INTRODUCTION

- Individuals age of 65 years and older represent a majority of the population in the United States.
- Increase in life expectancies leads to an increase in prevalence of many chronic diseases.
- Co-morbid conditions can lead to complications requiring many elderly individuals to reside in nursing home facilities for adequate long-term care.
- There has also been an increase in hospitalized patients needing skilled nursing facilities to long term care to manage their chronic conditions.
- It has been shown to be essential for residents to engage in stimulating activities.
- COVID-19 prevents many social interactions.

OBJECTIVES

- List 2 determinants of rehabilitation.
- List at least 3 benefits of horticulture therapy.
- Envision at least 3 patients that you think can benefit from horticulture therapy.

HOW TO MEASURE IMPROVEMENT

Quality improvement can be measured quantitatively or qualitatively.

Qualitative measurements include pre and post activity. This can present a snap-shot result of the horticulture therapy question which can allow for some immediate changes.

- Questionnaires illustrate that nursing facility residents reported improved mood, stress relief and overall enjoyed at social interaction.

Quantitative measurements include CASPER (certification and survey provider enhanced reports) report.
- Shows how a facility (shown here, The Manor in Freehold, NJ) compares to the other facilities state and nation wide.
- Categories used for comparison are use of anti-anxiolytics and anti-psychotic medications (long and short stay).

REPORTED THROUGH CENTERS FOR MEDICAID & MEDICARE SERVICES QUALITY IMPROVEMENT, AND EVALUATION SYSTEM (QIES)


<table>
<thead>
<tr>
<th>Location</th>
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<tbody>
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Horticulture Therapy: Practice of Healing for the Elderly in the Long-Term Care Facilities

Krishna Parikh MD, Joshua Raymond MD, MPH

Rutgers Robert Wood Johnson Medical School Family Medicine Residency at Centrastate Medical Center

INTRODUCTION

Horticulture has been used as a means of therapy since ancient times. There is increasing literature supporting the therapeutic effects of nature on stress and healing. The repetitive activities such as digging and watering along with observing plant growth have been found to bring stability and consistency in the lives of elderly. When elderly individuals witness the growth of their plants, it can lead to increase in their confidence and enthusiasm thus motivating them to pursue more outdoor activities with nature. Gives them an opportunity for emotional connections with their others taking part in the group activities.

HORTICULTURE THERAPY

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One of the benefits of horticultural therapy is that it allows them to work with their hands and connect with nature which really promotes stress relief and tranquility.

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REFERENCES

- https://www.census.gov/quickfacts/ma/California
- https://www.census.gov/quickfacts/ma/Central
county
- www.eldergrow.org
- www.kff.org
- www.census.gov

CONCLUSIONS

- This type of intervention has the potential to be community-based and can be sustained in nursing home facilities.
- Bringing horticulture therapy to residents of nursing homes truly promotes a sense of stability and consistency which provides them with a purpose.
- Overall provides improvement in quality of life.

FUTURE CONSIDERATIONS

- Large scale studies throughout the state/nation for qualitative and quantitative measures.
- Pre and post qualitative survey.
- More frequent horticulture therapy throughout the month to assess for behavior and mood changes in dementia patients.
- Specifically focus on a study and track their frequency use of anti-anxiolytic/psychotics during the time they are actively engaging in horticulture therapy.

ACKNOWLEDGEMENTS

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