HORTICULTURE AS A WORK PROGRAM FOR THERAPY

by

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ABSTRACT

During the early part of the twentieth century, the popularity of horticultural activities for therapeutic programs increased tremendously. A study was undertaken to trace the state of horticultural therapy programs across the United States and to outline the possibilities for horticulture to complement existing forms of therapy. Horticultural therapy is one of the newer therapeutical approaches to long-range patient care programs, which have become important to many types of hospitals.

A survey was used to gather information on present horticultural therapy programs so that site visits could be made to interview staff and examine the programs. Many hospitals consider horticulture to be valuable part of their adjunctive therapy as well as an aid to the rehabilitation of the ill and handicapped. Horticulture is appreciated for what it can do to satisfy the mental, physical and spiritual needs of man. It has broad appeal and great flexibility in that it may be enjoyed actively or with peace and quiet. Based on the results of this study, a manual of horticultural therapy incorporating aspects of various programs across the nation, as well as new ideas, has been developed.
INTRODUCTION

The purpose of this study was to gather information on existing programs which use horticulture as therapy, and to develop a manual of horticultural techniques for use by therapists. Because it was not feasible to evaluate all phases of this field, the author restricted his consideration to programs which dealt with the mentally ill. A survey was sent to hospitals and institutions across the United States in order to identify those having horticultural programs, and personal visits were made to interview staff and to evaluate the various horticultural activities used in their therapy programs. Based on this, a manual of horticultural therapy incorporating aspects of these programs has been developed as a guide to institutions and individuals interested in the field of horticultural therapy.
LITERATURE REVIEW

Gardening is one of the oldest arts of civilized man. From the earliest times, man has dealt with plants for food, clothing and shelter; for medicine and spices; and for beauty and pleasure. Thus a history of horticulture would closely parallel the history of mankind. The herbals of the fifteenth, sixteenth and seventeenth centuries show close relationship between gardens and medicine as plants were brought from many locations to botanical gardens to be studied and recorded for their medicinal uses. (1) Much of the exploration of the world during this time was in search of herbs, spices and other plants that man could cultivate for their utility. (2) Today, horticulture is important not only for the many physical products it supplies to man, but as one of the most widespread hobbies in America. In 1967 twenty million people enjoyed gardening as a hobby, more than the combined number of fisherman, hunters and boat enthusiasts. (3) It is no wonder that with all the varied activities horticulture can provide for man, we find so many people spending their leisure time with plants. A home-owner may find himself involved in landscaping his home, planting
planting and caring for various ornamentals, pruning, fertilizing, and possibly growing vegetables. The gardener can also explore indoor gardening, the art of flower arranging or the making of terrariums. The list is nearly endless and the physical activities associated with the field of horticulture would use every muscle of the body at one time or another. The varying intricacies of plant growth are a challenging pursuit for the disordered mind. What could be more reassuring than a chance to observe nature's wonderous cycles; or watch a plant grow from seed to bloom; and perhaps to grow with it.

The importance of natural beauty and growing plants to man's mental health is inescapable. As concrete jungles and industrial wastes encroach upon our shrinking areas of natural beauty, individuals need the therapy of the green leaf.

With so much to offer, it is easy to understand why horticulture has therapeutic effects on people with problems, whether they be mental, physical or emotional. The cultivation of plants as an adjunct to treatment for illness is not new. "Ever since the first admonition to dig and delve, people have been practicing garden therapy as preventative medicine. Before the science of psychiatry, physicians prescribed work in the garden for ills of the mind and nervous system." (7) Tuckey, from Michigan State Univer-
sity, said that "Horticulture has broad appeal -- it can be practiced in the home, in the garden, in the school, in the hospital and convalescent homes. It has great elasticity -- it may be enjoyed with a lusty physical appetite or with peace and quiet." (8)

In 1699, Leonard Maeger wrote in *The English Gardener*: "Would men be ruled by me, I would advise them to spend their spare time in the garden, either in digging, setting out or weeding, than which there is no better way to preserve their health. Gentlewomen, if the ground be not too wet, may do themselves good by kneeling on a cushion and weeding." This statement indicates that gardening was considered as therapy several hundred years ago.

Dr. D.W. Watson and Mrs. A.W. Burlingame in their book, *Therapy Through Horticulture*, cite several opinions as evidence that horticulture was used for therapy. Among these were the words of Benjamin Rush in 1798. This distinguished physician was convinced that "digging in the soil" had a curative effect on the mentally ill. The hospitals in Spain as early as 1806 emphasized the benefits of horticultural and agricultural activities for their patients. In 1846, Isaac Ray, reported in the American Journal of Insanity that in Europe agriculture was a favorite kind of employment. Usually patients were allowed a plot of land
where they were allowed to grow vegetables for their own table. Robert Carrol, in a paper read before the Tri-State Medical Society in Richmond, Virginia, in 1910, discussed the therapy of work in the treatment of neurosis. In three out of five cases he cited, it was proved that gardening, not merely a passive diversion, played a vital role in recovery. It was noted that a Bethlehem, Pennsylvania hospital used outdoor labor as part of the patient's regular treatment. This type of treatment quickly spread to other institutions but was carefully watched to assure these programs were strictly therapeutic and avoided exploitation of the patient. A large number of these programs were slowly phased out when they were found to be too expensive.

