

Dissemination and Adoption of Innovative Psychosocial Interventions

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Many challenges face researchers, developers of innovative programs, and practitioners as they attempt to promote the spread of new clinical interventions. Traditional dissemination methods such as journal articles and conferences have many limits. Three examples of successful utilization are described concerning, respectively, the Behavior Analysis and Modification Project, the Teaching Family Model for group home treatment of deviant adolescents, and the Fairweather Hospital-Community Treatment Program (Lodge Program). Interpersonal contact between potential adopters and those knowledgeable about innovations, outside consultation on the adoption process, organizational support for innovation, persistent championship by agency staff, adaptability of the innovation, and availability of credible evidence of success were the six main factors that appeared to promote utilization in these three examples. These factors are consistent with findings from the larger literature on utilization, and most are relevant to adoption of innovations by individual psychotherapists as well.

Practitioners do not adopt innovations in psychotherapy or psychosocial interventions readily. Despite efforts to enliven the scientist-practitioner model in professional psychology, psychiatry, and other mental health disciplines, most clinicians continue to use the treatment techniques learned through observing role models and supervision in graduate school, internships, and residencies. Therapeutic procedures are modified by trial-and-error, cumulative clinical experience with little influence by continuing education (Barlow, 1981). To surmount the many obstacles to the diffusion of innovations, those disseminating new treatment methods must carefully plan promotional strategies.

In this article, we will highlight some of the challenges that face researchers, field developers of innovative programs, and practitioners as they attempt to spur utilization of new psychosocial methods. How can these methods be spread to mental health practitioners and institutions in such a way as to promote successful, long-lasting adoptions in new settings?

When Is an Innovation Ready for Utilization?

First and foremost, a new development in psychotherapy or psychosocial programming must have satisfactory types of empirical validation before being considered worthy of adoption by

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This article is dedicated to the memory of Howard Davis, pioneer and visionary for dissemination of innovations.

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others. Validation methods include controlled clinical trials, data-based field testing, and systematic replications to other sites and populations. In addition, the innovation must be viewed by practitioners as relevant to their needs and must be readily translatable into tangible action appropriate to the user's clinical environment.

For translation to occur, the innovation needs to be packaged in a format enabling potential adopters to readily acquire skills required for faithful utilization. Packaging includes print materials with high degrees of specificity and operational description, audiovisual demonstrations of the methods in action, well-designed workshops and training programs emphasizing experiential learning and supervised practice, and instructions that ease adaptation of innovation elements to the practical constraints of various clinical sites. Clear delimitation of entry-level skills and experiences required by potential adoptees also is essential. For instance, different training and clinical experiences are desirable for practitioners interested in learning cognitive behavior therapy versus interpersonal therapy.

A final step for making an innovation ready for dissemination involves developing methods for determining the fidelity with which potential users will be implementing the innovation. Competency-based and criterion-referenced scales or other instruments facilitate quality assurance and guide the neophyte in acquiring requisite skills. Monitoring the appropriateness and quality of the adoption efforts permits detection of lapses and remedial training (Yeaton & Sechrest, 1981).

Limitations of Traditional Dissemination Vehicles

Halpert (1966) and Garvey and Griffith (1971) pointed out that many research findings that could improve clinical practice are virtually unknown to practitioners because these findings are never published. This is related to the observation that the modal number of publications of clinical psychologists is zero (Barlow, 1981). Even when findings are written up, it often takes years for innovative techniques to appear in print due to lags in peer review and publication timetables (Garvey & Griffith, 1971).

Moreover, the publication of an innovation may not result in its widespread utilization because it is estimated that half of the research articles published are read by not more than 200 persons (Garvey & Griffith, 1971). Similarly, Cohen (1979) estimated that clinical psychologists read only two to four research articles per month. Norris and Larsen (1976) found that less than 10% of 1,100 mental health workers in community mental health centers and state hospitals used print media to help them deal more effectively with their clients' needs.

