

# **Original Research Paper**

**Social Science** 

# Status of General Health, Functional Independence and services in Persons with Locomotor Disability (A study between social work intervention and non-intervention group)

## Rajesh Ramachandran

Rehabilitaion Officer\*(Service And Programme), NIEPMD, Muttukadu , Chennai

# Vemula Sree Rajya Lakshmi

Rehabilitaion Officer\*(Service And Programme), NIEPMD, Muttukadu , Chennai

BSIRACI

Several studies were made on health status and social work intervention but there is still a lag on studies focusing on functional independence in persons with disabilities. Hence this study was undertaken to compare status of general health, functional independence and social services between social work intervention and non-interventional group. 20 Clients who are attending services at NIEPMD under the category of locomotor disability were selected and allocated randomly into social work interventional and non-interventional groups.

Both groups were distributed pamphlets and guidance about various services available in NIEPMD for persons with locomotor disabilities. The interventional group was in addition given regular counselling and information on, services and benefits available in NIEPMD and the importance of therapies in improving quality of life in persons with disabilities. After a month of intervention at NIEPMD, all the clients were assessed using General Health Questionnaire 28 and Functional Independence Measure Scale. There was significant difference in scores of functional independence measure between interventional and non-interventional groups and the scores of general health questionnaire-28 had no significant difference between both the groups.

## **KEYWORDS**

Functional Independence, Locomotor Disability, General Health Questionnaire, Functional Independence Measure.

#### Introduction:

Being disabled is not the cause of disability but lack of confidence is the root cause for losing hope on life. One ideal person and one inspirational thought can bring out the capabilities of the disabled persons and can change their perception of life. And that change should be initiated by counselling and guidance given by the social worker. For people with severe disability, social services of various types, such as assistance with personal care, housing, transportation and equipments, are also necessary. The availability of these services is usually regulated by several authorities, depending on the legislation of the country.

Several studies were made on health status and social work intervention but there is still a lag on studies focusing on functional independence in persons with disabilities. Hence the present study is a part of an investigation on effectiveness of social work intervention on status of general health, functional independence and services in persons with locomotor disability. The study compares the status of general health and functional independence between interventional and non-interventional groups to find whether it varies with social work intervention or not.

## Needs and significance of the study:

Inspite of various awareness programs and camps conducted by government and NGOS for educating and empowerment of persons with disabilities, there is still a myth in certain communities and areas of the society that disability is permanent and life of persons with disabilities is restricted to home. The present study is to focus on the effective social work intervention in improving status of general health, functional independence and services in persons with locomotor disability. We need such studies to prove that disability can be overcomed with early guidance and couselling by social worker for timely assistance by medical and supportive therapies.

## Statement of the problem:

The problem of the study is to investigate the effects of social work intervention on status of general health and functional independence in persons with locomotor disability.

## Objectives:

- 1) To compare the effectiveness of social work intervention on the status of general health between interventional and non-interventional group.
- 2) To compare the effectiveness of social work intervention on functional independence between interventional and non-interventional group.

#### **Review of Literature**

Balasubramanian M M, et. al(2012) compared the functional independence and quality of life of persons with locomotor disabilities who undergo Institutional Based Rehabilitation (IBR) and similar persons who undergo Community Based Rehabilitation (CBR). Purposive sampling was done. Thirty males with locomotor disabilities -15 from IBR and 15 from CBR- were selected. Both the groups were first administered the Functional Independence Measure (FIM) questionnaire, followed by the Quality of Life (WHOQOL-BREF) questionnaire. There was no significant difference between IBR and CBR with regard to functional independence.

**Dahlberg Antti et.al (2003)** estimated the functional independence of persons with spinal cord injury according to the Functional Independence Measure motor items. The study design was cross-sectional. There were no significant differences between the genders. Subjects with tetraplegia needed significantly more assistance in all motor items except walking/wheelchair locomotion, where there was no significant difference. Subjects with tetraplegia in American Spinal Injury Association Impairment Scale D had higher Functional Independence Measure scores, more functional independence, than subjects in American Spinal Injury Association Impairment Scale A—C.