As programs were continued over the years and some agriculturally oriented ones were dropped, horticulture has continued to be recognized as a valuable part of the therapeutic milieu.

After World Wars I and II, horticultural programs became an important tool in the rehabilitation of veterans in many of the Veteran's Administration Hospitals. A number of these institutions now have full time professionals trained to work in the field of horticulture. Increasing emphasis is being placed on functional projects,
especially vegetable gardens and greenhouses. Between 1920 and 1940 almost all books written on Occupational Therapy contained some articles on gardening. In the 1940's, the term "garden therapy" seemed to be discussed repeatedly and was considered a separate type of treatment. In later years, the term horticultural therapy became recognized when a variety of horticultural skills were used to rehabilitate patients.

Horticultural therapy or "Hortitherapy", which refers to "rehabilitation through contact with nature" has been favored by the prominent psychiatrist, Dr. Karl Menninger. He observed that patients who are brought into close contact with the soil and involved with the beauty and mystery of plant growth, seem to relax and make better adjustment to treatment and hospitalization. His brother, William Menninger, made these observations in Popular Gardening Magazine: "Gardening therapy offers social opportunities for the individual. It serves to relieve symptoms by quieting anxiety and releasing tension. Gardening functions as therapy in most of the country's progressive psychiatric, geriatric and tuberculous hospitals. Usually the purpose is strictly therapeutic and has nothing to do with the hospital economy as it had earlier in many institutions. (5)
As people became aware of the various aspects of horticulture which can serve useful purposes in therapy we find more and more people exploring this field.

In 1959, Dunton, known as the Father of Occupational Therapy, stated, "I cannot recall any analysis of the benefit of gardening itself; it seems to me there are many, such as exercise for the muscles of the body, work in fresh air and sunlight, the satisfaction of producing something worthwhile, either flowers or vegetables, which gives pleasure to one's self and to others and possibly increase in self-esteem. (6)

In the early 1950's Michigan State University began a Master's Degree program in horticultural therapy for occupational therapists. At this time interested individuals began to gather information about this subject. Many National Federated Garden Clubs took up volunteer projects with their members working in hospitals across the nation with horticultural therapy programs. Gardening at this time was widely accepted as part of therapy programs. Many executives and professional people lose the tensions and frustrations built up in their job by gardening. Menninger explained part of this value of growing plants when he describes his love of peonies. "Peonies are very healthy flowers; they have no outcry and there are no anxious and troubled faces to comfort. They just grow and
bloom. That is why I fell more and more in love with them. They have helped me to keep my emotional and intellectual equilibrium. Growing peonies has helped me to satisfy an inborn curiosity to watch things grow. There is a gratification of the sense of sight in color and color combinations, of the senses of smell in perfumes and odors, and to that inner aesthetic sense of beauty and charm that has, I believe, made a better physician of me". (4)

Even though horticultural therapy is expanding to more and more hospitals and institutions and these programs are now widely being accepted, little has been published. After searching the many indices in the field of psychology for articles on garden therapy I find few mentioned. Most articles appear in the form of leaflets issued by institutions, both private and state. Some come from newspapers and lay magazines. Only a small handful of books represents what has been written on the subject and these are in no way considered complete in content by horticultural therapists. Computer centers which compile medical information for state agencies have only a small readout available on the subject. After speaking to Miss Rhea McCandliss, horticultural therapist for many years at the Menninger Foundation, we could say that those who work in
this area are far too busy to write articles and the others are not aware of what is happening.
METHODOLOGY

Nature of Survey

In March, 1972, a survey was sent to major hospitals across the nation to determine what was happening in the field of horticultural therapy. Ten hospitals were selected from each of the mental health regions across the United States, giving a scattering of 100 hospitals. These hospitals included both state and private institutions, schools for the retarded, and mental health centers. Addresses were taken from the list of hospitals published in the 1971 Mental Health Directory, which indicates the number of beds, length of stay, whether there is an occupational therapy department and other information. Letters were also sent out to all State and Mental Health Authorities who might be able to indicate specific hospitals which have well-developed programs in horticultural therapy.

Each survey sheet contained nine questions designed to provide pertinent information so that each hospital might be evaluated to determine which had exceptional horticultural programs in operation. Once these institutions were identified personal visits would be made to interview staff and evaluate horticultural programs.
To insure a substantial return, an introductory letter (see Appendix I, Exhibit A) was included. The purpose of this letter was to introduce the reason for the study. Attempts were made to keep the letter and questionnaire short and easily understood. A self-addressed, stamped envelope was included so the questionnaire could be returned easily.
RESULTS

The first reply was received in only eight days, and thereafter letters came in at a rate of eight to ten a day. Within two months all 100 answers were received. Ten respondents also wrote one, two, and three page letters explaining their feelings about horticultural therapy or describing their gardening activities in greater detail. Thirty-one respondents wrote short comments at the bottom of their questionnaire.

