

# **DISABILITY**

(PERMANENT PHYSICAL IMPAIRMENT)

## **ASSESSMENT**

**AND**

## **CERTIFICATION**

***GUIDELINES & EXPLANATIONS BY DR RATNESH KUMAR, DIRECTOR,  
NIOH, KOLKATA***

***BASED ON  
GUIDELINES & GAZETTE NOTIFICATION  
(Committee under chairmanship of DGHS, GOI) issued by  
Ministry of Social Justice & Empowerment, GOI,  
Regd No. DL33004/99 (Extraordinary) Part II, Sec. 1, June 13, 2001***

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**(In the interest of persons with disability, to sensitize medical doctors.)**

## **Introduction**

In order to review the guidelines for evaluation of various disabilities and procedure for certification (Ministry of Welfare, Govt. of India, 1986) and to recommend appropriate modification/alterations keeping in view the Persons with Disabilities (Equal opportunities, Protection of rights and Full participation) Act 1995, a committee was set up in 1988 by the Government of India, Ministry of Social Justice & Empowerment under the Chairmanship, DGHS, GOI with subcommittee, one each in the area of Mental Retardation, Locomotor/Orthopaedic, Visual and Speech & Hearing disability.

After considering the reports of committee, guidelines for evaluation of following disabilities and procedure for certification was notified vide no. 'The Gazette of India, Extra ordinary Part-II Section 1, Dated 13, June 2001'.

1. Visual Impairment
2. Locomotor / Orthopedic Disability
3. Speech and Hearing Disability
4. Mental Retardation
5. Multiple Disabilities

In the guidelines, the functional (permanent physical impairment) due to congenital, post disease or trauma have been evaluated. This is commonly interpreted as disability which is not so, in strict terms. In case of loco motor conditions, broadly, the body has been divided into upper limb, lower limb & trunk. In principle, the function of one part cannot be replaced by other, therefore each functional part in itself is 100% and thus loss of function/ PPI of that part is taken as 100%.

On the other hand, the whole body value cannot exceed 100%. Thus in case the impairment is seen in more than one function or body part, the mathematical sum may exceed 100 but total of body/individual cannot exceed 100%. Thus a total of one or all segments of body cannot exceed 100% in any situation.

Because of the UN proclamation in 1981, subsequent declaration of Decade for Disabled and the Biwako Millenium Framework of Actions in 2003, extended further from 2003-2012, to which India is a signatory, it is binding on the member countries to protect the rights, provide equal opportunities and empower persons with disability. The PWD Act 1995 and recent National Policy for disabled persons are initiatives by the Ministry of Social Justice & Empowerment, Govt. of India, to fulfill national & international commitments.

What is the need of and percentage in disability certificate? In view of the various constraints, physical & financial, the 40% disability has been taken as cutoff to avail various facilities & concession earmarked by government. The guidelines notified, are for assessment of disability in the respective area/body part (function) and to quantify in terms of percentage of disability, to avail facilities & concessions viz. Reservation in job, Travel concession, soft loan for entrepreneurship development, Scholarship, Income Tax / Custom rebate, Age relaxation in employment etc.

As per the Act, authorities to give a disability certificate will be a medical board duly constituted by the central and state government. The medical board should consist of at least three members, out of which one shall be a specialist in the concerned disability subject. The standard guidelines and tools mentioned in the notification have to be used in evaluation of disability for proper certificate.

The certificate would be valid for a period of five years for those, whose disability is temporary, which means that PPI may change to some extent, but in no way does this mean that disability will be cured. For example after traumatic amputation the percentage may change due to improvement in additional factors as pain, neuroma, scar infection etc. For those who acquire permanent disability, the validity can be shown as permanent.

A committee for evaluation, assessment of multiple disabilities and categorization, extent of disability and procedure for certification was also constituted in 1999.

The mental illnesses have also been included in the disability and the guideline for evaluation & assessment of mental illness and procedure for certification were issued by notification no 16-18/97-NI.I dated 18th February 2002 (Annexed).

The guidelines and clarifications submitted in subsequent paragraph are an attempt to clarify doubts being raised, based on guidelines and as per law of the land without having scope of personal opinion. These are neither final nor ultimate, thus having scope to amend in future. The efforts to develop a consensus on disability certification and simplification are going on.

For any clarification or details, feel free to contact us, e-mail: [director,nioh.@vsnl.net](mailto:director,nioh.@vsnl.net). or visit web: [www.niohonline.org](http://www.niohonline.org).

Dr. Ratnesh Kumar  
Director, NIOH

# THE GUIDELINES

The Universal guidelines for assessment and certification of the following Disabilities were finalized by group of experts and were notified by the Ministry of Social Justice & Empowerment, GOI in June 2001.

1. Visual Impairment
2. Locomotor Disability
3. Speech & Hearing
4. Mental Retardation
5. Multiple Disabilities.

Guidelines for certification were framed.

According to the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Rules, 1996 notified on 31.12.1995 by the Central Government in exercise of the powers conferred by sub-section (1) and (2) of section 73 of the Persons with Disabilities Act, 1995, the empowered persons to give disability certificate, will be a Medical Board, consisting of at least three members, out of which **at least one shall be a specialist in the particular field for assessing loco motor/visual including low vision/hearing & speech disability, mental retardation and leprosy cured as the case may be**, duly constituted by the Central and State Government. Specified tests as indicated in guidelines should be conducted by the medical board and **recorded** before a certificate is given. The certificate would be valid for a period of five years for those whose disability is temporary, while in permanent disability the validity is life long.

The Director General of Health Services, Ministry of Health & Family Welfare will be the final authority, should there arise any controversy/doubt regarding the interpretation of the definitions/classifications/evaluations/tests etc.

The minimum degree of disability should be 40% in order to be eligible for any concession/benefit.

As per PWD Act and in its compliance, various benefits & concessions are to be provided to the 'persons with disability'

'Person with disability' means a person suffering from not less than forty per cent of any disability as certified by a medical authority;

"Medical authority" means any hospital or institution specified for the purposes of this Act by notification by the appropriate Government.

The 'disability' under PWD act means -

- i. Blindness,
- ii. Low vision,
- iii. Leprosy-cured,
- iv. Hearing impairment,
- v. Locomotor disability,
- vi. Mental retardation,
- vii. Mental illness.

## **Broad Principles of Disability Assessment**

Following guiding principles to assess disability, required before issue of disability certificate, should be known to doctors/members of board with additional inputs related to disability of their concerned specialty. The specialist from the areas of locomotor, vision, speech & hearing and mental retardation should also have broad knowledge on multiple disability.

**Functional Loss:** It is assessment of functional loss based on some uniform test, resulting from permanent physical impairment caused due to congenital or acquired conditions (traumatic or post disease). In case of amputees, the percentage is calculated directly depending on the level of the part that is lost and additional weightage.

**Individual Function requirement:** The functions assessed are in relation to standard desired functions of anatomical part irrespective of individuals age, sex, nature of work, job, social status, requirement of specific part to him/her.

**Personal opinion:** There is no scope of personal opinion or to refer tests other than mentioned in guidelines notified.

**Where to decide percentage on extent of function/activity** – Wherever a limit to percentage disability (like each activity of ten activities to coordination in upper limb, nine activities to test stability and additional weightage, a certain percentage limit may be given, the specialist need to use his conscience with full satisfaction. It is advised to be uniform and unbiased, such range may be divided into three group as

- a. No loss – activity can be performed normally without assistance
- b. Partial loss – activity can be performed partly or with assistance
- c. Total Loss - activity can not be performed even with assistance

**Trick Movement:** In case where specialist feel that particular group of muscle/ part required to perform the function and said function should be performed in the event of involvement, despite this the individual is able to perform function due to trick movement or some part synergistic to it, this should be taken as function performed and percentage of PPI be calculated accordingly.

**Authority:** As per the act, authorities to give disability certificate will be a Medical Board duly constituted by the Central and State Government. The Medical Board should consist of at least three members. Out of which one shall be a specialist in the concerned disability subject.

**Testing Tools and Guidelines:** The standard guidelines and tools mentioned in the notification have to be used in evaluation of disability for proper certificate.

**When to Assess:** For purpose of certification, disability should be assessed when the specialist is satisfied that further medical treatment/intervention is not like to reduce the extent of impairment. Normally, a period of six months is considered in such medical conditions.

**Certification in condition of deformity, which is likely to be modified by surgery:**

In cases of conditions which can be corrected by surgical procedures, no strict mention is given. Ideally the assessment should be done only after best possible correction but the benefit is also given in favour of individual.

**Validity of certificate:** The certificate would be valid for a period of five years in case of temporary disability means that PPI may change to some extent, but no way it means that disability will be cured or significantly reduced. For example after traumatic amputation the percentage may change due to improvement in additional factors as pain, neuroma, scar infection etc. For permanent disability, certificate once issued is permanent and life long.

If disability percentage is changed after surgery: before issue of permanent disability certificate, the board ensures that improvement in medical condition has reached to its maximum and not likely to improve further. In case if an individual get his disability due to deformity get corrected by surgery, the percentage of disability if assessed in changed condition may vary. For example in case of Polio with contracture if get himself operated, contracture relieved and function improvement occurred due to tendon transfer, the percentage of disability will be less in post operated as compared to pre-operated stage. Can he use his earlier disability certificate to avail benefit/concession? Whether certificate issuing doctor be responsible?

Ideally, before issue of disability certificate all options to reduce/correct disability should have been tried but in view of practical difficulty and resource constraints and taking a holistic view, certificate can not be denied for want of medical intervention suggested. The percentage disability in the certificate was based on the condition on the day of assessment, when there were no chances of improvement by usual treatment. In case where further specific medical/surgical intervention done afterward, the percentage disability mentioned in the certificate, earlier shall not be valid. Such note may be mentioned if issuing authority apprehend, case to case basis.

