Site Selection for MMU and Baseline Survey Report

Mobile Medical Unit

Buxar-II MMU

Octavo Solutions Pvt. Ltd, New Delhi

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Executive Summary

The HelpAge India-SJVN collaborative Mobile Medicare Unit (MMU) project has been designed to provide health care services to the elderly at their doorsteps in selected villages of Buxar II. For initiating this project the following 4 villages in locations in Chausa block were to be mapped as per the information provided by HelpAge India (HI) and SJVN.

- Pavni
- Dharmagatpur
- Katgharwa
- Kanaknarayanpur

Together with the sample village visit, the focus was also to establish initial contacts with key stakeholders of the MMU project, collect basic demographic information and initiate survey process for establishment of baseline of elderly persons in each GP. The key stakeholders with whom communications were established were:

- SJVN's Corporate Social Responsibility Lead Officials
- HelpAge India representatives
- Elected Gram Panchayat Leaders, functionaries and elderly persons
- Government Health Centres – Primarily NRHM facilitated health bodies like PHCs & CHCs
- Local Government Administration (Block/Taluka/Mandal/District)
- Non-government Organisations are working in this area

Therefore, on the basis of the list of the villages provided by the concerned HR/CSRdepartment of SJVN and HelpAge India, a mapping of the villages and sites was done. The mapping was important because of four reasons, which were:

- The MMU operation needs to align itself with the local governance bodies, especially Gram Panchayats as it would require the sustained availability its resources for successful operation. The basic information that will feed into the operation of MMU will come from Gram Panchayats. The locations for parking of the MMU vehicle can be best identified in consultation with GP functionaries. As per the mandate of the MMU project, the parking locations need to be public places (Schools, Community Halls, Anganwadi Centres, Health Sub-centres, etc.) thereby guaranteeing uninhibited access by the target group. These locations in a village are essentially under the jurisdiction of Gram Panchayat and therefore, it becomes important that its consent and participation are elicited at the beginning itself.

- The village mapping helped in assessing the operational feasibility in terms of distance coverage for the MMU. Here factors like contiguousness of Gram Panchayats, travel distance between the GPs and location for MMU office were looked upon. The second important factor that was looked into was population strength of GP and the corresponding potential patient load that it will be borne by any one MMU. Based on the patient carrying capacity of the MMU and the suggested operational areas by SJVN, coverage of GPs in the project was assessed.
- For determining the exact patient load and generating the corresponding baseline a door-to-door survey was envisaged from the very beginning. The in-principle support of the Gram Panchayat leadership was considered crucial to conduct the survey smoothly and gather the relevant information.
- The SJVN team does not make any differentiation between natural villages/habitats and Village Panchayats or Gram Panchayats (GP). If one or two villages appear on the list of villages given by SJVN the MMU operation cannot stop at just reaching out to only these one or two stand-alone villages. The services have to be made available to the whole GP in order to make it relevant and participatory. Therefore, GP mapping was essential for making the entire process meaningful.
- The mapping of the Gram Panchayat was done by locating a field contact, primarily an elected leader from the Gram Panchayat. Supporting help from the field contact was then taken in mapping the names of the Gram Panchayats corresponding to the names of the villages suggested by SJVN. In all cases the information on matching the list of villages with corresponding GPs and other associated conditions like contiguity, operational feasibility keeping the distance factor in view, etc. were collected from more than one source in order to ensure its correctness and reliability. SJVN and HelpAge India personnel helped in locating some of the field contacts.

After Gram Panchayat meeting our team initiated a door to door survey for listing of elderly population with the help of pre-designed questionnaire. Two separate questionnaires were also prepared to assess the need of the mobile medical unit. After identification of elderly population in villages our field team conducted a baseline survey of 100% elderly households in selected villages. Besides, a good number of other household where there is no elderly population were interviewed. Data collection, data entry and data analysis in the Help Age India's 'e-Chikitsa' HMIS software were done. Octavo developed a Coding Methodology was developed for data entry. Key findings of the end results are given below:

Key Findings

1. HelpAge has started their MMU activities in the Buxar II region and covering 4 villages in 2 Panchayats through the MMUs. The MMU van runs 5 days in a week in two sessions (morning and afternoon). The unit provides free treatment, free medicines, basic diagnostics, home visits of the patients (in case of bed-ridden), counseling facilities and awareness generation.
2. All the sites parking areas located in public places.
3. It was observed that most of the identified sites have basic amenities like - accessibility, parking facility, drinking water facility, electricity and mobile network. About 40% of the sites have toilet facility and 30% of them have storage facilities and 10% have primary health centre and 80% doctors in the village.
4. PHC at Buxar II have basic facilities and enough to cater its service to the mass of Buxar II.
5. Interview with the village Pradhan revealed that MMUs in the Buxar II area is the real time window.
6. Total number of household of the selected 4 villages is 1029 and out of them 493 (48%) reported with elderly people (aged 55 years or above).
7. Out of the total population male population constitutes 55% and the remaining 45% are females.Sex ratio is 805 which is much lesser than the national average (940) and also lesser than district average.
8. Among the members, approximately 29% are illiterates and 16% are just literate. 7% of the population are non school going, 11% have completed matriculation, and the percentages for graduates are and above is 3%.
9. 25% of the elderly population are involved in farming and 21% are daily-wage earners. 13% are not into any occupation.
10. 55% of the elderly households belong to the BPL category and the remaining 45% belong to the APL category.
11. The caste-wise distribution for families with elderly people reveals that 80% of such families belong to the OBC category. 14% and 5% belong to the SC and General categories respectively.
12. Out of the total households, 76% respondents prefer sub-centres and primary health centres (PHCs) for treatment of common ailments, while 75% prefer government hospitals and 81% go to private clinics.
13. Around 66% respondents prefer three or more options for accessing medical facilities, while the percentages of those preferring two or a single option are 29% and 4% respectively.
14. Around 97% respondents regard modern medicine as their first preference over other forms of medicine.

15. Around 1% of the total population covered confirmed that they are disabled. Of the total population with disability, 71% are male and the remaining 29% are females. 54% of the disabled population are suffering from orthopaedic problems, 19% from mental anomalies, and 10% each from visual disabilities and hearing impairment respectively.
16. Around 1% of the total elderly population in the sample are disabled, out of which 71% suffer from orthopedic disabilities.
17. Around 64% of the elderly population are into the consumption of tobacco, 31% smoke beedi and 4% consume gutkha. Approximately 91% of the elderly addicted people are males, and the remaining are females.
18. Out of the total elderly population, 28% are suffering from joint pain, 12% from hypertension and 4% from diabetes.
19. Out of the total elderly population who have reported to be suffering from diseases, approximately 60% cases are of joint pain, 25% of hypertension and 8% are of diabetes.
20. Around 42% of those smoking beedi are suffering from hypertension, 33% from joint pains, 13% from diabetes and 7% are suffering from heart problems. 61% of those consuming tobacco suffer from joint pains, 29% from hypertension and 5% from diabetes. Approximately 19%, 50% and 25% of those consuming gutkha suffer from diabetes, hypertension and joint pains respectively.
21. Respectively 97% and 98% of the elderly population suffering from diabetes and joint pain have availed treatment. For those suffering from other disease types, all of them availed treatment.
22. Around 52% respondents availed treatment from private clinics and 47% from government hospitals.
23. 55% (63% male and 44% female) of the total elderly population are involved in different activities. Approximately 72% elders participate in religious activities, 49% attend village meetings and 22% involve themselves in social activities.
24. Only 11% (9% male and less than 1% female) of the total elderly population are aware of the rights of elders. None of the elderly females are aware of such rights.
25. Only 1% of the families reported incidents of abuse of elderly people.

Chapter 1: Introduction

Overview

The present district of Buxar came into existence in 1991. It consists of areas under Buxar Sadar and Dumraon Sub-Division of the old Bhojpur District. Buxar town is the principal town of the district and also its headquarters. The district shares its boundaries with Ballia district of UP in the north, Rohtas district in the south, Ghazipur and Ballia districts of UP in the west, and Bhojpur district in the east. There are 2 sub-divisions and 11 blocks in the district. Out of the 11 blocks, 7 are in Dumraon sub-division and the remaining 4 are in Buxar Sadar sub-division. A town is located each in Buxar and Dumraon sub-division.