Questions number one and two were included in the survey (Exhibit B in Appendix I) in order to obtain the location of each institution or hospital and to acquire the name of the superintendent-in-charge. The following table lists the results of the questionnaire. (See table 1, pg.13)
Table 1

Responses of 100 Institutions to Questions

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The Selection of Institutions for Visits

After analyzing the results, which included not only my initial questions but additional comments, attached articles, and letters from the many hospitals, the following institutions were chosen as having the best developed horticultural programs.

Central State Hospital, Milledgeville, Georgia.
Friends Hospital, Philadelphia, Pennsylvania.
Hasting Regional Center, Ingleside, Nebraska.
Harding Hospital, Worthington, Ohio.
Institution of Rehabilitation Medicine, New York, New York.
Menninger Foundation, Topeka, Kansas.
Pontiac State Hospital, Pontiac, Michigan.
Veterans Administration Hospital, Brentwood, Los Angeles, California.
Veterans Administration Hospital, Roseburg, Oregon.

Six of these nine hospitals were chosen for personal visits to determine exactly what phases of gardening, or horticulture in the broad sense were being adapted and used as therapy. It was felt that communication with each therapist, and possible with their patients, would be of importance in developing a complete picture. It was important to find out just what role the volunteer must play in the field of horticultural therapy and what they should be aware of, to give maximum efficiency to those interested in working with these programs.
Characteristics of the Outstanding Horticultural Programs

CENTRAL STATE HOSPITAL, located in Milledgeville, Georgia, has a well-established program in the field of horticultural therapy. The hospital depends upon its volunteers quite heavily. About 100 volunteers from Milledgeville and surrounding areas come weekly to participate, and most have college backgrounds. At the board meeting each month, Mr. Thomas E. Newsome, in charge of the staff and all volunteers, attends the meeting to get new programs established. At this time, he gives advice on what plants are available from the greenhouse and any new information on fertilizers, sprays, or new approaches that could be used.

The State Federation of the Garden Clubs of Georgia, Inc. contributes about $6,000.00 a year to buy seeds, plants, fertilizers, and tools as well as refreshments for the hundreds of patients who participate in these programs. Usually the All-America Winners and newly introduced flowering annuals, such as a new cultivar of petunia, are tried each year. All heavy work such as bed preparation or the repairing of flower boxes is done by the maintenance department.

Patients who work in the greenhouse area find themselves involved in mixing soil, propagating azaleas, planting
seeds, arranging flowers, and many other projects. There is a full time floral designer at Central State.

There are three greenhouses, all pad-cooled and well equipped. They produce thousands of cut flowers such as snapdragons and chrysanthemums and an assortment of various foliage plants. The outside hotbeds are used to produce about 40,000 annuals and perennials for the flower beds on the grounds. Cuttings are taken from the various ornamentals scattered over the grounds and grown on in one gallon containers. These plants will eventually be planted somewhere on the hospital property by the patients. The department in charge of remotivation has found vegetable gardening to be especially good in working with severely regressed patients. There are twenty such gardens ranging in size from 2,000 square feet to over an acre.

FRIENDS HOSPITAL, located in Philadelphia, Pennsylvania, uses a broad variety of horticulture for therapy purposes. The horticultural therapy program is under the direction of Mr. Richard Draper. At Friends Hospital, horticulture is considered to be a valuable part of the adjunctive therapies offered. They have two greenhouses, one which contains an interesting collection of orchids, a good collection of tropical plants and growing space for cut flowers such as
chrysanthemums and snapdragons. Cold frames are filled with azalea cuttings, annuals and perennials. There is an herb garden and a cutting garden where patients enjoy working. Mr. Draper said, "Patients find satisfaction in producing things with their hands, in realizing that plants depend upon their care." Once a plant is grown, the patient finds permanent value for he can take it home along with a well-developed interest in continuing on in horticulture. Nature walks, identification of trees and shrubs, floral designing and field trips throughout the community to arboretums or flower shows help to round out a very comprehensive program.

HASTINGS REGIONAL CENTER is located at Ingleside, Nebraska. This center maintains a very active program in horticulture. There is a program fully accredited by the State Department of Education, encompassing floral design, horticulture, grounds maintenance, and plant materials. Patients here work at their own pace with a one-to-one instructor-student relationship.

There are two greenhouses, 55' by 190' and 25' by 80'. Carnations, chrysanthemums, and snapdragons as well as many other seasonal potted crops are being grown. There is also a retail shop which sells at cost, plus 5 per cent to
hospital employees only.

You will find spruces, hollies, locusts, ashes, pines, and willows in their nursery of over four acres. There are eighteen flower beds on 60 acres. Approximately, 21,000 annuals; petunias, marigolds, salvia, geraniums and others, are grown and planted in these areas each year.