**Appeal-** In case of controversy arises on percentage of disability given by a board, the individual can appeal to the same board to reassess his/her disability. The board is authorized to consider and reassess the individual and modify its certificate with reasons. In case of further controversy, the individual can approach to higher state government medical authority to get reassessed by board/designated authority. The Director General Health Services, Govt.of India shall be final appellate authority.

## **Disability**

**'Locomotor Disability'** means disability of the bones, joints or muscles leading to substantial restriction of the movement of the limbs or any form of cerebral palsy;

**'Cerebral Palsy'** means a group of non-progressive conditions of a person characterised by abnormal motor control posture resulting from brain insult or injuries occurring in the pre-natal, peri-natal or infant period of development;

**'Leprosy cured person'** means any person who has been cured of leprosy but is suffering from -

- i. loss of sensation in hands or feet as well as loss of sensation and paresis in the eye and eye-lid but with no manifest deformity;
- ii. manifest deformity and paresis but having sufficient mobility in their hands and feet to enable them to engage in normal economic activity;
- iii. extreme physical deformity as well as advanced age which prevents him from undertaking any gainful occupation, and the expression "leprosy cured" shall be construed accordingly;

**'Blindness'** refers to a condition where a person suffers from any of the following conditions, namely:-

- iv. total absence of sight; or
- v. visual acuity not exceeding 6/60 or 20/200 (snellen) in the better eye with correcting lenses; or
- vi. Limitation of the field of vision subtending an angle of 20 degree or worse;

**'Person with low vision'** means a person with impairment of visual functioning even after treatment or standard refractive correction but who uses or is potentially capable of using vision for the planning or execution of a task with appropriate assistive device;

**'Hearing Impairment'** means loss of sixty decibels or more in the better ear in the conversational range of frequencies;

**'Mental Illness'** means any mental disorder other than mental retardation;

**'Mental Retardation'** means a condition of arrested or incomplete development of mind of a person which is specially characterised by sub-normality of intelligence;

**'Rehabilitation'** refers to a process aimed at enabling persons with disabilities to reach and maintain their optimal physical, sensory, intellectual, psychiatric or social functional levels;

## **Multiple Disabilities :( In case of more than one disability)**

Multiple disabilities means a combination of two or more disabilities as defined in Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995, namely-

- I. Loco motor disability including leprosy cured
- II. Blindness/Low vision
- III. Speech & Hearing Impairment
- IV. Mental Retardation
- V. Mental Illness.

A specialist, authorized to make assessment of disability in a disabled individual and issue disability certificate through duly constituted medical board (disability), need to understand how to add disabilities assessed by him/her, or the disabilities given by other experts in the concerned area/areas. The final certificate is sum of various disabilities, as per guidelines, using a telescopic sum formula.

In assessing disability (PPI) and giving percentage of disability, there is hardly any scope of personal opinion, individual's, age, sex, profession, nature of work, race, religion or importance of function impaired for that individual or society. But there is scope to bring such instances into notice and to be get clarifications/considerations, whenever review/modification of existing guidelines is made in future.

In case of multiple disabilities, the subject specialist from the area with higher percentage may sign the final certificate.

In case two areas are having the same percentage, either of specialists may sign the certificate.

### **2. Guidelines for Evaluation: -**

In order to evaluate the multiple disability, the same guidelines shall be used as have been developed by the respective sub-committees of various single disability, viz Mental retardation, Loco motor Disability, Visual Disability, and Speech & Hearing disability, and recommended in the meeting held on 29.2.2000 under the Chairmanship of Dr. S.P. Agarwal, Director General of Health Services, Government of India, with reference to Order No. 16-18/96-N.I.I, dated 28th August, 1998 and communicated to Ministry of Social Justice & Empowerment, Government of India, vide letter No. S-13020/4/98-MH, dated 16th March, 2000.

However, in order to arrive at the total percentage of multiple disability the combining formula  $a + \frac{b(90-a)}{90}$ , as given in the "Manual for Doctors to

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Evaluate Permanent Physical Impairment developed by Expert Group meeting on Disability Evaluation", shall be used, where

"a" will be the higher score and

"b" will be the lower score.

However, the maximum total percentage of multiple disabilities shall not exceed 100%.



### 3. Procedure for Certification of Multiple Disabilities:

The procedure will remain the same as has been developed by the respective sub-committees on various single disabilities and finalized in a meeting under the Chairpersonship of Dr. S.P. Agarwal held on 29.2.2000. The final disability certificate for multiple disability will be issued by Disability Board which has given higher score of disability by combining the score of different disabilities using the combining format, i.e.,

$$\mathbf{a + \frac{b(90 - a)}{90}}$$

In case where two scores of disability are equal, the final certificate of multiple disabilities will be issued by any one of them as decided by local authority.

STANDARD FORMAT OF THE CERTIFICATE

(for OH/ VH/ Sp & Hg)

(NAME & ADDRESS OF THE INSTITUTE/HOSPITAL: (ISSUING THE CERTIFICATE)

Certificate No.

Date

**CERTIFICATE FOR THE PERSONS WITH DISABILITIES**

This is to certify that Shri/Smt./Kum/-----  
Son/wife/daughter of Shri \_\_\_\_\_ Age \_\_\_\_\_  
yrs old male/ female, Registration No. \_\_\_\_\_ is a  
case of physically disabled/ visual disabled/ speech & hearing disabled and has  
\_\_\_\_\_ % (\_\_\_\_\_ percent) permanent (physical impairment/  
visual impairment/ speech& hearing impairment) in relation to his/her  
\_\_\_\_\_

Note: -

1. This condition is progressive/non-progressive/likely to improve/not likely to improve.\*
2. Re-assessment is not recommended/recommended after a period of \_\_\_\_\_ months/years.\*

**\*Strike out which is not applicable.**

Sd/-  
(Doctor)  
Seal

Sd/-  
(DOCTOR)  
Seal

Sd/-  
(DOCTOR)  
Seal

Signature/Thumb impression  
of the patient –

Countersigned by the  
Medical Superintendent/CMO/Head  
of Hospital (with seal)

Recent Attested  
Photograph  
showing the disability  
Affixed here.

## LOCOMOTOR DISABILITY

### 1. Definition:-

1. **Impairment:** Impairment is any loss or abnormality of psychological, physiological or anatomical structure or function in a human being.

2 Functional **Limitations:** Impairment may cause functional limitations which are partial or total inability to perform those activities necessary for motor, sensory or mental function within the range or manner of which a human being is normally capable.

3. **Disability:** A disability is any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being.

4. **Loco motor Disability:** Loco motor disability is defined as a person's inability to execute distinctive activities associated with moving both himself and objects, from place to place and such inability resulting from affection of musculo-skeletal and/or nervous system.

### 2. Categories of Loco motor Disability

The categories of loco motor disabilities are enclosed in subsequent paragraph.

### 3. Process of Certification

A disability certificate shall be issued by a Medical Board of three members duly constituted by the Central and State Government Out of which, at least, one member shall be a specialist from either field of Physical Medicine & Rehabilitation or Orthopaedics.

Two specimen copies of the disability certificate for mental retardation and others (visual disability, speech and hearing disability and loco motor disability) are enclosed at Annexure.

It was also decided that whenever required the Chairman of the Board may co-opt other experts including that of the members constituted for the purpose by the Central and the State Government.

On representation by the applicant, the Medical Board may review its decision having regard to all the facts and circumstances of the case and pass such order in the matter as it thinks fit.

### Variables-in assessing loco motor disability (PPI)

In Loco motor Disability following variables need to be taken in to consideration while assessing function loss resulting permanent physical impairment (disability)

1. Strength of Muscle (MRC scale)
2. Range of Joint Motion
3. Coordination
4. Stability
5. Limb length discrepancy
5. Hand Functions (prehension, sensation & strength)
6. Sensation
7. Deformity etc
8. Complications like pain, infection etc.
9. Extremity dominant or non-dominant.

The PPI (disability) due to amputation/congenital loss of limb, neurological conditions, post stroke (mono, hemi & quadric-paresis) & shortness(dwarfism) have been categorized separately.

## GUIDELINES FOR EVALUATION OF PERMANENT PHYSICAL IMPAIRMENT (PPI)

### 1.1 Guidelines for Evaluation of Permanent Physical Impairment of Upper Limb.

1. The estimation of permanent impairment depends upon the measurement of functional impairment and not expression of a personal opinion.
2. The estimation and measurement should be made when the clinical condition has reached the stage of maximum improvement from the medical treatment. Normally the time period is to be decided by the medical doctor who is evaluating the case for issuing the PPI certificate as per standard format of the certificate.
3. The upper limb is divided into two components; the Arm Component and 'Hand Component'.
4. Measurement of the loss of function of 'Arm Component' consists of measuring the loss of Motion, Muscle Strength and Co-ordinate Activities.
5. Measurement of loss of function of Hand Component consists of determining the Prehension, Sensation and Strength. For estimation of prehension– opposition, lateral pinch cylindrical grasp, spherical grasp and hook grasp have to be assessed as shown in Hand Component of Form-A (Assessment Performa for Upper Extremity).
6. The impairment of the entire extremity depends on the combination of the functional impairments of both components.

### 1.2 ARM COMPONENT

Total value of Arm Component is 90%.

#### 1.2.1 Principles of evaluation of 'Range of Motion' (ROM) of joints

1. The value of maximum ROM in the Arm Component is 90%
2. Each of the three joints of the Arm is weighed equally (30%)

#### Example:

The intra-articular fractures of the bones of right shoulder joint may affect Range of Motion even after healing. The loss of ROM should be calculated the each arc of Motion as envisaged in the Assessment Form - A (Assessment Performa for Upper Extremity).

