Review of Literature
A mental or behavioural disorder is characterized by a disturbance in thinking, mood, or behaviour, which is out of keeping with cultural beliefs and norms. In most cases the symptoms are associated with distress and interference with personal functions.

Mental disorders produce symptoms that sufferers or those close to them notice. These may include:

- physical symptoms (e.g. aches and sleep disturbance)
- emotional symptoms (e.g. feeling sad, scared, or anxious)
- cognitive symptoms (e.g. difficulty thinking clearly, abnormal beliefs, memory disturbance)
- behavioural symptoms (e.g. behaving in an aggressive manner, inability to perform routine daily functions, excessive use of substances)
- perceptual symptoms (e.g. seeing or hearing things that others cannot).

Mental illnesses affect the functioning and thinking processes of the individual, greatly diminishing his or her social role and productivity in the community. In addition, because mental illnesses are disabling and last for many years, they take a tremendous toll on the emotional
and socio-economic capabilities of relatives who care for the patient, especially when the health system is unable to offer treatment and support at an early stage. Some of the specific economic and social costs include:

- lost production from premature deaths caused by suicide (generally equivalent to, and in some countries greater, than deaths from road traffic accidents);
- lost production from people with mental illness who are unable to work, in the short, medium or long term;
- lost productivity from family members caring for the mentally-ill person;
- reduced productivity from people being ill while at work;
- cost of accidents by people who are psychologically disturbed, especially dangerous in people like train drivers, airline pilots, factory workers;
- supporting dependents of the mentally ill person;
- direct and indirect financial costs for families caring for the mentally-ill person;
- unemployment, alienation, and crime in young people whose childhood problems, e.g., depression, behaviour disorder, were
not sufficiently well addressed for them to benefit fully from the education available;

- poor cognitive development in the children of mentally ill parents, and the
- emotional burden and diminished quality of life for family members.

Rehabilitation for mental health, also known as ‘psychiatric rehabilitation’, is a set of targeted interventions that is intended to prevent further, or reduce disability that is associated with mental health problems. It is a process of assisting people to acquire and to use the strengths and skills, supports, and resources necessary for successful and satisfying living, learning, and working in the environments of their choice. Rehabilitation also plays an important role in reducing the despair and emotional suffering that often are associated with the early onset, chronicity and recurrent nature of mental illness, and its impact on families and carers. ‘Our primary objective is to improve the quality of life for people with chronic and complex health conditions, their families and carers’. NSW
Anti-psychotic medications have been repeatedly shown to be effective for the treatment of acute psychosis and the prevention of relapse for persons suffering from schizophrenia. Novel anti-psychotics with fewer neuromotoric side effects are a clear therapeutic advancement. However, with the exception of clozapine for treatment-resistant psychosis, the newer agents have not been clearly shown to have clinical advantages in other domains of outcome, such as social adjustment and obtaining competitive employment. Thus, the majority of persons with schizophrenia, even those who benefit from medication, continue to have disabling residual symptoms and impaired social functioning and will most likely
experience a relapse despite medication adherence. Hence, it is
necessary to integrate empirically validated psychosocial treatments
into the standard of care for this population.

In this article, I will attempt to present an updated review of the
various forms of psychosocial interventions that have been studied in
methodologically sound clinical trials over the past few years around
the globe.

Randomized controlled trials currently assess relevant outcomes in
patients with schizophrenia beyond the traditional measures of
psychopathology and rates of rehospitalization. Other domains of
outcomes include cognitive performance, social skills and adjustment,
overall quality of life, competitive employment, and comorbid
substance abuse as well as less usual clinical measures such as
negative, depressive, and deficit symptoms. As I describe different
psychosocial interventions, I will define the primary targeted outcome
measure addressed in each study.

Research into psychosocial treatment strategies exists at varying
stages of development, some modalities having been studied more
often and with better-designed randomized controlled trials. The
majority of the randomized controlled trials reviewed assumed that optimal antipsychotic medication management was provided. From the available literature, whenever possible, I will address the following questions. What is the efficacy of the specific intervention for the primary outcome measure? For secondary outcomes? Is a particular kind of psychosocial intervention more efficacious for certain outcomes?

Because family therapy is the most extensively studied psychosocial intervention, a reasonable attempt can be made to address most of these questions for this modality. For other forms of treatment, some of the questions may not be addressed because of limited data.

Early intervention at the first sign of prodromal symptoms can prevent full relapse in people with schizophrenia, said Marvin Herz, M.D., in a lecture at APA’s 2003 Institute on Psychiatric Services in Boston in October.

Herz was the 2003 recipient of the American Psychiatric Foundation’s Alexander Gralnick, M.D., Award for Research in Schizophrenia, and his lecture was presented in connection with the award.
While the costs of outpatient intervention during the prodromal phase are not insignificant, the strategy has been shown to be cost-effective when considering overall costs—especially the costs of rehospitalization, which are avoided through prevention.

Herz, 2003 whose groundbreaking research on prodromal symptoms of relapse has informed APA's treatment guideline for schizophrenia, provided an overview of prevention research in the last 20 years and outlined the problems and possibilities of early intervention.

The strategies he described entail the involvement of the family and the patient in recognizing early warning signs of relapse and an assertive outreach approach by the outpatient treatment team. He added that British psychiatrists and researchers have found success using cognitive-behavioral therapy to reduce the disabling effects of delusional thinking that may appear in the prodromal phase.