THE INSTITUTE OF REHABILITATION MEDICINE, located on 34th Street in New York City, proves that horticultural therapy can be accomplished even under city conditions with no land available. Their greenhouse stands just off the lobby of the Institute's main entrance at 34th and East River in Manhattan. It is an oasis of beauty, fragrance, and serenity in the mist of the city's bustling activity. Hanging baskets, fish tanks with tropical fish, begonias, specimen foliage plants, terrariums, bottle gardens of all shapes and sizes, and flowering ornamentals are everywhere. The patient can also find Myna birds and parrots whose chatter in song helps to shield this garden from the noises of the city. All plants have been grown by the patients and are for the enjoyment of all. The program is under the direction of Mr. Howard Brooks, Horticulturist. Sophia Chiotelis, Director of the
Occupational Therapy Department believes that horticulture under these conditions is very important to the patient. She said, "It is a non-medical therapeutic method, conducted in a natural environment." This type of therapy offers exercise to relieve many of the patient's disabilities.

On the day of admission, the patient is welcomed to the Institute and is given a flowering plant labeled "Greetings from the Garden of Enid." He may later be taken to the greenhouse to relax or to participate in a program. All work tables have hydraulic controls to be raised or lowered according to patient's need. Propagation, flower arranging, potting plants, and mixing soil, are only a small number of activities which go on there. Each is, in its way, a challenge to the patient.

MENNINGER FOUNDATION at Topeka, Kansas has had a horticultural therapy program for over forty years. Miss Rhea McCandliss, the foundation's horticultural therapist has been there for over 14 years, and came with many years of prior experience.

Horticulture crept into the program here when Dr. C. F. Menninger first took his patients on walks about the
hospitals grounds explaining plants and nature to them. He felt that his patients would benefit from working with the soil and plants. He often gave lectures on roses, lilies, peonies, herbs and other subjects.

Patients in the greenhouse have a varied program, propagation, making pressed flower prints, bonsai, seeding, transplanting, landscaping, floral arranging, and discussion groups are only a small sample of these activities. Most projects are centered around the greenhouse area but there are field trips to the East and West Campus, and to the new arboretum, so that there is contact with the outside world.

Miss McCandliss in a speech given at the C. F. Menninger Memorial Hospital, October 3, 1967 expressed her goals in horticultural therapy programs as follows:

We hope that a patient's working in a group, learning to adjust to and consider others; learning to be responsible for living plants dependent upon him; learning and understanding his dependency on nature and plant life; developing a greater appreciation and enjoyment in the plant world which surrounds him, no matter where he may live; being able to accept disappointments that inevitably come when working with living perishable material; developing a tolerance to the frustrations of a partnership with nature (and thus other disappointments)...we hope that these things are therapeutic.
PONTIAC STATE HOSPITAL in Pontiac, Michigan began a horticultural therapy program back in 1951. At that time, Mrs. Alice Burlingame approached the supervisor of the hospital with the idea of beginning this program. Permission was granted and volunteers were found to work with the patients each week. The program has been an extremely valuable addition. Garden Clubs were brought into the picture and soon all the needs of the program were being filled. There are greenhouses, outdoor gardens, and a large vegetable garden for patients to work. Flower arranging and corsage making along with propagation, weeding, seedling transplanting, pot washing, soil preparation and fertilizing are only a small part of the possible activities.

A garden for the geriatric patients was developed and these people work twice a week in their garden. The garden now supplies beauty, color and a changing scene for that area.

Needless to say, the Pontiac community is relied upon quite heavily for their help, and the devotion of these people to this program is phenomenal.

In 1961, a full time staff member was added to the horticultural therapy program. He was to assist in the
planning and carrying out of these activities. In addition, Pontiac receives second year occupational therapy majors from Michigan State University who assist the staff in this program which is educational for them as well.

At Pontiac, there is also a children's horticultural therapy program. The favorite project is the vegetable garden where each child has an opportunity to plant his own vegetables and care for them throughout the season. The total program offered at Pontiac is very impressive.
Survey Comments

The following paraphrased comments were received in response to question 9 and organized according to the ten Mental Health Regions of the country. These comments offer the reader the opportunity to evaluate and compare the various programs by regions. They provide an overall picture of horticultural therapy and show the variation of activities in programs scattered throughout the country.

REGION 1

Our garden plot is very small, we do not have a large scale operation.

A large part of the hospital is farm land and there are many farm buildings, yet they are no longer used for cattle and crops. We do have a conservation and repairs class that does grounds work and raises a garden.

REGION 2

We have an Industrial Therapy Assistant in charge of the vegetable garden.

We are located in Metropolitan New York with no grounds.
Our greenhouse work is under the supervision of our Groundsman and Florist. In years past, some work units have used gardening as part of their spring and summer occupational therapy programs. Patients received instruction and work experience with assignments from our lawn care squads, and with the florist in the greenhouse. However, there is no financial compensation for this work. Our staff tried to start such a program last year, but lack of funds precluded this.

REGION 3

We would be happy to answer any questions you might have relating to our horticultural therapy program.

Some of our patients who are assigned to the greenhouse raise flowers and tomato plants which we sell. The profits are used to pay these patients as an incentive. We also have about eight patients helping the landscape crew cut grass.

