

A Snapshot of The Health and Nutrition of the Ageing / Elderly Poor

Survey of 102 Participants of Pension Parishad Dharna, December 2013, New Delhi

[Public Health Resource Network – Pension Parishad]

INTRODUCTION

Pension Parishad

The Pension Parishad comprises over 200 organisations and groups from across India who are in agreement that how we treat the elderly speaks about the kind of society that we live in and that the rights of the elderly to live with dignity must be recognised and ensured. The elderly constitute 8.2% of the total population. About 10 crore people live either alone or with their husband/wife. Working class people migrate in search of work. Others struggle to eke out a living. The elderly are often left behind in the villages. They often do not have the physical and financial support of younger family members. Since they have contributed to India's growth during their working lives, Pension Parishad believes they should be entitled to a pension from the Government.

The Elderly and their Demand for Pension

According to a Government of India 2011 report¹ about 65% of the aged and elderly² depend on others for their day-to-day maintenance. Less than 20% of elderly women and majority of elderly men are economically independent and nearly 40% of persons aged 60 years and above (60% of men and 19% of women) are still having to work. In rural areas 66% of elderly men and above 23% of aged women are still participating in economic activity, while in urban areas only 39% of elderly men and about 7% of elderly women are economically active.

Under these types of circumstances, the demand for universal old age pension is one of the key demands of the Pension Parishad. The demand also developed from the experiences and needs of various marginalized communities indigenous communities, internally displaced, Dalits, cycle rickshaw pullers, forest dwellers, agricultural workers, construction workers, waste pickers, re-cycling workers, daily wage workers, NREGA workers, rural artisans, salt pan workers, domestic workers, sex workers, transgender, disabled, MSMs, street vendors, fish workers people living with HIV and innumerable other workers in insecure and precarious employments who live a hand to mouth existence.

¹ Situational Analysis of The elderly in India, June 2011, Central Statistics Office, Ministry of Statistics and Programme Implementation Government of India

² The National Policy on Older Persons' (January, 1999) defines 'senior citizen' or 'elderly' as a person who is of age 60 years or above.

Various Government of India reports acknowledge that informal unprotected workers constitute 93 per cent of the workforce. The National Commission of Enterprises in the Unorganised Sector estimated the contribution of the unorganised sector to be 50 per cent of the country's GDP (NCEUS, 2008). Humanitarian considerations apart, it stands to reason that unorganised, informal workers in often precarious livelihoods and occupations who have contributed to India's growth during their working lives should be entitled to a pension and health care from the Government. The Government of India provides a measly pension of Rs.200 per month only to those who are listed as being below the poverty line. Some states supplement this through state resources. The combined expenditure of the states and centre on old age social pensions was Rs.14,370 cr in 2011-12. Compare this with Rs.1,66,169 crores which is what the centre and states combined spend on pension and benefits of retired government employees. The inequity needs no further elaboration and really has no justification.

THE HEALTH SURVEY

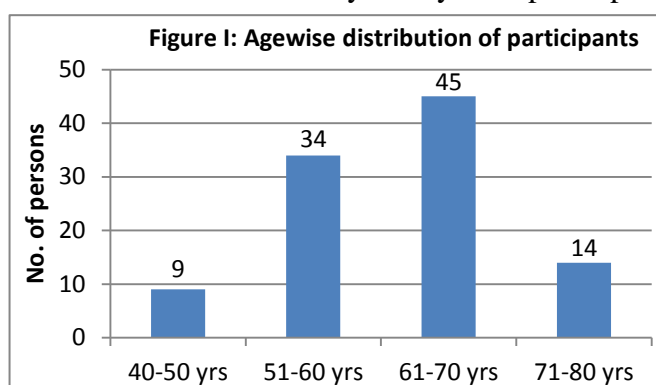
Pension Parishad organised a basic health camp as part of the dharna on 16th, 17th and 18th of December 2013. The purpose of the health camp was to understand the health and nutritional status of the participants who had spent more than 20 days during dharna in the bitter Delhi cold. The health check up was conducted by teams from various fraternal organisations and networks; the Mobile Clinic from Helpage India and a doctor from Public Health Resource Network. Investigations were carried out free of cost by Fortis and conducted by Super Religare Laboratories (SRL) Diagnostics as part of their Corporate Social Responsibility. Public Health Resource Network and Pension Parishad held responsibility for overall coordination, documentation and analysis.