**Deborah Towle et.al (1989)**have focused on the effect of social work intervention on functional independence in subjects effected with stroke and have explored the importance of social work intervention in improving quality of life in persons with disabilities. This study assessed the effect of social work intervention on service provision and functional independence in persons affected with stroke. Results showed that there was little difference between interventional and non-interventional groups hence, stating social work have little effect on service provision and functional independence in persons affected with stroke.

#### Hypothesis:

There is no difference between interventional and non-interventional group in the aspect of functional independence and status of general health.

#### Reasearch Design:

Sample- The Non-probability sampling involves the selection of elements based on assumptions regarding the population of interest, which forms the criteria for selection and owing to these reasons Non-probability sampling was engaged. The sample size of the present study is 20. 25 registered clients of NIEPMD under the category locomotor disability were selected between the age ranges of 20-60 years. A screening test was done to check the fulfilment of the criteria for inclusion. After the screening 20 clients were selected who fulfilled the criteria. Clients were allocated randomly into social work interventional and non-interventional groups.

Inclusion criteria- > 20 years of age

Both male and female

Bilateral or uni lateral locomotor disability

Exclusion criteria- Clients with history of dementia

Who are unable to answer the questionnaires

verbally

#### **Procedure**

A) Non-Interventional group:

This group was given pamphlets and one time guidance and counselling about various departments, therapies and benefits available at NIEPMD for persons with disabilities.

#### B) Interventional group:

This group was given regular (on every visit to NIEPMD) guidance and counselling and pamphlets about various departments, importance of therapies and other benefits available at NIEPMD for persons with disabilities.

#### **Tool Used**

- 1) General Health Questionnaire 28-An assessment of general health condition of the client under the categories somatic symptoms, anxiety insomnia, social dysfunction and severe depression. (Goldberg DP et.al; 1979)
- 2) Functional Independence measure-An assessment of functional independence of the client under the categories self care, sphincter control, transfers, locomotion, communication and social cognition. (Corrigan JD et.al;1997)

#### **FIM**<sup>™</sup> instrument

| 7<br>6   |                                  |                                 | N                                       | NO HELPER |  |
|--|----------------------------------|---------------------------------|---|-----------|--|
| Modified Dependence 5 Supervision (Subject = 100%+) 6 Minimal Austic (Subject = 175%+) 3 Moderate Austic (Subject = 157%+) 6 Moderate Austic (Subject = 157%+) 7 Complete Dependence 2 Maximal Austic (Subject = 158%+) 1 Total Austic (Subject = 158% than 25%) |                                  |                                 |   | HELPER    |  |
| L_   |                                  | ADMISSION                       | DISCHARGE                               | FOLLOW-UP |  |
| Self-C   |                                  |                                 |   |           |  |
| A.<br>B  | Eating<br>Grooming               | H                               |   | H         |  |
| C.   | Grooming<br>Bathing              | $\vdash$                        |   | H         |  |
| D.   | Dressing - Upper Body            | $\vdash$                        |   |           |  |
| E.   | Dressing - Lower Body            | H                               |   | -         |  |
| E  | Toileting                        |                                 |   |           |  |
| Sphin  | ecter Control                    |                                 |   |           |  |
| G.   | Bladder Management               |                                 |   |           |  |
| H.   | Bowel Management                 |                                 |   |           |  |
| Trans  |                                  |                                 |   |           |  |
| I.   | Bed, Chair, Wheelchair           | LI                              |   |           |  |
| J.   | Toilet                           |                                 |   |           |  |
| K.   | Tub, Shower                      |                                 |   |           |  |
|  | ocomotion                        |                                 |   |           |  |
| L.   | Walk/Wheelchair                  | C Wheelche                      | C Who                                   | C Wheeld  |  |
| M.   | Stairs                           |                                 |   |           |  |
| Moto   | or Subtotal Score                |                                 |   |           |  |
|  | nunication                       | A Andrey                        | C 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | ·         |  |
| N.<br>O.   | Comprehension                    | Y Yes                           | Y Voc                                   | Y 35-4    |  |
| O.   | Expression                       | Nonecodal Barth                 | ₫ إيا ا                                 |           |  |
|  | Cognition                        |                                 |   |           |  |
| P.   | Social Interaction               | $\vdash$                        | -                                       | - H       |  |
| Q.<br>R.   | Problem Solving                  | $\vdash$                        | -                                       | H-1       |  |
|  | Memory<br>nitive Subtotal Score  |                                 |   |           |  |
| TOT  | AL FIM Score                     |                                 | =                                       |           |  |
| 1012   | AL FIM Score                     |                                 |   |           |  |
|  | E: Leave no blanks. Enter 1 if p | stiant not testable due to risk |   |           |  |

