## Achieving functional goals in a deconditioned Geriatric patient through functional exercises combined with Counselling - A Clinical Case report

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## **Abstract**

Ageing is always associated with co morbidity and special needs. With the increasing population of Geriatrics there is need of customized healthcare System. In the modern lifestyle every individual is preoccupied with their commitments so often the retired Geriatrics felt isolated sometimes complaining and sometimes accepting the circumstances. Physical exercise has a positive outcome in reducing the risk of several diseases as well as for general well being. Physiotherapy session on an average takes 25 to 35 minutes. A well trained physiotherapist can motivate the patient to understand their special age related needs. Providing Geriatrics physiotherapy at home is the need of modern lifestyle. This case study is an attempt to show how physiotherapy with counseling in Geriatrics is helping to achieve functional goals established in the home without the use of sophisticated technology. A 88 years old female doing exercise under a professional supervision for first time on the recommendation of her family members to regain her ADLs. In her treatment protocol following Interventions were included functional exercises, Range of Motion exercises and Progressive resisted training followed by 10 minutes counselling session. Barthel Index and Berg Balance Scale were used to evaluate pre and post Intervention results. At the end of the treatment patient is able to regains her ADLs goals and her balance also improved, and after 3 follow up session she is still maintaining the same. In this Case study Functional exercises combined with counselling is found to be effective.

Key words: Functional exercise, Counselling, Barthel Index, Geriatrics, Berg balance scale

Introduction- The rapidly growing population particularly of age 60 and over does not necessarily experiencing functional independency with longevity. So there is a loss of intrinsic capacity along with other co morbidity. WHO has defined intrinsic capacity as the composite of all physical and mental capacities of an individual covering five sub domains:- cognition, locomotion, sensory, vitality, and getting old is a natural process, Old age brings with it many diseases. In this age, along with physical health , mental health is also very important and it is generally ignored. As we all know Ageing is always associated with co morbidity and special needs. With the increasing population of Geriatrics there is need of customized healthcare System. In the modern lifestyle every individual is preoccupied with their commitments so often the retired Geriatrics felt isolated sometimes complaining and sometimes accepting the circumstances. Physical exercise combined with counselling session has a positive outcome in reducing the risk of several disease as well as for general well being. Through this case study we want to tell how physiotherapy with counselling in Geriatrics is helping to achieve functional goals established in the home without the use of sophisticated technology.

Case description- Mrs Ratan Prabha 88 years old presents with difficulty in standing, sitting, walking, changing posture, she is dependent on her daughter for her activity of daily living like grooming, using toilet, fooding etc. She laughs uncontrollably unintentionally. She often get such episodes that upset her balance. Patient used to get embarrassed in front of the people so she used to skip attending any social gathering. Patient complains of chronic constipation. She complains of loss of appetite, her feeding adapted because she has few teeth. Eye Sight is poor with spectacles and recognize people by their voice. She describes fatigue as a lack of energy to perform any activity. She has been recommended by her family member for physiotherapy for the reason being, family fears she will become bed bound. Patient spent most of her time on her bed and even refuses to move out of her room.

**Medical History-** She had Transient Ischaemic Attack in 2016. She is on medication for Blood pressure, Hypothyroidism, and Diabetes. Age Related vision loss.

Clinical Examination and Intervention- On Observation upper back slouched with left side tilting and not able to lift her left foot properly to walk. Shoulder's ROM is restricted. No tenderness, paresthesia on her left sole and palm. Slump test negative, SLR negative, ULTT not done because of Shoulder's ROM restriction. Plantar flexior and dorsi flexors strength is poor. Poor balance control. The Patient gets tired easily. As this is the case of a very old patient who is dependent for her ADLs on others. Selecting Barthel Index seems appropriate to calculate her level of dependence and to plan a treatment to help her become less dependent on others. Together with Barthel Index we choose Berg Balance Scale to evaluate her balance. As this is the main objective of physiotherapy to make her Independent for her basic routine as well as this was the goal of patient also to become less dependent on her daughter for doing her ADLs and to improve her balance. The Patient Barthel Index is 25/100 and Berg Balance Scale is 5/56. The Patient is at high risk of fall. This is the case of deconditioning has no motivation to look forward and accepted that her physical condition will deteriorate with upcoming time. Motivating her to exercise was the most challenging task, it was a home visit. In her Treatment plan, Low intensity exercise performed on an almost daily basis which includes ROM Exercise, Muscle strengthening, Balance training, Breathing exercise and functional exercises combined with counselling. Counselling for 5-10 minutes followed by whistle blowing for 5 Repetitions with interval of 1 minute for 10 Repetitions and ask her to repeat the task twice daily. 10 Repetitions of Shoulder ROM (active assisted), Knee ROM 10 Repetitions (active) Ankle Plantar flexion and dorsi flexion ROM 10 Repetitions (active assisted) tactile stimulation on palm and feets using different fabrics, using hard and soft tactile stimulation.