A further hindrance is the fact that publications are often oriented toward other researchers rather than practitioners (Havelock, 1969). Researchers and clinicians have different goals. Researchers are primarily interested in the questions, "Does therapy work?" and "How does it work?" whereas clinicians are interested in the questions, "Will it help my practice?" and "Can I use it?" Descriptions of the detailed, step-by-step implementation of new treatment techniques required by practitioners are rarely found in research articles (Barlow, 1981; Stricker & Keisner, 1985).

Presentations at professional meetings and continuing education programs also fail to have an impact on most practitioners. Problems include the unavailability of such presentations to many practitioners due to geographical, financial, and time considerations (Jones, 1975); and lack of fit between backgrounds and needs of many practitioners and the type of material being presented. There is little evidence to suggest that practitioners can or do utilize the information obtained at these programs. Beisser (1976) conducted a follow-up survey of 1,623 participants in 21 continuing education courses and found that only 26% of the 393 respondents reported that they were offering new services as a result of their participation in the continuing education.

Research on adult education consistently indicates that active-directive training procedures are necessary to promote acquisition and utilization of new treatment procedures (Matarazzo, 1978). One reason that professional meetings and continuing education programs fail to make an impact on practitioners is that they seldom use such procedures (Kuehnel & Flanagan, 1984; Kuehnel, Marholin, Heinrich, & Liberman, 1978).

Major Barriers to Adoption of Innovations

Moreover, even when the information gap has been crossed and the needed information about an innovative program has been disseminated to a potential adopter, there is no guarantee that adoption will occur. In fact, many problems have been observed in the translation of disseminated findings into new practice in mental health settings (Larsen, Norris, & Kroll, 1976; Roberts & Larsen, 1971).

Over the last 25 years, social scientists have investigated factors inhibiting spread of innovations in areas ranging from the human services to technology in business and industry (Glaser, Abelson, & Garrison, 1983; Havelock, 1969; Rogers & Shoemaker, 1971; Zaltman, Duncan, & Holbek, 1973). Findings from experimental and retrospective studies have consistently confirmed the existence of certain barriers to successful adoption of innovations.

Factors Related to the Innovation Itself

Innovative interventions face many attitudinal barriers if they conflict with established concepts and practices. New treatments

that more closely simulate traditional, office-based, one-on-one psychotherapy approaches used by many practitioners and treatment organizations are much more likely to be adopted than are more complex, comprehensive systems of care. Moreover, innovations that are complex, demanding, extended in time, and linked to team implementation encounter problems in fidelity of delivery, often requiring unwieldy systems of quality assurance (Yeaton & Sechrest, 1981).

It is much easier to utilize a new drug than a new psychotherapy because the adoptees' response cost is only a pen and a prescription pad. Similarly, methods requiring implementation by solo practitioners are far less costly personnel-wise than a token economy or a psychosocial club. Comprehensive psychosocial methods often are expensive to implement, further limiting positive reaction to them by the field, especially in a time of funding constraints.

Other characteristics of the innovation that seem to have an important bearing on successful implementation include (a) the ease with which potential adopters can observe a demonstration of the innovation in operation (through site visits, through audiovisual media such as videotapes, or through consultation); (b) the relevance of the innovation to solving a problem that is currently in sharp focus by influential individuals in the adopting organization; (c) the relative advantage of the new program over existing practices; (d) the ease of understanding the innovation and its implementation; and (e) the degree to which the innovation can be installed one step at a time, with evidence along the way of incremental success (Glaser et al., 1983).

Factors Related to the Adopting Organization

Glaser and Backer (1979) discussed adoption of organizational development methods and identified several factors characteristic of mental health organizations that might create challenges in implementing new programs.

1. Professional values in many mental health organizations are still based on the medical model, which emphasizes authority of professionals at the top of the decision structure and reduces opportunities for broad involvement of all workers in the change program. The strategy of having a chief administrator write a memo to implement change has been shown in empirical research to be generally ineffective for introducing change.

