

## **Evaluating the Disease Spectrum and Cost of Care Among Neurology Inpatients in Northeast** India: Insights from a Real-World, Hospital-Based Study

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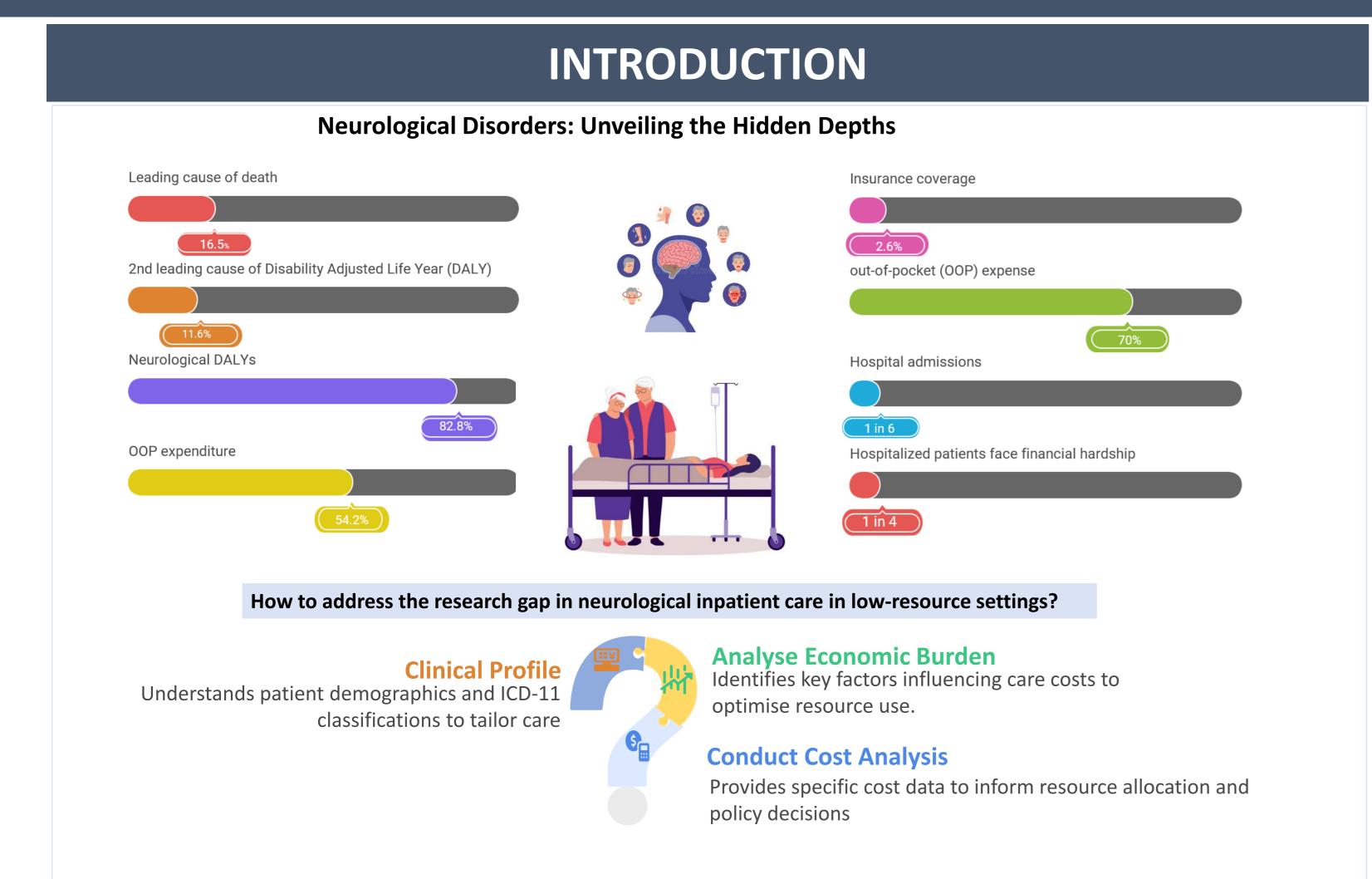