The health check ups mainly included a general check up, recording of weights and heights, Blood Pressure, estimation of total Serum Cholesterol, Haemoglobin and Blood Sugar Random. Body Mass Index (BMI) was calculated for each individual based on height and weight, which reflects their nutritional status. Medicines for common symptoms such as chest congestion, cough, influenza, head ache and body ache not exceeding a week were dispensed by the Helpage mobile clinic. Helpage also provided a fortnights iron supplements to those with low haemoglobin. A report of the check ups were made available to the participants so that required follow up and further investigation could be assisted when they got back home.

THE SAMPLE

At the outset, it must be clarified that since this was a convenience sample of people attending a dharna of over 2 weeks; in bitter cold, living on a pavement, following substantial travel, the sample is biased by the fact that only the relatively well elderly are participants. Results must be interpreted keeping this fact in mind.

A total of 102 participants in the age group of 40 – 80 years consented for the health check up, with participants from four different States across the country. Sixty two participants were from Rajasthan, 35 from Bihar, 3 from Maharashtra and 1 from Gujarat. The sample comprised of 48 men (47%) and 54 (53%) women. Out of these a majority of participants (81%) were elderly persons belonging to the age group of 60-80 years. **Figure: I** provides an age wise distribution of the participants.



FINDINGS OF THE HEALTH SURVEY

I. Nutritional Status; Weight

The findings on weight were dramatic with the average weight being only 46.7 Kg (avg wt men 49.4 Kg and women 44.2 Kg). The weights ranged from as low as 28 kgs to 80 kg. the distribution of weight by age and sex is further described in the table below. Altogether, 3/4ths of the people weighed less than 50 Kgs and nearly 1/4th less than even 40 Kgs.

Table 1. Distribution of 101 participants according to weight across sex and age

Weight (kg)	Total	Men	Women	Age group			
				40-50	51-60	61-70	71-80
20-30	1 (1%)	0	1(100%)	0	1 (100%)	0	0
31-40	23 (22.8%)	5 (21.7%)	18 (78.3)	3 (13%)	5 (21.7%)	9 (39.1%)	6 (26.1%)
41-50	50 (49.5%)	25 (50%)	25 (50%)	2 (4%)	19 (38%)	23 (46%)	6 (12%)
51-60	21 (20.8%)	15 (71.4%)	6 (28.6%)	2 (9.5%)	9 (42.9%)	8 (38.1%)	2 (9.5%)
61-70	5 (4.9%)	2 (40%)	3 (60%)	2 (40%)	0	3 (60%)	0
71-80	1 (1%)	1(100%)	0	0	0	0	1 (100%)

Since stunting due to chronic undernutrition is also common in India, BMIs were calculated as a finer measure of thinness.

II. Nutritional Status; Body Mass Index

Classification of nutritional status was done based on BMI, as per World Health Organisation (WHO) standards. BMI classification is provided in table 1 and the nutritional status of the participants reflects in figure II.

Table 2: BMI classification

Nutritional Status	BMI
Normal	18.5-25.5
Underweight	< 18.5
Severely underweight	< /=16
Overweight	25.5-29.9
Obese	> /=30

The average BMI in this group is 19.1 and ranges from 11.8 to 31.2.

The data shows that 40 (39%) persons, comprised of 22 men and 18 women, are underweight. Out of these 40 underweight persons 14 (35% of underweight and 13.7% of total), comprising of 6 men and 8 women, are severely underweight (**severe thinness**). **The average BMI in this group is as low as 14.8.**