2. Many mental health organizations are organized as traditional civil service bureaucracies, which also deemphasize dealing with feelings, attitudes, and personal styles of participants. Yet in many cases the emotional reactions of participants to a change program may be critical to successful adoption; psychologically induced resistance to change can sabotage almost any innovation (Backer & Glaser, 1979a, 1979b; Larsen et al., 1976).

3. Mental health organizations are open to outside influence from diverse sources such as legislatures, community advisory boards, regulatory agencies, citizen groups, client advocacy groups, and so forth. Any one of these influential bodies may be able to veto a given change program, and the nature of the innovation itself may have to be modified almost beyond recognizability in order to satisfy so many different, involved parties.

4. The diversity of interests and motivations in the organization may make it difficult to establish a reward structure that can influence the adoption of an innovation.

5. According to Weisbord (1976), medical-model institutions have multiple command groups that must be dealt with simultaneously in implementing innovations: the task system, which administrators manage; the identity system, which undergirds professional status; and the governance system, which sets standards. Sources of power are vested in all three systems, and the coordination among them may not be good.

Factors Related to the Adoption Effort Itself

Strategies for promoting the adoption of innovations in mental health organizations have come a long way from the memo by the chief executive approach alluded to previously. A considerable body of both empirical research and case studies now exists (Glaser et al., 1983) to suggest that strategies such as the following can help to increase the likelihood of successful adoption: (a) early involvement of influential potential users in the planning, research, and development of the innovation; (b) use of an outside consultant to advise on the development of the adoption strategy and the setting of goals and time frames and to aid in actually carrying it out; (c) personal contact between the developer of the innovation and its potential users in new settings, especially live demonstrations of the method to establish credibility and to provide a modelling experience; (d) linkage mechanisms between innovators and adopting entities to maintain flexibility and persistence in the face of institutional constraints and sources of conflict; and (e) building in, from the start, methods for rewarding adoption of the innovation among line-level staff and for maintaining staff competence and performance over time.

Personal contact as an implementation strategy is perhaps the best-validated principle in the entire literature on knowledge transfer and organizational change, including both controlled research studies and case analyses. This is true whether the innovation is birth control in primitive areas of the world (Rogers & Shoemaker, 1971) or drug detail men helping physicians understand (and use) the latest wonder drugs by visiting their offices with free samples from the pharmaceutical company (Glaser et al., 1983). Roberts and Larsen (1971) conducted a retrospective study of the adoption of innovations in mental health organizations and found interpersonal contact to be the single most critical variable in promoting adoption among mental health professionals, regardless of the nature of the innovation. Subsequent research in both human service and private industry settings has confirmed the importance of personal contact. Tornatzky, Fergus, Avellar, and Fairweather (1980), however, made it clear that interpersonal involvement strategies such as consultation, workshops, and similar techniques of organizational development have to be robust to be effective, as distinguished from being low-key and minimally intrusive.

Focus on Dissemination of Psychosocial Interventions

The three programmatic treatments chosen for highlighting the challenges posed by dissemination and adoption are familiar to the authors of this article but are not the only such efforts developed for populations of interest to clinical psychology and psychiatry. We chose them because (a) considerable information has been amassed on systematic procedures that each program used to promote dissemination and adoption by others and (b)

all are currently being used in a wide range of settings by various types of human service professionals.

Behavioral Analysis and Modification in Community Mental Health

The Behavior Analysis and Modification Project designed and validated behavior assessment and therapy procedures for a wide variety of patients in clinics, partial hospitalization, and consultation and education programs (Lieberman & Bryan, 1977; Lieberman, Eckman, Kuehnel, Rosenstein, & Kuehnel, 1982; Lieberman, King, & DeRisi, 1976). In this research, innovations were initiated to improve quality of care in the day hospital, including a credit-incentive system, educational workshops for community adaptation, social skills training, and multiple family therapy based on social learning principles. Experimental and evaluative research documenting the effectiveness of these innovative programs was published in 72 journal articles, 25 book chapters, and 5 practitioner-oriented books. These initial dissemination channels met only limited success in encouraging other community mental health centers (CMHCs) to adapt the various programs.

