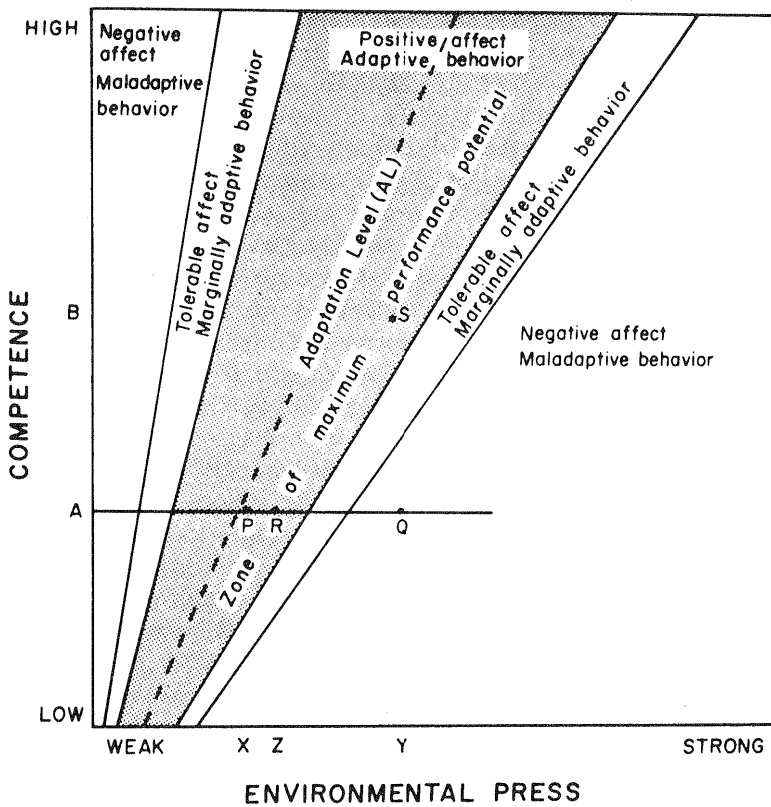
FIGURE 1.1 Diagrammatic representation of the behavioral and affective outcomes of person–environment transactions (from Lawton and Nahemow, 1973. Copyright 1973 by the American Psychological Association. Reprinted by permission.)

ventions make use of group sessions, social skill level and desire for socialization should also be assessed.

Sixth, the facilitators of these interventions, the nurse's aides, the activities directors, and the nurses, need to be trained in the intervention. These interventions, for the most part, are not complex therapeutic systems and do not need extensive certification. Still, to be effective, the facilitators need to be familiar with the rationale and methods of each intervention. It is interesting to note that in evaluations of various psychosocial interventions there typically is no measure of the extent to which the staff facilitators were knowledgeable of the intervention methods or effective in the application of the methodology (Gropper-Katz, 1987). This is an important factor when attempting to interpret results when they do not show the intervention

having an effect on residents. Was the technique ineffective? Or was the technique ineffectively applied?

Finally, follow-through and evaluation of the impact of the intervention is critical. In a dramatic follow-up study by Schulz and Hanusa (1978), nursing home residents who initially significantly benefitted by an intervention (visitation by students) exhibited steep declines in their well-being after the intervention was suddenly terminated, compared to a control group who did not receive the intervention. Administrators and staff need to insure a commitment to a psychosocial intervention, otherwise, undesirable negative effects from the termination of the intervention may be seen in the residents. As the extant literature reviews frequently note, more rigorous evaluations of psychosocial interventions are needed. To guard against negative effects, and to create an organizational expectation that psychosocial interventions are useful tools, a commitment to a systematic evaluation of the impact psychosocial interventions have on residents and staff is indispensable. Establishing a documented track record can help incorporate psychosocial interventions as a respected part of the nursing home culture.

Reality Orientation

Intervention's Goals and Assumptions

Reality orientation has been defined as an active participatory program for demented residents to reorient them to their current situation. It is assumed that reinforcing residents' contact with reality can counteract their confusion, enhance personal responsibility over behavior, and foster better interpersonal communication (cf., Folsom, 1968; Hogstel, 1979; Campos, 1984). It assumes some plasticity in cognitive functioning and that by creating a more stimulating environment, the resident can practice and better use existing cognitive skills. The expectation is that the rate of cognitive decline and associated functional loss found in demented residents can be decelerated, if not reversed. Some versions of reality orientation therapies include an "attitude therapy" component which seeks to communicate to the resident a feeling of friendliness, calmness, consistency and security.