"We advocate continuing and ongoing collaboration with the family," said Herz, a professor of psychiatry at the University of Miami School of Medicine and chair of APA's work group that developed a practice guideline on the treatment of schizophrenia.
"We think these early-intervention strategies should be routine practice in outpatient services. And we need more research to refine and improve techniques of recognizing early warning signs and [to refine and improve] treatment strategies.

The notion of prevention—especially primary prevention—of a costly, extraordinarily disabling disease for which there is no cure is a tantalizing one."

As early as 1980, Herz and colleagues performed retrospective and prospective studies of patients with schizophrenia to determine the kinds of symptoms they experienced immediately prior to the onset of disease.

Symptoms that were identified include trouble sleeping and concentrating, depression, a feeling of being overwhelmed, tension, nervousness, and worry about impending doom.

Also prominent during the prodromal phase was the appearance of idiosyncratic behaviors: one patient might begin to pace obsessively while alone in his room; another patient might dress bizarrely.
In a study by Herz and colleagues published in the March 2000 *Archives of General Psychiatry*, 82 outpatients with schizophrenia or schizoaffective disorder diagnosed with *DSM-III-R* criteria were randomly assigned to receive either a program for prevention of relapse (experimental group, 41 subjects) or treatment as usual (control group, 41 subjects). Patients in both groups were prescribed standard doses of maintenance antipsychotic medication.

The program for prevention of relapse consisted of a combination of psycho-education, active monitoring for prodromal symptoms with clinical intervention when such symptoms occurred, weekly group therapy for patients, and multifamily groups. The treatment-as-usual group received biweekly individual supportive therapy and medication management.

After 18 months, 17 percent of the patients in the experimental group had experienced relapse, compared with 34 percent in the control group. Twenty-two percent of the experimental group had to be rehospitalized, compared with 39 percent in the treatment-as-usual group.
During his lecture at the institute, Herz said the ambulatory care costs in the experimental group were higher—as expected—but the overall costs were lower than those of the treatment-as-usual group.

Brown and Rutter, 1999, and Butzlaff and Hooley, 2000 have recently supported the concept, that schizophrenia patients who returned to families that were originally rated as being high in expressed emotion (an empirically derived index of criticism, over involvement, and hostility) were more likely to experience a relapse during the following year despite adequate pharmacotherapy. Although high expressed emotion environments are not specific to families of patients with schizophrenia, the expressed emotion literature provided the background for most of the initial randomized controlled trials of family therapy that attempted to reduce psychotic relapse.

A large body of evidence has demonstrated the superiority of a variety of family therapy interventions that employ behavioral and psycho-educational techniques over customary outpatient care or individual therapy in terms of the primary outcome measures of psychotic relapse and rehospitalization. On average, relapse rates among schizophrenic patients whose treatment involves family
therapy are approximately 24% as compared to about 64% among those who receive routine treatment. Additionally, the beneficial effects of long-term family interventions (i.e., greater than 9 months) appear to be quite durable and may be maintained for up to 2 years or longer.

However, the few studies published since the 1996 and reviewed by Penn and Mueser, 1996 are remarkable for their lack of relapse prevention findings. Linszen and colleagues, 1996 studied adolescent patients early in their illness and found a very low (16%–20%) overall relapse rate at 1 year, with no advantage for the patients whose treatment included family therapy. It is worth noting that the comparison intervention involved a fairly intensive individual treatment approach rather than "standard" services. The personal therapy trial of Hogarty et al., 1997 included a family therapy arm for patients residing with their families. Unlike the subjects in the previous study, these subjects were mostly chronic patients. Family therapy offered no advantage over supportive therapy in preventing relapse (the overall relapse rate was only 29% at 3 years). The supportive therapy group received biweekly sessions, minimum effective medication dosage, and case management—an enriched
package of care compared to most community standards. These studies illustrate that if the base relapse rate is low (either because of the population selected or the use of a comprehensive control care program), the potential advantages of family therapy may not be realized.

Considerable attention has focused on the reduction of expressed emotion levels as an active mediator for the efficacy of family therapy interventions. In studies that selected families with high levels of expressed emotion, patients who did not experience a relapse were more likely to reside in a family household in which the expressed emotion environment had changed from high to low during the treatment. However, the number of subjects/families reassessed was very small, and there were no reports of a clear correlation between relapse and reductions in expressed emotion levels. Because it is possible that a high level of expressed emotion may be a consequence of the relapse itself (or of patients being more severely ill), proving a causal role of expressed emotion for psychotic relapse requires a controlled study that includes interim expressed emotion assessments. Only Tarrier et al., 1988 assessed expressed emotion levels at baseline, 4.5 months, and 9 months. Although they found
that the level of expressed emotion changed from high to low in the relatives in the experimental treatment, similar changes occurred for the control condition. They concluded that "...this latter result would not be expected if expressed emotion is a stable dimension with a simple causal role in relapse"

**Social Skills Training**

Social skills are those "...specific response capabilities necessary for effective social performance". Social skills training uses learning theory principles to improve social functioning by working with patients to remediate problems in activities of daily living, employment, leisure, and relationships. It is hoped that the improved skills (primary outcome) will generalize to better community functioning and have a downstream effect on relapse and psychopathology. Following the framework described by Bellack and Mueser, 1993 there are three forms of social skills training: the basic model, the social problem-solving model, and the cognitive remediation model.