In Pennsylvania Mental Hospitals, no patients are permitted to perform any function or service for hospital industry. All of our programs now are slanted toward evaluation and training. If a resident is providing a product or service for the hospital he must be paid. This is regardless of the therapeutic benefits in-
Greenhouse functions and lawn care are part of our Physical Medicine and Rehabilitation Service. All horticulture activities are under the Chief of Industrial Therapy.

We call our program "Landscaping and Horticulture" rather than gardening. Many of the patients are assigned to a lawn care squad and become involved with grounds maintenance as a therapeutic program.

REGION 4

The South Carolina Department of Mental Health is comprised of five major facilities including the S. C. State Hospital, Crafts-Farrow State Hospital, William S. Hall Psychiatric Institute, Alcohol and Drug Additions Center, and the C. M. Tucker Human Resources Center consisting of the John M. Fewell Long Term Care Pavilion and the E. Roy Stone Jr. War Veteran's pavilion.

Our program is very small, approximately 12 patients participate weekly. This is primarily a hobby or diversionary program for most patients.

Our garden depends on many short stay patients and as a result cannot be classified as successful. It is
however very useful at times and varies with the patients involved.

We no longer have a gardening program. This was abolished two years ago due to lack of patient occupational therapy. In my own experience I have always felt it to be most satisfying and gratifying for mental patients. I feel it is a great loss that today's trends do not encourage occupational therapy.

REGION 5

We have a complete horticultural therapy and nature interpretive program established over nine years. Included are vegetable gardening, greenhouse cutflower production, flower arranging, annual flower and vegetable production, flower bed planting, care of orchard and small fruits, fertilizing and pruning trees and shrubs, etc. Practically all phases of horticulture except lawn care (Maintenance Department activity) are now included in our program. We have about 50 patients or more daily involved in horticulture from 8:30 A.M. to 5 P.M. These programs are under the supervision of the hospital's horticultural therapist who has his PhD. in horticulture.
Patients are assigned to lawn care as part of the Industrial Therapy Department. Planting of flower seeds is used as a tool for patient interaction by staff members. We are farming approximately 735 acres of farm land presently, but within the next year we plan to phase out this activity.

Each summer all interested patients form a garden club and plant a large vegetable garden --- doing the planting, cultivating and harvesting under staff guidance.

We have had a very extensive and intensive program of horticultural therapy since 1953 when the hospital turned over the greenhouses and surrounding areas to the occupational therapy department. This includes programs for children, adults and geriatrics and has proven to be a most therapeutic activity for all concerned. For over eleven years, we have had preclinical students from the three nearby schools of occupational therapy for six weeks in the summer. These students receive 4 credits for this work and we are now working with one university to set up a program to train horticultural therapists.

Fifteen patients are assigned to the greenhouse. Some work there all day. Six of these also work in the evenings and week-ends. The patients are supervised by one Grounds Superintendent, two general foreman and four
temporary summer employees. Our program includes taking care of lawns and plants, propagating, and seeding in the greenhouse, arranging floral bouquets, gardening, care of the orchards, planting shrubbery and shade trees, watering lawns, trimming trees, and building new lawns and parking areas.

Some patients are assigned to lawn care as industrial assignments. Each center has a small gardening project. We do have farm land that is leased to farmers, it was previously used by the hospital for production of vegetables for our canning factory. This has since been discontinued.

REGION 6

As the duration of stay in this hospital has decreased from 2964 days to 23 days, we have had to change the direction of our occupational and vocational programs. Our acute patients stay too short a time for farming or gardening and our long term patients are generally too ill to participate in such programs.

An extensive horticultural therapy program is being planned under the direction of our Vocational Rehabilitation Unit. This will be started when the greenhouse now under construction is completed.
Our inpatient unit is in a high-rise building and therefore has no gardening or agricultural therapy programs. Our occupational therapy programs are mainly arts and crafts.

REGION 7

We have planted a basic garden and our patients are involved in all phases of garden care. We feel that this garden is therapeutic from the creative viewpoint.

We have had a horticultural therapy program in our hospital for over 40 years. The horticultural therapist has been on the staff for over 14 years, with 10 years experience in other hospitals before that. Our program includes greenhouse, outside gardens, a new arboretum, nature trails, and environmental projects. The activity is a part of the treatment process and we work closely with the others on the treatment team. The patients are scheduled on a basis of 2 hours per day, five days per week. There are two other staff members who work in the greenhouse and flower bed program and one other who has a vegetable garden. We do not have a large greenhouse but do many related projects such as dry arrangements, pressed flower prints, Christmas decorations,
etc. We cooperate with a nearby university in providing clinical training for their students.

Horticulture is part of our vocational therapy program. This phase of our program is under supervision of a graduate horticulturist from Iowa State University. The greenhouse is used as a therapeutic training and learning situation. Whenever the weather prohibits us from working in our large flower garden, vegetable garden and other related areas we then ready plants for outside planting, etc. Patients are taught flower arranging and potting, corsage making, and many other techniques in horticulture.