Arc of ROM	Normal Value	Active ROM	Loss of ROM
Shoulder Flexion- Rotation	0-220	110	50%
Abduction-Adduction	0-180	90	50%

Hence the mean loss of ROM of shoulder will be  $(50 + 50 + 50) / 3 = 50\%$

Shoulder movements constitute 30% of the Motion of the Arm Component; therefore the loss of Motion for Arm Component will be  $50 \times 0.30 = 15\%$ . If more

than one joint of the Arm is involved the loss of percentage in each joint is calculated separately as above and then added together.

**1.2.2 Principles of evaluation of Strength of Muscles:**

1. Strength of muscles can be tested by manual method and graded from 0-5 as advocated by Medical Research Council (MRC) of Great Britain depending upon the Strength of the muscles.
2. Loss of muscle power can be given percentages as follows:

Manual muscle Strength grading	Loss of Strength in percentage
0	100%
1	80%
2	60%
3	40%
4	20%
5	0%

3. The mean percentage of loss of muscle strength around a joint is multiplied by 0.30.
4. If loss of muscle strength involves more than one joint the mean loss of percentage in each joint is calculated separately and then added together as has been described for loss of Motion.

**1.2.3 Principles of evaluation of Coordinated Activities:**

1. The total value for coordinated activities is 90%
2. Ten different coordinated activities should be tested as given in **Form A**.
3. Each activity has a value of 9%

**1.2.3 Combining values for the Arm Component:**

The total value of loss of function of 'Arm Component' is obtained by combining the value of loss of ROM, muscle Strength and coordinated activities, using the combining formula.

$$= a + \frac{b \times (90-a)}{90}$$

Where a =higher value, b = lower value

**Example**

Let us assume that an individual with an intra articular fracture of bones of shoulder joint in addition to 16.5% loss of Motion in Arm has 8.3% loss of Strength of muscles and 5% loss of coordination. These values should be combined as follows:

- a. Loss of Strength of muscles-8.3% ,
- b. Loss of ROM-16.5%
- c. Loss of coordination-5%
- d. To add above (a & b) =  $16.5 + \frac{8.3 \times (90-16.5)}{90}$

$$= 23.33\%$$

$$e. \text{ Now to add loss of coordination (d \& c) } = 23.3 + \frac{5(90-23.3)}{90}$$

$$= 27.0\%$$

So total value of loss of functions in Arm Component 27.0%

### 1.3 HAND COMPONENT:

1. Total value of Hand Component is 90%
2. The functional impairment of Hand is expressed as loss of Prehension, loss of Sensation and loss of Strength.

#### 1.3.1 Principles of evaluation of Prehension:

1. Total value of Prehension is 30%. It includes:
  - a) **Opposition** 8%
 

Tested against	-Index finger	2%
	-Middle finger	2%
	-Ring finger	2%
	-Little finger	2%
  - b) **Lateral pinch** 5%
 

(Tested by asking patient to hold a key between thumb & lateral side of Index finger)
  - c) **Cylindrical grasp** 6%
 

tested for

    - i) Large object of 4" size (diameter) 3%
    - ii) Small object of 1" size (diameter) 3%
  - d) **Spherical grasp** 6%
 

tested for

    - i) Large object of 4 inches size 3%
    - ii) Small object of 1 inch size 3%
  - e) **Hook grasp** 5%
 

tested by asking the patient to lift a bag

#### 1.3.2.Principles of Evaluation of Sensation:

1. Total value of Sensation in Hand is 30%
2. It should be assessed according to distribution as below:
  - i) Complete loss of Sensation
 

Thumb ray	9%
Index finger	6%
Middle finger	5%
Ring finger	5%
Little finger	5%

- ii) Partial loss of Sensation: Assessment should be made according to percentage of loss of Sensation in thumb/finger (s)

**1.3.3.Principles of Evaluation of Strength**

- 1. Total value of Strength 30%
- 2. It includes:
  - i) Grip Strength 20%
  - ii) Pinch Strength 10%

Strength of Hand should be tested with 'Hand Dynamo-meter' or by clinical method (grip method).

**Additional weight age-A** total of 10% additional weightage can be given to following accompanying factors, if they are continuous and persistent despite treatment.

- 1. Pain
- 2. Infection
- 3. Deformity
- 4. Mal-alignment
- 5. Contractures
- 6. Cosmetic disfiguration
- 7. Dominant extremity-4%
- 8. Shortening of upper limb - First 1" no weightage, for each 1" beyond first 1" -2% disability.

The extra points should not exceed 10% of the total Arm Component and total PPI should not exceed 100% in any case.

**1.3.4.Combining values of Hand Component:**

The final value of loss of function of Hand Component is obtained by summing up values of loss of Prehension, Sensation and Strength.

**1.3.4.Combining values for the Extremity:**

Values of impairment of Arm Component and impairment of Hand Component should be added by using combining formula.

$$a + b \frac{90-A}{90} \quad \begin{matrix} a = \text{higher value} \\ b = \text{lower value} \end{matrix}$$

Example: Impairment of Arm - 27%, Impairment of Hand - 64%

Total of upper limb (by combining formula)

$$= 64 + 27 \frac{90-64}{90} = 71.8\%$$

The total value can also be obtained by using the 'Ready Beckoner Table' for combining formula (Annexed).The total value can also be obtained by using the 'Ready Beckoner Table' for combining formula (Annexed).

**2. Guidelines for Evaluation of PPI (disability) in Lower Limb**

The measurement of loss of function in lower extremity is divided into two components: Mobility and Stability components

**2.1. Mobility Component:**

1. Total value of Mobility component is 90%
2. It includes Range of Movement (ROM) and Muscle Strength

**2.1.1 Principles of Evaluation of Range of Movement:**

1. The value of maximum range of movement in mobility component is 90%.
2. Each of three joints i.e. Hip, Knee and Foot-Ankle component is weighted equally-30%.

**Example:**

A fracture of right Hip joint bones may affect range of Motion of the Hip joint. Loss of ROM of the affected Hip is different and should be assessed as given in **Form B** (Assessment Performa for lower extremity).

Affected Joint-Rt. Hip:

Arc of Movement	Normal ROM	Active ROM	Loss in % age
a. Flexion-Extension	0-140°	70°	50
b. Abduction-Adduction	0-90°	60°	33
c. Rotation	0-90°	30°	66

$$\text{Mean loss of ROM of Rt Hip} = (50+33+66)/3 = 50\%$$

Since the Hip constitutes 30% of the total mobility component of the lower limb, the loss of Motion in relation to the lower limb will be  $50 \times 0.30 = 15\%$ .

If more than one joint of the limb is involved, the mean loss of ROM in percentage should be calculated in relation to individual joint separately and then added together as follows to calculate the loss of mobility component in relation to that particular limb.

For example:

$$\begin{aligned} &\text{Mean loss of ROM of Rt. Hip} && 50\% \\ &\text{Mean loss of ROM Rt. Knee} && 40\% \\ &\text{Loss of Mobility component of Rt. Lower Limb will be} \\ &\quad (50 \times 0.30) + (40 \times 0.30) = 27\% \end{aligned}$$

**2.1.2. Principle of Evaluation of Muscle Strength:**

1. The value for maximum muscle Strength in the limb is 90%
2. Strength of muscles can be tested by Manual Method and graded 0-5 as advocated by MRC of Great Britain depending upon the residual strength in the muscle group.
3. Manual muscle grading can be given percentage like below:

Grade of Ms. Strength	Loss of Strength in % age
0	100
1	80
2	60



3	40
4	20
5	0

4. Mean percentage of muscle strength loss around a joint is multiplied by 0.30 to calculate loss in relation to limb.
5. If there has been loss of muscle strength involving more than one joint the values are added as has been described for loss of ROM.

### 2.1.3. Combining values for mobility component:

1. The values of loss of ROM and loss of muscle strength should be combined with the help of combining formula:

$$= a + b \frac{90-a}{90}$$

(a = higher value, b = lower value)

**Example:** Let us assume that the individual with a fracture of right Hip bones has in addition to 16% loss of Motion, 8% loss of muscle Strength also. To combine, Motion-16% & Strength-8%

$$\begin{aligned} \text{Combined values} &= \frac{16 + 8 (90 - 16)}{90} \\ &= 22.6\% \end{aligned}$$

### 2.2 Stability Component:

1. Total value of the Stability component is 90%
2. It should be tested by clinical method as given in 'Form B' (Assessment Performa for lower extremity). There are nine activities, which need to be tested, and each activity has a value of ten per cent (10%). The percentage value in relation to each activity depends upon the percentage of loss of stability in relation to each activity.

### 2.3. Extra points:

Extra points have been given for pain, deformities, contractures, loss of sensation and shortening Maximum points to be added are 10% (excluding shortening). Details are as following:

i) Deformity	a. In functional position	3%
	b. In non-functional position	6%
ii) Pain	a. Severe (grossly interfering with function)	9%
	b. Moderate (moderately interfering with function)	6%

	c. Mild (mildly interfering with function)	3%
iii) Loss of Sensation	a. Complete Loss	9%
	b. Partial Loss	6%
iv) Shortening	First"	Nil
	(For every additional ½" shortening	4%
v) Complications	a. Superficial complications	3%
	b. Deep complications	6%

### 3. Guidelines for Evaluation of Permanent Physical Impairment of Trunk (Spine)

#### Basic guidelines:

1. As permanent physical impairment caused by spinal deformity tends to change over the years, the certificate issued in relation to spine should be reviewed as per the standard format of the certificate given at Annexure.
2. Permanent physical impairment should be awarded in relation to spine and not in relation to whole body.
3. Permanent physical impairment due to neurological deficit in addition to spinal impairment should be added by combining formula.