In the basic model, complex social repertoires are broken down into simpler steps, subjected to corrective learning, practiced through role-
playing, and applied in natural settings. The social problem-solving model focuses on improving impairments in information processing that are assumed to be the cause of social skills deficits. The model targets domains needing changes including medication and symptom management, recreation, basic conversation, and self-care. Each domain is taught as part of a module, with the purpose of correcting deficits in receptive, processing, and sending skills. In the cognitive remediation model, the corrective learning process begins by targeting more fundamental cognitive impairments, like attention or planning. The assumption is that if the underlying cognitive impairment can be improved, this learning will be transferred to support more complex cognitive processes, and the traditional social skills models can be better learned and generalized in the community.

The basic model has been repeatedly demonstrated to have an effect on improving specific social skills, and this learning is maintained for up to 12 months. However, the outcomes measured in most of these studies closely resembled those assessed in the skills training setting, and there is little evidence that this learning translates into improved social competence in the community. In the most extensive study of the basic social skills training model, Hogarty et al., failed to
demonstrate a significant impact on social adjustment after 2 years of treatment, despite a very intensive intervention (1 hour weekly for 21 months plus medication compared to medication only). The lack of generalization in this study and others that used the basic model has been a significant limitation.

The social problem-solving model has also demonstrated an effect on skill enhancement. Two studies have examined the long-term impact of this model. Marder et al., 1996 assigned schizophrenic outpatients to problem-solving group therapy or supportive group therapy for 2 years. Both groups received the same intensity, frequency, and overall length of intervention (90 minutes twice weekly for the first 6 months, then weekly). There was a small but statistically significant advantage for the problem-solving intervention in two out of six measures of social adjustment after 2 years. Thus, the experimental treatment had modest benefits.

Liberman et al., 1998 compared the problem-solving group model to equally intensive occupational therapy. Subjects received the psychosocial interventions for 6 months (3 hours a day, four times a week) and were followed for 2 years. The experimental condition had
a significant effect in three out of 10 independent living skills (more personal possessions, more skilled food preparation, and improved money management) that were maintained up to 18 months after completing the intervention. The authors posited that the effect on independent living skills suggests generalization of skills learned and attributed this effect to the fact that all subjects were assigned a case manager who actively encouraged them to apply the skills learned in the community.

Although initial studies of the cognitive remediation model demonstrated some improvement of elementary cognitive processes, studies that have evaluated more complex cognitive and social skills have provided mixed results. Hodel and Brenner, 1992 failed to find in a program that started with cognitive remediation before skills training (N=10) the predicted advantage on social adjustment over a program that followed the opposite order (N=11). Wykes et al., 1999 found that 17 patients treated with an intensive cognitive remediation approach (1-hour daily sessions for up to 3 months) that targeted executive functioning deficits showed improvement on three of 12 cognitive measures as compared to 16 patients who received a comparison intervention (occupational therapy) matched for therapist
contact and treatment duration. The cognitive remediation intervention did not result in any direct improvements in social functioning or symptoms.

A recent report by Spaulding et al., 1999 from their large study (total N=90) comparing cognitive remediation plus the social problem-solving modules with equally intensive supportive therapy plus the modules presents a more hopeful outlook. Subjects were very ill, mostly with schizophrenia, and were referred for long-term hospital treatment because of inability to sustain community living. The experimental and control interventions were matched for intensity (3 hours per week for 6 months). The cognitive remediation group did better in two out of four measures of social competence and demonstrated better acquisition of skills for two out of four of the social problem-solving modules. This study suggests that the cognitive remediation approach can enhance response to more standard skills training in very ill, institutionalized patients.

The study by Hogarty et al., 1997 is the only large social skills training study to find an effect on relapse prevention (46% for social skills training versus 30% for the control condition after 1 year), but there is
an important caveat to this finding: the relapse prevention effect was lost in the second year, 3 months after the social skills training was reduced from weekly to biweekly. Thus, it is not clear whether the effect on relapse was due to the higher patient contact rather than a specific advantage of social skills training. Two studies that used the social problem-solving model and controlled for the nonspecific effects of patient contact failed to find an effect on relapse prevention, which suggests that some nonspecific aspects of social skills training (e.g., improved symptom monitoring) may reduce relapse rates. For other outcomes such as psychopathology and employment there have been no consistent effects reported for any of the social skills training modalities.

**Vocational Rehabilitation**

Competitive employment (holding a regular community job as opposed to being employed in a program overseen by a rehabilitation agency) has been estimated at less than 20% for severely mentally ill persons and is probably lower for patients with schizophrenia. In an effort to keep patients as functional and autonomous as possible in the community, various programs have been implemented to help
patients find jobs and maintain them. Supported employment programs, the most recent approach to enhancing outcomes beyond those associated with traditional vocational rehabilitation (like transitional or sheltered employment), aims to improve opportunities for competitive employment.

The implementation of supported employment programs differs along a number of dimensions. However, several common components across models may be identified, including a goal of permanent competitive employment, minimal screening for employability, avoidance of pre-occupational training, individualized placement (i.e., not enclaves or mobile work crews), time-unlimited support, and consideration of client preferences.