To improve diffusion results, information and skills were disseminated to a representative sample of 40 other CMHCs across the nation. Six programs were packaged as modules for dissemination: personal effectiveness/social skills training, marital therapy, parent training, contingency contracting, educational workshops for community skills, and behavioral evaluation. Each module contained an instructional manual, learning exercises, and films or videotapes that demonstrated the techniques.

The dissemination process included a 2-day workshop at the site of the recipient CMHC, using active-directive teaching methods. Six structured in-service training sessions followed over a 3-month period. Therapist-trainees were urged to learn only those modules relevant to their particular clinical role.

After the therapist-trainees completed the workshop, volunteers were solicited to serve as peer tutors for each of the six modules during subsequent in-service training sessions. Peer tutors were provided with a detailed training guide for these sessions. A key element in implementing the project's methods at other CMHCs was the choice of a coordinator in each CMHC whose job included championing the new methods, keeping track of data, and serving as active liaison among the CMHC, its staff, and the personnel of the Behavior Analysis and Modification Project.

Although the intervention program was carried out in 40 CMHCs, data presented here reflect findings from the last 18 CMHCs visited. From the group of 18 CMHCs, 562 staff members who expected to participate in the full training program completed the preintervention data packet and attended the initial 2-day on-site training and program orientation session. Approximately 26% completed the full program and attended the in-service training sessions for all six training modules, whereas 66% completed four or more modules. This level of participation reflected reasonably good acceptance of the training program, particularly given the vagaries of vacations, clinical emergencies, and administration changes in the operation of CMHCs. A 60-item multiple-choice assessment was given to participants before and after the 14 weeks of training to test their conceptual mastery

of basic behavioral principles and their clinical application of these principles. For trainees who participated in the on-site workshop and at least four of the modules, the results showed a statistically significant increase from pretraining to posttraining periods. An ideology scale, reflecting favorable attitudes toward behavioral approaches, also showed statistically significant increases as a result of the training program.

The most relevant measure of determining whether the new techniques were adopted was to identify the extent to which the treatment procedures were put into practice by the therapist-trainees. Approximately 1 year after the 14-week training program had been completed, the participants were assessed to learn whether they were using the procedures taught. Of the CMHCs that participated in this phase of the training program, 67% reported using one or more of the modules in a programmatic manner. Most of the CMHCs reported continued use of the modules by staff members in both individual and group therapies (Lieberman et al., 1982).

The personal effectiveness/social skills training package was adopted by 8 of the 18 CMHCs on a program-wide basis and was adopted by a majority of the therapist-trainees in 24 of the total 40 CMHCs visited. The second most frequently adopted module was the parent training package. Therapist-trainees also significantly increased their use of behavioral assessment and therapy techniques from before training to 3 months after training, as determined by sample audiotapes coded for these techniques. Moreover, several CMHCs subsequently offered "second-generation" training of professionals in their locales using the module materials, effectively promoting further dissemination beyond the scope of the planned program.

Six CMHCs were arranged in matched pairs according to organizational and demographic characteristics and were randomly assigned to immediate training versus delayed training conditions. Assessments of the 120 staff members from the six CMHCs before and after training indicated that the training intervention had a significant impact on reported utilization of three of the six behavioral modules as well as on use of behavioral counseling techniques.

The Teaching Family Group Home Treatment Model

The Teaching Family Model (TFM) was designed to meet the residential needs of predelinquent and delinquent youths (Phillips, Phillips, Fixsen, & Wolf, 1974). This model teaches juveniles socially appropriate behaviors in a structured, familylike setting. The model has three components referred to collectively as the Motivational System: a multilevel token-economy system, a social-reinforcement system, and a self-government system.