Demographic Profile of Buxar District

District Buxar has a total area of 17575 sq.km. Its population is 102,861. It has achieved a decadal growth rate of 27.2%. It has also experienced an annual exponential growth rate of 21.77% according to Census 2011.

State Name -- Bihar District Name – Buxar	
Total Area	1623.83 sq. km.
Total Forest Land	Nil
Land under Cultivation	666 Sq. km
Sub Division	2
Cities	1
Tehsils	11
Municipal Councils	2
Gram Panchayat	142
Villages	1134
Population Total (Census 2011)	102,861
Male (Census 2011)	54,277
Female (Census 2011)	48,584
Literacy rate	71.77
Population density	1003
Source: District website and Census of India	

Housing Amenities

Housing Amenities	
House with electricity	24.5%
House with drinking water facility	2.0%
House with toilet facility	17.7%
House with LPG connection	8.2%
Pucca house	24.9%
BPL household	34.7%
Source: District level household and facility survey, 2007-08	

Educational Infrastructure

Educational Infrastructure	
Primary Schools	658
Middle Schools	164
High and Higher Secondary Schools	70
Colleges	15
ITI	Nil
Source: Brief Industrial Profile of BUXARDistrict, Ministry of MSME, 2012-13	

Health Infrastructure

Health Infrastructure	
Institution	**% of Villages**
Sub-centre	24%
PHC	7%
Any government facility of health	43%
Having doctors	36%
ASHA workers	100%
Anganwadi	100%
Source: District Health Action Plan, 2012-13	

Vital Statistics

Vital Statistics	
Indicator	**Rate**
Crude birth rate	27.7
General fertility rate	113.5
Total fertility rate	3.5
Gross reproduction rate	1.6
General marital fertility rate	156.2
Total marital fertility rate	5.5
Infant Mortality Rate	43
Death Rate	6.6
Still Birth Rate	1
Source: Census of India	

Economy

Agriculture is the main occupation for the majority of the people in the district. Approximately 86% of the total land is suitable for agriculture. Out of the 2/3 is irrigated land.[1]The industry has good number of industries. Locally available raw material and for agro processing units and good road transportation made it possible. Land accusation for the industry and roads, and shortage of power in the district become major problems.

[1] District website

Culture

Buxar is famous since the epic period for being the seats of eminent saints; battlefield of Gods and Demons as per Puranas and a combat zone between foreign invasion and countrymen in modern history.Buxar is also famous for rich culture. This main language is Bhojpuri. Folks, art and handicraft of this region are very famous.

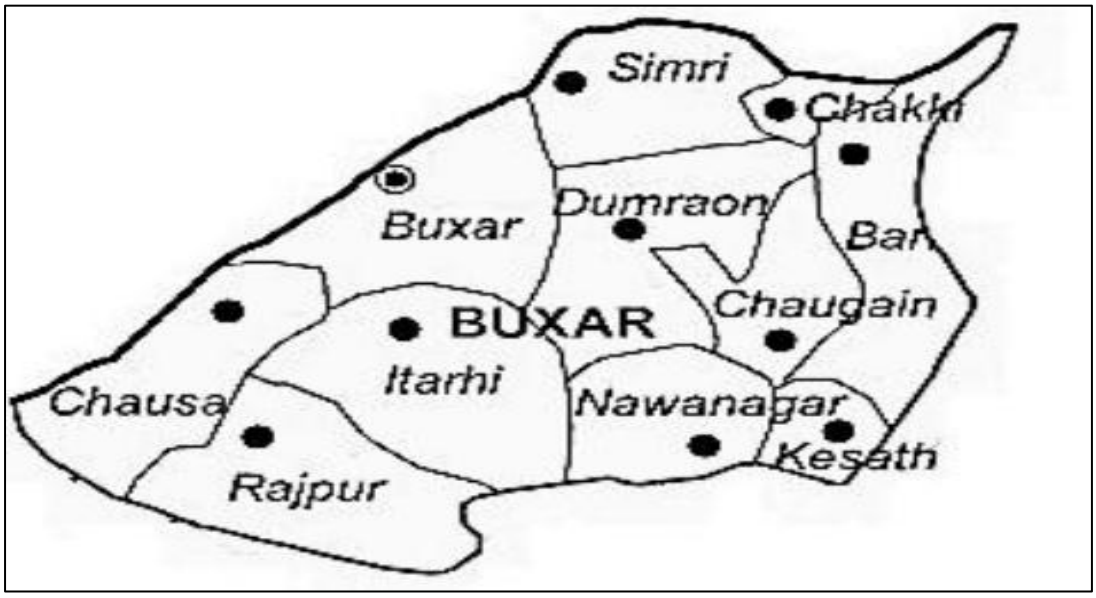
Chausa Block

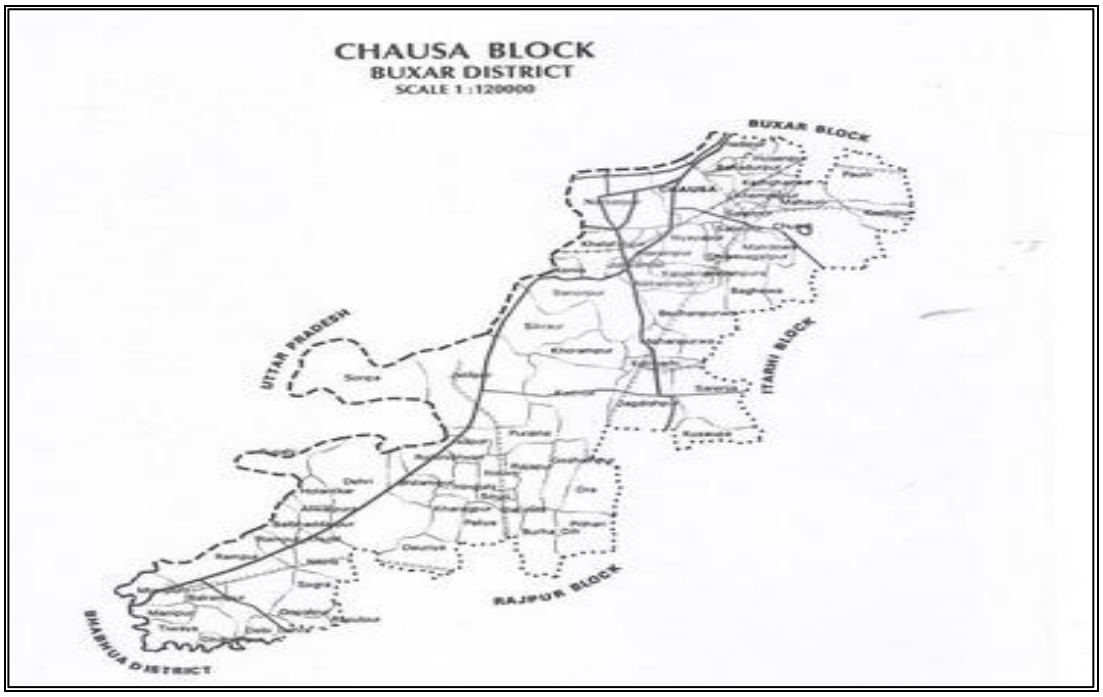
SJVN project is located at Buxar -I of Chausa Block under Buxar district. The population of Chausa block, according to Census 2011, is 100028, which is 5.86% of the total population. There are 11794 households in Chausa and the male to female ratio is 91.76%. The overall literacy rate for Chausa is 47%, the female and male literacy rates being 39.91% and 73.85% respectively. Out of the total populations of Chausa, 38.87% are working populations. 56.21% of the male population is working, and the percentage for females is 19.87%. The total non-working population is 61.13% of the total population. 43.79% of the male members are non-working, and the non-working percentage is 80.13% for the female population[2]. The project location is 15-20 km from Buxar city.

[2]District Health Action Plan 2012-2013, Official Website of Buxar District

Maps and How to reach Buxar II

Chausa is located at a distance of around 12 kilometres from Buxar city. It can be reached both by road and the railway. By road, buses and auto rickshaws can be accessed to reach Chausa from Buxar city via SH-13. Road condition is good. As far as the railway is concerned, local trains can be accessed from Buxar city to reach Chausa.





Chapter 2: Approach & Methodology

Objective

Health infrastructure of this area is very poor and due to poor economic conditions people could not afford the available medical facilities. The current study deals with the identification of elderly population (age more than 54 years).Besides, this study also looks into the available health facility in the project location and identifies the site for mobile medical unit and finalizing an operational plan for the same.

