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Health needs of older people post 2005 Pakistan Kashmir earthquake

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Introduction and Background

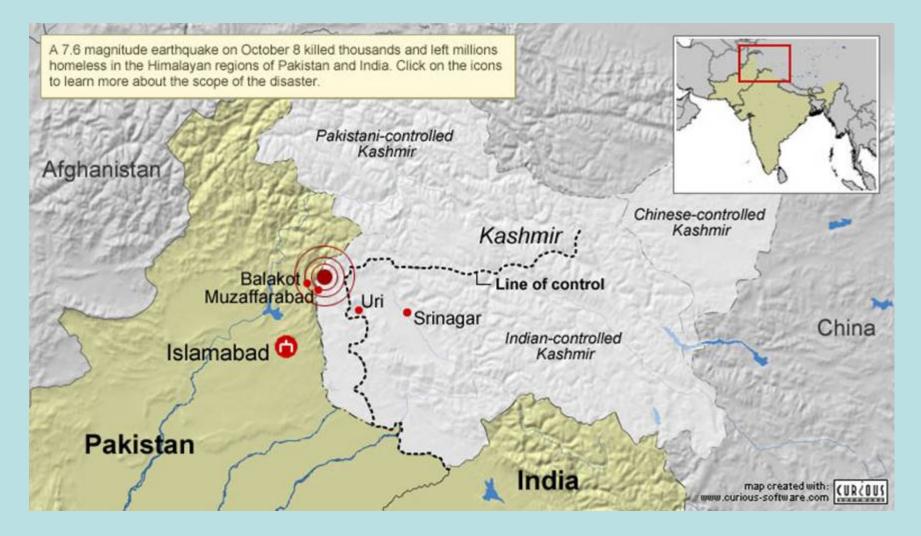
Introduction

- Recent research on the roles older people play in emergencies and their economic and social contributions has shown they contribute significantly to local efforts in post disaster/crisis relief.
- Limited is known about older people's experience and health needs after natural disaster in rural areas of developing countries where impact of crisis tends to felt the strongest and poorest suffer the most enduring damage.

Background

Date	October 8, 2005
Time	8:50 am (local time)
Magnitude	7.6 Richter Scale
Location	Kashmir (northern Pakistan and India, parts of eastern Afghanistan)
Impact	Estimated 73,000 died, 70,000 injured and 3 million made homeless

Where is it?



The Earthquake



"Ground Zero" – Balakot, in Pakistan's North-West province

Aerial view of Muzaffarabad, capital of Pakistani-controlled Kashmir



Immediate Relief Efforts



Receiving emergency supplies in Indian controlled Kashmir

British rescue team in Pakistani capital Islamabad



The study

Objective

- To provide an overview of older people health needs in the earthquake region post emergency phase.
- To identify need gap and to assess potential of intervention by HelpAge International in Pakistan-controlled Kashmir in collaboration of international NGO Merlin.







Key research question

Regarding older people in rural post-disaster setting:

- What was health/medical service utilization pattern?
 Were patterns different in different settings?
- What were the disease profile in post emergency phase?
- What were the technical challenges in assessment and implementation?

Time: Four Months After



BBC: "Winter had passed with no severe malnutrition or outbreak of epidemics..."

Source: BBC (www.bbc.co.uk dated 17/4/06)



CNN: "Emergency operations... are slowly winding down and relief workers are shifting focus to reconstruction and recovery."

Place(1): Kashmir Pakistan

Bird's Eye View of Muzaffarabad



Place (2): IDP camps

IDP (Internally Displaced Persons) Camps



Person: Older people





The research team

- HelpAge International
- Muslim Hand (Local NGO)
- MoH Support (Kashmir, Pakistan)
- Local staff (14)







What I saw...