Independent national evaluations of the TFM have compared several hundred youths from more than 37 TFM programs and 34 comparison programs in various states (Blase, Fixsen, & Phillips, 1983; Kirigin, Braukmann, Atwater, & Wolf, 1982). Findings generally indicated that (a) school grades of TFM youths stabilized during treatment, whereas grades of comparison youths continued to decline; (b) TFM youths utilized fewer postprogram social services (e.g., therapy and probation) than did comparison youths; (c) consumers rated TFM programs higher than did consumers of comparison programs; and (d) community-based TFM homes cost one-fourth less than the comparison homes. However, one replication of the TFM by other investigators with residents

of different ethnic identification (Mexican American) and teaching-parents with no formal college or graduate school training found only qualified evidence for the effectiveness of the multilevel token-economy system (Lieberman, Ferris, Salgado, & Salgado, 1975). This study did reveal that the procedures could be disseminated successfully and that desirable behavioral changes could be produced. The relative importance of point contingencies and back-up rewards in the Motivational System is not clear from this study.

A second cautioning note comes from an outcome evaluation of 12 TFM programs and 9 comparison group home programs (Kirigan et al., 1982). Results favored the TFM programs during treatment on rates of alleged criminal offenses, percentages of youths involved in those offenses, and consumer ratings of the programs. However, none of the differences between the groups was significant on any of the outcome measures during the post-treatment year.

Dissemination efforts for this program have proceeded through regional training sites that are responsible for establishing and maintaining group homes in different geographic areas. Elements critical to operating the program are explicitly described in training guides (Phillips et al., 1974). Continued research on treatment procedures, postmortem analyses of couples and homes that failed, and continuous input from program users and consumers have helped to identify and refine important treatment elements while dropping routine and superstitious program behaviors. What is learned from feedback and research is translated into teachable formats for new teaching-parents.

Characteristics of the TFM that seem to have facilitated dissemination include comprehensive design of the treatment unit, specificity and completeness of the important treatment elements, and emphasis on consumer satisfaction (D. L. Fixsen, K. Blase, M. Freeman, & C. James, personal communication, November 6, 1984).

The youths, their parents and teachers, advisory board members, community members, referral and funding agents, and other stakeholders in each home are regularly asked to state positive and negative opinions about the program. Changes in the TFM based on this input over time have resulted in a program with great social validity.

Four factors in the adoption process have been instrumental in facilitating utilization. First, agency support was extremely critical. Several large organizations have provided continuing support to the TFM and to the establishment of additional homes.

Second, development of professional teaching-parents facilitated dissemination by the everexpanding list of couples who have made their careers as users of the program. An extensive training program prepares teaching parents in five stages; it includes an initial 5-day workshop, a 3-month field education experience, and then another workshop.

Third, provision of local technical support has been essential. Frequent consultation visits by training staff have helped to ensure effective implementation of the program by the teaching-parents and have helped boards of directors solve administrative problems. Regional training site organizations provide preservice training, inservice training and consultation, routine evaluations, and administrative support services to local family-teachers.

Fourth, research and evaluation data have facilitated dissemination by enhancing program effectiveness and by building a

credible national reputation. In particular, the empirical basis of the program served to distinguish this model from other good ideas that abound in the human services field. In the opinion of the Boy's Town National Family Home Staff (D. L. Fixsen et al., personal communication, November 6, 1984), a "well researched good idea" is clearly preferred by more potential users and provides a better basis for rational choices about which program to adopt. This opinion stands in stark contrast to Barlow's (1981) view that clinical research has little or no influence on clinical practice. It may be that mental health practitioners are less interested in research than are state and local funding bodies.

Fairweather Hospital-Community Treatment Program

The Fairweather Lodge Program (FLP) attempts to provide an environment that can encourage growth and development of ex-mental patients in the community. A group of patients, heterogeneous in diagnosis and chronicity, is formed in a state mental hospital or equivalent facility. As patients' behaviors are modified through a series of small, incremental steps of responsibility and rewards, the group moves out into a Lodge, an autonomous, self-supporting community-living facility. The program focuses on environmental rather than intrapsychic determinants of psychiatric symptoms. It is based on belief in the power of a small, cohesive group to shape individual behavior and in the value of normalizing community membership for improving psychosocial well-being.