A few patients are assigned to our greenhouse for industrial therapy, a program long proven to be a good one. The activities therapy department uses gardening from time to time but has no set program.

Our industrial therapy program assigns patients to the lawn, garden and greenhouse as part of their regular assignments.

We have a full program which is accredited by the State Department of Education. This program includes horticulture, floriculture, floral design, grounds.
equipment repair, and small engine repair. In our vocational rehabilitation unit, courses are set up on a modified schedule, and the better patients work at their own pace. This is called the Learning Pack System. Individual attention is given to the slow learner. We have two greenhouses, one is 55' by 190' and the other is 25' by 80'. Our nursery consists of four acres. We grow thousands of annuals each spring for planting the many large flower beds on the hospital property.

We feel gardening is very important to the total therapeutic aspect of our program.

In years past we have had gardening programs, but we gave it up several years ago when the length of stay in our hospital became so short that patients could not really get involved in this type of therapy.

Gardening is a wonderful therapeutic effort for patients. I had experienced it in England during my residency. Unfortunately at the present time we do not have a gardening program. Maybe sometime in the near future.

As a short-term psychiatric facility, we do not use horticulture in our treatment program.
A greenhouse was used extensively here for many years until it became unsafe. We are in hopes of purchasing another greenhouse in the near future. Our patients enjoyed very much our greenhouse when it was in operation. Many patients receive an industrial assignment to work on our lawn and grounds crew. This seems most suitable to patients who are used to working outdoors, such as ranchers, etc. We have 12 acres to care for and many patients are involved.

We have a current opening for such a person, but can find no individual appropriate.

Overall there are 120 patients working in outside (out-of-doors) activities, which includes a two-acre garden plot plus a small greenhouse, to which five veterans are assigned. Activities also include landscaping, trimming lawn areas, and maintenance of our nursery. We also have a beautification program which consists of specially placed flower boxes which are cared for by the patients. We have found that this type of work has been beneficial to our patients of all ages.

Some of our wards and units have special garden projects. Assignments are made through the industrial
therapy section for the given patient to work on the grounds, including lawns and flower beds. Our growing season is too short to have an effective horticultural program.

The field of horticulture has proven to be very beneficial modality in treatment of psychiatric patients at this hospital.

REGION 9

The use of gardening at our hospital is fully dependent upon the choice of the treatment division. Enthusiasm for it varies. My impression is that we have made no achievements worthy of serving as models.

We have attempted to garden on a limited basis with the help from a contracted gardener. We hope to employ a part time gardener for the ground work and involve more patients.

At one time, our hospital had a farm with dairy cattle, but this since has been discontinued. Patients are sometimes assigned work on the grounds cutting lawns, weeding, assisting the gardener with irrigation and landscaping, for which they are paid a minimal salary.
Our patient turnover is so rapid that it inhibits much of our horticultural activities.

REGION 10

This hospital may no longer be considered a custodial institution. Our programs are currently designed to meet the needs of short-term acutely ill patients.

In recent years emphasis has turned to incentive farms of therapy. Work for pay is now being used as a conditioning, testing, and evaluating program. Few gardening programs are used at this hospital.

Horticultural therapy sounds great...tell us how to get started?

We are working with a nearby community college in hopes of establishing a student program along the lines of horticultural therapy.

Many of our patients who have worked in our greenhouse and gardens have found this assignment very rewarding.

We have patients assigned to the greenhouse, lawns, grounds maintenance and golf course areas.
I am also interested in any organizational efforts in promoting communication and collecting information on horticultural therapy. I would like to see all interested individuals working in this field by being brought together, but seriously doubt if a formal organization would be possible until more specific individual identity is established and recognized. Many programs are out-growths of some other activity and individuals are oriented and affiliated with their respective organization.
In the field of rehabilitation, medicine has been turning more and more to the psychologist for an assessment of emotional disabilities and potentialities of a disabled individual. With the development of the physiological and the psychological aspects of medicine comes a new field of Horticultural Therapy. Various horticultural activities have been identified as aids to the rehabilitation of the ill and handicapped. It serves to tie together the successful growing of plants with troubled patients to give them an interest in the future. Gardening provides an opportunity for the emotionally disturbed patient to overcome his fear of others through a nonthreatening relationship. The garden clubs, the greenhouse, field trips and demonstrations all offer a wide variety of activities easily adapted to the needs of the psychiatric patient. Throughout the nation, there are mental health centers that could use gardening as an activity in their daycare program.
Uniform communication in the field of horticultural therapy is non-existent. In the course of evaluating survey results and personal site visits, it was discovered that more horticultural therapists weren't aware of the many on-going programs at other institutions across the country; probably due to the absence of any professional organization in the field. Most therapists were eager to hear about these programs so the following manual of horticultural therapy was developed as a potential aid to them. It was felt that a brief description of the major established horticultural therapy programs would be useful to the reader and serve as a point of departure. Information for the volunteers, program needs, supply sources, and horticultural activities for specific therapeutic benefits have been covered. Additional projects used for therapy treatments have been grouped according to indoor and outdoor activities.
A WORD TO THE VOLUNTEER

The most important aspect about volunteer service is that you regularly and punctually meet your assignment. The garden volunteer must be able to work with a patient at his level of interest and understanding, and respect and accept him as an individual. He must be helpful while giving others every opportunity to help themselves. A patient learns to trust and like you, but when you fail him without an understandable reason, he may regard it as the latest of many rejections. Illness and family emergencies are understandable exceptions but parties, shopping and personal whims are not. A basic and practical horticultural background is necessary for the individual who plans and supervises a horticultural program. Assistants working with this program must have a practical background in horticulture and a desire to learn and work with people. Experience in working with groups of any sort is helpful.