Scope of Work

- Identification of villages in the proposed MMU location in consultation with local sponsor officials and Help Age India team
- Visiting MMU location and all identified villages in each location in order to prepare detailed operational plan
- Active consultation with major stakeholders in the identified villages to elicit their opinion regarding inclusion of their villages in the project and soliciting their active participation during the implementation period of the project i.e. 3 years
- Conducting baseline survey in each location consisting of a number of villages or gram panchayats by recruiting local investigators/surveyors in order to arrive at the exact numbers of elders in each village and location
- Identifying central locations in consultations with Help Age India and sponsor for establishing the project office where the MMU staff would gather, stocks would be kept, records would be maintained and MMU would be parked during non-functioning days and hours

Methodology

The methodology for the study includes the field survey and secondary research.

Secondary Research

Octavo team carried out secondary research in which documents relating to the current project were collected from the varied sources (who were in the public domain). In the secondary study our researchers saw the following parameters:

- District demographics including health indicators
- Social and financial scenario of the project location

Establishing contacts with the Panchayats was the second most crucial step in the project initiation process. There were many objectives for establishing this contact. They are as follows:

- Appraising the Panchayat leadership on the MMU project and develop a consensual understanding among the local leadership and general population on the need of the project and the health as well as psycho-social benefits that it is going to accrue to the elderly population.
- Mapping of basic infrastructure was another requirement which would help the project run from those points. Resources like government schools, Anganwadi Centres, Health Sub-centre, Village Community Halls, Temples, etc. are counted as basic infrastructure available in the villages or habitats. Usually all people in the village have access to these resources and these would serve as the parking place for the MMU. The MMU would park at these locations at predetermined time slots and would offer the health and counseling services to the elderly of the nearby villages/hamlets within a particular village. Since Gram Panchayats (GP) have many such hamlets the MMU would need to park at more than one location within the GP.
- A basic understanding of the constitution of the Gram Panchayat, its geographical spread, number of hamlets/natural villages, population with necessary disaggregation (male/female, BPL/APL, no. of elderly persons, etc.), etc. is required to address the health needs through this programme.
- Unless it is known as to how many elderly persons (for this project an elderly person is one who is 55 years old and/or above) live in a village, how many households have elderly people, their habits, their disease history, etc. it would be imprudent to start the project because the benefits that accrued to the elderly people because of this intervention cannot be measured or evaluated at a later point in time. Monitoring would also not be possible without a baseline. Moreover, individual cards would be issued to each elder for tracking his/her individual health status at the time of his/her visit to the MMU. The consent and cooperation of the GP leadership to conduct this baseline survey is considered essential.
- Since the project will run for a period of five years sustained support and assistance would be required from the GP leadership for its smooth operation and conflict resolution in case of any eventual need. Therefore, a relationship building exercise is also at the core of establishing contact with the GP leadership.
- The first point of contact was usually the Gram Panchayat offices and a meeting with Panchayat Pradhan, Secretary and other key people of the village was held. In such meetings the participants were introduced to HelpAge India's organizational objectives and operation. Thereafter, they were appraised in-detail about the objectives and operational aspects of the

MMU project. Their views on the project were also elicited. In all the cases the Panchayat leadership welcomed the initiative undertaken by HelpAge India and appreciated the working model of project and assured their continued support for smooth running of the project.

After initial discussion with GP leadership basic information on demography andinfrastructural facilities were collected. The parameters on which information werecollected were:

- Population – with necessary disaggregation
- No. of Households (HHs) in the GP
    - No. of BPL HHs
    - No of HHs with M-NREGA Job cards – Discussion was held on elderly people's participation in M-NREGA work
    - No. of HHs enrolled under any government Health Insurance scheme
    - No. of old Age pensioners (& pending pension applications, if any)
- Administrative arrangement – District, Sub-division, Tehsil & Block
- Basic Infrastructure facilities in GP
    - Bus Services, Auto & Taxi services
    - PCO, Mobile Service and Internet
    - Community hall
- Health & Sanitation
    - No. of HHs with Toilet facilities
    - Cooking facilities
    - Drinking water facilities
- Health Infrastructure
    - NRHM facilities – Sub-center to District Hospital related information
    - Private Clinics operation
    - Access to Health facilities
    - Any NGO operating on Health issues or on old age care in the GP

All the above information is being consolidated into a Gram Panchayat informationformat for future references. After collection of aforementioned information, discussionwas held on identification of MMU parking locations in the GP. The GP functionaries wereadvised to select minimum number of locations that would be required to cover all theconstituent hamlets/villages of the GP effectively, i.e. all the elderly people can access itwithout many problems.

Primary Research

On the basis of secondary research and Gram Panchayat meeting's findings Octavo researchers designed the survey questionnaires to tap the perception of local people regarding the health facility

and also to capture their social and financial status. We have collected information from the elderly population as well as the head of the household.

Approach

- Meeting and consultation with key stakeholders i.e. donor representatives, Regional/Local Offices, panchayat leaders & functionaries of local health clubs, NGOs to select the villages
- Identification of possible MMU office location within the MMU operational area of the nearest place with sufficient infrastructure i.e. basic amenities such as electricity and water and voice / data connectivity
- Identification of health issues of elderly persons and community as general and available health infrastructure in the proposed villages
- Two separate questionnaires were prepared to assess the need of the mobile medical unit which is given at **Annexure 7 and 8.**
- Conducting baseline survey of 100% elderly households in selected villages as well a good number of other household where there is no elderly population
- Data collection, data entry and data analysis in the Help Age India's 'e-Chikitsa' HMIS software
- Coding Methodology was developed for data entry
- Report Preparation and submission to Help Age

Organization of the Report

The report consists 6 chapters. Chapter 1 deals with overview of the project, whereas chapter 2 deals in approach and methodology. Chapter 3 deals with the mobile medical unit. Chapter 4 narrates the sample size and demographic scenario of the project location with a special emphasis on elderly population. Chapter 5 deals with status of medical facility. Chapter 6 describes the status of social involvement and incidence of abuse of the elderly population. The last part of the report is way ahead.

Chapter 3: Site Selection for Mobile Medical Unit

As medical infrastructure in the Chausa block is not adequate, SJVN agreed to give mobile medical unit (MMU) facilities through HelpAge in the affected villages as a part of their corporate social responsibility. The MMU project aims at reaching out to provide healthcare to older persons above 55 years of age as well as the communities they live in—in the operational areas—who have limited or no access to healthcare either due to poor services by the existing healthcare facilities or because affordability issues due to lack of financial resources or other physical / mobility reasons.

HelpAge has started their MMU activities in the Buxar II region and covering 4 villages through the MMUs. They have already identified certain sites over there. The MMU unit runs 5 days in a week in two sessions (morning and afternoon). The unit provides free treatment, free medicines, basic diagnostics, and home visits of the patients (in case of bed-ridden), counselling facilities and awareness generation.

Village wise Status of Basic Infrastructure

Village	Power Supply	Transport Facilities	Approachable Roads
Kanaknarayanpur	Just adequate	Just adequate	Pucca Road
Katgharwa	Adequate	Adequate	Pucca Road
Pavni	Just adequate	Adequate	Pucca Road
Dharmagatpur	Very Inadequate	Adequate	Kuccha Road

Village wise distance from the petrol pump

Village	Distance from the Nearest Petrol Pump (Km)
Kanaknarayanpur	1
Katgharwa	4
Pavni	4
Dharmagatpur	3

Village wise distance from the School

Village	School Type	Distance (Km)
Kanaknarayanpur	Prathamik Vidyalaya (Primary School)	0.5
Katgharwa	Prathamik Vidyalaya (Primary School)	0.5
Pavni	Madhyam Vidyalaya (Middle School)	1
Dharmagatpur	Prathamik Vidyalaya (Primary School)	0.5

These operational sites have been excluded because of three main reasons such as (i) their distance from the central location of theMMU, (ii) the optimal patient load being already ensured by the included GPs; (iii) they are not contiguous to other villages.