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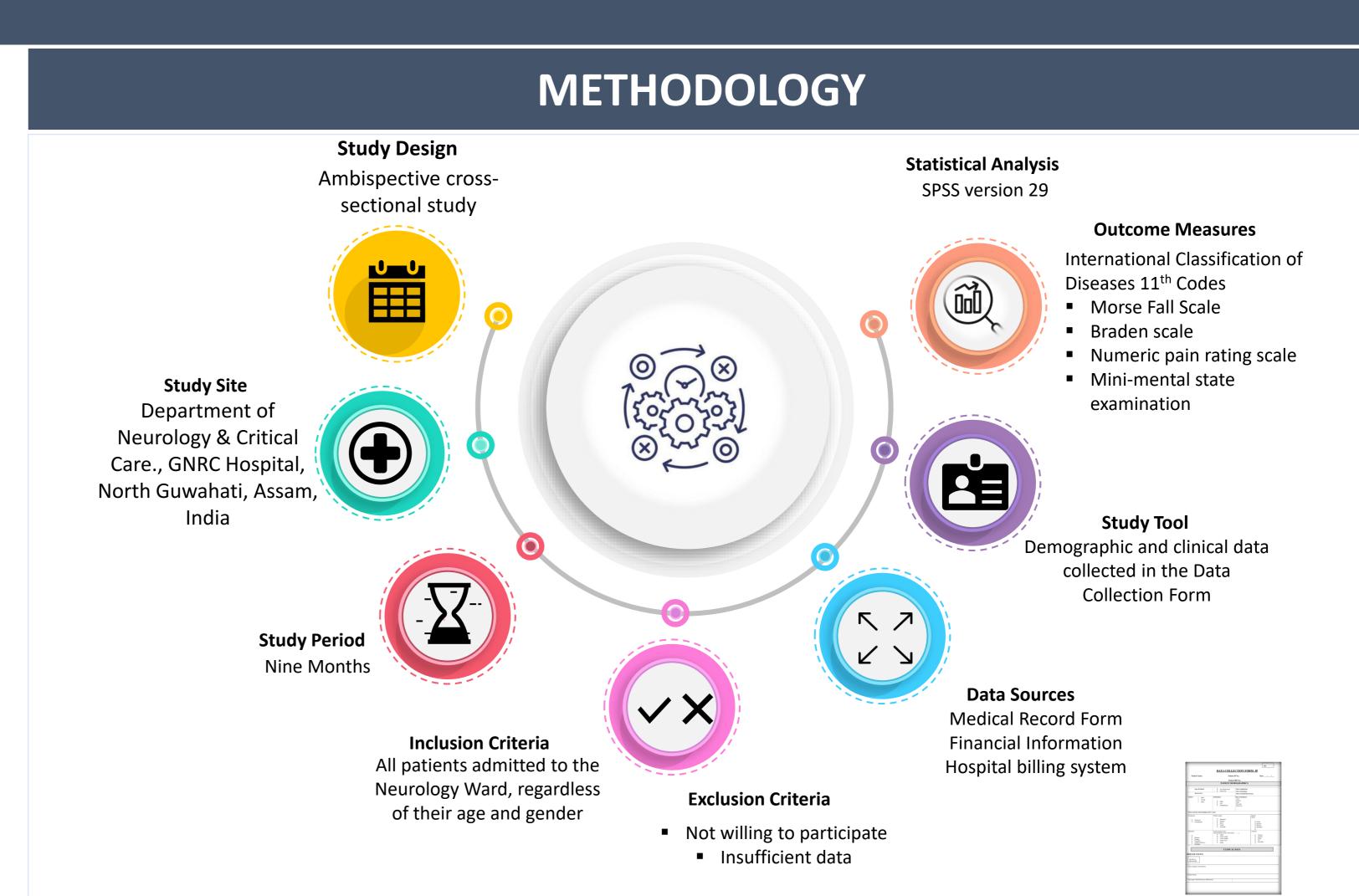
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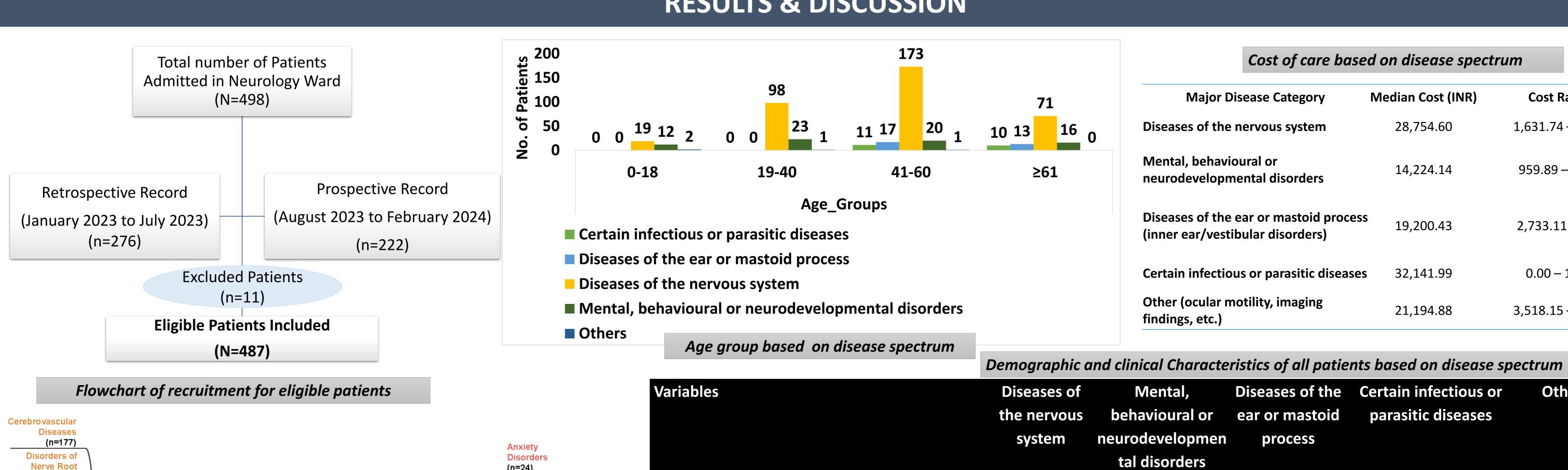