The local effects of the lesions of the spine can be conventionally divided into 'Traumatic and Non-traumatic'. The percentage of PPI in relation to each situation should be valued as follows :

#### 3.1 TRAUMATIC LESIONS :

##### 3.1.1 Cervical Spine injuries

##### Percentage of PPI in relation of Spine

- |      |   |    |
|------|---|----|
| i)   | 25% or more compression of one or two adjacent vertebral bodies with No involvement of posterior elements. No nerve root involvement. Moderate Neck Rigidity and persistent Soreness. | 20 |
| ii)  | Posterior element damage with radiological evidence of moderate partial dislocation/sub-luxation including Whiplash injury.   |    |
| a)   | With fusion healed, No permanent motor or sensory changes.  | 10 |
| b)   | Persistent pain with radiologically demonstrable instability.   | 25 |
| iii) | Severe Dislocation :  |    |
| a)   | Fair to good reduction with or without fusion with no residual motor or sensory involvement :   | 10 |
| b)   | Inadequate reduction with fusion and persistent radicular pain.   | 15 |

##### 3.1.2 Cervical Inter vertebral Disc Lesions

##### Percentage of PPI in relation to spine

- |     |  |    |
|-----|--|----|
| i)  | Treated case of disc lesion with persistent pain and no neurological deficit | 10 |
| ii) | Treated case with pain and instability                                       | 15 |

##### 3.1.3. Thoracic and Thoraco-Lumbar Spine Injuries :

- |    |  |    |
|----|--|----|
| i) | Compression of less than 50% involving one vertebral body with no neurological manifestation | 10 |
|----|--|----|

- ii) Compression of more than 50% involving single vertebra or more with involvement of posterior elements, healed, no neurological manifestations Persistent pain, fusion indicated 20
- iii) Same as (b) with fusion, pain only on heavy use of back 15
- iv) Radiologically demonstrable instability with fracture or fracture dislocation with persistent pain. 30

### 3.1.4 Lumbar and Lumbo-Sacral Spine :

#### Fracture

- a) Compression of 25% or less of one or two adjacent vertebral bodies, No definite pattern or neurological deficit 15
- b) Compression of more than 25% with disruption of posterior elements, persistent pain and stiffness, healed with or without fusion, inability to lift more than 10 kgs. 30
- c) Radiologically demonstrable instability in low lumbar or Lumbo-sacral spine with pain. 35

### 3.1.5. Disc lesion

- a) Treated case with persistent pain. 15
- b) Treated case with pain and instability. 20
- c) Treated case disc of disease with pain, activities of lifting moderately modified 25
- d) Treated case of disc disease with persistent pain and of heavy weight stiffness; aggravated by lifting of heavy weight, necessitating modifications of all activities requiring heavy weight lifting. 30

## 3.2 NON TRAUMATIC LESIONS :

### 3.2.1 Scoliosis :

Basic guidelines-following modification is suggested.

The largest structural curve should be accounted for, while calculating the PPI and not the compensatory curve or both structural curves.

### 3.2.2 Measurement of Spine Deformity :

Cobb's method for measurement of angle of curve in the radiograph taken in standing position should be used. The curves have been divided into following groups depending upon the angle of major structural scoliotic deformity.

Group	Cobb's Angle	PPI in relation to Spine
I	0-20	Nil
II	21-50	10%

III	51-100	20%
IV	101 & above	30%

### 3.2.3. Torso Imbalance :

In addition to the above, PPI should also be evaluated in relation the torso imbalance. The torso imbalance should be measured by dropping a plumb line from C-7 spine and measuring the distance of plumb line from gluteal crease.

Deviation of Plumb line	PPI
Up to 1.5 cms	4%
1.5-3.0 cms	8%
3.1-6.0 cms	16%
6.1 cms and more	32%

### 3.2.4. Head Tilt over C7 Spine PPI

Upto 15	4%
More than 15	10%

### 3.2.5. Cardiopulmonary Test

In cases with Scoliosis of severe type cardiopulmonary function tests and percentage deviation from normal should be assessed by one of the following method whichever seems more reliable clinically at the time of assessment. The value thus obtained may be added by combining formula

a. Chest Expansion	PPI
4 – 5 cm	Normal
Less than 4 cm reduction in	5% for each cm chest expansion
No expansion	25%
b. Counting in one breathe: Breathe count	PPI
More than 40	Normal
0-40	5%
0-30	10%
0-20	15%
0-10	20%
Less than 5	25%

3.2.6 Associated Problems: To be added directly but the total value of PPI in relation to spine should not exceed 100%

a. Pain	
Mildly interfering with ADL	4%

Moderately restriction ADL	6%
Severely restriction ADL	10%

b. Cosmetic Appearance

No obvious disfiguration with clothes on	Nil
Mild disfigurement	2%
Severe disfigurement	4%

c. Leg Length Discrepancy

First ½ shortening	Nil
Every ½ beyond first ½	4%

d. Neurological deficit- Neurological deficit should be calculated per established method of evaluation of PPI in such cases. Value thus obtained should be added telescopically using combining formula.

### 3.3. Kyphosis

Evaluation should be done on the similar guidelines as used for scoliosis with the following modifications

#### 3.3.1. Spinal Deformity PPI

Less than 20	Nil
21-40	10%
41-60	20%
Above 60	30%

3.3.2. Torso Imbalance – Plumb line dropped from external ear normally falls at ankle level. The deviation from normal should be measured from ankle anterior joint line to the plumb line.

Less than 5 cm in front of ankle	4%
5 to 10 cm in front of ankle	8%
10 to 15 cm in front of ankle	16%
More than 15 cm in front of ankle	32%
(Add directly)	

#### 3.4.1. Miscellaneous conditions:

Those conditions of the spine which cause stiffness and pain etc are rated as follows.

Conditions	Percentage PPI
a. Subjective symptoms of pain, no involuntary	

Muscle spasm, not substantiated by demonstrable structural pathology	0%
b. Pain, persistent muscles spasm and stiffness of spine, Substantiated by mild radiological change	20%
c. Same as B with moderate radiological changes	-25%
d. Same as B with severe radiological changes involving Anyone of the regions of spine	-30%
e. Same as D involving whole spine	-40%

#### **4. Guidelines for Evaluation of disability (PPI) in Neurological Conditions may/may not be associated with Spine.**

##### **Basic Guidelines:**

1. Assessment in neurological conditions is not the assessment of disease but the Assessment of its effects, i.e., clinical manifestations.
2. These guidelines should only be used for Central and upper motor neuron (UMN) lesions.
3. Performa (form A & B) will be utilized for assessment of lower motor neuron lesions, muscular disorders and other loco motor conditions.
4. Normally any neurological assessment for the purpose of certification has to be done six months after the onset of disease however exact time period is to be decided by the Medical doctor who is evaluating the case who has to recommend the review of the certificate as given in the standard format of certificate.
5. Total percentage of physical impairment in any neurological condition should not exceed 100%.
6. In mixed cases the highest score will be taken into consideration. The lower score will be added telescopically to it by the help of combining formula
7. Additional weightage of 4% will be given for dominant upper extremity.
8. Additional weightage up to 10% can be given for loss of Sensation in each extremity but keeping a total 100%.

<b>Neurological Status</b>	<b>Physical Impairment</b>
Altered sensorium	100%

##### **4.1 Intellectual Impairment** (to be assessed by Psychiatrist/Clinical Psychologist)

<b>Degree of Mental Retardation</b>	<b>IQ Range</b>	<b>Intellectual Impairment</b>
Border line	70-79	25%

Mild	50-69	59%
Moderate	35-49	75%
Severe	20-34	90%
Profound	Less than 20	100%

#### 4.2 Speech defect

#### PPI

Mild dysarthria	Nil
Moderate dysarthria	25%
Severe dysarthria	50%

#### 4.3 Cranial Nerve Disability

Type of Cranial Nerve Involvement	Physical Impairment
Motor Cranial nerve	20% for each nerve
Sensory Cranial nerve	10% for each nerve

#### 4.4 Motor system Disability – Hemi paresis

Neurological Involvement	Physical Impairment
– Mild	25%
– Moderate	50%
– Severe	75%

#### 4.5 Sensory System Disability

Anaesthesia	Up to 10% for each limb
Hypoaesthesia	depending upon % of loss of Sensation
Paraesthesia	Loss of Sensation up to 30% depending
Hands/feet sensory loss	upon % loss Sensation

#### 4.6 Bladder disability due to neurogenic involvement

Bladder Involvement	Physical Impairment
Mild (Hesitancy/Frequency)	25%
Moderate (precipitancy)	50%
Severe (occasional but recurrent incontinence)	75%
Very Severe (Retention/total incontinence)	100%

#### 4.7 Post Head Injury Fits & Epileptic Convulsions

Frequency/Severity of convulsions	Physical Impairment
Mild-occurrence of one convulsion only	Nil
Moderate 1-5 convulsions/month on adequate medication	25%



Severe 6-10 convulsions/month on adequate medication	50%
Very Severe more than 10 fits/mth on adequate medication	75%

#### **4.8 Ataxia (Sensory or Cerebellar)**

<b>Severity of Ataxia</b>	<b>Physical Impairment</b>
Mild (detected on examination)	25%
Moderate	50%
Severe	75%
Very Severe	100%

## 5. Guidelines for Evaluation of PPI in cases of Short Stature/Dwarfism

1. Recumbent length or longitudinal height below 3rd percentile or less than 2 Standard Deviation from the mean is considered to have 'Short Stature'.
2. The evaluation of 'Short Statured' person should be considered only when it is of disproportionate variety and is accompanied by underlying pathological conditions, e.g., Achondroplasia, Spondyloepiphysial dysplasia, Mucopolysacchroidosis etc.
3. The Indian Council of Medical Research (ICMR) norms as enclosed should be taken as guidelines for the height.
4. Every 1 inch. Vertical height reduction should be valued as 4% Permanent Physical Impairment (PPI).
5. Associated skeletal deformities should be evaluated separately and total percentage of both should be added by combining formula.