Scenes from Muzaffarabad city



MZH Central Hospital













UN Muzaffarabad Compound



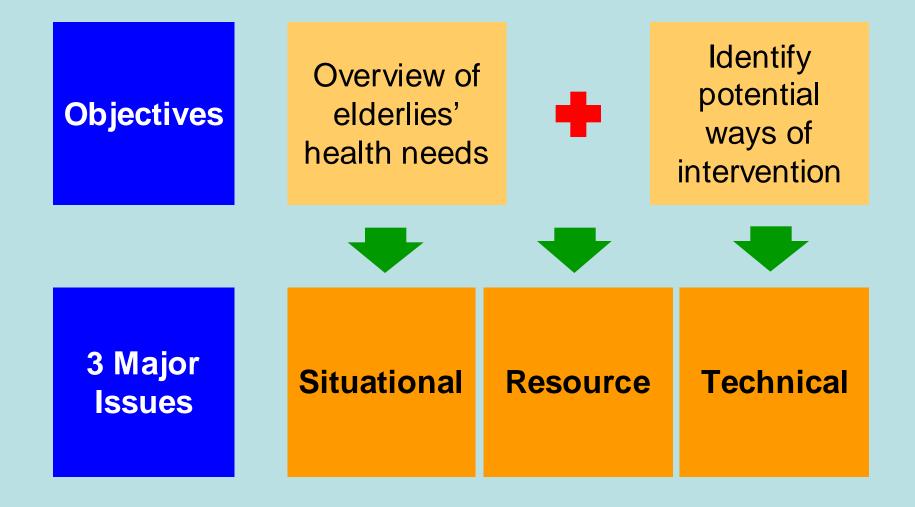
IDP (Internally Displaced Persons) Camps





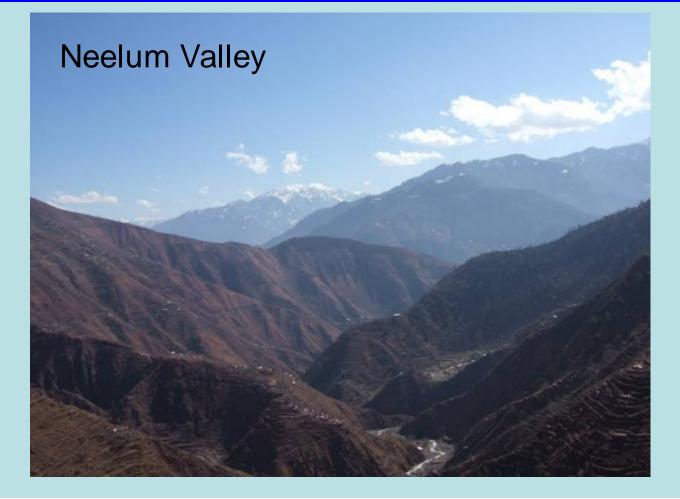
Research Challenge

Key Issues



Situational Issues (1)

Weather / Terrain



Situational Issues (2)

Transport / Logistics



Helicopters still regularly drop food to remote areas not accessible by other means of transportation

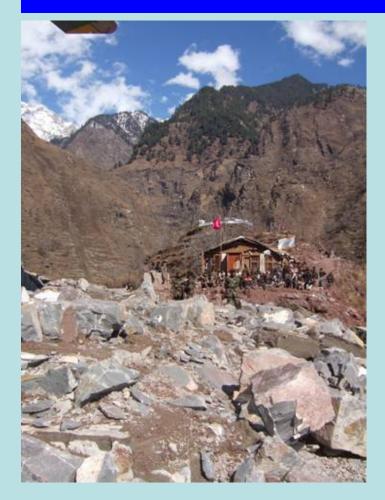
Situational Issues (3)

Weather / Terrain



Situational Issues (4)

Transport / Logistics



Helicopter pad in Neelum was no more than a small flat pitch on one of the valley's ridges



Situational Issues (5)