**Post Intervention outcome-** After six months of Intervention, She no longer complains of fatigue. She is doing her toilet activity independently walking inside the house with the help of walker for 10 minutes without complaint. Her Barthel Index is now 65/100 and Berg Balance Score is 25/56 and after 3 follow up visit patient maintains her functional activity and mobility. 1<sup>st</sup> follow up done after 1 month, 2<sup>nd</sup> follow up after 3 months and 3<sup>rd</sup> follow up after 6 months.

**Limitation-** This is a single case study so the counselling session done by the physiotherapist for the better outcome of the patient is need to be done in a larger groups. More over the integrated care approach is lacking in this case study.

**Discussion-** Building a connection with patient is an integral part of effective treatment. This becomes more important for the physical therapist as we have to visit the patient at least for 4 times a week for 30 minutes session. There is a involvement of physical and mental work of both patient and the physiotherapist, so building effective rapport with patient is essential. The deteriorating health of this Geriatric patient started within a year after her Husband's death. So there is strong connection of her health and her Husband's death. Counselling has helped the patient to believe physiotherapy will lead the path towards healthy Ageing. Functional Exercise worked quite effectively in gaining the ADLs and Balance.



Fig:1 Balance Exercise done by Mrs Ratan Prabha Ratan Prabha



Fig: 2 1 Balance Exercise done by Mrs



Fig:3 Whistle blowing Exercise done by Mrs Ratan Prabha done by Mrs Ratan Prabha



Fig: 4 Whistle blowing exercise



Fig: 5 Physiotherapist assisting Mrs Ratan Prabha to do the functional tasks

## References

- 1.KlausHauerPhD,BrendaRost, Kirstin Rütschle et.al. Exercise Training for Rehabilitation and Secondary Prevention of Falls in Geriatric Patients with a History of Injurious Falls. 2001 https://doi.org/10.1046/j.1532-5415.2001.49004.x.
- 2. Alexander C. Morgan, M.D.Practical Geriatrics: Psychodynamic Psychotherapy With Older Adults.2003 https://doi.org/10.1176/appi.ps.54.12.1592.
- 3.Jo Sheedy, Ben Smith, Adrian Bauman et.al. A controlled trial of behavioural education to promote exercise among physiotherapy outpatients.2000 Australian Journal of Physiotherapy 2000 Vol. 46.
- 4. Hyun-Ju Jun, PT, PhD, Ki-Jong Kim, PT, PhD, Ki-Won Nam, PT, PhD, Chang-Heon Kim, PT, PhDc. Effects of breathing exercises on lung capacity and muscle activities of elderly smokers.2016. J. Phys. Ther. Sci. 28: 1681–1685.
- 5.JosefneLampinen, Mia Conradsson, FredricaNyqvist et.al. Loneliness among very old people with and without dementia: prevalence and associated factors in a representative sample.2022 European Journal of Ageing https://doi.org/10.1007/s10433-022-00729-8European Journal of Ageing https://doi.org/10.1007/s10433-022-00729-8.
- 6.Elisabeth Platzer ,KatrinSingler, Peter Dovjak, et.al. Evidence of Inter-Professional and Multi-Professional Interventions for Geriatric Patients: A Systematic Review.2020 International Journal of Integrated Care , 20(1): 6, 1–10. DOI: <a href="https://doi.org/10.5334/ijic.4683">https://doi.org/10.5334/ijic.4683</a>.
- 7.C.Collin, D.T.Wade,S.Davis et.al. The Barthel ADL Index:a reliability study 1988.10(2):61-3. doi: 10.3109/09638288809164103.
- 8.K.Hachisuka, T.Okazaki, H.Ogata.Self-rating Barthel index compatible with the original Barthel index and the Functional Independence Measure motor score.1997 Jun 1;19(2):107-21. doi: 10.7888/juoeh.19.107.

9.Briggs AM, Valentijn PP, Thiyagarajan JA, et al. Elements of integrated care approaches for older people: a review of reviews. BMJ Open 2018;8:e021194. doi:10.1136/bmjopen-2017-021194.

10.S.T. Miyamoto, Lombardi Junior, K.O. Berg. et.al.Brazilian version of the Berg balance scale. 2004 Braz J Med Biol Res 37(9) https://doi.org/10.1

