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# **Rehabilitation Service Needs and Referral Systems: A Pathway to Primary Health Care Integration in Karnali Province, Nepal**

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# Background

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- Globally, 2.4 billion people live with health conditions that could benefit from rehabilitation, contributing to 310 million Years Lived with Disability (YLD), which increased by 63% from 1990 to 2019.
- The gap between the demand for rehabilitation services and access remains high worldwide.
- In low- and middle-income countries, unmet rehabilitation needs are even greater.

# Background and Objectives

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- Conflicts, disasters, and outbreaks escalate the need for rehabilitation services
- Fall injury Ratio is higher and Disability Prevalence greater than National in Karnali Province
- To bring health services closer and fill the health service gap, Karnali Province endorsed a Provincial Rehabilitation Strategy
- This study explores knowledge, awareness, practices, challenges, and needs in Karnali Province, Nepal

# Methods

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- **Design-** Cross sectional
- **Study Area-** All health facilities of Karnali Province, Nepal
- **Study Duration-** March- December 2024
- **Data collection method-** Self administred through google forms sent via email and social media
- **Study participants-** 313 through covinance sampling

# Methods

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- **Tools-** Structured questionnaire, pre-tested and validated
- **Data analysis-** Google form output, Excel and R
- **Ethical Consideration-** Written informed consent through a form, Brief about the study was sent, An ethical approval was obtained from NHRC.

# Results- Socio-demographic of study participants (n=313)

Characteristics		Frequency	Percent
Sex	Male	192	62.3
	Female	118	37.7
Ethnicity	Brahmin/Chhetri/Thakuri	228	72.8
	Dalit	14	4.5
	Janajati	45	14.4
	Madhesi	26	8.3
Religions	Hindu	272	86.9
	Buddhist	5	1.6
	Christian & others	33	11.2
Work Experience in Health Sector	<10 Years	217	69.32
	10 & > Years	97	30.67

# Results- Socio-demographic of study participants

Characteristics		Frequency	Percent
Working District	Surkhet	113	36.1
	Jagarkot	49	15.7
	Jumla	11	3.5
	Rukum West	15	4.8
	Humla	14	4.5
	Kalikot	18	5.8
	Dailekh	58	18.5
	Salyan	15	4.8
	Dolpa	23	7.3
	Mugu	5	1.6
Type of Health facility for work	Health Post	85	27.5
	District Hospital	42	13.4
	Basic/Community Hospital	20	6.4
	Health Section of Local Level	32	10.2
	Province Hospital	77	24.6
	Municipal Hospital	13	4.2
	Primary Health Care Centre	12	3.8
	Basic/Community Health Unit	27	8.6

# Results-Distribution of Knowledge and awareness of Rehabilitation Services

	Characteristics	Frequency	Percent
Aware about the concept of rehabilitation services in health sector	Yes	85	27.7
Types of rehabilitation services in health system*	Physiotherapy	250	79.9
	Audiology	163	62.6
	Occupational Rehabilitation	216	69
	Psychological Rehabilitation	226	72.2
	Speech Therapy	196	62.6
	Vision Therapy	199	63.6
	Nutritional Rehabilitation	1	0.3
	Assistive materials	164	52.4
	Don't know	34	10
Types of rehabilitation services	Physiotherapy	258	82.4
	Audiology	174	55.6
	Occupational Rehabilitation	221	70.6
	Psychological Rehabilitation	258	82.4
	Speech Therapy	190	60.7
	Vision Therapy	218	69.6
	Assistive Devices	172	55.0
	Specialized Services	1	0.3
	Motivational Sessions	1	0.3
	Don't know	16	5.1
Importance of rehabilitation service in overall health system	Very Important	266	85.0
	Important	38	12.1
	Somehow Important	7	2.2
	Not Important	2	0.6



# Results-Challenges in providing rehabilitation service

Characteristics		Frequency	Percent
Perceived Challenges for rehabilitation services	Human Resources	248	79.2
	Technical Skills/ Trainings	271	86.6
	Finance/ budget	239	76.4
	Geography/ Remoteness	248	79.2
	Equipment	226	72.2
	Referral system	193	61.7
	Political commitment	164	52.4
	Education and awareness of service users	2	0.6
	Don't know	10	3.2
Aware about existing referral system	Yes	198	63.3
	No	115	36.7
Know about first point for referring patients to rehabilitation services.	Province hospital	126	40.3
	District hospital	52	16.6
	KAHS	12	3.8
	Private health facilities	4	1.3
	Basic/Primary Care Hospital/ Municipal Hospital	54	17.3
	Don't know	55	17.6
Perceived adequately trained on Rehabilitation services	Yes	99	31.6
	No	61	19.5
	Partially	136	43.5
	Don't know	17	5.4

# Results- Distribution of the Challenges in providing rehabilitation service

Characteristics		Frequency	Percent
Frequency of referral made	Rarely	97	31.0
	Occasionally	148	47.3
	Frequently	68	21.7
Factors influence your decision to refer a patient to rehabilitation services *	Severity of the condition	221	70.6
	Availability of rehabilitation services locally	178	56.9
	Patient's financial constraints	249	79.6
	Patient's willingness to travel for services	127	40.6
	Don't know	7	1.6
Difficulties in the referral process *	Severity of the condition	94	30.0
	Availability of rehabilitation services locally	105	33.5
	Patient's financial constraints	166	53.0
	Patient's willingness to travel for services	49	15.7
	No any difficulty	66	21.2

# Results-Educational and training needs reported by HW

Characteristics		Frequency	Percent
Received formal training in rehabilitation	Yes	74	23.6
	No	239	76.4
Methods for staying updated about advancements or changes in rehabilitation practices	Workshops/Seminars/ trainings	199	63.6
	Online resources	196	62.6
	Professional networks	152	48.6
	Not updated	65	20.76
Think integration in primary health care is possible in Karnali province	Yes	260	83.1
	No	53	16.9
Know about provincial rehabilitation strategy	Yes	244	78.0
	No	69	22.0
Think Service readiness is in place	Yes	71	22.7
	No	242	77.3
Preparation/ Readiness required for services	Service guidelines/ Protocol	270	86.3
	Trained staff	279	89.1
	Diagnostic capacity/ Screening equipment	251	80.2
	Record-keeping systems	199	63.6
	Medicines/ Equipment	242	77.3
	Budget	256	81.8
	Political commitment	211	67.4
	Don't know	11	3.5

# Conclusion

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- A high proportion of participants were familiar with rehabilitation services, referral services, challenges, and types of services.
- However, a low proportion of them were ready to provide rehabilitation services.
- Timely addressing of health system challenges is essential for the effective integration of rehabilitation services.
- Capacity development of health workers, especially those serving in remote areas, is also recommended.

- Myself also suffered an accident and still in Rehabilitation after 2 and Half Months in Surkhet





# Bio- Brish Bahadur Shahi

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- **Eudcation-** MPH from Institute of Medicine, TU
- **Experience-** >2 Decades
- **Current Position-** Health Section Cheif, Ministry of Social Development Karnali Province, Nepal.
- **Feedbacks and contac**