Survey team wanted to gauge the basic facilities in the MMU sites on the basis of few parameters like – accessibility, parking facility, drinking water facility, electricity, toilet, primary health unit's availability in the village, availability of doctors, mobile connectivity and storage facilities of the medicines and other equipment. During field visit of the survey team it was revealed most of the identified sites have basic amenities like - accessibility, parking facility, drinking water facility, electricity and mobile network. About 40% of the sites have toilet facility and 30% of them have storage facilities. Only 10% of the sites have primary health unit nearby.

Site-wise Availability of Facilities of Facilities

Therefore it is clear from the above charts that the selected sites in the beneficiary villages are appropriate and accessible for the patients as well as medical teams. The elderly persons in the project areas are now facilitate with basic medical support to live with dignity and respect.

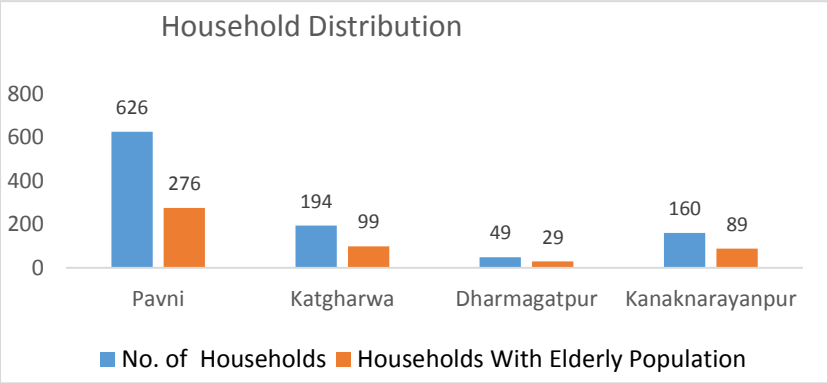
Mobile Medical Unit Parking Site Details

Village Name	Site Name	Landmark	Criteria	Day	Shift Time	Gram Panchayats Name
Pavni	Utkarmit Madhya Vidhalaya, Ward No-10	Utkarmit Madhya Vidhalaya	Public place	Monday	09:15am to 1:00pm	Pavni
Pavni	Pavni Panchayat Bhawan	Gram Panchayat Office	Public place	Monday	01:30pm to 05:15pm	Pavni
Pavni	Harijan Basti Ambedkar Bhawan Ward Number -6	Harijan Samudayik Bhawan	Public place	Friday	09:15am to 1:00pm	Pavni
Pavni	Balika Vidhyala Ward Number-7	Balika Vidhyala (Private School)	Public place	Friday	01:30pm to 05:15pm	Pavni
Dharmagatpur	Kali Mandir	Primary School	Public place	Tuesday	09:15am to 1:00pm	Chunni
Dharmagatpur	Lallan Yadav Chaupal	Lallan Yadav Chaupal	Public place	Tuesday	01:30pm to 05:15pm	Chunni
Katgharwa	Opposite Government Primary School	Government Primary School	Public place	Wednesday	09:15am to 1:00pm	Pavni
Katgharwa	Hussainpur Tola	Purva Tola Area	Public place	Wednesday	01:30pm to 05:15pm	Pavni
Kanaknarayanpur	Polling Booth	Old Primary School (Polling Booth)	Public place	Thursday	09:15am to 1:00pm	Chunni
Kanaknarayanpur	Ward No-2 Lane	SBI Bank	Public place	Thursday	01:30pm to 05:15pm	Chunni

Analysis of the Baseline Survey

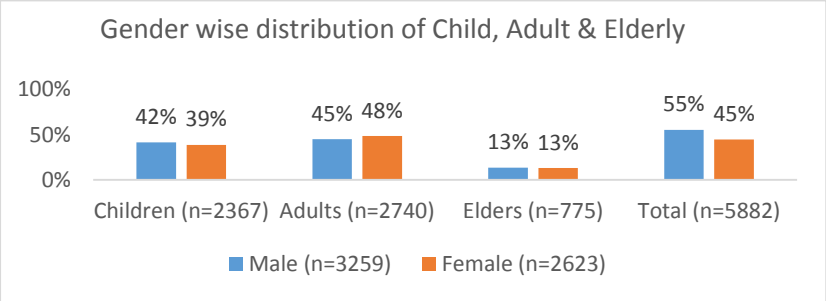
Chapter 4: Demographic Scenario

Household Distribution

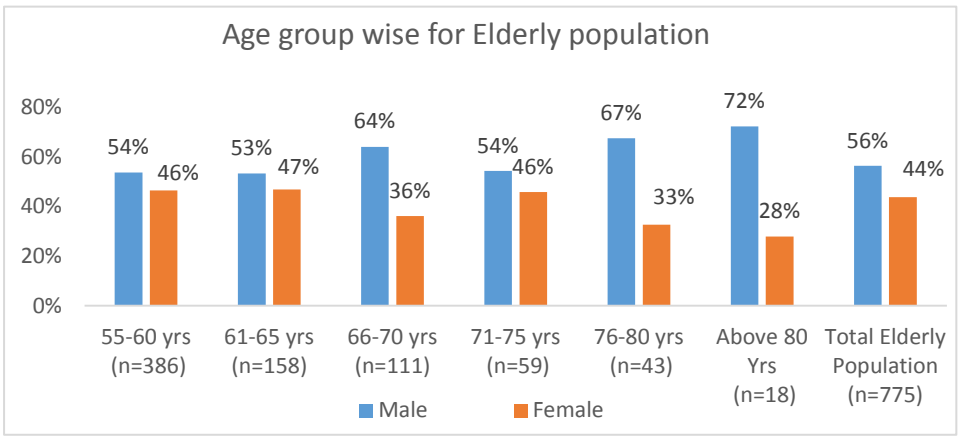


The chosen sample includes 1029 households from 4 villages. Of the 1029 households, 493 households have elderly people (aged 55 years or above) amongst their members. 48% of the families reported with elderly population and these people have minimum access to the health facility. This means there is a huge scope for intervention of MMU units.

Age and Gender Distribution of the Population



In the 1029 household have 5882 members.The sample has 55% male population and 45% female population. Gender-wise percentage break up for children, adults and elders has been provided in the chart. Overall, the percentages for children, adults and elders (aged 55 years or above) in the sample are 40%, 47% and 13% respectively. Sex ratio is 805 which is much lesser than the national average (940) and also lesser than district average (991[3]). MMU can take a positive role in this area.