When working in a ward with a group of people, you naturally feel drawn toward some patients more than others just as you do in any large group. A good volunteer shows
no partiality toward, nor special attention to any one patient. The patient who is most able to reach out and respond to you is probably the one who needs least help. Helping the withdrawn patient to take part in a work session and to mingle with others is very important. Never talk to the patient about his problems, this may seem to make him feel better and to make your job easier, but this practice is not encouraged. Change the subject as quickly as possible or offer him some other activity when such situations arise.

On entering the ward, contact the nurse or attendant in charge to let that person know that you are there to perform your service. The person in charge of your particular department will have made prior arrangements for your appearance. You will wonder what to do and how to act, but will find that this usually takes care of itself. You are a person of some social skills or you would not have volunteered. Most likely, the patients themselves will try to make you feel at home. Always make sure you wear a name tag and that the patient with whom you are working knows your name. Introduce yourself to the interested patients, and they in turn may introduce you to the more shy and retiring patients.
The volunteer should remember that being friendly does not mean asking personal questions about the patient's family or illness. When trying to make friends with a new patient, you must project friendly feelings in your attitude and conversation rather than physical contact such as putting your arms around him. It is often threatening to a patient if you approach him too closely, especially if he has just met you.

Patients have a right to privacy. They must not be discussed by name or in any identifiable way outside the hospital. It is their right to let people know that they are in the hospital if they wish. Anonymity is also their legal right in many states.

Being committed to a mental institution is, in most cases, a traumatic experience. When these patients learn that people from the community outside are interested in their welfare, it sometimes alleviates their anxiety.

Volunteers bring the life of the community to the patients, linking them with the day-to-day happenings outside the hospital walls. These are the people who lead patients away from fear, insecurity and self-absorption toward hope and a confident future. Gardening volunteers
help to build the morale of the patient. They are teaching
them skills so that they can function in the outside
world. Horticultural therapy activities are being carried
out today in:

1. Veteran's Hospitals
2. Private and Public Hospitals
3. Institutions for the handicapped and
   emotionally disturbed.
4. The homes for individual shut-ins.
5. Nursing homes and homes for the aged.
6. Rehabilitation Centers

Horticultural therapy programs are designed to
deal with disabilities and a wide range of physical limi-
tations. These programs fall into six major categories:

1. The emotionally disturbed and mentally ill.
2. The sightless
3. Exceptional children
4. The tubercular
5. The aged
6. The physically handicapped.
If horticultural therapy is to become effective as a gardening program it must first be welcomed by the hospital staff. These people need first to realize the importance of this type of program. They must train volunteers so that when these individuals begin working with the patients, they can make their program consistent with the patient's prescribed treatment.

The following is a list of Do's and Don'ts a volunteer is expected to be aware of before working in a psychiatric hospital.*

*Based on resources from site visits. Pontiac State Hospital and the Menninger Foundation.