Transport / Logistics

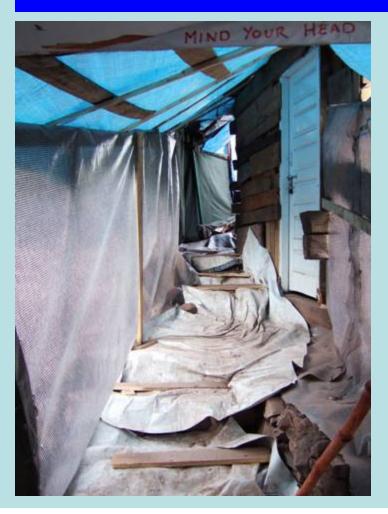




The region is only accessible via helicopters

Situational Issues (6)

Weather / Terrain



Camp conditions



Situational Issues (7)

Politics



Kashmir is so politically sensitive that no "official" maps are issued

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Situational Issues (8)

Politics / Danish Cartoon Incident



Source: BBC (www.bbc.co.uk dated 17/4/06)

Situational Issues (9)

Language / Cultural Barriers



Gender issues have significant impact on medical assessment



Vital to have reliable interpreter

Resource Issues (1)

Limited Timing – only 2 weeks from start to finish

Depart for Pakistani capital Islamabad

Meetings in Islamabad with NGOs and UN and stakeholders

Depart for Kashmir (due to Danish cartoon demonstrations on 19)

Meetings/briefing with Merlin

Site visits in Neelum Valley

Surveys in Muzaffarabad IDP camps

Depart for Islamabad

Debriefing with Merlin/team and leave Islamabad to return home

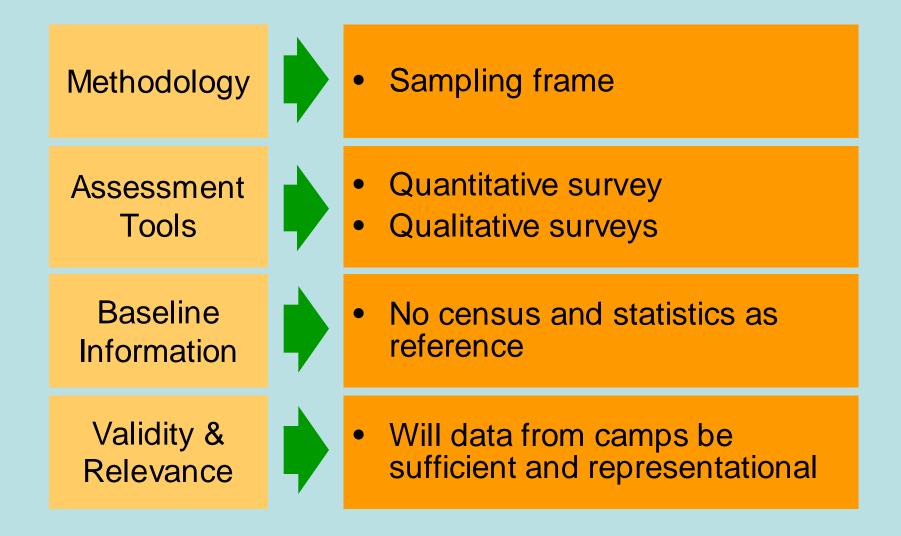
16/2 17/2 18/2 19/2 20/2 21/2 22/2 23/2 24/2 25/2 26/2 27/2 28/2 1/3 Thu Fri Sat Sun Mon Tue Wed Thu Fri Sat Sun Mon Tue Wed

Resource Issues (2)

Manpower & Technical Skills

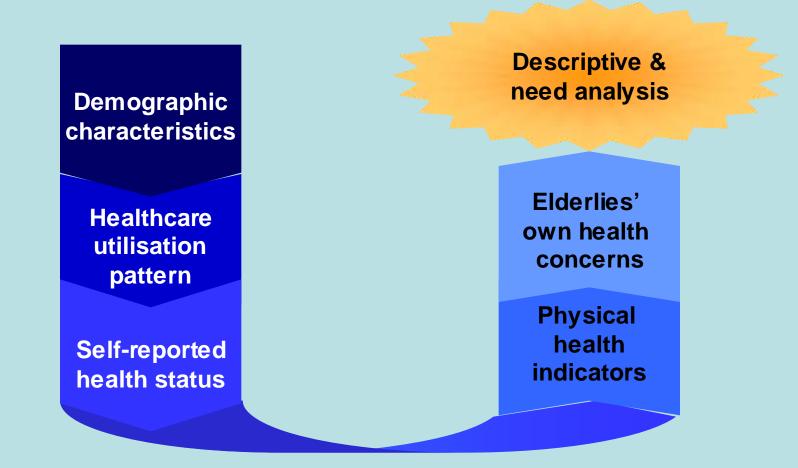


Technical Issues (1)