### ICMR Norms for Indian Population

#### Standing Heights for Indian Population (Inches) Mean & Standard Deviations

Age	Male			Female		
	Mean	S.D	2SD	Mean	S.D	2SD
Less than 3 months	22.113	2.32	17.49	21.65	2.13	17.39
3 months +	24.68	1.58	21.52	23.98	2.40	21.80
6 months +	25.55	3.19	19.17	25.35	1.43	22.49
9 months +	27.36	1.77	23.82	26.26	1.52	23.22
1 year +	29.09	2.07	24.95	28.54	2.04	24.46
2 years +	32.13	2.10	27.93	31.53	2.28	26.97
3 years +	34.96	2.58	29.80	34.33	2.50	29.33
4 years +	37.80	2.65	32.50	37.20	2.50	32.20
5 years +	40.19	3.16	33.84	39.92	2.90	34.12
6 years +	42.71	2.81	37.09	42.28	3.41	35.46
7 years +	44.84	3.41	38.02	44.40	3.34	37.72
8 years +	46.96	2.89	41.18	46.53	3.03	40.47
9 years +	48.70	3.65	41.40	48.38	2.96	42.46
10 years +	48.97	3.93	41.11	50.55	3.15	44.25
11 years +	52.51	3.83	44.86	52.60	3.73	45.14
12 years +	54.45	3.99	46.47	54.80	4.03	46.74
13 years +	56.93	3.84	49.25	56.65	3.63	49.39
14 years +	59.10	3.95	51.20	58.07	3.82	50.43
15 years +	61.22	3.94	53.34	58.89	3.27	52.35
16 years +	62.79	3.84	55.11	59.44	2.80	53.84
17 years +	63.54	4.11	55.32	59.64	2.95	53.74
18 years +	64.21	3.76	56.69	59.72	2.31	55.10
19 years +	64.37	3.79	56.72	59.72	2.31	55.19
20 years +	64.60	2.75	59.10	59.72	2.32	55.08
21 years	64.64	2.40	59.84	60.24	2.24	55.76

#### 5.Guidelines for Evaluation of PPI in Amputees:

## Basic Guidelines:

1. In case of multiple amputees if the total sum of permanent physical impairment is above 100%, it should be taken as 100% only.
2. If the stump is unfit for fitting the prosthesis, additional weight-age of 5% should be added to the value.
3. In case of amputation in more than one limb percentage of each limb is added by combining formula and another 10% will be added but when only toes or fingers are involved only 5% will be added.
4. Any complication in form of stiffness of proximal joint, neuroma, infection etc., should be given up to a total of 10% additional weight-age.
5. Dominant upper extremity should be given 4% additional weight-age.

### Upper Limb Amputations

#### PPI & loss of Physical Function each limb

1. Fore-quarter amputation	100%			
2. Shoulder Disarticulation	90%			
3. Above Elbow up to upper 1/3 of Arm	85%			
4. Above Elbow up to lower 1/3 of fore Arm	80%			
5. Elbow disarticulation	75%			
6. Below Elbow up to 1/3 of Forearm	70%			
7. Below Elbow up to 1/3 of Forearm	65%			
8. Wrist disarticulation	60%			
9. Hand through carpal bones	55%			
10. Thumb through C.M. or 1st MC joint	30%			
11. Thumb disarticulation through M-C Joint or. Phalanx	25%			
12. Thumb disarticulation through IP joint or distal phalanx	15%			
	Index Finger (15%)	Middle Finger (5%)	Ring Finger (3%)	Little Finger (2%)
13. Amputation through Prox Phalanx or Disarticulation through M.P.	15%	5%	3%	2%
14. Amputation through middle Phalanx or Disarticulation through PIP joint	10%	4%	2%	1%
15. Amputation through distal Phalanx or through DIP joint	5%	2%	1%	1%

### Lower Limb

#### Amputations

#### PPI & loss of Physical function each limb

1. Hind quarter	100%
2. Hip disarticulation	90%
3. Above Knee up to upper 1/3 of thigh	85%
4. Above Knee up to lower 1/3 of thigh	80%
5. Through Knee	75%
6. B. K. up to 8 cm	70%
7. B. K. up to lower 1/3 of leg	60%
8. Through Ankle	55%
9. Syme's amputation	50%

10.	Up to mid-foot	40%
11.	Up to fore-foot	30%
12.	All toes	20%
13.	Loss of first toe	10%
14.	Loss of second toe	5%
15.	Loss of third toe	4%
16.	Loss of fourth toe	3%
17.	Loss of fifth toe	2%

## 6. Evaluation of PPI of Congenital Deficiencies of the Limbs.

### 6.1 Transverse Deficiencies:

1. Functionally congenital transverse limb deficiencies are comparable to acquired amputations and can be called synonymously as congenital amputation, however, in some cases revision of amputation is required to fit prosthesis.
2. The transverse limb deficiencies therefore should be assessed on basis of the guidelines applicable to the evaluation of PPI in cases of amputees as given in the preceding chapter.

#### For example:

	Deficiency	Equivalent to amputation	PPI
1.	Transverse deficiency Rt. Arm complete	(Shoulder disarticulation)	90%
2.	Transverse deficiency at thigh complete	(Hip disarticulation)	90%
3.	Transverse deficiency proximal Upper Arm	(Above Elbow amp.)	85%
4.	Transverse deficiency at lower thigh	(Above Knee amp. Lower 1/3)	80%
5.	Transverse deficiency fore arm complete	(Elbow disarticulation)	75%
6.	Transverse deficiency lower forearm	(Below Elbow amp)	65%
7.	Transverse deficiency Carpal complete	(Wrist disarticulation)	60%
8.	Transverse deficiency Metacarpal complete	(Disarticulation through carpal bones)	55%

## 6.2 Longitudinal Deficiencies:

### 6.2.1 Basic Guidelines

1. In cases of longitudinal deficiencies of limbs, due consideration should be given to functional impairment.
2. In upper limb, loss of ROM, Muscle Strength and Hand functions like Prehension etc. should be tested while assessing the case for PPI.
3. In lower limb clinical method of assessing the Stability component and Shortening of lower limb should be given due weightage.
4. Apart from functional assessment the lost joint/part of body should also be valued as per distribution given in chapter. 'Guidelines for Evaluation of PPI in Upper and Lower Extremity'. The values so obtained should be added with the help of combining formula.

**Example:** Congenital absence of Humerus where Forearm bones directly articulate with Scapula.

There will be mild reduction in ROM and Strength of muscles in the existing joints apart from loss of body part.

Loss of shoulder joint can be given-30%

Loss of ROM of Elbow/Shoulder & Wrist

All the Components should be added together by the combining formula of

6.2.2 In case of loss of single bone in forearm the evaluation should be based on the principles of evaluation of Arm component which include evaluation of ROM, Muscle Strength and Coordinated Activities. The values so obtained should be added together with the help of 'combining formula'.

6.2.3. In case of loss of single bone in leg the evaluation should be based on the principles of evaluation of Mobility component and Stability components of the Lower Extremity. The values obtained should be added together with the help of 'combining formula'.

## **7. Guidelines for Evaluation of Physical Impairment due to Cardiopulmonary Diseases.**

### **7.1 Basic Guidelines:**

1. Modified New York Heart Association subjective classification should be utilized to assess functional disability.
2. The assessing physician should be alert to the fact that patients who come for disability claims are likely to exaggerate their symptoms. In case of any doubt patients should be referred for detailed physiological evaluation.
3. Disability evaluation of cardiopulmonary patients should be done after full medical, surgical and rehabilitative treatment available because most of these diseases are potentially treatable.
4. Assessment of cardiopulmonary impairment should also be done in diseases, which might have associated cardiopulmonary problems eg. Amputees, Myopathies, etc.
5. For respiratory assessment, routine respiratory functions test should be done. However, in cases of interstitial lung diseases, diffusion studies may be done.
6. In cases of Angina Pectoris (chest pain) base line studies in resting ECG should be done. When there is persistence of symptoms, exercise or stress test should be done.

### **7.2 Proposed classification with loss of function is as follows:**

**Group 0:** A patient with cardiopulmonary disease who is asymptomatic (i.e has no symptoms of breathlessness, palpitation, fatigue or chest pain).

**Group 1:** A patient with cardiopulmonary disease who becomes symptomatic during his ordinary physical activity but has mild restriction (25%) of his physical activities.

**Group 2:** A patient with cardiopulmonary disease who becomes symptomatic during his ordinary physical activity & has 25-50% restriction of his ordinary physical activities.

**Group 3:** A patient with cardiopulmonary disease that becomes symptomatic during less than ordinary physical activity so that his ordinary physical activities are 50-75% restricted.

**Group 4:** A patient with cardiopulmonary disease who is symptomatic even at rest or on mildest exertion so that his ordinary physical activity is severely or completely restricted (75-100%)

**Group 5:** A patient with cardiopulmonary disease who gets intermittent symptoms at rest (i.e. patients with Bronchial Asthma, Paroxysmal nocturnal dyspnoea, etc.)

**MINISTRY OF SOCIAL JUSTICE AND EMPOWERMENT**

**NOTIFICATION**

NEW DELHI, THE 1st JUNE, 2001

**Subject: – Guidelines for evaluation of various disabilities and procedure for certification.**

**No. 16-18/97-NI.I.**

In order to review the guidelines for evaluation of various disabilities and procedure for certification as given in the Ministry of Welfare's O.M. No. 4-2/83-HW.-III, dated the 6th August, 1986 and to recommend appropriate modifications/alterations keeping in view the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995, Government of India in Ministry of Social Justice and Empowerment, vide Order No. 16-18/97-NI. I, dated 28-8-1998, set up four committees under the Chairmanships of Director General of Health Services-one each in the area of mental retardation, loco motor/ orthopaedic disability, visual disability and speech & hearing disability. Subsequently, another committee was also constituted on 21-7-1999 for evaluation, assessment of multiple disabilities and categorization and extent of disability & procedures for certification.