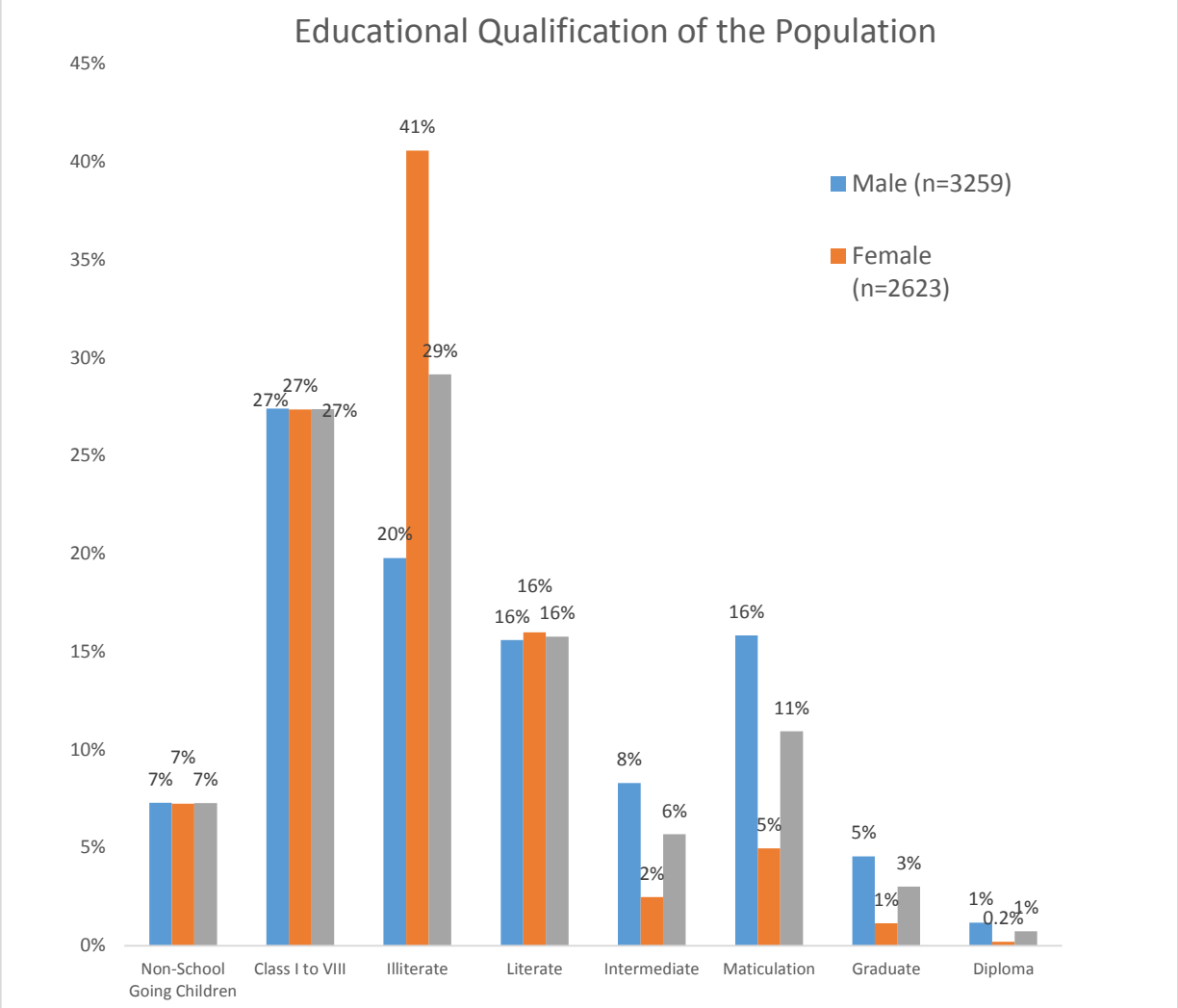


The total elderly male population is 12% more than the total elderly female population. The proportion of males and females

[3]Census data, 2011

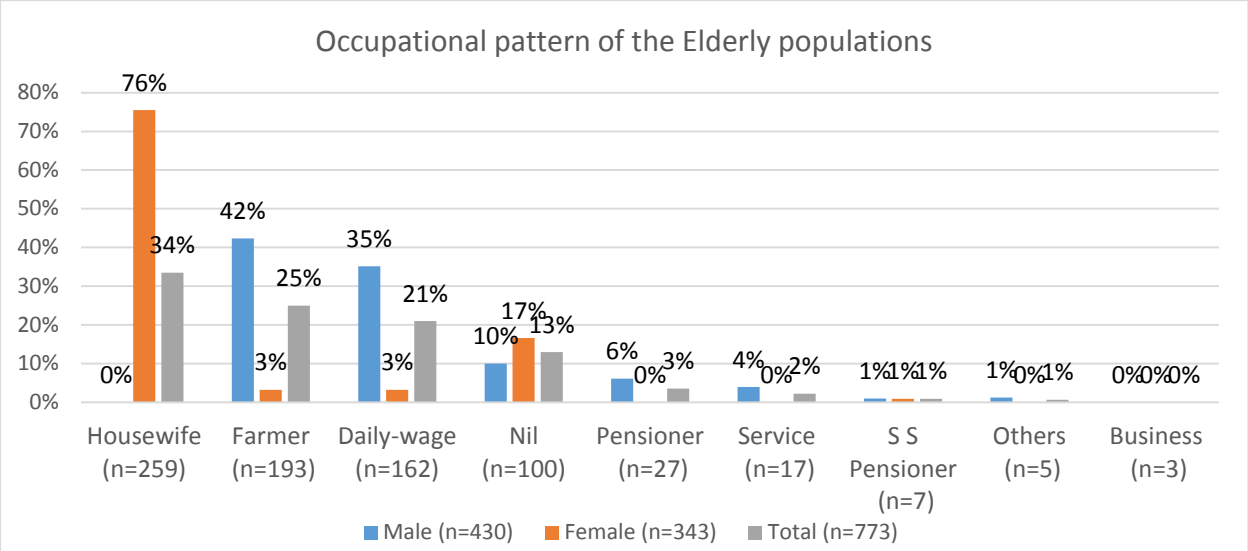
for all age-groups of elderly people in the sample has been provided in the chart.

Educational Status of the Population



Among the members, approximately 29% are illiterates and 16% are just literate. 7% of the population are non school going, 11% have completed matriculation, and the percentages for graduates are and above is 3%. Among the females in elderly households, 16% are just literate and 41% are illiterates the respective figures for males being 16% and 20% respectively. 2% of the females are intermediates and 1% contitute of graduates, the respective figures for males being 8% and 5% respectively.

Occupational Distribution of the Elderly Households

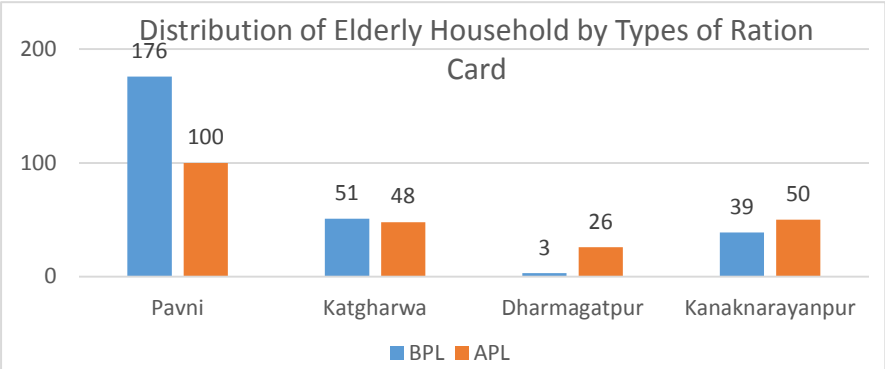


Almost half the population of elderly people are farmers and daily wage earners, the proportion of farmers and daily-wage earners among the elderly population being 25% and 21% respectively. Housewives constitute another 34% of the total elderly population surveyed. A mere 2% is into services, with less than 1% of the elderly population into business activities. Among the elderly women, 76% are housewives, farmers constitute 3% and another 3% are daily-wage earners. 35% of the elderly male population consists of daily-wage earners and 42% are farmers. 6% of the elderly male population are pensioners.

Per Capita Income

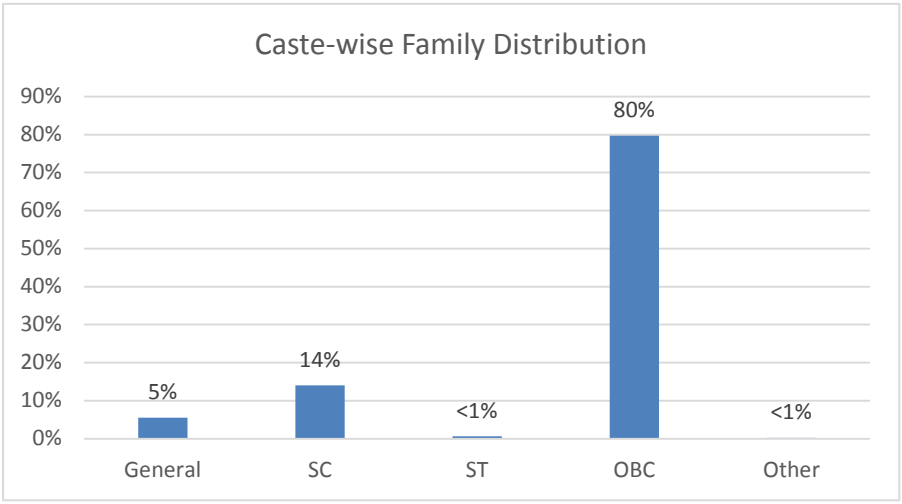
During the field survey information were collected from the respondents on 'Total Monthly Income' from all sources. Form this researchers have computed monthly household income and monthly per capita income per members (after summing up all income sources and then divided by the number of household members). By multiplying the number with 12 we have arrived at per capita income per annum. It was observed that most of the household are farmers and tribal. The average per capita income reported Rs. 9,850. This is below the district per capita income of little less than Rs. 10,000 (Bihar Economic Survey 2-13-14).