Figure II: Nutritional Status of participants

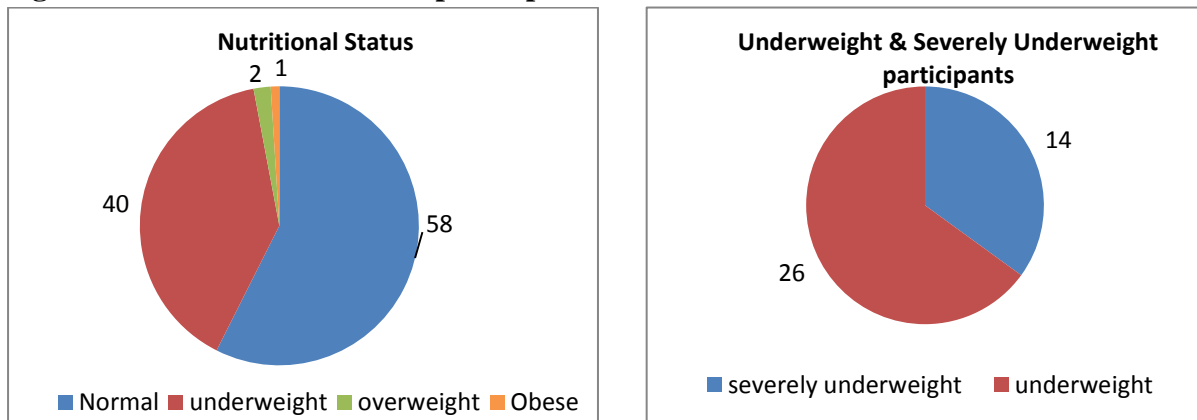
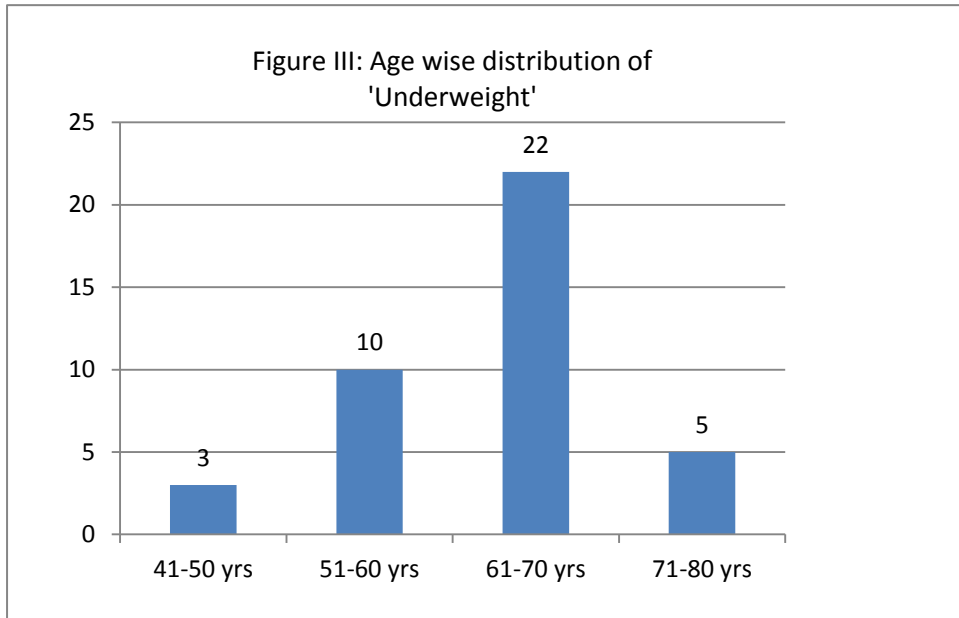


Table 3: Distribution of participants according to BMI

Detail	Total	M	F	40-50 yrs.		51-60 yrs.		61-70 yrs.		71-80 yrs	
				M	F	M	F	M	F	M	F
Normal	59	25	34	2	3	11	13	8	12	4	6
Underweight	25	16	9	0	0	3	5	12	2	1	2
Severely underweight	14	6	8	0	3	0	2	6	2	0	1
Overweight	2	0	2	0	1	0	0	0	1	0	0

Obese	1	1	0	-	-	-	-	1	-	-	-
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III. Anemia

Anaemia is a common haematological abnormality in the aging population. It should never be considered a normal physiological response to ageing. The causes of anaemia are diverse. Nutritional anaemia and the anaemia of chronic disease is probably the commonest in old age. The WHO criteria for diagnosing anaemia are a hemoglobin (Hb) level of less than 13 g/dl in men and 12 g/dl in women³.

The Hb level of 95 participants was estimated and classification was done based on WHO standard. The result shows that 71% of the women were normal, whereas 29% were anaemic and 61% men were normal and 39% were anaemic (as presented in table 2 below).