Mental health staff become technical consultants rather than therapists to patients. This basic attitude of patient responsibility is a key to the innovation's success. Also highly important are efforts to teach patients needed social skills for routine living with each other and in the local community and to develop a group work project that provides meaningful employment and regular income (e.g., a janitorial or gardening service).

The FLP was initially developed in the late 1950s, and its first experimental tests were conducted in the early 1960s (Fairweather, 1964; Fairweather, Sanders, Cressler, & Maynard, 1969). Later experimental follow-ups (Fairweather, Sanders, & Tornatzky, 1974; Tornatzky et al., 1980) indicated that with proper implementation the Lodge provided a better track record in terms of recidivism and employment than most other forms of community aftercare. Persons who were members of the Lodge remained in the community much longer than did their matched pairs in other community treatment programs. The Lodge residents were more frequently employed, and the cost of operating the program was less than that of other comparable programs. When a Lodge became totally self-governed by the ex-patient group, it could also become completely self-supporting by virtue of the employment income generated, a further measure of cost-effectiveness.

In the 1974 study reported by Fairweather and his associates, all 255 state mental hospitals in the United States were approached about adopting the Lodge program, and 25 ultimately did so. Many other adaptations of the Lodge idea doubtless occurred because of the wide visibility this effort received during the 1960s and 1970s, but these are difficult to document. In this same study, three factors were found to be most significantly associated with successful adoption of the Lodge model: (a) aggressively active presentation of the new idea, as through dem-

onstration projects rather than written materials; (b) small change-oriented groups within the organization, fortified with the assistance of outside change agents; and (c) implementation in organizations where many people made the decisions rather than only a few at the top.

Backer and Glaser (1979c) studied the long-term fate of two mental health program innovations: Goal Attainment Scaling (Glaser & Backer, 1980) and the FLP (Backer, 1979; Backer & Glaser, 1979a, 1979b). Critical factors that related to FLP durability in this retrospective study included (a) willingness and ability of FLP operators to make major modifications in their structures and operations; (b) ongoing support, especially during periods of crisis, of one or two key individuals responsible for the FLP; and (c) technical assistance and consultation from the developers of the Lodge concept, both in initial implementation and in adapting to crisis circumstances and ongoing shifts in community and patient population. Support from the local community, although desirable, did not appear essential to long-term success.

Characteristics of Effective Dissemination

The three case examples presented here suggest six generalizations about effective dissemination and adoption of psychosocial or psychotherapeutic interventions.

1. Interpersonal contact is almost always an essential component of the utilization process; as mentioned, this variable is found important in most studies of innovation adoption. In particular, the three case examples all point to the importance of contact with credible professional peers as an aid to successful adoption.

2. Outside consultation on the adoption process and especially on the psychological and administrative ramifications of the change that adoption will involve was critical to success in all three instances. In reviewing a 6-year study of consultation in the human services, Glaser and Backer (1985) concluded that technical assistance on the process of change itself (overcoming psychological resistances and dealing with unintended side effects of the innovation) is probably the most critical consultation an outside expert can offer, as seen especially in the Lodge and TFM cases.

3. Organizational support for the innovation appeared to be critical for success in all three case examples, consistent with the importance of support from the top found in many studies of organizational change (Barber, Barber, & Clark, 1983; Glaser et al., 1983; Liberman, 1979).

4. Persistent championship of the innovation by one or more adopting agency staff also appeared to be a critical factor in two of the three cases, again consistent with the larger literature on adoption of innovations.

5. Although there is controversy on this point, two of the three cases suggest that adaptability of the innovation may be important for wider successful adoption. This factor often is cited in the literature on knowledge transfer as facilitative (Glaser et al., 1983). Sometimes the key to adaptation may be separating the innovation into component parts and promoting only those elements that fit congruently with an adopting agency (Liberman & Phipps, in press).