## **RESULTS & DISCUSSION**



Cost of care bas	Cost of care based on disease spectrum				
Major Disease Category	Median Cost (INR)	Cost Ra	ange (INR)		
Diseases of the nervous system	28,754.60	1,631.74	- 241,934.91		
Mental, behavioural or neurodevelopmental disorders	14,224.14	959.89 –	140,076.37		
Diseases of the ear or mastoid proces (inner ear/vestibular disorders)	ss 19,200.43	2,733.11	- 44 <i>,</i> 440.80		
Certain infectious or parasitic disease	es 32,141.99	0.00 – 2	L53,122.89		
Other (ocular motility, imaging findings, etc.)	21,194.88	3,518.15	– 287,623.40		

Cerebrovascular Diseases (n=177)  Disorders of Nerve Root (n=85)  Epilepsy or Seizures (n= 30) Spinal Cord Disorders (n= 17)  Neuromuscular Junction Diseases (n= 13)  Movement Disorders (n= 11)  Certain Disorders f the Nervous System (n= 9)  Headache Disorders (n= 10) Multiple Sclerosis (n=7)  Cerebrospinal Fluid Disorders (n=2)  Diseases of the Inner Ear (n=3)  Acute stress reaction (n=2)	Diseases of the nervous system n=361(74%)  Diseases of the Ear or Mastoid Process n=30(6%)  Problems associated with harmful or traumatic events n=2(0.4%)	Mental, Behavioural, or Neurodevelopmental Disorders (n=5)  Neurodevelopmental Disorders (n=7)  Psychotic Disorders (n=5)  Diseases Spectrum based on International Classification of Diseases 11th Revision  Certain Infectious or Parasitic Diseases (n=1)  Tuberculosis Meningitis (n=10)  Tuberculosis Meningitis (n=10)  Viral Encephaliti (n=8)  Neurocysticerco (n=3)  Diseases of the Visual System n=1(0.2%)  Diseases of the Visual System (n=1)
occupying lesion (n=2)	Diagnostic imaging of central nervous system n=1(0.2%)	n=1(0.2%) (n=1)