Status of Sample Households by Types of Ration Card



Of the households with at least one elderly person amongst the members, 55% belong to the BPL category, while the remaining 45% belong to the APL category. But, according to primary survey, the number of households above poverty line has been found to be considerably higher as compared to those below the poverty line for Dharmagatpur and Kanaknarayanpur. On the other hand, the number of BPL households for Pavni has been found to be considerably high as compared to APL households. BPL category people do not get proper treatment. MMUs can also play a facilitating role in linking them with health schemes, food security and social security schemes under government and non-government bodies through in proving basic information of the areas.

Caste Distribution of Sample Household



The caste-wise distribution for families with elderly people reveals that 80% of such families belong to the OBC category. 14% and 5% belong to the SC and General categories respectively.

Chapter 5: Medical Facilities

Available Government Health Facilities

Health Infrastructure	No. of Unit in Buxar District
APHC	29
PHC	11
Sub-Centre	270
District-Hospital	1
Source: District health Action Plan, 2012-13	

As per District health action plan, there is one district hospital, 11 PHCs and 270 sub centres at Buxar.

PHC's status at Buxar II

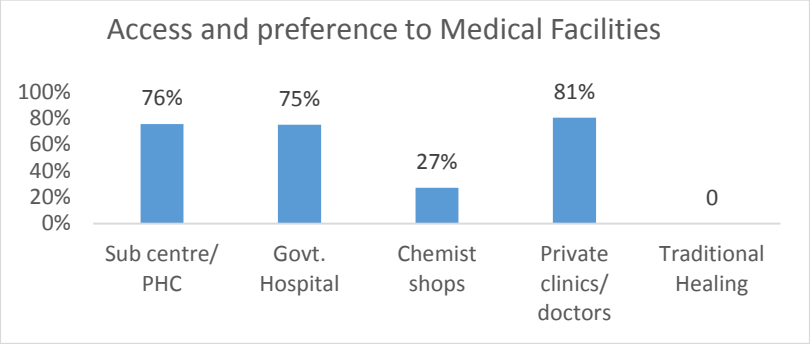
There are 1 PHC in Chausa block. There is noPHC inside the village.

Particular	Details
Functioning on 24 X 7 hours basis	No
Have doctor	Yes
PHCs with at least 4 beds	Yes
PHCs with AYUSH doctor	No
PHCs having residential quarter for Medical Officer	NA
New born care services on 24 X 7 hours basis	No
Having referral services for pregnancies/delivery on 24 X 7 hours basis	No

So it is clear that facilities in the PHC's at Chausa are equipped with basic maternal delivery system and not sufficient enough to cater the entire mass of Buxar II.During survey our field investigators observed following constraints at the PHC:

- Non-availability of doctors /paramedics
- Shortage of ANMs/ LHVs / MPWs.
- Shortage of Drugs/ vaccines
- Dysfunctional equipment
- Untimelyprocurements
- No minimum mandatory service provision standards for every facility in place which makes full use of available human and physical resources and no road map to how desirable levels can be achieved.
- No local initiatives or role, Centralized management and schematic inflexibility
- Lack of indicators and local health status assessments that can contribute to local Planning.
- Poor capability to design and plan programmes.

Access and Preference of Medical Facility



Out of the total of 1029 households, 76% of the respondents prefer sub-centres and primary health centres (PHCs) for treatment of common ailments. 75% go to government hospitals for the aforementioned purpose, and 81% prefer private clinics.

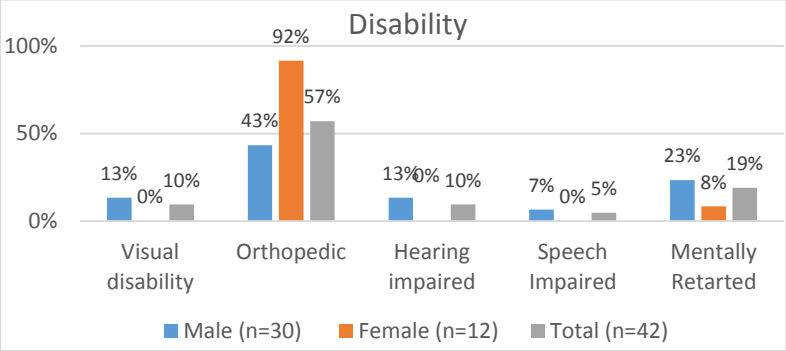
Village	Sub centre/ PHC	Govt. Hospitals	Chemist Shops	Private Clinics/ Doctors	Traditional Healing	Single Option	2 Options	3 or More Options
Pavni	556	485	171	573	1	0%	14%	86%
Katgharwa	84	180	92	72	0	2%	68%	30%
Dharmagatpur	44	47	1	46	0	0%	6%	94%
Kanaknarayanpur	96	62	17	140	0	25%	50%	25%
Total	**780**	**774**	**281**	**831**	**1**	**4%**	**29%**	**66%**

Around 4% of the respondents have chosen a single option for accessing medical facilities and treatment. 29% of the respondents prefer two options for the same, the percentage for those preferring three or more options being around 66%.

Household Preference to Various Forms of Medicine					
Preference	**Household remedy**	**Homeopathy**	**Modern Medicine**	**Ayurveda**	**Yoga**
First	1%	0%	97%	0%	0%
Second	84%	3%	1%	3%	<1%
Third	3%	23%	0%	5%	<1%

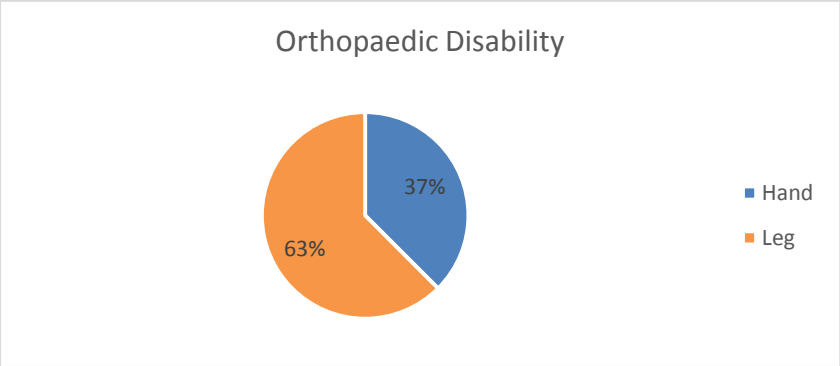
Around 97% of the respondents regard modern medicine as their first preference over other forms of medicine. As a second preference, household remedy has come out to be the most popular option among the respondents. Homeopathy is preferred by 23% as a third option.So it is clear that after introduction of MMU units in the area awareness among household rises and they prefer modern medicine as their first preferred remedial option.

Disability Status

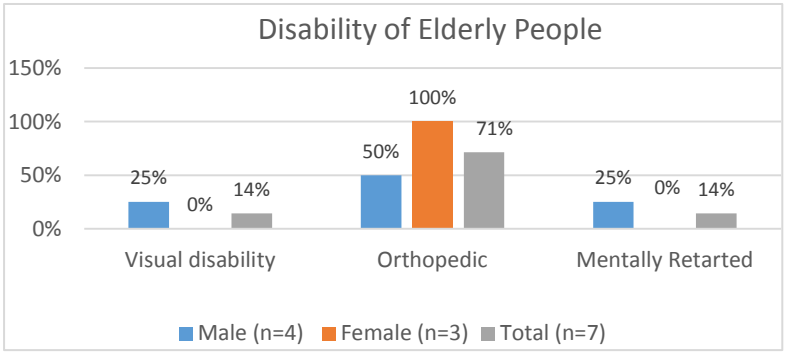


Around 1% of the total population covered confirmed that they have disabilities. Out of the total disabled population, 71% are male and the rest are female. Out of the total disabled population in the sample, Among those disabled persons orthopedic disabled persons has the largest share (57%), 19% have mental anomalies, 10% suffer from visual disabilities and another 10% have hearing impairment.

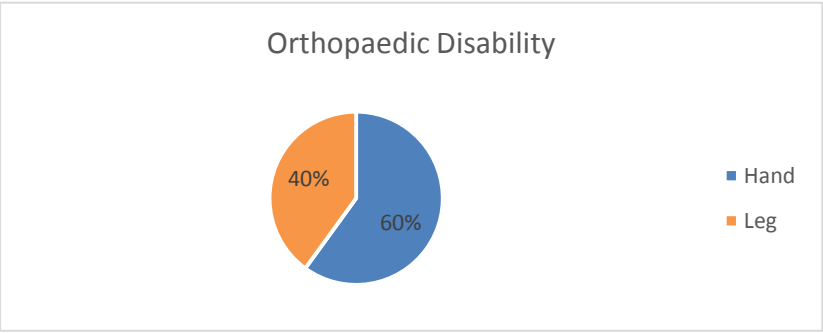
In case of ortopedic disabled persons, it was revealed in the survey that female disabled persons (92%) is more than male disabled (43%).