They identified three randomized controlled trials for supported employment programs that had competitive employment as the primary targeted outcome. The results were consistent in demonstrating significant advantages for supported employment programs over control interventions. The unweighted mean among patients in supported employment programs for obtaining competitive employment was 65% (range=56%–78%), whereas the
corresponding rate for patients in the control conditions was 26% (range=9%-40%). Thus, in contrast to traditional vocational-rehabilitation approaches, these results provide encouraging evidence for the efficacy of supported employment programs in terms of increasing rates of competitive employment.

These positive results must be interpreted in light of the small number of trials that have been conducted and a number of methodological limitations (described in detail by Bond et al., 1997). Retention is a particularly important issue to consider, since dropout rates over 40% are not uncommon. Although supported employment programs appear to be efficacious in helping patients attain entry-level positions, there are no data to evaluate whether supported employment programs confer longer-term benefits for patients who may be capable of progressing beyond these positions. For patients who have poor work histories and limited pre-morbid skills (perhaps the majority of persons with schizophrenia), attainment of entry-level positions may be a reasonable outcome.

Supportive employment programs do not appear to result in benefits for non-vocational outcomes. For example, despite the belief that
employment may produce such secondary benefits as improved self-esteem, improved quality of life, and reductions of symptoms and relapses, the studies reviewed provide little to no evidence to support these assumptions. However, it is possible that employment per se, apart from the vocational rehabilitation strategy implemented, could lead to improvement in other outcomes.

Drake et al., 1996 compared two types of supported employment interventions, one with early placement plus integration of vocational and mental health services (interpersonal placement and support) and the other with initial training and later placement (and no integration of services). The interpersonal placement and support group achieved higher rates of competitive employment, but it is not clear whether the effect was due to early placement or integration of services.

**Cognitive Behaviour Therapy**

Over the past decade, there has been a growing interest in applying cognitive behavior therapy techniques to persons with schizophrenia, particularly those who continue to experience psychotic symptoms despite optimal pharmacological treatment. The principal aims of
cognitive behavior therapy for medication-resistant psychosis are to reduce the intensity of delusions and hallucinations (and the related distress) and promote active participation of the individual in reducing the risk of relapse and levels of social disability. Interventions focus on rationally exploring the subjective nature of the psychotic symptoms, challenging the evidence for these, and subjecting such beliefs and experiences to reality testing.

We identified five randomized controlled trials of cognitive behavior therapy for the treatment of psychotic symptoms as compared to standard or control treatment in patients with chronic psychoses. For four of these studies, a reduction in delusions and hallucinations was the primary targeted outcome; one trial targeted reduced rehospitalization rates.

Three studies examined the effects of cognitive behavior therapy on medication-resistant psychotic symptoms in schizophrenic outpatients and included follow-ups of up to 1 year post treatment. Kuipers et al., 1997 found that patients receiving cognitive behavior therapy demonstrated a significant reduction in overall symptoms as
compared to standard treatment alone but did not find a specific reduction in psychotic symptoms.

Tarrier et al., 1998 found a reduction of delusions and hallucinations with cognitive behavior therapy compared to supportive counseling (of equal intensity) and routine care alone. The effects were clinically meaningful: 11 out of 33 of the patients treated with cognitive behavior therapy had reductions in delusions and hallucinations of at least 50% (compared to four out of 26 subjects who received supportive counseling). A particular effort was made in this study to ensure that symptoms were rated blindly. The advantage for cognitive behavior therapy was maintained at 12-month follow-up. A methodologically rigorous study by Sensky et al., 2000 found that patients treated with cognitive behavior therapy or a befriending intervention (of equal intensity) plus routine care both experienced a reduction of psychotic symptoms following 9 months of treatment. At the end of treatment, there were no advantages for cognitive behavior therapy. However, at 9-month follow-up the treatment gains were sustained in the cognitive behavior therapy group but were not in the comparison condition. These studies suggest that the therapeutic
benefit of cognitive behavior therapy is not simply attributable to nonspecific benefits of a psychological intervention.

In acutely psychotic inpatients, Drury et al., 1996 found that cognitive behavior therapy adjunctive to antipsychotic medication resulted in a significantly faster and more complete recovery from the psychotic episode. At 9-month follow-up, 95% of the patients in the cognitive behavior therapy group reported no or only minor hallucinations or delusions as compared to 44% of patients in the control condition. A limitation of this study was that the raters of psychopathology also provided the experimental treatment.

Buchkremer et al., 1997 compared four programs of care (two that included cognitive behavior therapy) to routine care. The interventions were delivered over 8 months and were assessed after 1 and 2 years of follow-up. The predicted reduction in re-hospitalizations with cognitive behavior therapy was not found, but the group that received the most intensive intervention (cognitive behavior therapy plus individual and family psycho-educational psychotherapy) showed a trend toward fewer hospitalizations. In
addition, cognitive behavior therapy failed to demonstrate an effect on psychotic symptoms.

Overall, the few available randomized controlled trials provide some preliminary evidence for the efficacy of cognitive behavior therapy in reducing delusions and hallucinations in medication-resistant patients and for its use as a complement to pharmacotherapy in acute psychosis.