Description of Technique

There are two basic approaches to reality orientation, a 24-hour a day approach and a more formal classroom approach. Frequently the approaches are combined. In the 24-hour a day approach, staff continually reorient residents to time, place, and person by asking residents questions and reinforcing correct responses. Environmental props, such as clocks, calendars, name tags, and reality orientation boards are used as cues. Staff are expected to engage residents in their environment, provide clear instructions,

ask simple questions of residents, and provide a friendly atmosphere. In the 24-hour approach the staff as a whole are responsible for the implementation and conduct of the reality orientation intervention.

In the classroom approach 5–6 residents meet in a group that is led by a facilitator, a trained staff member. Classes are held frequently, either daily or 4–5 times a week and typically last 30 minutes. In the classroom setting environmental props, such as clocks, calendars, name tags, and reality orientation boards are also used as cues. Classroom techniques focus on group rehearsal of orientation information and reinforcement for correct responses. They have also included more varied group activities, such as bingo (Woods, 1979). The mixture of activities dilutes the character of reality orientation and causes the sessions to more resemble other nursing home activities. In addition, some approaches advocate the combination of reality orientation with other techniques such as exercise programs or validation therapy (e.g., Bleathman, 1988). This creates difficulties in interpreting the effectiveness of the intervention.

Target Population

Reality orientation is primarily aimed at those residents who exhibit behaviors considered confused or disoriented in respect to space and time. In practice, the primary targets of reality orientation are often residents with moderate levels of dementia.

Evaluation

The results of various studies indicate a mixed picture of effectiveness. Reality orientation has been found effective in several studies. Predominantly, the effects of reality orientation have been found on cognitive measures (Citrin & Dixon, 1977; Hanley, McGuire, & Boyd, 1981; Nodhturft & Sweeney, 1982; Woods, 1979; Zepelin, Wolfe, & Kleinplatz, 1981). Reeves and Ivinson (1985) found reality orientation coupled with environmental manipulation produced behavioral changes, but most studies do not report statistically significant behavioral changes.

Most of the evaluation studies examined the short-term impact of reality orientation, 6–12 weeks (e.g., Citrin & Dixon, 1977; Reeves & Ivinson, 1985). One study, Zepelin, Wolfe, & Kleinplatz (1981), did examine the impact of reality orientation over a yearlong period. Residents in the reality orientation group compared to a control group had improvements in cognitive measures 6 months posttreatment. At 12 months the differences between groups, while in the correct direction, fell short of statistical significance. Johnson, McLaren, and McPherson (1981) found no differences in the effectiveness of classroom-based and 24-hour-based reality orientation.

Other studies find no effects of reality orientation (e.g., Barnes, 1974;

Letcher, Peterson, & Scarbrough, 1974; Voelkel, 1978). A major gap in the literature is that the medical and cognitive status of the residents is not adequately taken into account. Whether reality orientation is effective among more demented residents is not clear, with some evidence (Brook, Degun, & Mather, 1975) suggesting less cognitively impaired residents may benefit more. Several case studies and anecdotal reports suggest adverse effects associated with reality orientation (e.g., Dietch, Hewett, & Jones, 1989).

Perhaps the most critical response to reality orientation comes from those who advocate specialized care units for demented residents (Cleary, et al., 1988; Maas, 1988). Reality orientation can overstimulate the demented resident, placing too many demands on the resident and, in effect, create a more confusing and distracting environment. This more stressful environment can result in negative effects on the part of the residents. Contrary to reality orientation's implicit logic, specialized care units strive to reduce the cognitive strain of the environment to better match the lower threshold levels of the demented resident (see Chapter 3, this volume).

Validation Therapy

Intervention's Goals and Assumptions

Validation therapy is a humanistically based approach originated by Feil (1982) and based upon principles of Carl Roger's client-centered therapy. It is designed to give disoriented residents a sense of self and dignity by validating their feelings. A major premise of validation therapy is that many residents of nursing homes are in a state of despair (Erikson, 1950). The withdrawal, isolation, and disorientation of residents are seen as defense or coping mechanisms that the residents use to defend against anxiety associated with unresolved existential conflicts. These tendencies are further exacerbated by the intellectual, social, and sensory deprivation that can be found in nursing homes (Babins, 1988; Babins, Dillon, & Merovitz, 1988). Validation therapy strives to humanize the relationships between the residents and their caregivers.

