

Current practices in disability grading and monitoring

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WHO 'disability' grading system

Grad	Site	Criteria
0	Eyes, hands & feet	No impairments

Grade 0 includes

- Normal sensation = ability to feel sensory testing instrument
- Scars with 'normal sensation'
- Dryness of the skin with 'normal sensation' (including minor cracks)
- Callous with 'normal sensation'
- Normal blink, but conjunctivitis.



WHO 'disability' grading system

Grad	Site	Criteria
0	Eyes, hands & feet	No impairments
1	Eyes	Leprosy-related impairment, but visual acuity $\geq 6/60$
	Hands and feet	Sensory and/or mild motor impairment



Grade 1 includes

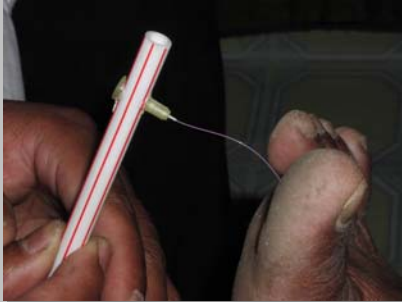
- Sensory impairment
- Scars with sensory impairment
- Muscle weakness without contractures (?)



Sensory testing: ballpoint pen



Sensory testing: monofilament



Voluntary muscle testing



WHO 'disability' grading system

Grad	Site	Criteria
0	Eyes, hands & feet	No impairments
1	Eyes	Leprosy-related impairment, but visual acuity \geq 6/60
	Hands and feet	Sensory and/or mild motor impairment
2	Eyes	Visual acuity $<$ 6/60, lagophthalmos or iritis
	Hands and feet	Visible impairments



Grade 2 includes

- Visible impairment
- Lagophthalmos
- Iridocyclitis
- Visual acuity of $<$ 6/60
- Burns
- Deep cracks
- Wounds (both simple and deep ulcers)
- Muscle atrophy
- Bone absorption of shortening
- Contractures

Maximum grade as summary measure

	Right	Left
Eyes	0	0
Hands	1	1
Feet	2	1
Maximum grade	2	



EHF score as summary measure

	Right	Left
Eyes	0	0
Hands	1	1
Feet	2	1
EHF grade	5	



Examples of current practices

Country	Reported at diagnosis	Reported at RFT	Coverage reported	Summary measure	Change indicator
Brazil	EHF*	Gr 0-2 (but low)	Yes 40-81%	Max grade	No
DRC	EHF*	EHF*	No	Max grade	Yes*
India	Gr 1-2 EHF*	Gr 1-2 EHF*	No	Max grade	Few centres only
Nepal	Gr 0-2	Gr 0-2	Yes(?)	Max grade	Yes (part of progr)
Indonesia	Gr 2	Gr 2	No	Max grade	Yes (part of progr)

* Only just implemented

COMPARATIVO DO GRAU DE INCAPACIDADE NO DIAGNÓSTICO E NA CURA, ENTRE OS CASOS DE HANSENÍASE EM MAIORES DE 15 ANOS, QUE RECEBERAM ALTA POR CURA EM 2008

Avaliação no Diagnóstico	Avaliação na Cura						Total
	Gr 0	%	Gr 1	%	Gr 2	%	
GRAU ZERO	10.382	90,7	911	8,0	146	1,3	11.439
GRAU I	2.483	52,2	2.046	43,0	231	4,8	4.760
GRAU II	482	29,7	429	26,4	714	43,9	1.625
NãoAvaliado/Inf.	989		217		99		1.305
TOTAL	14.336		3.668		1.212		19.216

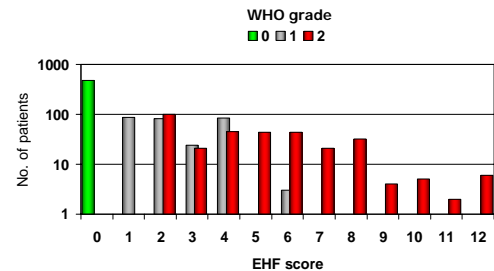
Fonte: Base de dados do Sinan/Net de 23/03/2009

Courtesy of Linda Lehman

EHF-based impairment indicator

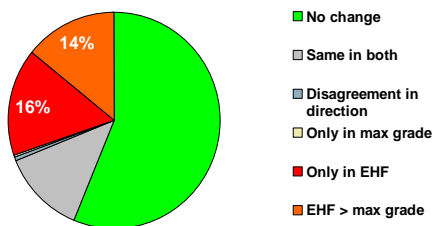
- EHF_diagnosis minus EHF_rft
 - Same
 - Improved
 - Deteriorated
- Cohort-based indicator
 - % improved
 - % deteriorated.

WHO maximum grades vs. EHF scores in 1082 new MB patients



van Brakel WH, et al. Grading impairment in leprosy. *Lepr.Rev.* 1999;70:180-8.

Changes in maximum grade vs. EHF score (N=706)



van Brakel WH, et al. Grading impairment in leprosy. *Lepr.Rev.* 1999;70:180-8.

Best practice examples

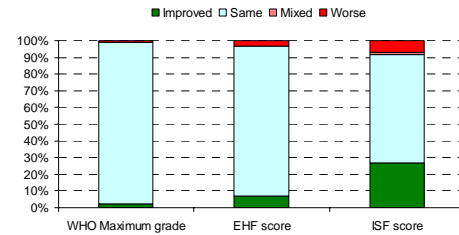
- Eastern Region LCP, Nepal
- South Sulawesi LCP, Indonesia
- POD Programme for PLD after RFT, Myanmar
 - ISF*, but no cohort-based indicators yet

* Impairment Summary Form

ELCP, Nepal (MDT cohort)

Change in EHF	MB N (%)	PB N (%)	Total N (%)
Improved	33 (8.4)	8 (2.5)	41 (5.8)
Same	356 (90.8)	310 (97.2)	666 (93.7)
Worse	3 (0.76)	1 (0.31)	4 (0.56)
Total	392 (100)	319 (100)	711 (100)

Changes in impairment status after POD Pilot Project ($n = 395$)



Operational issues of disability grading

- Validity and quality
 - Operationalisation of grading criteria
 - Method and coverage of nerve function assessment
 - Practical training needed
- Coverage
 - Grading during penultimate MDT visit
 - Monitoring after RFT
- Interpretation of impairment change indicator
 - Individual impairment status
 - Programme quality.



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