DO'S AND DON'TS IN A PSYCHIATRIC HOSPITAL

DON'T

1. Don't give negative command to negative patients.

2. Don't pry into the patients personal problems or history.

DO

1. Do tell them directly what is expected. If they are unable to cooperate, assist them in doing so.

2. Do listen to whatever he has to tell you, but without emotionally committing yourself. Do report significant information to the therapist.
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<th>DON'T</th>
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<td>3. Don't express agreement with patients expressing delusions. Don't pretend to experience the sensations the patients experience through hallucinations.</td>
<td>3 &amp; 4. Do listen with interest, but do not agree or dispute these false ideas or unreal experiences. Inject a word or phrase of mild doubt and direct the patient's attention elsewhere.</td>
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<td>4. Don't argue or try to reason away patient's delusions and hallucinations.</td>
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<td>5. Don't allow patients to remain continuously withdrawn.</td>
<td>5. Do try to stimulate new interest or re-awaken previous interest in some activity.</td>
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<td>6. Don't use force.</td>
<td>6. Do wait, if possible, until the patient is more amenable to the activity or try to win his cooperation, friendship or trust.</td>
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<td>7. Don't mislead a patient or lie to him in an effort to avoid a difficult situation.</td>
<td>7. Do deal with patient honestly at all times so that his trust in you will never be shaken; if unable to answer a question for ethical or other reasons tell him so honestly and tactfully.</td>
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<td>8. Don't discuss anything in the patient's presence which you would not want him to repeat, even though he may not appear to be attentive or alert.</td>
<td>8. Do keep in mind that even though those who appear in a deep sleep or far withdrawn from reality, can often hear, understand, and remember all that goes on around them.</td>
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<td>9. Don't whisper in the presence of suspicious patients; don't use many gestures and don't use complicated equipment.</td>
<td>9. Do speak loud enough so the patient can clearly hear that you are not talking about him, use as few gestures as possible to avoid stimulating the patient's suspicions. Do use simple apparatus to prevent the patient becoming apprehensive of &quot;dangerous plots&quot; and &quot;instruments of torture&quot;.</td>
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<td>10. Don't make telephone calls, mail letters, communicate with relatives, carry messages, run errands or loan money to patient.</td>
<td>10. Do tell them frankly you cannot do this for him.</td>
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<td>11. Don't allow the patient's mood to determine your own.</td>
<td>11. Do maintain a friendly, neutral mood tone regardless of the almost contagious effect of excessive gaiety, deep depression or stimulating belligerence.</td>
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<td>12. Don't rush the regressed patient or become impatient with his slow response.</td>
<td>12. Do encourage him by praise and give him plenty of time, realizing that physically and mentally he is incapable of rapid response.</td>
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<td>13. Don't offer glib reassurance or flattery.</td>
<td>13. Do offer sincere, thoughtful reassurance based only on fact; do offer genuine praise whenever and as often as it is deserved.</td>
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<td>15. Don't give up hope or consider a patient's slow progress to be a sign of futility.</td>
<td>15. Do remember that psychiatric patients do get well and progress best when you seem genuinely interested in and hopeful toward their progress.</td>
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<td>16. Don't permit the over-confident patient to perform great feats of power or ability and otherwise behave in a manner which would expose him to physical danger or ridicule.</td>
<td>16. Do guide his activities into safe and normal channels by your own good judgement, tact and ingenuity.</td>
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<td>17. Don't let the more aggressive patient dominate those who are more regressed.</td>
<td>17. Do divide groups according to their behavior, interests, needs and physical and mental abilities.</td>
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<td>18. Don't be offended by abusive or &quot;insulting&quot; remarks.</td>
<td>18. Do remember that if the patient were able to control his behavior he would not need to be hospitalized. His illness often causes him to misidentify people; he probably does not intend his remarks for you personally but for someone whom you seem to represent in his imagination.</td>
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<td>19. Don't avoid talking to the mute and unresponsive patient.</td>
<td>19. Do speak to him often, as though you fully expect him to respond.</td>
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DON'T

20. Don't be rigid and inflexible in your dealings with the resistive or stubborn patient.

21. Don't give the patient advice about his problems or illness.

22. Don't tell your patient to "snap out of it", or that with a "little will power" he could get over his illness.

23. Don't give the self-deprecatory or the timid patient activities which are extremely challenging.

24. Don't give the pre-occupied or withdrawn patient monotonous or repetitive activities.

25. Don't ignore a patient's physical complaints - no matter how frequently or unconvincingly they are presented.

26. Don't give information to visitors, discuss a patient's problems or behavior outside the hospital.

DO

20. Do allow some flexibility in routines and deviations from set rules of the game, in accordance with the needs of your patients.

21. Do tell him you are not competent to give an answer. He should be referred to his ward physician.

22. Do remember that he is sick and is not always able to regulate his behavior voluntarily.

23. Do give him activities at which you feel he is capable of succeeding.

24. Do try to stimulate his interest and thinking participation, so his morbid preoccupations will be discouraged.

25. Do report all physical complaints one of these complaints may at one time require medical attention.

26. Do refer questions to the proper person and protect the patient's confidence.
DON'T

27. Don't overlook your friends' and neighbors' misconceptions, prejudices, and superstitions regarding mental illness and mental hospitals.

28. Don't devote your entire attention to only the most responsive patients, ignoring the less aggressive or socialable ones.

29. Don't offer medical or psychiatric advice.

30. Don't talk to the patient in a condescending manner in response to his dull or childish behavior.

31. Don't treat the patient as though he were unfeeling, unaware or insensitive.

32. Don't expect patient to blindly follow an assignment.

33. Don't allow the patient to do the same task repeatedly.

27. Do help the public to understand the importance of mental hygiene, early treatment, and to develop wholesome attitudes toward the mentally ill.

28. Do include as many in activities as possible, dividing attention to the best therapeutic advantage and giving the regressed and withdrawn patient sufficient attention to draw him out of his dream world.

29. Do encourage the patient's confidence in his physician.

30. Do speak to the patient naturally and as a friend might on the level which you would if he were well.

31. Do treat the patient as a wholesome, worthwhile individual entitled to respect.

32. Do explain why you are asking him to do a certain task and its use.

33. Do change his work often enough to keep him interested. Progress level or work as he improves.
DON'T

34. Don't laugh at patient, things funny to you might have another meaning to the disturbed patient.

DO

34. Do laugh with him if the patient really makes a joke.
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