Description of Technique

Validation therapy involves 5–10 residents who meet in a group to discuss unresolved personal conflicts (see Babins, 1988; Babins, Dillon, & Merovitz, 1988; Bleathman, 1988). A trained staff member leads the group. Topics for discussion typically focus on death, loneliness, or loss, and are picked by the group. Sing-alongs, role playing, and playing with objects are techniques to enhance resident self-expression. Asking of questions and validating resident feelings without interpretation are key elements in the sessions. The groups typically meet weekly or semi weekly for about one hour.

Target Population

Validation therapy is targeted at confused and withdrawn elderly. The approach may be especially appropriate for very old (over 85 years of age) residents. The approach is not considered appropriate for severely demented, vegetative, or psychotic residents (Babins, 1988).

Evaluation

Some evidence in the literature suggests that validation therapy may be effective (Babins, Dillon, & Merovitz, 1988; Peoples, 1982), however, the lack of control group designs, and absence of statistical analysis makes this literature equivocal.

Reminiscence Therapy

Intervention's Goals and Assumptions

Reminiscence therapy is based on a developmental approach (Erikson, 1950). The normal and adaptive task before elderly individuals is to engage in life review and the goal is the achievement of ego integrity, that is, a sense that life lived has been worthwhile and without regrets (Butler, 1980; Lo Gerfo, 1980; Osborn, 1989). To that extent it overlaps with some of the assumptions underlying validation therapy. The two approaches can be seen as differing in the emphasis placed on life review and validation of feelings. Several authors have distinguished between different types of reminiscence (e.g., Lo Gerfo, 1980; Osborn, 1989). Informative reminiscing stresses review of factual material. The opportunity to engage effective remembrance provides pleasure and self-esteem enhancement. Evaluative reminiscence stresses life review as a developmental task which can allow an individual to come to terms with old conflicts and defeats and to work through the meaning and acceptance of one's life. The possibility of obsessive and maladaptive reminiscence is noted among those elderly adults who are unable to accept their past and are despairing. It is assumed that the benefits of reminiscence are far-reaching and include improvement in self-esteem, acceptance of losses, increased life satisfaction, and decreased depression. A mechanism of how reminiscences can cause some of these adaptive effects is not clearly specified (Osborn, 1989).

Description of Technique

Reminiscence techniques are quite varied. Both individual-based and group-based interventions have been used (cf., Coleman, 1974; Goldwasser, Auerbach, & Harkines, 1987; Perrotta & Meacham, 1981). Interventions also vary in the extent to which they were structured (e.g., Fry, 1983). In

group-based approaches the technique can change with the type of reminiscence, that is, factual or evaluative. In evaluative approaches the group members and group facilitator may need to take a more active role in guiding the reminiscence and avoid destructive obsessive reviews (Lo Gerfo, 1980). In evaluative reviews the reminiscences tend to be more personal, dealing with one's own life or non-personal dealing than factual reviews, which focus on recalling less personal historical events. Several authors comment on the importance of this latter type of review in fostering intergenerational links (Perschbacher, 1984). Frequently, aids such as music, photographs, old newspapers, or movies are used to facilitate the reminiscence.

The group approach consists of 5–10 residents and a trained staff facilitator who meet for 30 minutes to one hour once or twice a week. The length of the therapy typically ranges from 5 to 12 weeks (cf., Goldwasser, Auerbach, & Harkines, 1987; Berghorn & Schafer, 1986). The function of the group is to provide the resident with an atmosphere that stimulates and heightens the reminiscence activity. In the conduct of these sessions it is important to make sure reminiscence time given each resident allows adequate time to share his or her memories with the group, and to facilitate group discussion and interpretation of the memories in a positive way. Ensuring continuity within and between sessions is desirable.

Target Population

Reminiscence therapy requires residents who are verbal, and are cognitively functioning. The applicability of this kind of approach with confused and demented residents is open to question but a study did find evidence for the effectiveness of this approach with more demented residents (Goldwasser, Auerbach, & Harkines, 1987).