Out of the total population suffering from orthopaedic disabilities, 63% cases relate to disabilities in leg, and the remaining 37% have reported disabilities in the hand.

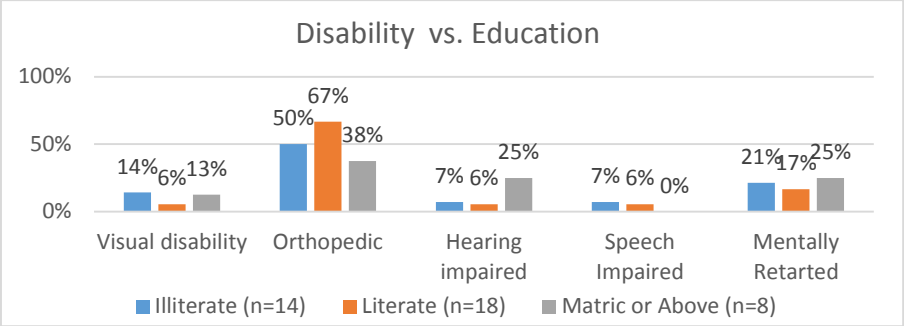


Around 1% of the elderly people in the sample are disabled. Out of them, 71% suffer from orthopaedic disabilities, and those suffering from visual impairment and mental problems constitute 14% each.



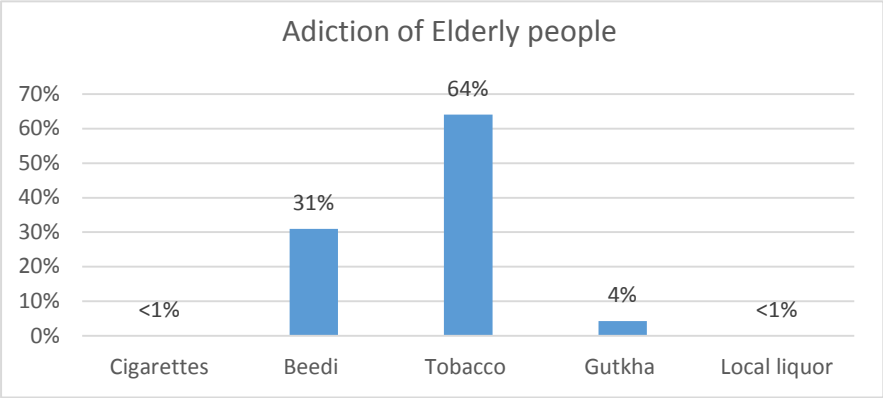
Out of the total elderly population suffering from orthopaedic disabilities, 60% have reported problems in the hand, whereas the remaining 40% suffer from

problems with the leg.



According to primary survey, it has been found that out of the total disabled population, 35% are illiterate, 45% are just literate and the educational status is matriculation or above for the remaining 20%.In all educational group orthopaedic disabled are more than any other disabled.

Habits and Diseases of Elderly People



Around 64% of the elderly people are into the consumption of tobacco as far as addiction is concerned. 31% smoke beedi and 4% are addicted to gutkha. Not many amongst the respondents prefer local liquoror cigarettes.

Addiction vs. Gender

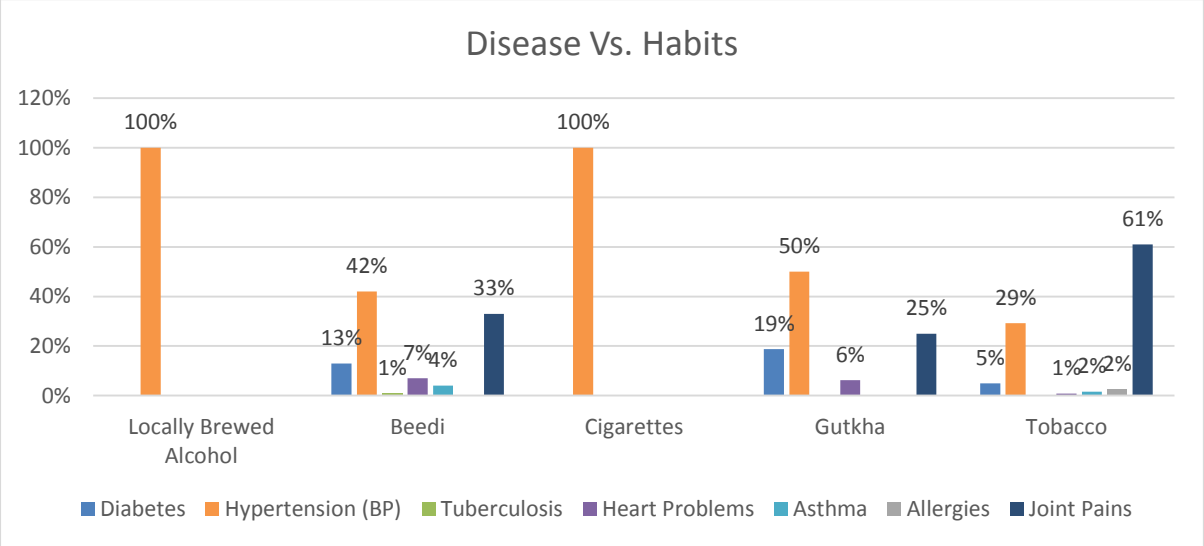
Habits	Regular		Occasional	
	Male	Female	Male	Female
Cigarettes	1	0	0	0
Beedi	37	4	42	3
Tobacco	40	5	129	4
Gutkha	5	3	0	4
Opium	0	0	0	0
Locally brewed alcohol	0	0	0	1
Foreign liquor	0	0	0	0
Total	**83**	**12**	**171**	**12**

It was found that most of the addicted elderly are male (91%) and rests 9% are female. Most of the addicted elderly are addicted their habits occasionally. This shows there is a huge need for awareness campaign in the area and which can be served through the MMU units.

Diseases

Disease	Currently Suffering		Availed Treatment	
	Male	Female	Male	Female
Diabetes	0	0	19	9
Hypertension	0	0	61	32
Tuberculosis	0	0	0	1
Heart problem	0	0	7	1
Asthma	0	0	3	5
Allergies	0	0	3	1
Ulcer Diseases	0	0	5	1
Joint Pain	0	2	96	119
Total	0	2	194	169

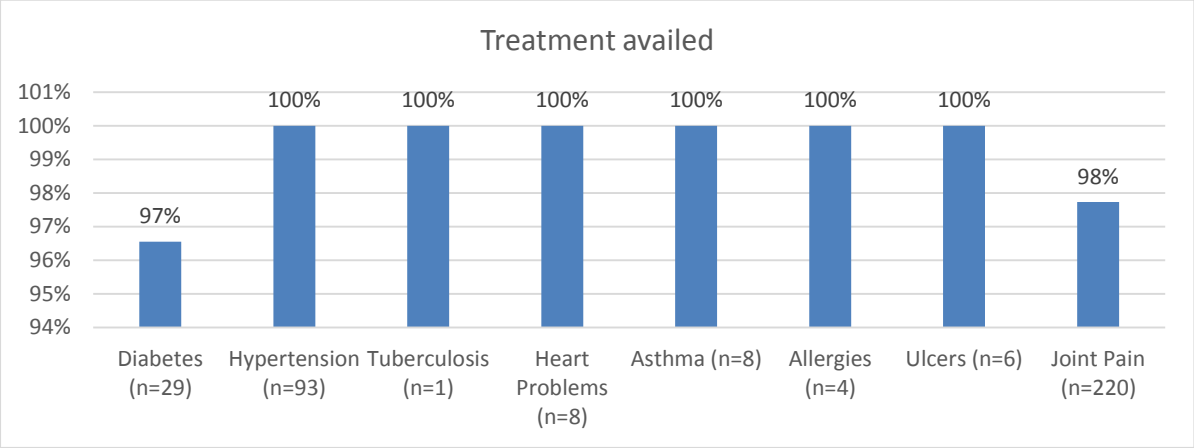
Among the total elderly population, around 48% have reported diseases while the remaining 52% did not report any. Only 2 females are presently suffering from joint pain. Earlier 28% of the total elderly population suffered from joint pains and around 12% suffered from hypertension. 4% have reported that they suffer from diabetes. Only few cases of the above population have reported heart problems, asthma, ulcers, etc.