6. Availability of credible evidence of success for the innovative program was clearly important to the spread of the TFM. Pub-

lication of research findings on adoption might also have been a factor in subsequent adoptions of the other two innovations, and certainly all three presented evidence of successful use in their active-directive dissemination training program. Support for this factor in the literature on innovation adoption is mixed, however, because new programs often are widely adopted without credible data on their effectiveness.

These factors seem to hold true for innovations in general and for psychosocial interventions in particular. Each factor presents special challenges in the psychosocial arena, however. Interpersonal contact may be especially difficult to achieve with psychosocial interventions because many of these innovations are developed by practitioners who do not often travel from their home bases, are preoccupied with running their own programs, and have no funding for providing assistance to other potential adopters. Backer and Levine (in press) showed in a study of psychosocial rehabilitation programs that consultation by and among these programs is erratic because practitioners have never developed consulting skills and because consultation to other programs might be seen as an onerous burden to those struggling to maintain their own programs.

And there is evidence that many developers of psychosocial interventions are adamant about faithful reproduction of their inventions under the most rigorous conditions. Fairweather and his associates, for example, have argued strongly for accurate adoption of the FLP as essential to program success (Calsyn, Tornatzky, & Dittmar, 1977), despite evidence that long-term adoptions of this psychosocial intervention have allowed program modification over time (Backer & Glaser, 1979a).

Requirements for promoting the adoption of complex psychosocial programs generally may be greater than those for effective dissemination of psychotherapies. For ensuring the adoption of psychosocial programs, there are few shortcuts to well-funded training projects that support innovators and change agents either making site visits to work intensively with institutional staff or having a host demonstration program that enables visitors to spend extended training periods on site. The latter approach to dissemination has been effectively used by the psychosocial clubhouse model typified by Fountain House (J. Schmitt, personal communication, May 24, 1985). On the other hand, psychotherapies can be more easily disseminated through manuals, videotapes, audiotapes, and personal influences on a one-to-one basis.

There are, however, organizational factors that may facilitate the adoption of innovations by institutional or agency staff more than by solo practitioners. For example, it is difficult for private practitioners to take time off from their caseloads to attend workshops or conferences. Each hour away from direct patient care costs the private practitioner money. In contrast, agency staff are allotted time and funds to participate in continuing education activities. Similarly, utilization review and quality assurance programs in place in institutions or mental health centers can reinforce fidelity and integrity of utilization of innovations, factors not present in private offices.

Contextual factors favoring adoption of innovations by solo practitioners are (a) the licensing laws that consist of regulations and contingencies that apply more to practitioners in solo practice than to those protected by an agency and (b) intrinsic motivation by private practitioners for learning new methods that is not found in agency staff who may rebel against supervisors who set

up the training experience. Moreover, the competitive climate in the private sector encourages innovation seeking more than do the status quo values inherent in most agencies.

With the exception of organizational support and internal championship for an innovation, the other four characteristics of effective dissemination that were previously described might hold equally well for psychotherapies as for more comprehensive psychosocial programs.

These findings have implications for both funding and policy-making bodies concerned with psychosocial interventions and for professional societies whose members are involved in this area of work. First, it seems clear that further support for innovation transfer activities would be useful, encouraging both opportunities for interpersonal contact between innovation developers and adopters and the development of consultation skills by innovators. Second, further efforts to look at long-term consequences of adoption for psychosocial interventions, focusing on modifications that have occurred and highly successful adoption strategies (e.g., the use of outside consultation), would help to promote credibility of the approaches that seem to work the best in getting dissemination and adoption to occur.

Third, additional strategies for promoting dissemination and adoption can be investigated.

1. Backer (in press) and his associates are investigating the usefulness of networking as a strategy for promoting knowledge transfer in rehabilitation services. The current emphases of the program are on school-to-work transition programs for disabled high school students and computer applications in rehabilitation organizations. Many of the transition programs have strong psychosocial components. Preliminary evidence suggests that setting up informal networks of professionals and consumers having common interests in some service area or problem can make it far easier to get information out and get it used. Interpersonal contact and consultation are facilitated, of course, and there is an opportunity for mutual problem solving that is difficult to achieve in any other way.