Evaluation

Early studies of a correlational nature found greater adjustment and happiness among residents who showed a higher frequency of reminiscing (e.g., Boylin, Gordon, & Nehrke, 1976). Among community-based residents experimental evidence for the effectiveness of reminiscence therapy relative to control groups varies (cf., Fallot, 1979; Perrotta & Meacham, 1981). Specific to nursing home residents, Goldwasser, Auerbach, & Harkines (1987) found positive effects of reminiscence on affective processes, but in general, the impact on cognitive, and behavioral processes is not clear (Burckhardt, 1987; Merriam, 1980). There is evidence that individual differences, such as the extent to which the residents hold values incongruent with the social structure of the nursing home (Berghorn & Schafer, 1986), may affect the effectiveness of the intervention.

Behavior Modification

Intervention's Goals and Assumptions

Behavior modification is based on the well established tradition of behaviorism in psychology (Kazdin, 1975). It assumes behavior is lawful and objectively caused, and not a product of some unconscious mental process. Some of the current social learning theories (e.g., Bandura, 1977) are less radical and admit to the importance of cognitive processes in causing behavior. From a behavior modification perspective, the behavior of an individual is elicited by environmental causes that can be determined and changed. Specifically, the frequency and strength of a behavior are assumed to be functions of the consequences it produces, that is the resulting reinforcement. Reinforcers consist of those environmental stimuli which increase the probability of a response being made. They can be very concrete, such as food, or more symbolic, such as praise or attention. Cues are those stimuli in the environment that signal to the individual that reinforcement is imminent, if a particular behavior is performed. Changing behavior is accomplished by changing the reinforcements in the environment, either stopping reinforcement for an unwanted behavior (extinction) or giving reinforcements when the individual performs a desired alternative behavior. Punishment, that is, actively doing something unpleasant to the individual as a consequence of his or her behavior, is not seen as effectively changing behavior.*

Description of Technique

The classical behavior modification technique in applied settings is described in full by Kazdin (1975) and in geriatrics by Burgio and Burgio (1986). The section below is designed to give a brief summary of the process. Behavior modification depends on a complete behavioral analysis. First, the unwanted behavior is designated and desirable alternative target behaviors are defined. In the case of complex behavioral change, for example increased socialization, the global behavior is broken up into specific molecular behaviors. Next, the overt behavioral referents need to be determined, that is, isolating the maintaining conditions—the antecedents and consequences of the behavior. This requires a rigorous observation period where the responses of the resident are systematically recorded. Third, the staff changes the reinforcement patterns in the environment. Frequently the staff's behavior when interacting with residents may be the reinforcement and so staff behavior must be changed (Baltes et al., 1983). To eliminate an unwanted

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*Negative reinforcement is frequently confused with punishment. Negative reinforcement is different in that it removes something unpleasant in the environment as a consequence of the individual performing a behavior. Unlike punishment, negative reinforcement is a very effective way of changing behavior.

behavior, reinforcement that was previously obtained is eliminated. To develop new desired behaviors, the staff prompts the resident and reinforces the resident when the new behavior is performed. Attention is paid to the frequency of reinforcement, that is, the schedules of reinforcement. Behavior that is reinforced continuously is learned the quickest, but is the least long lasting. Behavior that is reinforced variably takes longer to learn but is longest lasting. Frequently, to develop novel behaviors, behavioral shaping is required where desired behavior is obtained through a process of successive approximations.

Target Population

Behavior modification can be used with all residents. In fact, some of the more dramatic examples of behavior modification success can be seen in more impaired subjects (Burgio & Burgio, 1986). Since intense cognitive involvement is not required for behavior modification, it is especially suited for demented patients. But, there is some evidence that individual differences, such as cognitive functioning (e.g., Hu et al., 1989) may moderate the effectiveness of the intervention. Unlike the other interventions, the staff member is the primary agent of change. This raises ethical issues, especially with impaired elderly. While the behavior modification can be done without an individual being aware of the intervention, behavior modification frequently involves and enlists the cooperation of the individual in helping define the unwanted and desired behaviors. Involving cognitively functioning residents in the behavior modification process is possible and may be desired, since the elderly residents themselves may be important sources of reinforcement in the nursing home environment, for example, socialization patterns.