Cognitive behavior therapy failed to improve social functioning or relapse rates, both of which have been targeted outcomes in medication-resistant patients. Studies that have reported negative symptom effects have generally not found significant improvements associated with cognitive behavior therapy. However, the recent study by Sensky et al., 2000 reported improvements in negative and depressive symptoms that were sustained up to 9 months following completion of treatment. A brief cognitive behavior therapy intervention based on motivational interviewing techniques that targeted compliance with antipsychotic medication showed significant improvements in compliance and patient attitudes toward drug treatment and insight into their illness as compared to standard
treatment. However, the effects of this intervention were not translated into improvements in social functioning or symptoms.

Only one study has compared two forms of cognitive behavior therapy for medication-resistant psychotic symptoms. Tarrier et al., 1993 found that coping strategy enhancement or problem-solving interventions both led to targeted reductions in psychotic symptoms, with no between-group differences. The lack of a no-treatment group limits conclusions that may be drawn regarding "active ingredients."

**Individual Therapy**

Before the 1960s, many considered individual psychoanalytically oriented therapy the optimal treatment for schizophrenia. Following the negative findings in the landmark studies of May et al., 1987 and Gunderson et al., 1984 psychoanalytically oriented individual psychotherapy for most patients with schizophrenia has been practically eliminated in the United States. Only recently has a different form of intensive individual treatment been examined.

Hogarty et al., 1997 compared individual personal therapy for schizophrenia to family therapy, combined treatment, and supportive
therapy in a 3-year trial. Personal therapy was conducted weekly (for 30 to 45 minutes) following an incremental approach individualized for the patients' stage of recovery: the initial phase focused on the relationship between stress and symptoms; the intermediate phase emphasized learning to use relaxation and cognitive reframing techniques when stressed; the advanced phase (which generally started 18 months into treatment) focused on seeking social and vocational initiatives in the community and applying what was learned in personal therapy.

For the primary outcome measure of relapse prevention, personal therapy was no different than the other conditions. However, the personal therapy group was clearly favored in a composite measure of social adjustment (with an effect size that was over twice as large as that seen with non-personal-therapy), with the greatest differential improvement occurring in the last 2 years. Adjustment data were derived from various sources: patient interview, therapist assessments, and relatives' perception, which argues for its validity. Limitations were that 40% of the patients assigned to personal therapy did not move on to the advanced phase of the treatment, and adjustment ratings were not blind to treatment conditions.
Illness management is a broad set of strategies designed to help individuals with serious mental illness collaborate with professionals, reduce their susceptibility to the illness, and cope effectively with their symptoms. Recovery occurs when people with mental illness discover, or rediscover, their strengths and abilities for pursuing personal goals and develop a sense of identity that allows them to grow beyond their mental illness. The authors discuss the concept of recovery from psychiatric disorders and then review research on professional-based programs for helping people manage their mental illness. Research on illness management for persons with severe mental illness, including 40 randomized controlled studies, indicates that psycho-education improves people's knowledge of mental illness; that behavioral tailoring helps people take medication as prescribed; that relapse prevention programs reduce symptom relapses and re-hospitalizations; and that coping skills training using cognitive-behavioral techniques reduces the severity and distress of persistent
symptoms. The authors discuss the implementation and dissemination of illness management programs from the perspectives of mental health administrators, program directors, people with a psychiatric illness, and family members.

Requirements for Multidisciplinary Teamwork in Psychiatric Rehabilitation, Robert Paul Liberman et al, 1998

Psychiatric rehabilitation by its very nature is multidisciplinary because of the many competencies required for its implementation. In promoting optimal levels of recovery from schizophrenia and other disabling mental disorders, teams must combine the expert contributions of professionals and paraprofessionals who can individualize a comprehensive array of evidence-based services with competency, consistency, continuity, coordination, collaboration, and fidelity. The authors describe the properties and functions of the multidisciplinary team and key attributes of effective teams. The importance of teams' involving clients, their relatives, and other supporters in setting personally relevant life goals is emphasized. The authors provide examples of the challenges posed by the need to
individualize services and of the ways in which barriers to communication and coordination can be overcome. The roles of the various team members are described, including leadership roles and the unique role of the psychiatrist, in the context of newly emerging, evidence-based treatments for psychiatric rehabilitation.

*Community mental health team management in severe mental illness: a systematic review*, Shaeda Simmonds et al, 2002

**Background** Community mental health teams are now generally recommended for the management of severe mental illness but a comparative evaluation of their effectiveness is lacking.

**Aims** To assess the benefits of community mental health team management in severe mental illness.

**Method** A systematic review was conducted of community mental health team management compared with other standard approaches.

**Results** Community mental health team management is associated with fewer deaths by suicide and in suspicious circumstances (odds ratio=0.32, 95% CI 0.09-1.12), less dissatisfaction with care (odds ratio=0.34, 95% CI 0.2-0.59) and fewer drop-outs (odds ratio=0.61,
95% CI 0.45-0.83). Duration of in-patient psychiatric treatment is shorter with community team management and costs of care are less, but there are no gains in clinical symptomatology or social functioning.

Conclusions Community mental health team management is superior to standard care in promoting greater acceptance of treatment, and may also reduce hospital admission and avoid deaths by suicide. This model of care is effective and deserves encouragement.