2. After having considered the reports of these committees the undersigned is directed to convey the approval of the President to notify the guidelines for evaluation of following disabilities and procedure for certification :-

1. Visual Impairment
2. Locomotor Disability
3. Speech & Hearing
4. Mental Retardation
5. Multiple Disabilities.

copy of the Report is enclosed herewith.

3. The minimum degree of disability should be 40% in order to be eligible for any concession/benefit.

4. According to the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Rules, 1996 notified on 31.12.1996 by the Central Government in exercise of the powers conferred by sub-section (1) and (2) of section 73 of the Persons with Disabilities Act, 95 to give disability certificate, will be a Medical Board duly constituted by the Central and State Government. The State Government may constitute a Medical Board consisting of at least three members, out of which **at least one shall be a specialist in the particular field for assessing loco motor/visual including low vision/hearing and speech disability, mental retardation and leprosy cured as the case may be.**

5. Specified tests as indicated in guidelines should be conducted by the medical board and recorded before a certificate is given.

6. The certificate would be valid for a period of five years for those whose disability is temporary. For those who acquire permanent disability the validity can be shown as permanent.

7. The State Governments/UT Administrations may constitute the medical board indicated in para 4 above immediately, if not done so far.

8. The Director General of Health Services, Ministry of Health and Family Welfare will be the final authority, should there arise any controversy/doubt regarding the interpretation of the definitions/classifications/evaluations/tests etc.

GAURICHATTERJI, Jt. Secy.



**Reports of the Committee set up to review the guidelines for evaluation of various disabilities and procedure for certification and to recommend appropriate modifications/alteration keeping in view the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995.**

In order to review the definitions of various types of disability, the guidelines for evaluation of various disabilities and procedure for certification as given in the Ministry of Welfare's O.M. N. 4-2./38-HW III. Dated the 6th August, 1986 and to recommend appropriate modifications/alterations keeping in view the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act 1995, five Sub-Committees were constituted in the areas of Mental Retardation, Orthopaedic/Locomotor Disability, Visual Disability, Speech & Hearing and Multiple Disabilities, under the Chairmanship of Dr. S. P. Agarwal, Director General of Health Services, vide the Ministry of Social Justice & Empowerments Order No. 16-18/97-NI.I, dated 28.8.1998 and 21.7.1999.

2. The Sub-Committees, after detailed deliberations, have submitted their reports. The reports of the Committees set up to review the guidelines for evaluation of various disabilities and procedure for certification on each of the area of the disabilities are given in pages referred earlier.

# **VISUAL DISABILITY INTROSPECTION & INTERVENTION BY DISABILITY CERTIFICATION**

In India approx. three million persons are suffering from vision impairment. This include blind and low vision who need intervention in form of assistive aid/ technology support in their mobility, daily living skills, to get education, to carry on vocation/employment etc. to compete with their counterpart in the society. Legislations are framed, Acts were passed by the parliament, and activists pressed their demands through agitation & dharnas that resulted in a policy framework, schemes, programs, facilities and concessions, reservation in education & employment. Who is eligible for all these facilities & concessions? The individual with visual disability 40% or above certified by a disability certificate issued by a duly constituted medical board. To get a disability certificate by a disabled individual, other than an apparent blind person is still a question.

It is because either a lack of adequate information among expert member of board or imposition of their personal opinion in deciding disability.

Facts about vision impairment, prevalence, degree, distribution and disability assessment guidelines need to be popularized amongst the medical doctors including expert members. The technology devices, which are value addition in life of others, may be a basic need for a person with visual impairment. Disability assessment and certification is first need before going for any additional support/assistance from government. With this background in mind, facts about persons with visual disability and guidelines for disability certification have been compiled in the simplest form, in the forthcoming pages.

As per definition adopted by National Sample Survey Organization-a person with visual disability is one who does not have light perception, when both eyes are taken together, or if a person has light perception but could not correctly count fingers of a hand (after best possible correction with spectacles) from a distance of 3 meters in good day-light.

Thus, following the above definition, the visually disabled persons can be categorized into two broad groups:

**Blindness:** Persons who does not have light perception or persons who have light perception but cannot count fingers at a distance of 1 meter even with spectacles (best possible correction).

**Low vision:** persons who have light perception and can count fingers up to a distance of 3 meters even with spectacles.

As per National Census 2001, there are more than 10 million persons suffering with visual disability in contrary NSSO, 2002 reported 03 million persons with visual disability. The significant difference is due to definition adopted by them. Since NSSO having expertise and experienced in such survey, their report may be considered more authentic.

In the country as a whole, the prevalence and incidence of visual disability has decreased marginally between 1981 & 1991, and substantially between 1991 and 2002. In the improved conditions of better health care over time, ailments, like diarrhea, cataract, glaucoma, etc. causing visual disability might have been prevented largely during the recent years. It may also be noted that a large proportion of people are using spectacles as a preventive measure to improve their ability to see objects properly that they could not have done so without spectacles. Further, visual disability is judged with or without spectacles depending upon whether one is using it or not.

The reduction in prevalence and incidence rate in visual disability from 36<sup>th</sup> (1981) to 58<sup>th</sup> round (2002) was due to various preventive measures taken and improvement in services and use of technology in medical science.

**Prevalence & Incidence of visually disabled persons (per 1,000 persons) during last three decade.( from NSS 36<sup>th</sup>, 47<sup>th</sup> and 58<sup>th</sup> round)**

All-India Sector	36 <sup>th</sup> round (July – Dec., 1981) Persons	47 <sup>th</sup> round (July – Dec., 1991) persons	58 <sup>th</sup> round (July – Dec., 2002) Persons
	<b>Prevalence rate</b>		
Rural	5.53	5.25	2.96
Urban	3.56	3.02	1.94
	<b>Incidence rate</b>		
Rural	.038	.025	.013
Urban	.030	.020	.009

**Prevalence:**

Out of every thousand persons, about 2.69 (2.40 for male and 3.01 for female) was visually disabled. 72 % of them were blind and rest 28% had low vision. The prevalence of visual disability was substantially higher among the females than males. The prevalence rate among the rural residents (296) was also significantly higher than in urban residents (194). 24 per cent of the visually disabled were using spectacles. Amongst the persons with low vision, 51% were using spectacle.

## **Points to be remembered in visual disability assessment.**

1. Vision has been taken as 100% and percentage of disability in such cases should be calculated from that and not thinking human body as 100% and considering vision as part of that.
2. Disability percentage should be calculated following latest guidelines (2001) framed and not by personal opinion.
3. Disability guidelines are based on functional loss (visual) taking medical diagnosis in to account and not mere on medical diagnosis.
4. The assessment has to be done after best possible correction medical/ surgical & glasses)
5. In Vision assessment both eyes should be tested separately.
6. In calculating disability percentage, vision, acuity and limitation of field vision has to be taken in to account.
7. In calculating disability, age, sex, education and nature of work being performed by individual has no role to play.
8. In case of multiple disabilities, if a person has disability other than visual, it should be added as per guidelines and not mere summing percentage of two disabilities.
9. In case of dissatisfaction by individual issued disability certificate, the decision taken (disability percentage) may be reviewed by the same board on individual's request.
10. In case of any quarry, the DGHS, Govt. of India is the final authority (appellate authority)

## **GUIDELINES FOR ASSESSMENT OF VISUAL DISABILITY**

1. **Definition:** - **Blindness** refers to a condition where a persons suffers from any of the condition, namely,
  - i) Total absence of sight; or
  - ii) **Visual acuity** not exceeding 6/60 or 20/200 (Snellen) in the better eye with best correcting lenses; or
  - iii) **Limitation of field of vision** subtending an angle of 20 degree or worse;
2. **Low Vision:** -Persons with low vision means a person a with impairment of vision of less than 6/18 to 6/60 with best correction in the better eye or impairment of field in any one of the following categories:-
  - a) Reduction of fields less than 50 degrees
  - b) Hemianopia with macular involvement
  - c) Altitudinal defect involving lower fields.

### **3. Process of Certification**

A disability certificate shall be issued by a Medical Board duly constituted by the Central/State Government having, at least three members. Out of which, at least one members shall be a specialist in ophthalmology.

It was also decided that whenever required the Chairman of the Board may co-opt other experts including that of the members constituted for the purpose by the Central and the State Government.

On representation by the applicant, the Medical Board may review its decision having regard to all the facts and circumstances of the case and pass such order in the matter as it thinks fit.

If visual disability is associated with one or more other disability (other than visual disability), the guidelines for multiple disability in disability assessment has to be followed.

### **4. Variables in assessing Vision Disability (PPI)**

In Vision Disability following variables need to be taken into consideration while assessing function loss resulting permanent physical impairment (disability).

1. Vision

2. Acuity of vision
3. Field of vision (in degrees)
4. Hemianopia
5. Altitudinal Defect (in lower field)

5. **Categories of Visual Disability**

All with correction

<b>Category</b>	<b>Better eye</b>	<b>Worse eye</b>	<b>% age impairment</b>
<b>Category 0</b>	<b>6/9-6/18</b>	<b>6/24 - 6/36</b>	<b>20%</b>
<b>Category I</b>	<b>6/18-6/36</b>	<b>6/60 - Nil</b>	<b>40%</b>
<b>Category II</b>	<b>6/60-4/60 or Field of vision 10-20</b>	<b>3/60 - Nil</b>	<b>75%</b>
<b>Category III</b>	<b>3/60-1/60 or Field of vision 10o</b>	<b>F.C at 1ft - Nil</b>	<b>100%</b>
<b>Category IV</b>	<b>F.C at 1 ft-Nil Or field of vision 10o</b>	<b>F.C at 1 ft-Nil</b>	<b>100%</b>

**One eyed persons 6/6**                      **F.C at 1 ft.-Nil or**                      **30%**  
**Field of vision 10**

(Note: F. C. means finger Count.)