Evaluation

Geriatric-based behavior modification literature, while not vast, documents the power and effectiveness of behavior modification in geriatric settings (Burgio & Burgio, 1986). Behavior modification techniques have been used to increase walking and exercise patterns of elderly residents (Burgio et al., 1986; MacDonald & Butler, 1974; Sperbeck & Whitbourne, 1981). Gains in verbal behavior and socialization skills among nursing home residents have been demonstrated by Balleseros et al. (1988); Blackman, Howe, and Pinkston (1976); Carsensen and Erickson (1986), Kletsch, Witman, and Santos (1983); and Praders and MacDonald (1986). Behavior modification principles have been used with some success in developing problem solving and memory skills in nursing home residents (Hussain & Lawrence, 1981; Langer et al., 1978). A large body of literature demonstrates the effectiveness of

behavioral therapy on incontinence (e.g., Burgio & Burgio, 1986; Hadley, 1986; Hu et al., 1989; Ouslander, 1986; Resnick & Yalla, 1985).

While the evidence shows that behavior modification works, it is important to note that it requires a trained staff to monitor the intervention and an absolute commitment to the program over the long term. Without continuous monitoring, the reinforcement patterns may slip, resulting in the extinguishing of the desired behavior or unwanted behaviors being reinforced. The costs involved in staff time may not be worth the effects the intervention produces. For example the cost of a behavior modification program in controlling incontinence may be more expensive compared to laundering wet clothing and bed sheets (Schnelle et al., 1983).

A common problem is the generalizability of the behavior modification effects across time or place. The benefits of behavior modification obtained in one shift may not generalize to the next shift, if the next shift does not continue the intervention. Cross-shift cooperation is essential. So too environmental cues may be so strong that behavior changes found in one nursing home environment, e.g., the activities room, may not generalize to other environments, such as the dining area.

Some Additional Interventions

Aside from the more systematic and widely used psychosocial interventions described above, there is a constellation of additional interventions that have demonstrated effects. Some examples follow. Sensory training and sensory stimulation programs (e.g., Lowe & Silverstone, 1971) are aimed at increasing the mental and physical stimulation of nursing home residents who are regressed and who are not aware of or are unable to interact with their nursing home environment. These programs share some of the same assumptions of reality orientation, namely that by creating a more stimulating environment, the resident can practice and better use existing cognitive skills. In some cases these approaches are combined with reality orientation (Tolbert, 1983). As with reality orientation approaches, the effectiveness of these approaches with more severely demented and disoriented residents is equivocal (see Chapter 3, this volume).

Several clinicians have developed orienting/socialization approaches. For example, Moran and Gatz (1987) developed welcoming groups to orient new nursing home residents. This orienting intervention led to increased feelings of control and life satisfaction among the residents who participated relative to controls.

A number of interventions aimed at enhancing the perceived control residents have over their lives have proven to be effective (Langer & Rodin, 1976; Schulz, 1976). What is striking in these studies is that the positive

effects are due to a relatively modest intervention, e.g., giving a resident a choice of whether he or she wished to water a plant, or when to see a visitor.

Formal exercise programs and interventions that encourage movement among elderly adults have been shown to be beneficial in improving cognitive performance (Diesfeldt & Diesfeldt-Groenendijk, 1977) and morale (Goldberg & Fitzpatrick, 1980). More research on the effectiveness of these and other innovative approaches is called for.

SOME UNANSWERED QUESTIONS AND NEW DIRECTIONS

The review of the various psychosocial interventions indicates a mixed picture of their effectiveness. But overall it is reasonable to say that the literature points to positive effects associated with the use of psychosocial interventions. Still, this literature as a whole can be criticized on several fronts, which makes scientifically based statements about psychosocial interventions premature and equivocal.

Internal Validity Concerns

The internal validity of much of the literature is suspect, making it hard to state conclusively the effects are due to the intervention, not to some confounding variable. A large portion of the literature consists of anecdotal articles, which, while dramatic, do not provide a source of incontrovertible support. Among the empirical studies, a frequent weakness is underutilization of experimentally based randomized control group designs. A potentially confounding element is the self-selection of residents into the intervention group and control group.

Assessments of psychosocial interventions should consist of repeated measures over time of a wide range of behaviors. Typically, however, no long-term follow-up of residents is reported. Another significant omission is measurement of possible moderating variables, such as residents' depression or health status, which may impact on the intervention's effectiveness. There is also a lack of process measures which could chart the flow of the intervention and its effects. Questions such as the optimal length of the intervention, the optimal number of participants in group-based interventions, or the optimal duration of a session are, for the most part, unanswered.