The Psychosocial Treatment of Schizophrenia: An Update, Juan R. Bustillo et al., 1999

The authors sought to update the randomized controlled trial literature of psychosocial treatments for schizophrenia using computerized literature searches to identify various psychosocial interventions, with emphasis on studies published since a previous review of psychosocial treatments for schizophrenia in 1996. The results showed that family therapy and assertive community treatment have clear effects on the prevention of psychotic relapse and rehospitalization. However, these treatments have no consistent effects on other outcome measures (e.g., pervasive positive and
negative symptoms, overall social functioning, and ability to obtain competitive employment). Social skills training improves social skills but has no clear effects on relapse prevention, psychopathology, or employment status. Supportive employment programs that use the place-and-train vocational model have important effects on obtaining competitive employment. Some studies have shown improvements in delusions and hallucinations following cognitive behavior therapy. Preliminary research indicates that personal therapy may improve social functioning. In conclusion the authors feel that relatively simple, long-term psycho-educational family therapy should be available to the majority of persons suffering from schizophrenia. Assertive community training programs ought to be offered to patients with frequent relapses and hospitalizations, especially if they have limited family support. Patients with schizophrenia can clearly improve their social competence with social skills training, which may translate into a more adaptive functioning in the community. For patients interested in working, rapid placement with ongoing support offers the best opportunity for maintaining a regular job in the community. Cognitive behavior therapy may benefit the large number of patients who
continue to experience disabling psychotic symptoms despite optimal pharmacological treatment.

**A therapeutic trip**, Dr. Darvin Teljas et al, 1995 (International Journal of Psychosocial Rehabilitation)

Dr. Darvin et al, 1995 undertook a therapeutic trip where they studied the developments in Psychiatric Rehabilitation. The Rehabilitation department of the MHC organized, starting in 1995, a rehabilitation school which provided a series of courses in order to prepare chronic schizophrenics to leave the hospital where they had been admitted for the last average 14 years, and pass to live in new facilities, called Hostels, or Half-Way Houses, being developed in the community. The school provided courses on very basic elements of independent living:

- Personal Hygiene
- Mental Illness and the effects of medication (why it is advisable to continue complying with medication)
- Basic cooking
- Creating and managing a shoe string budget
Applying to other organizations in the community such as the municipality, gas, electric companies, etc.

Finding out about free community resources available and not-generally-known

How to engage oneself in spare time without getting bored

Those courses covered the four basic elements enunciated by Hersen & Bellack, 1993. Some other elements of resocialization were covered by other activities carried out in the ward: Group activities on news read in the newspapers or heard in the radio or television, with the dual purpose of 1) Keeping the patients in contact with the surrounding reality of the external world, and 2) To promote dialogue and communication among the patients; active intervention of the patients in preparing some of the collective activities, like cleaning the ward (there are no cleaning personnel in the ward); preparing religious or national festivities; collective visits to a social club for mentally ill people which functions outside the hospital walls; encouragement of some "normal" social activities which are generally not considered in hospitals, like ordering a pizza on the phone and sharing it with friends.
The day care unit, comprising a doctor, a nurse and a social worker, provides the patients with occupation in the Occupational Therapy department of the MHC or as assistants in the Maintenance and Cleaning department, for a very low salary. Patients are also provided with lunch in the premises of the MHC. This salary, although very low, together with the hot meal provided, assist the patients to square their budgets.

The day-care unit provides placements in the different working areas, including some in the community or in sheltered workshops outside the MHC. It also provides the patients with medical follow-up, including application of injectable medication, social worker services and house visiting when necessary. General medical needs are covered by one of the medical insurance companies existing in the community, which are paid for by a special tax applied to every citizen in Israel.

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Results

The patients effectively took their trip to Turkey. They 23 of them were accompanied by a nurse and two instructors who worked in the hostel with them.

During the trip there were absolutely no incidents, the patients behaved just like anybody else. Some of them, who were flying for the first time in their lives, were slightly apprehensive, but all in all there were no problems. Once in Turkey, they arrived in the hotel,
received their rooms, shared the lives of all the other guests at the hotel, took guided and unguided tours around, with no special difficulties or signs that they were a group of mental patients.

The nurse had taken along great amounts of medication, and was prepared to cope with almost any eventuality, but there was not even need to open the medication case, each patient had been provided with their weekly medication containers, and that was all they needed.

Discussion

From the above mentioned we may conclude that the social impairment of mentally ill people may be overcome, at least partially, by intensive training and dedicated cooperation of the staff.

The work made with this particular group of patients may be divided into three stages: a first stage, accomplished during their period of hospital admission, which enabled them to abandon the hospital and pass to live in the hostel; a second period in which they acclimatized to life in the hostel, and in which they decided that they could do just like anybody else, and decided to take the trip to Turkey; and a third stage in which they prepared this trip.
The first stage, accomplished in the Rehabilitation Department in the hospital, started the process of rehabilitation which would lead the patients to eventually return to the life in the community.
The Indian Scenario