Research Plan

Research Design (1)



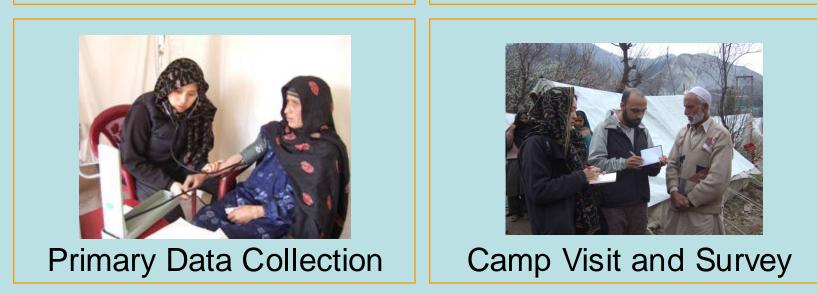
Research Design (2): Multi-Study Method



Retrospective Review



Stakeholder Interviews



Health Profiling at Selected Locations



Panjkot (P1) outreach medical service Sarli Saccha (P3) *a remote mountainous medical clinic* IDP camp run by local relief group Muslim Hand

Merlin Sites in Neelum Valley

Location	Village Population	Catchment Population	Priority Number	Type of Health Facility	Status of Structure	Current Status
Panjkot	14,687	35,000	18	BHC	CD	Ongoing Merlin operations
Sarli Sachha	11,334	11,334	27	BHC	CD	Semi- permanent facility
Deolian (Panjgiran)	16,881	50,000	10	BHC	CD	Ongoing Merlin operations
Bheri	14,990	14,990	17	BHC	CD	<mark>No services</mark>
Machharia	5,600	5,600	37	CD	CD	<mark>No services</mark>
Chilehana	8,000	8,000	49	BHC	CD	<mark>No services</mark>
Total	71,492	124,924				

Source: "Emergency Reactivation and Provision of Primary Healthcare Services in the Lower Neelum Valley Following the October 2005 Earthquake". November 2005, Merlin.

Data Collection

Study	Location	Methods	Sample size=n
1	Border Mountain clinic at Sarli Sacha	 a) Retrospective review of clinical records* b) Physical assessment**: Blood glucose, BMI, BP 	a) n =2942 b) n =85
2	Remote Outreach clinic	a) Retrospective review of clinical records*	a) n=142
3	IDP camp at 115km from Muzzaffarabad	 a) Retrospective review of clinical records* b) Cross-sectional camp survey*** 	a) n = <mark>392</mark> b) n = 339
4	Stakeholder interviews	On site, semi-structural questionnaire interviews****	n(Local)= 9 n(International)=9

21/1-20/2 /2006**, ***2/20-2/23/2006, *******2/24-2/28/2006, ********2/15-2/28

Results

Results (1a): Health Service Utilization Pattern

Location	Mountainous Clinic*	Outreach Clinic **	IDP Camps***
Total Attendees	2942	142	392
Male/female	7:3	4:5	3:4
Service taken up by older people ⁺	14%	9%	26%

*Merlin P3, Sarli Saccha Clinic

** Merlin P1, Panjkot outreach clinic

***Muslin Hand IDP camp in Chella bandi

+According to UNHCR, population aged 45 constituted to about 19% of the population in that area

Results (1b): Health Service Utilization Pattern

- Significant factors of health service used found within the logistic regression model (p<0.05):
 Gender (men), age (younger), gender of service provider, distance
- Not significant:

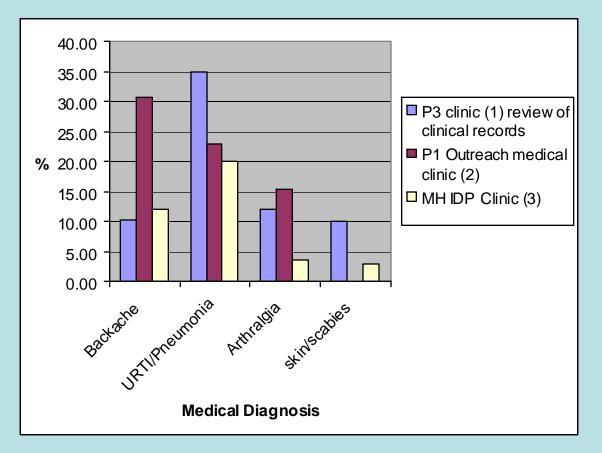
Underlying medical problems, financial concern

Results (2): Selected Self-reported Health Status of Older People in 2 Different Settings

	Mountainous Clinic*	IDP Camps**	
Dental Problems	100%	25%	
Visual Problems	75%	38%	
Eating Problems	87%	50%	
Hearing problems	54%	40%	
Overall worsening of health post earthquake	68%	34%	
Depressed and Felt Helpless	72%	42%	
Top 3 Resources cited to be most needed	Shelter (90%), medicine (60%), financial support (60%)	Financial support (55%), shelter (50%), medicine (20%)	
Under-diagnosed chronic disease (DM)	48%	22%	

By snow-ball sampling, older people sample size: Mountainous clinic*: 85, IDP camps**: 66

Results (3): Summary of the Most Common Medical Diagnosis of Older People*



Review of medical consultation records from January to February, 2006.

* Older patients of: 1. Among 2,942 medical registrations at Sarli Saccha P3 clinic; 2. Among 142 medical registrations at Panjkot P1 clinic; 3. Among 392 medical registration at MH Chella Bandi IDP clinic

Other key findings(1)

Disparities of gender service utilization due to access barriers:

Female with general medical service - Gender of the service providers

Male for psychosocial service - Reverse discrimination. MEN NOT WELCOME!

Other key findings(2)

<u>Underlying chronic medical condition of older people</u>*:

- Among older people who had known chronic medical problem (which required medication/management), only 20%(rural) versus 60%(suburb) received management post disaster.
- On-site physical examination at rural site** found 22% older people had undiagnosed or no medical management their chronic diseases.

*A total of 151 older people on mountainous clinic and IDP camps

** Rural site consists of 85 older people at mountainous clinic

Other key findings(3)

Drug Prescription pattern

- Discrepancies between diagnosis and prescription of drugs.
- Over prescription of antibiotics. (of all age)
- No consideration of dosage and potential drug interaction when prescribing drugs for extreme of ages.

Other key findings(4)

Awareness of older people issues among stakeholders:

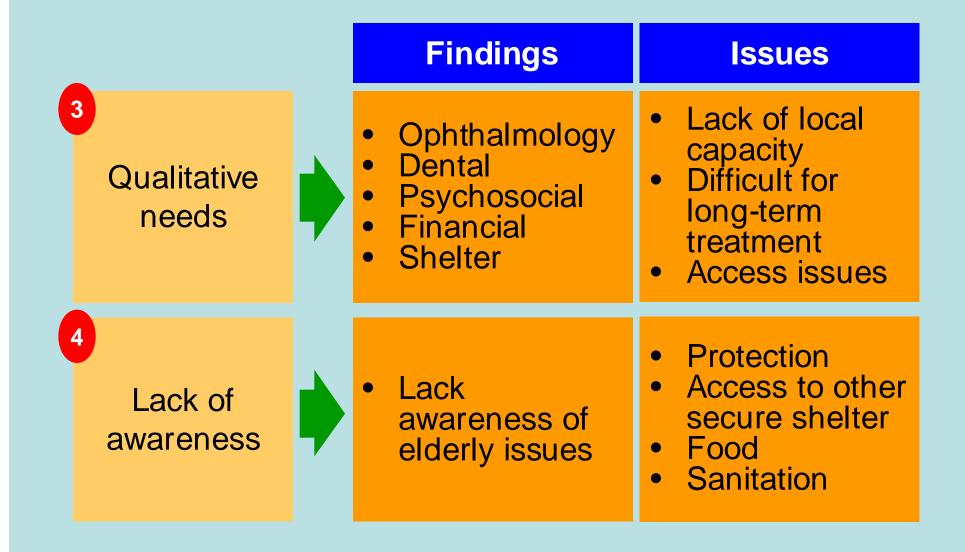
- 1. Most (17/18) agreed that over 45 was a reasonable definition of old age.
- 2. Most cited relief challenges included:
 - Lack of medication.
 - Technical expertise.
 - Resources for long term implementation.
- 3. None of them are aware of the guidelines*.