The measures used are often specific to that study. In the literature far-reaching effects of the psychosocial intervention are theoretically claimed, (e.g., changes in self-care behaviors), but empirically these more removed effects are not measured. Some studies rely on general ratings of staff who are frequently not blind to the treatment condition of the residents. While a few studies report preliminary evidence of reliability and validity of

the scales, many do not. In her meta-analysis of mental health interventions in nursing homes, Burckhardt (1987) found only 9 studies reporting reliability estimates. Paralleling this is the Rabins et al. (1987) review of published nursing home articles. They found that out of 106 measures of mental functioning or behavioral disorders, only 23 were reliable. The development of reliable and valid measures are critical, if compelling evaluations of psychosocial intervention effects are to be done.

External Validity Concerns

Putting aside for a moment questions of the studies' internal validity, there are some questions about the generalizability of the effects of the different interventions, that is the external validity of the findings. Borrowing the logic of the person-environment transaction model, the role of individual differences and environmental determinants in the effectiveness of organized psychosocial interventions needs to be examined. Relatively little emphasis is placed on determining how individuals' competencies moderate the effectiveness of the psychosocial interventions. The issue of the generalizability of psychosocial interventions across residents' cognitive levels is not yet satisfactorily answered. Systematic research which examines effectiveness of psychosocial interventions as a specific function of resident competence level is called for.

Psychosocial interventions do not take place in a vacuum but are situated within the larger nursing home environment and are affected by the community culture and expectations. Distinguishing between the intervention and the effects of the larger environmental structure may not be easy. A recent study by Lemke and Moos (1989) illustrates this point. In their study of 1428 residents of 42 congregate residential settings (including nursing homes and domiciliaries) they found that residents' activity levels were dependent on their functional level and the demands of the facility. Less able residents were more likely to participate in facility-organized activities when the program was more structured and the staffing level was higher. However, they also found higher functioning residents were more active in environments that were larger, had lower settings, and stressed greater resident autonomy. The formality of psychosocial programming, and the staff involvement in the interventions may be additional critical ingredients which may enhance or detract from the overall efficacy of the intervention.

Specific and Nonspecific "Therapeutic Effects"

There are basic unanswered questions about why these therapies work. A major concern is the presence of a "Hawthorne Effect," namely, the residents' effects are due not to the psychosocial intervention alone but due to a combination of the psychosocial intervention and other dynamics nonspecific

to the intervention, e.g., increased attention levels given residents by staff. In the clinical literature a distinction is frequently made between specific and nonspecific therapeutic effects. The former refers to therapeutic effects caused by the dynamics specific to the therapeutic model and the latter refers to effects caused by generic factors, such as a therapist's empathy, nonspecific to the therapeutic model. In the clinical psychological literature an interesting pattern is found where over time the therapeutic style of therapists from different theoretical models converge (Fiedler, 1950). In reviewing the literature on psychosocial interventions, the stated practice guidelines converge on several common principles, such as reinforcement of resident involvement. The training of staff and the systematic implementation and monitoring of the intervention in a nursing home setting may be a very potent intervention in its own right (Linn et al., 1989).

Each of the psychosocial approaches attempts to provide a theoretical base to explain its effectiveness. The empirical literature, however, is not predominantly theoretically based. In general, the research focuses on evaluating the outcomes of the interventions, but does not test whether the theoretically proposed dynamics do in fact produce the expected therapeutic effects. Notably absent are studies which systematically manipulate the key active elements of the psychosocial intervention.

Several potent nonspecific effects can be derived from the gerontology literature. First, the implementing and regularly scheduling of therapeutic sessions can create a more predictable environment for residents (Schulz, 1976). Second, inherent in many psychosocial interventions is the opportunity for socialization with other residents and staff. This can lead to many positive effects associated with enhanced socialization and social support (Cohen & Syme, 1985), such as, self-affirmation, an opportunity to vent feelings and to engage in positive social comparisons. Third, among the higher cognitively functioning residents, the intervention can provide residents with opportunities to master a part of their lives and their environment. These opportunities can affect residents' feelings of efficacy (Bandura, 1977), control (Langer & Rodin, 1976) and self-responsibility for solving their problems (Karuza et al., 1990). Fourth, in a related vein, the introduction of interventions can induce in residents greater "mindfulness" in which they actively engage in a cognitive restructuring of their environment (Alexander et al., 1989). Fifth, from a behavioral perspective, the attention of staff can be a reinforcer for the residents, increasing their activity levels and cognitive involvement (Langer et al., 1978). Sixth, the interventions can increase the professional involvement of staff and lead to more individualized resident care (McMahon, 1988).