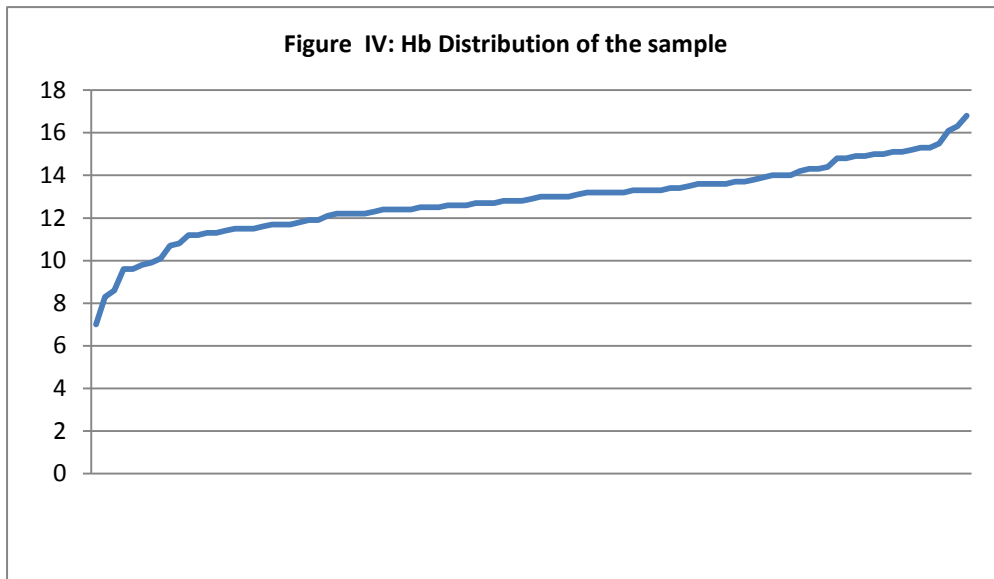
Table 4: Distribution of participants on the basis of Hb levels across age and sex

Detail	Total	M	W	40-50 yrs.		51-60 yrs.		61-70 yrs.		71-80 yrs.		As per SRL Diagnostics*
				M	F	M	F	M	F	M	F	
Normal	63 (66.3%)	27 (61%)	36 (71%)	2	6	7	11	17	13	1	6	70 (73.7%)
Anaemic	32 (33.7%)	17 (39%)	15 (29%)	0	0	7	8	8	4	2	3	25 (26.3%)

Note: *as per SRL Diagnostics Range between 12.0-15.0

³ Age and Ageing 2002; 31:87-91, 2002 British Geriatric Society

Hb ranged widely from 7 gm/dl to 16.8 gm/dl. However, most values;nearly 70%, were clustered between 10 and 14 gm/dl with nearly 50% lying between 10 and 13 gm/dl, as the lined scatter below demonstrates.



The average Hb level of all participants was 12.8 g/dl and 12.5 for women and 13.2 for men participants. Out of the total 51 women, 15 (29%) were anaemic with an average Hb level of 10.78 g/dl. One woman had a Hb level as low as 7g/dl and 4 women below 10g/dl. Similarly out of 48 men, 17 (39%) were anaemic with average Hb level 11.44 g/dl, with as low as 8.3 g/dl.

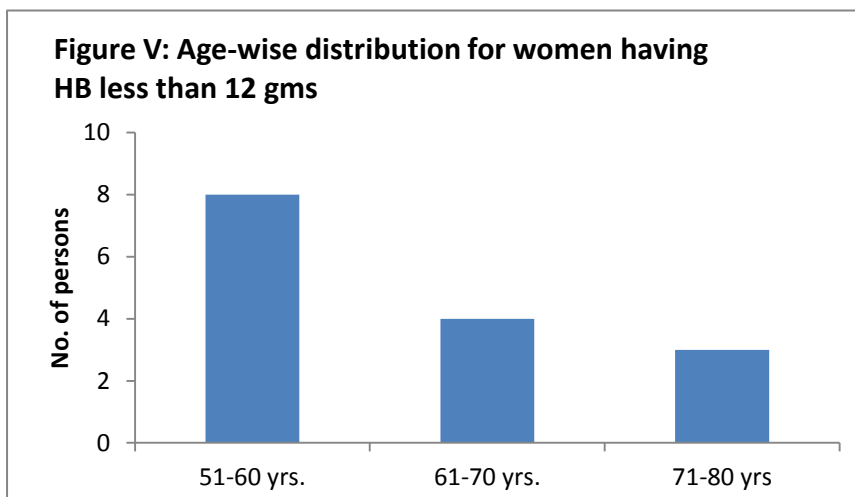
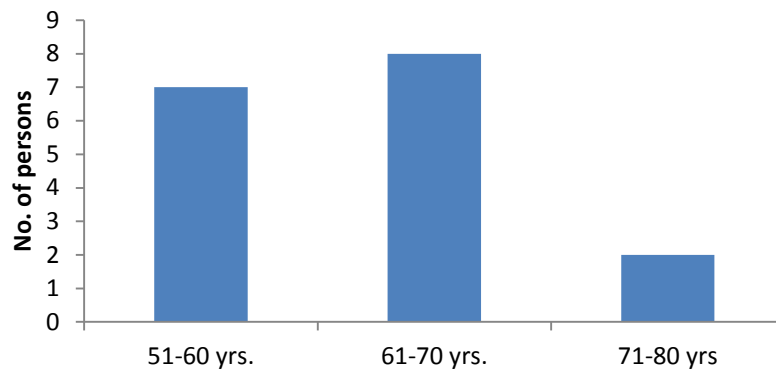


figure VI: Age-wise distribution for males having H.B less than 13 gms



Surprisingly the haemoglobin level of the 14 persons with lowest BMIs ranged between 11.9 and 16.8 gm/dl (the highest Hb of the sample!), with an average of 13.8 gm/dl.