Ward Based on ICD-11

Variables		<b>Diseases of</b>	Mental,	Diseases of the	Certain infectious or	Others	P-Value
		the nervous	behavioural or	ear or mastoid	parasitic diseases		
		system	neurodevelopmen	process			
			tal disorders				
Age (Year), Mean (SD)		50 (±16)	42(±2)	50 (±13)	29 (±16)	34 (±21)	<.001*
Gender	Male	217 (78)	35 (40)	9 (3)	12 (4)	2 (1)	.017*
	Female	144 (68)	36 (17)	21 (10)	9 (4)	2 (1)	
Residence	Rural	321 (74)	66 (15)	25 (6)	21 (5) (0)	4 (1)	.262
	Urban	40 (80)	5 (10)	5 (10)	0 (0)	0 (0)	
<b>Employment Status</b>	Employed	193 (68)	54 (19)	20 (7)	15 (5)	2 (1)	.004*
	Unemployed	168 (83)	17 (8)	10 (5)	6 (3)	2 (1)	
Habits-Alcohol	Present	51 (75)	12 (18)	3 (4)	2 (3)	0 (0)	.753
	Absent	310 (74)	59 (14)	27 (6)	19 (5)	4 (1)	
Habits-Smoking	Present	12 (80)	2 (13)	0 (0)	1 (7)	0 (0)	.850
	Absent	349 (74)	69 (15)	30 (6)	20 (4)	4 (1)	
Habits-Tobacco	Present	198 (80)	26 (11)	18 (7)	5 (2)	1 (0.4)	.003*
	Absent	163 (68)	45 (19)	12 (5)	16 (7)	3 (1)	
Comorbidities-	Present	232 (80)	25 (9)	26 (9)	7 (2)	1 (1)	<.001*
Hypertension							
	Absent	129 (66)	46 (24)	4 (2)	14 (7)	3 (2)	
Comorbidities	Present	143 (82)	16 (9)	10 (6)	3 (2)	2 (1)	.015*
Diabetes							
Diabetes	Absent	218 (70)	55 (18)	20 (6)	18 (6)	2 (1)	
Hyperlipemia	Present	83 (79)	6 (6)	14 (13)	1 (1)	1 (1)	<.001*
	Absent	278 (73)	65 (17)	16 (4)	20 (5)	3 (1)	
Discharge Mode	Routine	201 (76)	38 (14)	18 (7)	8 (3)	1 (0.4)	.147
	DOR	146 (74)	25 (13)	11 (6)	12 (6)	3 (2)	
	DAMA	14 (58)	8 (33)	1 (4)	1 (4)	0 (0)	
Length of Stay in hospital, Mean (SD)		5 (±3)	4 (±2)	4 (±1)	6 (±3)	4 (±1)	<.001*

## CONCLUSION

- Cerebrovascular diseases, particularly ischemic stroke, were the most common neurological disorders, mainly affecting middle-aged adults.
- Hypertension, diabetes, and hyperlipidemia were frequent comorbidities, often undiagnosed, worsening disease outcomes.
- Direct medical costs (hospitalization and investigations) imposed a major out-of-pocket burden despite partial insurance coverage.
- Findings highlight the need for targeted public health interventions, better comorbidity management, and improved rural healthcare access.

## REFERENCES

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Authors sincerely acknowledge the Department of Pharmaceuticals under the MoC&F, Government of India, and NIPER Guwahati for their constant support and GNRC Institute of Medical Sciences, North Guwahati, Assam, for the clinical research facility.

#significant at p<0.05