The need is clear for more theoretically derived research that can help identify key critical mechanisms which produce the desired effects. In this way, more tailored psychosocial interventions can be created which can maximize effectiveness.

Psychosocial Interventions as Job Enrichment: Impact on Staff

The role of staff as important nonspecific therapeutic agents must be recognized in the nursing home setting (Karuza & Feather, 1989). Involving staff, especially nurse's aides, in psychosocial interventions does increase the "professionalism" of the staff. A commitment to systematic psychosocial intervention programming can have an unanticipated, but no less powerful, impact on staff morale and quality of care. The training in psychosocial interventions should, ideally, lead nursing staff to be more aware of behavioral dynamics in nursing home environments. The responsibility of staff to implement and monitor the psychosocial interventions should further invigorate attention paid to quality of care issues.

Several nursing professionals have remarked on staff problems when caring for dependent residents and individuals with behavioral problems (e.g., Armstrong-Esther & Brown, 1986; Heine, 1986). Reviews of nursing home staff indicate that turnover and absenteeism are costly problems for administrators (e.g., Malany, 1979; Stryker-Gordon, 1981). Low pay is certainly a factor in turnover and morale problems of nursing staff, especially nurse's aides, but it is not a sufficient explanation of staff dynamics in nursing homes. There is evidence that factors such as feeling one's work is intrinsically rewarding, personal achievement, and interpersonal relations are associated with job satisfaction and organizational effectiveness in nursing homes (cf., Donovan, 1989; Holtz, 1982).

As several critics have noted (cf., Brannon et al., 1988; Karuza & Feather, 1989), nursing home staff, such as nursing home aides, can benefit from job redesign that enriches their job. This view is built on the premise that nursing staff, including nurse's aides, can be motivated intrinsically by the job itself. The notion of job enrichment (Hackman & Oldham, 1980) argues that five key job characteristics affect the motivating potential of any job. These job characteristics are skill variety, task identity, task significance, autonomy, and feedback on the job (both from the work itself and from supervisors). Specifically, redesigning the nursing home staff's jobs focuses on maximizing the number of skills the nursing staff is required to use, the extent to which they identify with the nursing care given, the extent to which they feel their efforts are important to the residents, the extent to which they have a say in what and when to do tasks, and the amount of information they receive about the results of their activities.

In a variety of work settings, both inside and outside the health care industry, job enrichment strategies have led to gains in employee satisfaction and productivity (Kopelman, 1985). As Hackman and Oldham (1980) point out, the usefulness of enrichment strategies depends on having a work force that is accepting challenges on the job. In some situations, the nursing staff may not benefit from job enrichment exercises because of their low need for

challenge and personal growth on the job, but this may be the exception rather than the rule (Brannon et al., 1988).

A strong case can be made to specifically target nurse's aides as the lead persons implementing, facilitating, and monitoring psychosocial interventions. Traditionally, nurse's aides positions are not enriched. They are routine, repetitive, physically demanding, and closely regulated. The nature of the care-giving requirements for debilitated residents, and regulations can set definite barriers to some job enrichment strategies. But the involvement of nursing staff, especially nurse's aides, in different psychosocial interventions serves as a practical and powerful means to enrich their jobs. Since the interventions are not invasive treatments and do not require formal licensing or disciplinary certification, it is feasible to turn to nurse's aides as resource persons to implement and facilitate psychosocial interventions. Since nurse's aides positions are traditionally the lowest paid, the cost of psychosocial intervention programing should be less than if other higher paid staff were used. An anticipated bonus for the administrator should be the promise of reduced costs associated with lower nurse's aide turnover, and improved quality of care.

Using a nurse's aide as the lead person in psychosocial intervention programming can enrich his or her job in many ways. In conducting the interventions, e.g., scheduling, preparing material, fostering group interactions, collecting behavioral measures, implementing and monitoring reinforcement schedules, the nurse's aide is given new tasks, ones that capitalize on emotional and intellectual resources and not on physical strength. Training the nurse's aide and relying on him or her to conduct the interventions promotes the identification with the total nursing care given. The responsibility of implementing and following through on the psychosocial interventions fosters greater autonomy and enhances the significance of the nurse's aide's position within the nursing home context. By the nature of the intervention, the daily contact, the monitoring of the effects of the intervention on the residents, will open up feedback channels for the nurse's aide. He or she will be able to see in a more direct way the links between one's activities and resident's outcomes.