No... 16-18/97-N.I.I.  
**Government of India**  
**Ministry of Social Justice & Empowerment**  
**Shastri Bhavan**  
**New Delhi, Dated, July21' 1999**

**ORDER**

In It has been decided t constitute a Sub-Committee in the sector of Multiple Disability, in order to have standard definitions, and guidelines for evaluation and procedure for certification and to make appropriate recommendations keeping in view the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 Accordingly, a Sub-Committee is hereby constituted in the sector of multiple disability, with the following Members:

- |    |  |                  |
|----|--|------------------|
| 1. | Dr. S. P. Agarwal<br>Director General Health Services<br>Ministry of Health and Family Welfare,<br>Nirman Bhawan, New Delhi-11 | Chairperson      |
| 2. | Smt. Aloka Guha.<br>Director, Spastics Society of Tamil Nadu,<br>Opp. TTTI, Taramani Road, Chennai-13                          | Member           |
| 3. | Dr. H.C. Goyal<br>Consultant, Rehabilitation Department<br>Safdarjung Hospital, New Delhi.                                     | Member           |
| 4. | Dr. Uma Tuli,<br>General Secretary, Amar Joyti Charitable Trust,<br>N-192, Greater Kailas-1, New Dehi-110048.                  | Member           |
| 5. | Dr. D. K. Menon,<br>Director ,National Institute for the Mentally Handicapped,<br>Manovikas Nagar, Secunderabad-500 009.       | Member-Secretary |

3. The terms of reference for the Committee are as follows: -
- (a) Providing uniform definitions and categorization of degree and extent of the Disabilities.
  - (b) Recommending authorities competent to give certification.
  - (c) The Committee will submit its report in two months.

TA/DA to the members of the committee will be borne by the National Institute for the Mentally Handicapped, Secunderabad

(Gouri Chatterjee)  
Joint Secretary to the Govt. Of India  
Tele No. 338 1641

To  
All Members of the Committees  
Copy for Information to :  
PSs to Secretary (SJ&E) /AS(SJ&E) /JS(DD)

## MENTAL RETARDATION

1. **Definition :-** Mental retardation is a condition of arrested or incomplete development of the mind, which is especially characterized by impairment of skills manifested during the development period which contributed to the overall level of intelligence, i.e., cognitive, language, motor and social abilities.

### 2. Categories of Mental Retardation :-

2.1 **Mild Mental Retardation:** - The range of 50 to 69 (standardized IQ test) is indicative of mild retardation. Understanding and use of language tend to be delayed to a varying degree and executive speech problems that interfere with the development of independence may persist into adult life.

2.2 **Moderate Mental Retardation :-** The IQ is of 35 to 49 Discrepant profiles of abilities are common in this group with some individuals achieving higher levels in visuo-spatial skills than in tasks dependent on language while others are markedly clumsy, do not enjoy social interaction and simple conversation. The level of development of language is variable. Some of those affected can take part in simple conversations while others have only enough language to communicate their basic needs.

2.3 **Severe Mental Retardation:** - The IQ is usually in the range of 20 to 34. In this category, most of the people suffer from a marked degree of motor impairment or other associated deficits indicating the presence of clinically significant damage to or mal-development of the central nervous system.

2.4 **Profound Mental Retardation:** - The IQ in this category estimated to be under 20. The ability to understand or comply with requests or instructions are severely limited. Most of such individuals are immobile or severely restricted in mobility incontinent and capable at most of only very rudimentary forms of non-verbal communication. They possess little or no ability to care for their own basic needs and require constant help and supervision.

### 3. Process of Certifications:-

3.1 A disability certificate shall be issued by a Medical Board consisting of three members duly constituted by the Central/State Government. At least one shall be a specialist in the area of mental retardation, namely **Psychiatrist, Pediatrician and Clinical Psychologist**. Copy of the Certificate for Mental Retardation/Illness is enclosed.

It was also decided that whenever required the Chairman of the Board may co-opt other experts including that of the members constituted for the purpose by the Central and the State Government.



#### 4. Variables in Assessing Disability (PPI)

Following variables need to be taken into consideration while assessing function loss resulting permanent Physical Impairment (disability) in Mental Retardation/Mental Illness.

- a. Clinical Assessment,
- b. Assessment of Adaptive Behavior and
- c. Intellectual functioning.

### **Assessment of Permanent Physical Impairment in Mental Illness based on Indian Disability Evaluation and Assessment Scale (IDEA)**

A scale for measuring and quantifying disability in mental disorders, developed by the Rehabilitation Committee of Indian Psychiatric Society, December 2000.

#### **Items:**

I. Self Care: Includes taking care of body hygiene, grooming, health including bathing, toileting, dressing eating taking care of one's health.

II. Interpersonal Activities (Social Relationships): Includes initiating and maintaining interactions with others in contextual and social appropriate manner.

III. Communication and Understanding: Includes communication and conversation with others by producing and comprehending spoken/written/nonverbal messages.

IV. Work: Three areas are Employment/ Housework/ Education Measures on any aspect.

1. Performing in Work/ Job: Performing in work/ employment (paid) employment/ self employment/ family concern or otherwise. Measure ability to perform tasks at employment completely and efficiently and in proper time includes seeking employment.

2. Performing in Housework: Maintaining household including cooking, caring for other people at home, taking care of belongings etc. Measures ability to take responsibility for and perform household tasks completely and efficiently and in proper time.

3. Performing in school/ college: Measures performance education related tasks.

Scores for each item:

0- NO disability (none, absent, negligible)

1- MILD disability (slight, low)

2- MODERATE disability (medium, fair)

3- SEVERE disability (high, extreme)

4- PROFOUND disability (total, cannot do)

#### **TOTAL SCORE**

Add scores of the 4 items and obtain a total score

Additional Weightage for Duration of illness (DOI):

< 2 years: score to be added is 1

2-5 years: add 2

6-10 years: add 3

> 10 years: add 4

## GLOBAL DISABILITY

Total Disability score + DOI score = Global Disability score

Percentages:

0	No Disability	=0%
1-6	Mild Disability	=<40%
7-13	Moderate Disability	= 40-70%
14-19	Severe Disability	=71-99%
20	Profound Disability	=100 %

Cut off for welfare measures

## MANUAL FOR “IDEAS”

In order to score this instrument, information from all possible sources should be obtained. This will include interview of patient, the care giver and case notes when available.

### I. SELF CARE:

This should be regarded as activity guided by social norms and conventions. The broad areas covered are

- a. Maintenance of personal hygiene and physical health.
- b. Eating
- c. Maintenance of personal belongings and living space
- a. Does he look after himself, wash his clothes regularly, and take a bath and brush his teeth?
- b. Does he have regular meals?
- c. Does he take food of right quality and quantity?
- d. What about his table manners?
- e. Does he take care of his personal belongings with reasonable standard of Cleanliness and orderliness?

0 = No disability

Patient's level and pattern of self-care and normal, within the social cultural and economic context.

1 = Mild

Mild deterioration in self-care and appearance (not bathing, shaving, changing clothes for the occasion as expected). Does not have adverse consequences such as hazards to his health to his health. No embarrassment to family

2 = Moderate

Lack of concern for self-care should be clearly established such as mild deterioration of physical health, obesity, tooth decay & body odors.

3 = Severe

Decline in self-care should be marked in all areas. Patient wearing torn clothes, would only wash if made to and would only eat if told. Evidence of serious hazards to physical health. (Malnutrition, infection, patient unacceptable in public).

4 = Profound

Total or near total lack of self-care (Example: risk to physical survival, needs feeding, washing, putting on clothes etc., Constant supervision necessary)

## II INTER PERSONAL ACTIVITIES

Includes patient's response to questions, requests and demands of others. Activities of regulating emotions. Activities of initiating, maintaining and terminating interactions and activities of engaging in physical intimacy.

### Guiding Questions

- a. What is his behavior with others?
- b. Is he polite?
- c. Does he respond to questions?
- d. Is he able to regulate verbal and physical aggression ?
- e. Is he able to act independently in social interactions?
- f. How does he behave with strangers?
- g. Is he able to maintain friendship?
- h. Does he shows physical expression of affection and desire?

### Scoring

0 = No

Patient gets along reasonably well with people personal relationships No friction in inter-personal relationships

1 – Mild

Some friction on isolated occasions. Patient known to be nervous or irritable but generally tolerated by others.

2 = Moderate

Factual evidence that pattern of response to people is unhealthy. May be seen on more than few occasion. Could isolate himself from others and avoid company.

3 = Severe

Behavior in social situations is undesirable and generalized. Causes serious problem in daily living/ or work. Patient is socially ostracized.

4 = Profound

Patient in serious and lasting conflict, serious danger to problems or others Family afraid of potential consequences.

### III COMMUNICATION AND UNDERSTANDING

Understanding spoken messages as well as written and non-verbal messages and ability to reduce messages in order to communicate with others.

#### 1. Questions

- a. Does he avoid talking to people?
- b. When people come home what does he do?
- c. Does he ever visit others?
- d. Is he able to start, maintain and end a conversation?
- e. Does he understand body language and emotions of others such as, crying, screaming, etc.
- f. Does he indulge in reading and writing?
- g. Do you encourage him to be more sociable?

### Scoring:

0 = No disability

Patient mixes, talks and generally interacts with people as much as can be expected in his socio-cultural context. No evidence of avoiding people.