Rehabilitation as seen earlier not only includes the medical and psychosocial treatment but also include ways to foster social interaction, to promote independent living, and to encourage vocational performance (Cook et al. 1996). Unlike past now psychosocial rehabilitation aims to integrate patients back into the community rather than segregating them in separate facilities. The goal of psychiatric rehabilitation is to teach skills and provide community supports so that the individuals with mental disabilities can function in social, vocational, educational and familial roles with the least amount of supervision from the helping professionals. The professionals must involve families in treatment planning and implementation. So rehabilitation is labor intensive and person-to-person venture. The developing countries are having dearth of financial resources, which causes the tremendous difficulties in rehabilitation of the patients. A study of the status of the mental hospitals commissioned by the National Human Rights Commission revealed gross inadequacies in all aspects of care, clinical services and rehabilitation (National Human Right Commission, 1999). Some of the problems (Sheth, H.C. 2005) cited in the study are related to:
1. Irregular follow-up due to financial problems: A survey of an urban community in southern India, served by four state-run general hospitals with psychiatric services and a large psychiatric institution, found that a third of people with schizophrenia had never accessed any treatment (Padmavati et al, 1998). Even after these individuals and their families were offered treatment, a third of them continued in their untreated state (Srinivasan et al, 2001). The processes of rehabilitation start with medication. But due to lack of money they cannot come for regular follow-up. They cannot afford bus-fare or train-fare. Sometimes illness of earning member of families ensures that they don’t even have money to eat, let alone for bus-fare or train-fare. And medicines have to continue for long time or in some cases for the lifetime. This leads to frequent relapses of the illness.

2. Lack of medicines in Government hospitals: Sometimes government institutes in developing countries lacks even the basic medicines. Patient’s condition may be stable on long-term depot preparation (e.g. Fluphenazine Deconate) and suddenly the stock of injection is finished. They cannot purchase the medicine form outside because cost of medicine is high.
3. Difficulties in Vocational Rehabilitation: Sometimes the patients want to come to day care center for vocational training. But due to lack of money, he is unable to do so. Even the governments in the developing countries cannot arrange for the transport because of the lack of the fund, so the patients cannot come regularly. Sometimes patient may manage to have bus fare for attending daycare activities. But the hospitals don’t have the materials for the daycare activities; e.g. patients may be doing tailoring work but there is no stock of the clothes. Even number of the vocational training centers is inadequate. Some private day care centers are there but cost is prohibitive. There are no buyers for the materials produced in rehabilitation center, because most of the time the materials produced by the patients are not as good as the material produced by the professionals. The only buyer is the government, but the governments in the developing countries have limited requirements and limited purchasing capacity.

4. Lack of Job Opportunities: Unemployment and underachievement act as threats to his social status. Compounding this situation, the social security system in India does not consider patients with schizophrenia as its beneficiaries. In India mental illness are not
yet eligible for any welfare measures (Thara et al., 2004). Employment provides not only a monetary recompense but also 'latent' benefits — non-financial gains to the worker which include social identity and status; social contacts and support; a means of structuring and occupying time; activity and involvement; and a sense of personal achievement (Shepherd, 1989). People with mental illness are sensitive to the negative effects of unemployment and the loss of structure, purpose and identity, which it brings (Rowland & Perkins, 1988). Studies show a clear interest in work and employment activities among users of psychiatric services, with up to 90% of users wishing to go into (or back to) work (Grove, 1999). There is a tendency for mental health professionals and others to underestimate the capacities and skills of their clients and to over-estimate the risk to employers (Boardman J, et al. 2003). Satisfactory working life may reduce the need for clinical support, but such support should remain available and be tailored where possible to the constraints of the individual's working life (Secker et al., 2002). Unemployment is associated with physical ill health, including premature death (Wilson & Walker, 1993; Bartley, 1994). Social isolation is often particularly
problematic for people who experience mental health problems, and work is effective in increasing social networks (Boardman J, 2003). Lack of job and ensuing financial crisis causes tremendous stress which cause relapse of symptoms, which in turn lead to difficulty in psychosocial rehabilitation.

5. Hospital as a shelter: In developing countries, where poverty is widespread, many relatives of the patient don’t want to take discharge, even when patients have improved completely. The reason for not taking discharge is they may not be having food, shelter or job. Some relatives are reluctant to take discharge because they fear that patient may relapse at home and they again have to borrow the money to bring patient to the institute. All these things may interfere with rehabilitation, treatment and improvement of patients.

6. Hospital as a dumping site: Many relatives of the patients are not interested in the treatment or rehabilitation of the patients. There main aim is to get patient admitted in institute and get rid of him. Although they are not at all at fault because treatment and rehabilitation of psychiatric patients is always difficult due to frequent exacerbations and relapses of the illness.
7. Expressed emotions and relapse: Brown described five components of expressed emotion (Brown, 1985): emotional overinvolvement, critical comments, hostility, positive remarks and warmth. Sometimes overinvolvement, hostility and criticism within family may worsen patients. Sometimes parents are extremely close to the patient and they fulfill his each and every whims and his unreasonable demands. They may not restrain his undesirable behavior so patient illness may relapse. The Patients in high expressed emotion settings were more likely to relapse (56% compared with 17% for low expressed emotion). Also, there was a high relapse rate (68%) among those in the non-medicated high expressed emotion group, whereas there were no relapses at all in the medicated low expressed emotion group (Leff and Vaughan, 1985).

8. Problems of Hospitalization: We know how damaging many of the traditional practices of the asylum were, even when they had been adopted for the best of motives. The official practices (such as the locking of doors, constant oppressive security, continual counting of people, cutlery, bed linen and so on) were bad enough, but far worse were the unofficial happenings – the beating up, the
garroting, the use of padded cells and ECT as punishments, and the occasional killing (David.H, 1998). But there are problems from patient’s side also due to their inability to adjust in outside world.