2. The authors and their colleagues have pioneered in the use of videotapes to convey information on psychosocial interventions. Psychosocial clubs, job-seeking skills for ex-mental patients, and family management skills are among the topics these videotapes have covered. Videotapes also have been produced directly for consumer and advocacy groups, helping to generate demand for psychosocial interventions at the grass-roots level. Videotapes can be used independently or in a workshop format with print materials and interpersonal presentations.

3. Technological innovations such as computer clearinghouses for psychosocial information are starting to be developed. For example, the Self-Help Clearinghouse of the University of California at Los Angeles is assembling information on many hundreds of self-help organizations throughout the state, many of which include a psychosocial component. Professionals or consumers wanting to make contact with such groups can easily do so through the center's computerized search and referral services.

4. Publications, such as those offered by commercial publishers and professional organizations (e.g., the American Psychological Association and the American Psychiatric Association), are attempting to provide timely information on psychosocial interventions that are geared to both practitioners and researchers.

Future utilization programs may incorporate these and other strategies in a more comprehensive approach, such as the research development and utilization units proposed by Liberman and Phipps (in press). These units would (a) identify existing exemplary innovations, (b) work with clinicians and service settings to develop other needed new procedures and techniques, (c) fashion learning modules to convey innovations, (d) assist clinicians in adoption efforts through workshops and other modes, (e) evaluate the impact of innovations conveyed, and (f) establish model or demonstration programs in which new strategies or techniques could be tested in vivo. Such utilization units may be sponsored by state or federal funding agencies in the mental health and related human services.

These recent advances in utilization techniques all have clear implications for psychotherapists in practice, as well. For example, professional societies and local networking organizations play an important part in the professional lives of many psychotherapists by helping to provide interpersonal support and by combating isolation, lack of intellectual stimulation, and other aspects of the four-wall syndrome that are often felt to exacerbate burnout in practicing psychotherapists. Networking thus may be welcomed even by those not actively looking for innovative practices; however, new ideas and techniques are nonetheless likelier to be disseminated under such circumstances.

Videotapes and other audiovisual materials are becoming more accessible to psychotherapists if for no other reason than the video revolution that now has videotape players in one out of five American homes. Ads now appear regularly in professional journals for continuing education products in video format. Increased accessibility to this equipment in both home and office settings makes it easier to reach professionals in this way.

Similarly, an increasing number of psychotherapists in practice are purchasing microcomputers, often used for practice management, bookkeeping, report generation, psychological testing, and other purposes. This both increases willingness to use other computer resources such as the previously mentioned clearinghouses and also allows direct computer access to some of the more advanced resources.

An increasing number of print resources are being addressed specifically to the needs of psychotherapists to remain updated on innovations in their field. These include annual volumes such as the *Innovations in Clinical Practice* series, published by the Professional Resource Exchange; and the *Resource Book for Psychiatric Rehabilitation*, published by the National Institute of Handicapped Research and the University of California at Los Angeles.

The key challenge for the future is to provide researchers with the needed skills and information to be able to design research studies that are more likely to lead to utilization. This means considering the potential use of research findings at every phase of the work, from designing the research protocol to writing up findings. Researchers who are attuned to the need for application are more likely to study questions that have practical interest for practitioners and treatment facilities. And resources can then be provided for the development of practitioner-oriented dissemination vehicles.

Professional societies also can play a role in this needed development, in particular by encouraging researchers along the lines previously mentioned. Proposals for conference events and article manuscripts for scholarly journals can be accepted par-

tially on the basis of utilization-related criteria. And practitioners can be encouraged to become more actively involved in publication and conference activities so that they can learn about psychosocial research findings and can have the opportunity to present innovations developed in the field. Such sharing of resources and information outlets can promote wider and more effective utilization of the important psychosocial interventions that help persons with various mental disorders recover functioning and lead lives of enhanced quality.

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