Some Benefits and Caveats

Weaving together the various themes of this chapter, implementing psychosocial interventions in nursing homes has the potential of benefitting both residents and staff. Psychosocial interventions can positively impact on residents directly and indirectly. To the extent to which the psychosocial intervention's specific therapeutic and nonspecific therapeutic ingredients are activated, the intervention can directly help residents learn new skills, practice old ones and validate their sense of self. This should result in behavioral,

cognitive and affective changes which would lead the resident to be more adaptive in the nursing home environment. The nursing staff, especially nurse's aides, should benefit from increased morale as a result of the psychosocial intervention enriching their job.

A major issue that needs to be addressed is how many of the benefits of psychosocial interventions are due to the programming and how many are due to the nonspecific therapeutic dynamics that are present. Practically speaking it is of little concern why psychosocial interventions work, as long as they work. From another perspective, the long-term task is to develop cost-effective improvements in quality of care in nursing homes. Whether techniques specific to a psychosocial intervention or nonspecific ingredients are important has implications for future policy and regulation. If nonspecific therapeutic dynamics are the active ingredients, then the psychosocial intervention is not per se critical. The intervention becomes merely a convenient context in which the nonspecific therapeutic dynamics are expressed. If that is the case, the emphasis should not be on prescribing specific psychosocial interventions but developing training and structural changes in staffing and administration that capitalize on the nonspecific therapeutic dynamics. It is critical that nursing home administrators and researchers develop a systematic evaluation of psychosocial interventions' impacts on residents and staff and of factors that can enhance their effectiveness.

Some caveats should be sounded before embracing psychosocial interventions as the answer to all nursing home problems. First, is that using a nurse's aide as the lead person in psychosocial intervention programming requires nurse's aides who have the necessary communication and interpersonal skills which are essential in implementing and conducting the intervention. This can create new demands in the personnel selection process.

Second, if the psychosocial intervention programming is perceived by the nursing staff as unfairly enlarging the amount of work expected, then staff cooperation will be poor.

Third, if the nursing home environment is understaffed, then implementation of the psychosocial intervention will be jeopardized. Under conditions of staff shortage, the priority will be given to addressing basic functional and health needs, not psychosocial ones.

Fourth is the fact that, even though the OBRA legislation mandates training and delivery of mental health interventions, it does not mandate funding. Simply put, the administrator will not find a convenient revenue stream to subsidize the implementation of these psychosocial interventions. An advantage of using nurse's aides as psychosocial intervention facilitators is that their wage levels are much lower than health and allied health professionals. Administrators must take a larger perspective and consider the savings in personnel and health care utilization costs that are theoretically

possible with implementing systematic psychosocial intervention programming. In keeping with this "bottom line" approach, it is important to make sure cost/benefit data are rigorously collected on both resident and staff outcomes.

Fifth is the danger of staff rivalries developing when designating nurse's aides as lead persons. Care must be given in developing a workable wage structure and in assigning duties and responsibilities so that they are in keeping with the organizational hierarchy. Since psychosocial interventions are not psychotherapeutic or psychiatric treatments, the danger of disciplinary turf issues is minimized. Even so, efforts should be made to actively integrate the nurse's aide and the psychosocial intervention into the interdisciplinary networks and continuity of care mechanisms that are in place.

Sixth is the importance of instituting adequate training in the specific and nonspecific therapeutic dynamics involved in the psychosocial interventions, not only to satisfy the OBRA regulations, but to ensure quality interventions. Trained geriatric psychologists, psychiatrists, and other health and allied health professionals are important resources for such training. Unfortunately, the number of health and allied health professionals with a background in geriatrics who can provide the training is still low for the need (Smyer, 1989).

Seventh is recognizing that the effective systematic implementation of psychosocial interventions requires a nursing home climate that is receptive and responsive to the intervention. If the administration and supervisory staff do not support the intervention efforts they will not succeed. Clear, objective, and scientifically based data on the efficacy of psychosocial interventions can be instrumental in ensuring a salubrious environment for the interventions.

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