9. Social Insensitivity: Many patients when returned to the society, face insults. The society keeps overt as well as covert discrimination with them. They don’t admit them in their friendship circle and other activities. So the patient becomes lonely and isolated. A recent report, based on responses from 556 UK users, shows that 70% have experienced discrimination in some form: 47% in the workplace, 44% from general practitioners and 32% from other health professionals (Mental Health Foundation, 2000).

10. Lack of Staff and Overburdened Staff: The staffs of the hospitals are woefully overburdened in the developing countries. The ratio of staff to patients is rarely in accordance with law and requirement. There are now 37 mental hospitals in the country with a total bed strength of 18,024 (National Human Rights Commission, 1999). The beds are grossly inadequate in comparison to number of patients and population. In the developing country like India the psychiatrists have to manage the average OPD of 70 to 80 patients. Along with managing OPD they also have to do the administration
work and management of staff. Along with this work sometimes there is deputation of psychiatrist at the remote places. All this further explains the sorry state of rehabilitation.

11. The Bureaucratic Hurdles: The delay due to bureaucratic hurdles may slow the processes of rehabilitation. Sometimes due to procedural delay there is delay in procurement of medicines. And patients have to put on a medicine other than he was taking for many years. The patient may worsen on another molecule of medicine due to psychological, social and physiological reasons.

Conclusion: To sum up the matter, mental illnesses would assume gigantic proportion in coming years. And governments must deploy more resources to tackle the illnesses and rehabilitate the patients. The mental illnesses not only affect patients but also his kith and kin in financial and social ways. Mental Health Care in India, as elsewhere in the world is largely dependant on mental hospitals and general hospital psychiatric units. The day care centers, halfway homes or support groups are mainly run by non-government organizations which are mostly located in urban areas and are not evenly distributed throughout the country. Hence they cater to a
select population. Besides daycare centers or residential facilities are much less in number than mental hospitals or general hospital psychiatry units. Those which are there are oriented towards work, of a subcontract nature, acting as sheltered workshop, geared towards keeping the mentally ill away from the family for some part of the day. Most of the time they never succeed in putting the person back into the community successfully. Some of them do concentrate on social skills training and social functioning. Residential facilities provide more of an alternative to hospital stay and most of them are concentrated in the urban area only. They are made use of for keeping the patients again away from the family; some of them are active therapeutic centers treating active mental illnesses like a nursing home.

There are no notable outcome studies on the importance of psychosocial studies in India too since it is an area which is still in its infancy.
Clinical Recommendations by authors of the above studies:

What implications can be drawn for the use of the psychosocial interventions described in this review, for the standard of care for persons suffering from schizophrenia? For frequent relapsers who reside with family, a relatively simple but sustained psycho-educational family approach should be offered (for example, monthly visits in a single or multifamily group setting). Additionally, for the majority of patients, the family should be viewed as a natural ally that can provide crucial early information regarding relapse, substance abuse, community functioning, and compliance. For patients with high service utilization rates, assertive community treatment programs should be considered, especially if family involvement is not available.

With the large majority of schizophrenia patients living in the community and hospital stays becoming progressively shorter as a result of managed care, a comprehensive system of delivery of services based on assertive community treatment principles will continue to be necessary for a large proportion of patients.

Once stable community living is achieved, a systematic rehabilitation effort for the majority of persons with schizophrenia is necessary. Beyond allowing patients to make use of previously learned social
skills once the psychotic process is sufficiently controlled, there is no compelling evidence that medications (even the novel drugs) offer additional benefits in terms of social competence. Specific strategies to teach social skills are available. Of these, the social problem-solving model not only has resulted in the acquisition of skills but also is the approach with some evidence that suggests generalization of skills to community functioning and of effectiveness in more routine clinical settings. The requirement of social skills training for clinicians specifically trained in these techniques presently limits their use, but the availability of printed manuals with well-defined modules targeting different areas of social functioning is a fundamental step towards disseminating these interventions.

Patients who wish to work should be referred to a vocational rehabilitation agency with resources for supported employment. No other psychosocial or pharmacological treatment has been shown to promote competitive employment. However, for many patients a traditional sheltered form of employment or no employment will remain the best option. Because presently there is no evidence to identify these patients in advance, the majority of persons suffering
from schizophrenia should be offered the supported employment approach when available.

A large number of patients will continue to experience disturbing delusions and hallucinations despite the best available medications. Persistent symptoms after an adequate trial with one antipsychotic agent generally predict little response to other medications. Superiority for previously resistant psychotic symptoms has been demonstrated only for clozapine, but a recent meta-analysis of efficacy for this agent suggests that the effects, although important, are smaller than originally found. Therefore, the results from cognitive behavior therapy interventions are particularly encouraging. Currently, these strategies are in their infancy, there are few clinicians with the expertise to implement them, and it is not clear that even in the best hands these strategies will result in clinically meaningful sustained effects. Nevertheless, cognitive behavior therapy has become established for the treatment of depressive and anxiety disorders and may prove to be a valuable resource for clinicians helping persons with chronic psychotic disorders as well.