Project Title

Improving Quality of Life and Mobility among Post-Covid Elderly through Intelligent Computerized Equipment

Project Lead and Members

Project lead: John Roselin Jensi

Project members: Ms.Sivasankari, Ms.Erika, Ms.Suthiri Aung, Mr. Gopikannan

Organisation(s) Involved

Sunlove SCC @ Central

Healthcare Family Group Involved in this Project

Ancillary Care, Allied Health

Applicable Specialty or Discipline

Medical Social Workers, Occupational Therapy, Physiotherapy

Project Period

Start date: Nil

Completed date: Nil

Aims

To evaluate the effect of Intelligent Computerized Equipment among Post-Covid community care elderly by increasing functional status and quality of Life.

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Conclusion

See poster appended/ below

Project Category

Applied/ Translational Research

Quantitative Research

Care Continuum

Intermediate and Long Term Care & Community Care, Nursing Home, Quality of Life

Keywords

QOL, Physiotherapy, Occupational Therapy

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AIM

- To evaluate the effect of Intelligent Computerized Equipment among Post-Covid community care elderly by increasing functional status and quality of Life

Objective

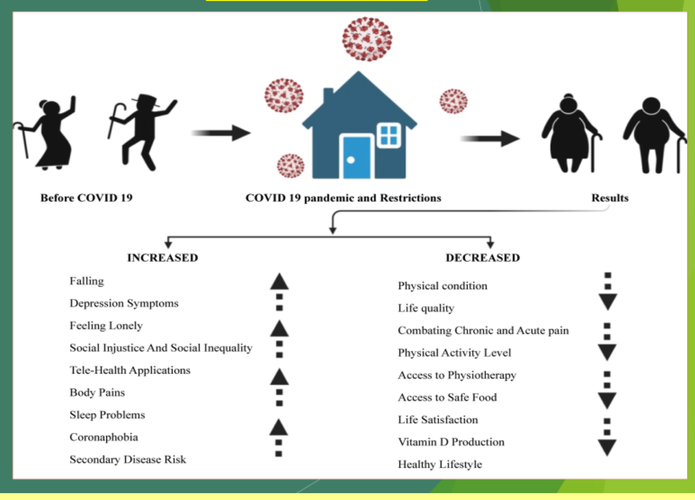
- To regain the functional and mobility status
- To improve physical strength
- To improve strength
- To improve QOL

Project Title	Improving Quality of Life and Mobility among Post-Covid Elderly through Intelligent Computerized Equipment	Project Period: January 2022- January 2023
Project Lead	• John Roselin Jensi (Physiotherapist) • Krishnasamy Gopikannan (Rehab Head)	Sunlove Senior Care Center @ Sunlove Central (Buangkok View)
Project Members	Ms. Sivasankari- Sr. Occupational Therapist Ms. Erika Nicolas- Sr. Therapy Aide Ms. Su Thiri Aung- Therapy Aide	

BACKGROUND

This past few years, we have been hit globally by a deadly virus named as COVID-19. All sorts of people have experienced the effect of this virus. Among them are elderly who are more susceptible due to their comorbidities

Among our community care (CC) clients who acquired Covid, we have noticed a decreased in functional status, physical mobility and decreased endurance which had showed impact on their activities of daily living (ADL). To overcome with these changes our rehabilitation team have initiated the idea of utilizing the Intelligent Computerized Equipment (ICE) which consists of HUR machine , cyber cycle and HUR smart balance



METHODS

- A group of 10 post covid community care clients aged 60 and above with different diagnosis were selected in the study. They were assessed by physiotherapist and occupational therapist to gather data such as muscle strength, endurance, ADL's and QOL
- Created checklist on intervention to be done for post covid patient which includes strength, endurance and balance includes measurement of outcome measures which is reassessment, 6 MWT,TUG and EQ5d
- Clients were engaged in 2 hours ICE intervention minimum twice a week for the period of 1 year. Intensity of the exercises were adjusted based on their capabilities and stability of their medical condition. Data were gathered every 3 months to compare the assessments

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RESULT

- **Data shows that 10 clients who are engaged in ICE have significantly improved muscle strength, endurance, ADL and QOL.**
- **We shared client progression with our multidisciplinary team and other nursing home staffs with in our organization**

Collection of data enrolment of clients to participate in the project

- Set inclusion criteria: clients diagnosed with post covid with different primary diagnosis. Clients include above 60yrs old
- Set exclusion criteria: Exemption who are not diagnosed with covid Jan2022 clients were identified with post covid and new admission clients also added in Mar2022
- Ensure that the distance used in 6MWT is measured and marked 30meter in walk way
- The progression data will captured by the ICE

CONCLUSION

Many post covid-19 clients suffered from long covid symptoms such as shortness of breath, fatigue, fear, anxiety and decreased physical and functional status. These complications leads to their physical inactivity which greatly affected their QOL and mental well-being

Although there is no specific treatment for post covid management, ICE exercises which consists of strengthening, endurance and balance exercise has shown significant increase in muscle strength, improve endurance which substantially improves QOL study had shown that therapeutic exercises has shown significant increase in muscle strength, physical fitness, improve endurance which substantially improves QOL(Fernández-Lázaro et al.,2022)

3 MONTHS	6 MONTHS	9 MONTHS	12 MONTHS
In 6 MWT - 60% of the clients able to participate In TUG - Able to perform with supervision in seconds	In 6 MWT 80% of the clients able to participate In TUG - Able to perform with minimum prompts	In 6 MWT - 90% of the clients able to participate In TUG - Improved gait speed	In 6 MWT - 100% of the clients able to participate In TUG - Displayed significant improvement EQ5D noticed to have considerable improvement