1 = Mild

Patient described as uncommunicative or solitary in social situations. Signs of social anxiety might be reported.

2 = Moderate

A very narrow range of social contact, evidence of active avoidance of people on some occasions and interference with performance of social rules causes concern to family.

3 = Severe

Evidence of more generalized, active avoidance of contact with people (leave the room when visitors arrive and would not answer the door or phone).

4 = Profound

Hardly has contacts and actively avoids people nearly all the time. eg: may lock himself inside the room. Verbal communication is nil or a bare minimum.

**IV. WORK**

This includes employment, housework and educational performance. Score only one category in case of an overlap.

**Employment:**

Guiding Questions

- a. Is he employed/unemployed?
- b. If employed, does he go to work regularly?
- c. Does he like his job and coping well with it?
- d. Can you rely on him financially?
- e. If unemployed does he make any efforts to find a job?

Scoring:

0 = No disability.-Patient goes to work regularly and his output and quality of work performance are within acceptable levels for the job.

1 = Mild-Noticeable decline patient's ability to work, to cope with it and meet the demands of work. May threaten to quit.

2 = Moderate--Declining work performance, frequent absences, lack of concern about all this. Financial difficulties foreseen.

3 = Severe- Marked decline in work performance, disruptive at work, unwilling to adhere to disciplines of work. Threat of losing his job.

4 = Profound-Has been largely absent from work, termination imminent. Unemployed and making no efforts to find jobs.

In similar ways, housewives should be rated on the amount, regularity and efficiency in which tasks in the following areas are completed. Consider the amount of help required completing these. Acquiring daily necessities, making, storing and serving of food, cleaning the house, working with those helping with domestic duties such as maids, cooks etc. looking after possessions and valuable in the house.

Student: Assess an score on performance in school/college, regularity discipline, interest in future studies, behavior at educational institutions. Those who had to discontinue education on account of mental disability and unable to continue further should be given a score of 4.

**IDEAS SCORING SHEET**

ITEMS	0	1	2	3	4
Self Care					
Interpersonal Activities					
Communication & Understanding					
Work					
A. TOTAL SCORE					
B. DOI SCORE					
GLOBAL SCORE (A+B)					

# STANDARD FORMAT OF THE CERTIFICATE

## OF MENTAL RETARDATION FOR GOVERNMENT BENEFITS

(NAME & ADDRESS OF THE INSTITUTE/HOSPITAL ISSUING THE CERTIFICATE)

Certificate No.

Date-

This is to certify that /Smt./Kum. \_\_\_\_\_

Son/Daughter of \_\_\_\_\_ of Town/City -----

\_\_\_\_\_ with particulars

given below:-

- a) Age
- b) Sex
- c) Signature/Thumb impression

CATEGORISATION OF MENTAL RETARDATION- Mild/Moderate/Severe/Profound

Validity of the Certificate: Permanent

Signature of the Government  
Doctor/Hospital with seal

Chairperson Mental Retardation  
Certification Board

Recent Attested Photograph  
Showing the disability affixed here

Dated:

Place:

(TO BE PUBLISHED IN GAZETTE OF INDIA (EXTRAORDINARY) PART I SECTION 1)

GOVERNMENT OF INDIA

**MINISTRY OF SOCIAL JUSTICE AND EMPOWERMENT**

PUBLISHED ON WEDNESDAY, FEBRUARY 27, 2002

**Subject:-Guidelines for evaluation and assessment of mental illness and procedure for certification.**

No. 16-18/97-N.I.I

Dated:18<sup>TH</sup> February, 2002.

Mental illness has been recognized as one of the disabilities under Section 2 (i) of the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995. "Mental illness" has been defined under Section 2(q) of the said Act as any mental disorder other than mental retardation.

2. In order to prescribe guidelines for evaluation and assessment of mental illness and procedure for certification, a Committee was constituted by the Department of Health, Government of India vide Order dated 6<sup>th</sup> August, 2001 under the Chairmanship of Director General of Health Services on the basis of request made by the Ministry of Social Justice & Empowerment. The Committee has submitted its report.

3. After having considered the report of the Committee, the undersigned is directed to convey the approval of the President to notify the guidelines for evaluation and assessment of mental illness and procedure for certification. Copy of the Report is enclosed herewith as **annexed**.

4. The minimum degree of disability should be 40% in order to be eligible for any concessions/benefits.

5. According to the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Rules, 1996 notified by the Central Government in exercise of the powers conferred by sub-section (1) and (2) of section 73 of the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 (1 of 1996), authorities to give disability Certificate will be a Medical Board duly constituted by the Central and the State Government. The Committee has recommended that certification of disability for the purposes of the Act may be carried out by a medical board comprising of the following members:

a. The Medical Superintendent / Principal /

Director /Head of the Institution or his nominee -Chairperson

b. Psychiatrist -Member

c. Physician - Member

6. At least two of the members, including Chairperson of the board must be present and sign the disability certificate.

7. The State Governments are, therefore, requested to constitute Medical Board as indicated above immediately.

8. Specified test as indicated in annexed should be conducted by the medical board and recorded before a certificate is given.

9. The certificate would be valid for a period of five years for those whose disability is temporary and are below the age 18 years. For those who acquire permanent disability, the validity can be shown as 'Permanent' in the certificate.

10. The Director General of Health Services, Ministry of Health and Family Welfare shall be the final authority, should there arise any controversy/doubt regarding the interpretation of the definitions/classifications/evaluation tests etc.

(Smt. RAJWANT SANDHU)

Joint Secretary to the Government of India.



No-16-18/97 – NLI  
Government of India  
Ministry of Social Justice & Empowerment  
New Delhi, dated 28<sup>th</sup> August 1998

### **ORDER**

In order to review the definitions of various types of disability the guidelines of evaluation of various disabilities and procedure for certification as given in the Ministry of Welfares O.M.no:4-2/83-HW. III. Dated the 6<sup>th</sup> August 1986 and to recommend appropriate modifications alterations keeping in view the Persons with Disabilities ( Equal Opportunities, Protection of Rights and Full Participation)Act, 1995, the following sub committees are hereby constituted in the areas of Mental Retardation, Orthopedic/Loco motor Disability, Visual Disability and Speech and Hearing Disability.

#### **Sub-Committee on Mental Retardation**

- |  |                  |
|--|------------------|
| 1. Dr.S.P. Aggarwal<br>Director General<br>Health Services, Ministry of Health & Family Welfare,<br>Nirman Bhawan,<br>New Delhi – 11 | Chairperson      |
| 2. Dr.R.Srinivastava Murty<br>Prof & head, Dept.of Psychiatry,<br>NIMHANS,<br>Bangalore – 22   | Co-Chairperson   |
| 3. Dr G G Prabhu<br>Workehil Cour,<br>Mysore.  | Member           |
| 4. Dr.(Mrs) Neena Vohra<br>Consultant & HOD, Psychiatry,<br>Dr.R.M.L.Hospital,<br>New Delhi  | Member           |
| 5. Dr.Anand Pandit,<br>Hony, Prof & Director,<br>KEM Hospital,<br>Pune – 11.   | Member           |
| 6. Dr.D.K.Menon,<br>Director,<br>NIMH,<br>Secunderabad,  | Member Secretary |



## **SPEECH & HEARING DISABILITY**

**1. Definition of Hearing:-** A person with hearing impairment having difficulty of various degrees in hearing sounds is an impaired person.

**2. Points to be remembered in Hearing Disability Assessment:**

- a. Hearing has been taken as 100% and percentage of disability in such cases should be calculated in relation to this and not thinking human body as 100%
- b. Disability percentage should be calculated following latest guidelines notified (2001) and not of personal opinion.
- c. Disability guidelines are based on loss in function (hearing) taking medical diagnosis into account and not mere based on medical diagnosis.
- d. The assessment has to be done after possible correction, mechanical cleaning of ear canal but without hearing aid.
- e. Hearing in both ear should be tested separately.
- f. In calculating disability percentage, hearing and speech discrimination have to be taken into account.
- g. While calculating disability, age, sex, education and nature of work being performed by individual have no role to play.
- h. In Multiple Disability, if a person has disability other than hearing, it should be added as per guidelines and not mere summing percentage of two disability.
- i. The board may review certificate issued by it, on the request/representation of disabled.
- j. The DGHs, Govt.of India is final authority (Appellate authority)

**2. Variables in assessing Hearing Impairment (PPI)**

1.Hearing loss in units of dB level in each ear separately

2.Speech discrimination

**3. Categories of Hearing Impairment.**

Category	Type of Impairment	dB Level	Speech discrimination	% age of impairment
I	Mild hearing	dB 26 to 40 dB in better ear	80 to 100% in better ear	Less than 40%
II (a)	Moderate hearing	41 to 60 dB in better ear	50 to 80% in better ear	40% to 50%
II (b)	Severe hearing Impairment	61 to 70 dB in better ear	40 to 50% in better ear	51% to 70%
III	a. Profound hearing Impairment b. Total deafness	71 to 90 dB 91 dB and above/ in better ear/ no	Less than 40% in better ear/ very poor discrimination	71% to 100%

		hearing		
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- i) Pure tone average of hearing in 500 and 2000 HZ, 4000 HZ by conduction (AC and BC) should be taken as basis for consideration as per the test recommendations.
- ii) When there is only an island of hearing present in one or two frequencies in better ear, it should be considered as total loss of hearing.
- iii) Wherever there is no response (NR) at any of the 4 frequencies (500, 1000, 2000 and 4000 HZ), it should be considered as equivalent to 100 dB loss for the purpose of classification of disability and in arriving at the average.

**4. Process of Certification**

A disability certificate shall be issued by a Medical Board duly constituted by the Central and State Government. Out of which at least one member shall be a specialist in the field of ENT.