## Functional Independence Measure



### **General Health Questionnaire-28**

#### Results:

Out of the 20 clients, 17 were male and 3 were female and amongst the category of locomotor disability 7 clients were hemiplegic, 3 were having the condition of unilateral post polio residual paralysis, 5 were having the condition of bilateral post polio residual paralysis, 3 were having locomotor disability due to lower limb amputation and 2 were multiple sclerotic.

Data was collected through interview method from all the clients and the results were analysed using Mann -Whitney U Test between both the groups. There was difference between interventional and non-interventional group in scores of Functional Independence Measure under the sub categories- self-care (U=8,P<0.05), sphincter control (U=12.5,p<0.05), transfers (U=19.5,p<0.05), locomotion (U=20, P< 0.05). And there was no difference seen under the sub categories-communication (U=50, p<0.05) and social cognition (U=30.5,p<0.05). Also there was no significant difference between interventional and non-interventional group in scores of General Health Questionnaire-28(U=34.5,p<0.05).

#### Discussion:

There is a difference between the scores of non-interventional and interventional groups in FIM under sub categories -self care, sphincter control, transfers, locomotion, hence proving that social work intervention has an impact on functional independence which improves the quality of life in persons with locomotor disability.

The clients in interventional group have attended various therapies and availed benefits available at NIEPMD and this has contributed for significant difference between both the groups on scores of FIM. There is no difference under the sub category communication as speech is not affected in clients with locomotor disability and also persons who are unable to answer the questionnaire verbally have been excluded.

Non-interventional group clients were unaware of importance of the therapies and benefits for persons with disabilities and hence have not availed the services regularly.

**Conclusion-** The study concludes that social work intervention plays a vital role on level of functional independence in persons with locomotor disability. Social work Intervention is inclined towards supporting individuals, families, groups and communities which augments collective well being. The well being improves the life span, reduces stress and strengthens their skills and abilities by using their own resources.

#### Limitations:

The clients for this study were selected randomly under the category locomotor disability which included clients with unilateral post polio residual paralysis, bilateral post polio residual paralysis,

hemiplegia, lower limb amputation, multiple sclerosis and not under specific condition.

#### Future research:

The present study is based on a small number of PwDs, future studies are recommended on more number of clients with disabilities particularly multiple disabilities covering much broader geographical location.

#### References:

- Balasubramanian M M, Dhanesh, KG, Amarnath, A (2012). Functional Independence and Quality of Life for Persons with Locomotor Disabilities in Institutional Based Rehabilitation and Community Based Rehabilitation A Comparative Study. dcidj.org > Home > Vol 23, No 3 (2012)
- Corrigan JD, Smith-Knapp K, Granger CV. (1997) Validity of the functional independence measure for persons with traumatic brain injury. Archives of Physical Medicine and Rehabilitation. 1997;78(8):828-34.
- Dahlberg Antti, Kotila, Mervi, Kautiainen Hannu and Alaranta, Hannu (2003). Functional Independence In Persons With Spinal Cord Injury In Helsinki. J Rehabil Med 2003; 35: 217–220. file:///C:/Users/Administrator/Downloads/35217.pdf
- Deborah Towle, Nadina B Lincoln, Louise M Mayfield (1989) Service provision and functional independence in depressed stroke patients and the effect of social work intervention on these; Journal of Neurology, Neurosurgery, and Psychiatry 1989;52:519-522.
- Goldberg DP, Hillier VF. (1979) A scaled version of the General Health Questionnaire. Psychol Med 1979;9: 139-45.

  Granger CV, Cotter AC, Hamilton BB, Fiedler RC (1993). Functional assessment scales: a study of persons after stroke. Archives of Physical Medicine and
- Rehabilitation. 1993;74(2):133-138. Granger CV, Cotter AC, Hamilton BB, Fielder RC, Hens MM (1990) Functional assessment scales: a study of persons with multiple sclerosis. Archives of Physical Medicine and Rehabilitation. 1990;71(11):870-875.