IV. Total Cholesterol Serum

Out of total 102 participants, cholesterol estimation was done for 94 participants. Of these, 23 (24.5%) were found to have high cholesterol (over 200 gm/dl).

V. Blood Sugar Random

A random blood sugar check up was also carried out for 94 elderly persons.

Out of these 94 participants one person was a known diabetic and a further two persons (1 male of 60 yrs. and female of 45 yrs.) had high random blood sugars (higher than 200 gm/dl).

VI. Blood Pressure

Blood Pressure was recorded for 93 persons, of whom only 9 (9.6%) were detected to have high blood pressure.

DISCUSSION

To do a health survey in the settings of a noisy, overcrowded dharna has obvious limitations and challenges. Those notwithstanding, and considering the fact that the sample comprised of a population of ageing/ elderly poor people who were fit enough to participate in the physically demanding event, the findings are quite dramatic in their pointer to a drastic situation of food insecurity.

Of these relatively well people, 13.7 % had BMIs less than 16 – a situation that is classified as one of not mere ‘thinness’ but starvation⁴. Starvation demands from the administration immediate action and the implementation of ‘mandatory protocols for intervention for relief, prevention and accountability’ as per the Supreme Court Commissioners for the Right to Food⁵, whereas these vulnerable people have been found living on the pavements of the capital demonstrating for the right to live with dignity.

In all, 39 % were significantly underweight with BMIs less than 18.5. Considering the fact that the elderly are dependent upon others for their expenditures on food and health (ref status report), this is hardly surprising.

The findings on anemia, with 34% being anemic are consistent with other studies⁶ and tend to corroborate the general findings of nutritional and health insufficiency. However, there appears to be an overestimation in terms of actual hemoglobin levels with averages which are higher than expected from previous experience even while it is understood that hemoglobin levels tend to be higher and anemia milder amongst the elderly. There is also a remarkably poor correlation with underweight which cannot easily be explained even while it is understood that many non-nutritional causes of anemia exist in the elderly.

None of these underweight people seemed to be suffering from any acute illness from the records of their health check during the survey and past history. Thus their nutritional status is unlikely to be the result of some acute medical condition. However, TB and other chronic diseases cannot be rule out as underlying conditions, which further raises the issue of the access to health care by the elderly and the outreach to them by the public health system.

The screening for hypertension and diabetes revealed a low incidence amongst this sample as compared with other studies⁷ the experience and reports of others working with poor rural

⁴ Guidelines for Investigating Suspected Starvation Deaths’, prepared by the Jan Swasthya Abhiyan) Hunger Watch Group. Available Online http://www.righttofoodindia.org/data/guidelines_starvation.pdf

⁵ <http://www.sccommissioners.org/Starvation/investigationprotocol.html>

⁶ Patterns of Anemia in Geriatric Age Group. Saurabh R Shrivastava et al. JKIMSU, Vol. 2, No. 1, Jan-June 2013. Available <http://www.jkimsu.com/jkimsu-vol2no1/jkimsu,%20vol%202,%20no%201,%20jan%20-%20june%202013,%2077-81.pdf>

⁷ Prevalence, Awareness, Treatment and Control of Diabetes Among Elderly Persons in an Urban Slum of Delhi. Arvind Kumar Singh et al. Indian J Community Med. 2012 Oct-Dec; 37(4): 236–239. Available <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3531017/>

Prevalence, awareness, treatment and control of hypertension among the elderly in Bangladesh and India: a multicentre study. Hypertension Study Group. Bull World Health Organ. 2001;79(6):490-500. Available <http://www.ncbi.nlm.nih.gov/pubmed/11436469>

elderly in a hospital setting such as Jan Swasthya Sahyog, which can be explained by the nature of the sample itself. However, hypercholesterolemia was significant at 24.5%.

While this survey offers only a snapshot of the nutritional status of the ageing and elderly it reinforces the demand for greater focus on the food security and health care of the elderly, both of which depend on economic sufficiency as well as a policy environment that specifically links public programmes to this vulnerable population.