*"Guidelines for best practices for older people in disaster and humanitarian crises" published by HelpAged International(2004)

Summary of study results

	Findings	Issues
¹ Utilisation of healthcare	 9% to 26% IDP camps > mountain areas 	 Access/location Gender of medical staff
2 Disease	 Backache URTI Gastritis Arthralgia 	 Lack of longitudinal analysis Drug utilisation pattern Weather
pattern	 No report of CVD, stroke, DM 	 Poor clinical skills Poor records Lack of awareness

Study Results (cont'd)



Discussion

- Data
 - Small sample size
 - Lack of data sources for triangulation
- Implementation of recommendation
 - Official end of "emergency phase" on 31/3/06
 - Political sensitivity and access to region
 - Further investment by NGOs
 - Lack of local expertise
- Missed opportunities
 - Too little too late
- Ethical concerns
 - Official accountability over NGO resources

Conclusions

Conclusion (1)

- Overall health needs of older people found during the assessment were compatible with other findings in crisis/unstable settings such as Darfur and Sierra Leone.
- Some examples of potential health interventions to address the need gap include:
 - gender-specific outreach medical services,
- specific health services for psychosocial problems, dental care and ophthalmology.

Conclusion (2)

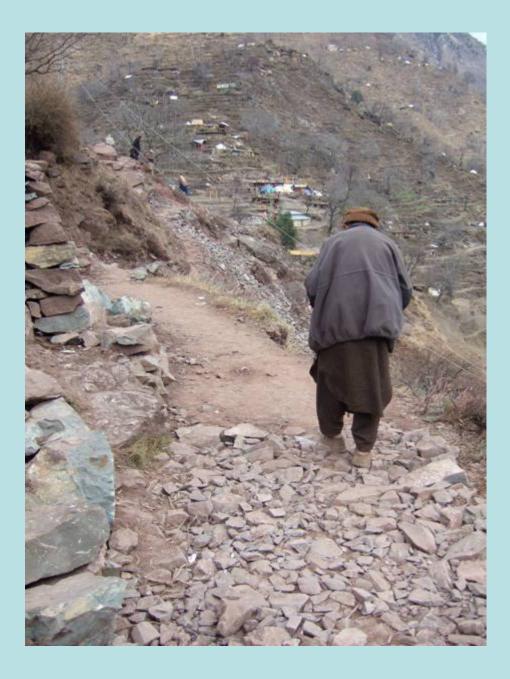
Technical consideration

- Utilizing multiple studies in sub-optimal conditions appeared to be an useful methodology to study needs among population health needs in sub-optimal conditions.
- Quality of care could be enhanced through training, specialist support and presence of agencies who may advocate on behalf of older people and coordinate their care in disaster/post-disaster settings.

Conclusion (3)

- As most of the health issues of older people require longer term involvement, collaboration with local partners and technical groups is important to ensure older people are not forgotten during the reconstruction phase, especially in rural settings.
- Moreover, the ongoing NCD burden of local older populations could be reduced by implementing a longterm NCD strategy during the rehabilitation phase of the relief effort.

Question and Answer





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