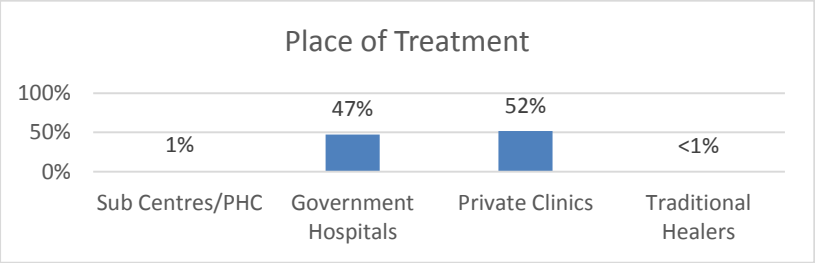
Among those smoking beedi, 42% are suffering from hypertension, 33% are suffering from joint pains, 13% are suffering from diabetes and 7% are suffering from heart problems. Consumption of

tobacco is another popular addiction amongst the elderly population being analysed here. It has been noted that 61% of that population suffer from joint pains, 29% suffer from hypertension and 5% suffer from diabetes. For those consuming gutkha, the percentages of those suffering from diabetes, hypertension and joint pains are 19%, 50% and 25% respectively.

Treatment History of Elderly Population



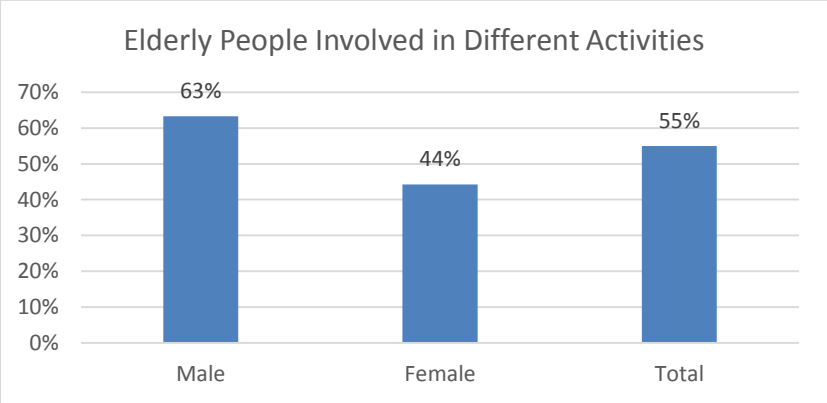
Of the elder population analysed, all of them have availed treatment for almost all the disease types, with the exception of diabetes and joint pain, wherein respectively 97% and 98% people have availed treatment.



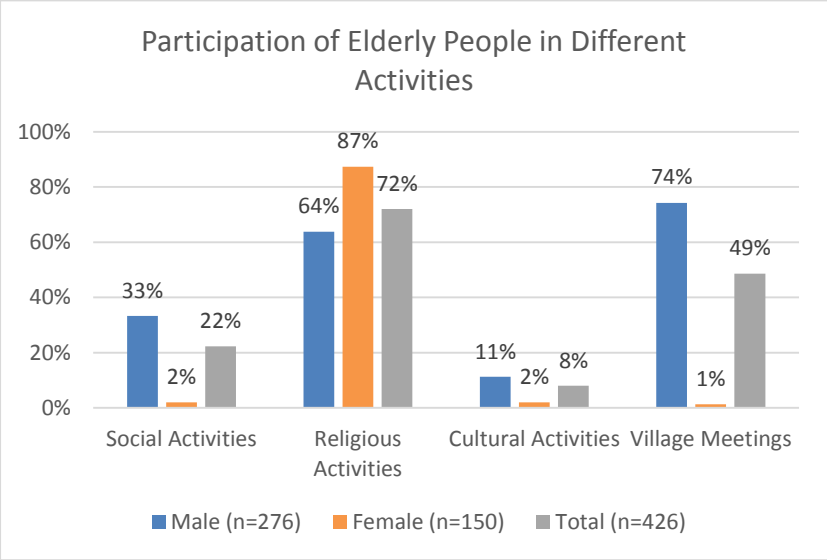
52% of the respondents have said that they preferred private clinics for treatment purposes and 47% preferred government hospitals.

Chapter 6: Social Involvement and Abuse of Elderly Population

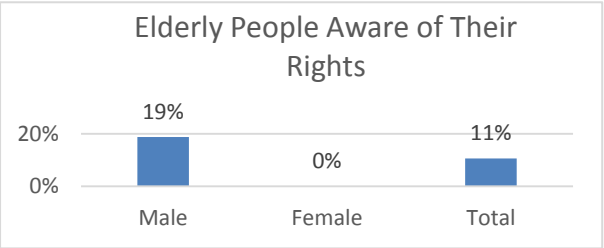
Social Involvement of Elderly Population



Of the total elderly population, 55% are involved in different activities. 63% of the elderly males are involved in different activities, whereas the percentage for elderly females is 44%.

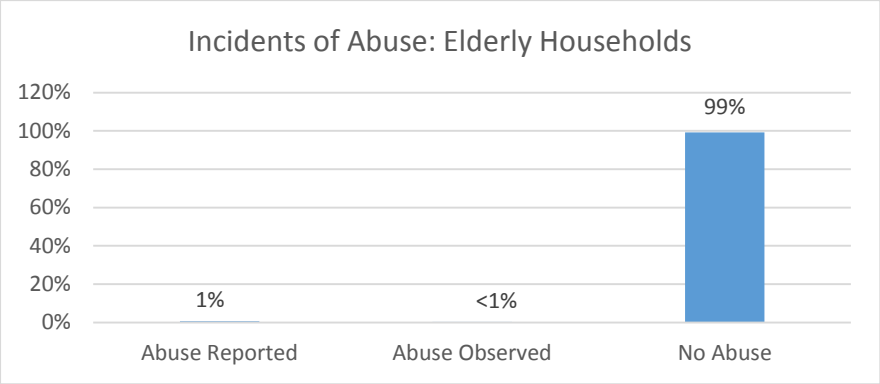


Around 72% elders participate in religious activities and 49% attend village meetings. 74% elderly males participate in village meetings, 64% in religious activities and 33% in social activities. 87% elderly females take part in religious activities, their participation in other activities being low.



11% of the total elderly population are aware of the rights of elders. 19% elderly males have the aforementioned awareness, whereas no elderly female has any awareness about the rights of elderly people. MMU unit can take a positive role in creating female awareness in that area.

Incidents of Abuse: Elderly People



Only 1% families reported abuse and 99% confirmed there were no incidents of abuse of elderly people. Awareness towards elderly population for care rises among Buxar II people.

Chapter 7: Way Ahead

The MMU units at Buxar - II a collaborative efforts between SJVN and HelpAge is a real time window for providing health services to the residents, especially elderly residents in the Buxar II area. MMU operation is primarily addressing health issues of old age people. Therefore, it becomes important that effective referral links are to be established with the mainstream health system. MMU unit can take an important role to increase the awareness of the elderly people about their rights.

Besides, providing health services MMU units are also supporting in the awareness generation of the Buxar-IIarea for elderly population. As a result abuse in the area was found negligible. This can be a role model for other adjacent areas also.

The Project Coordinator or Project Officer plays the role of a socialmobilizer and counsellor in order to create demand for health services among the elderly population by conducting door-to-door visits and also working along with the available government health infrastructure and the Gram Panchayat system. All the elderly persons are motivated and counselled to seek timely health intervention.

In a nutshell it can be says that MMU units could be one of important centre for seeking basic health related remedies in the area and could be one of the important hub for information of the localites to introduce other government and non-government schemes in the area.

Annexure

Annexure 1: Household Survey Meeting Point with SJVN LTD.

- Mr. Pankaj Kumar, Social Protection Officer at HelpAge India, introduced Mr. Arijit and Mr. Sanjay Gupta, Field Manager at Octavo Solution Pvt. Ltd., to Mr. Amarnath Jha, Senior Administration Head at SJVN Pvt. Ltd. on 26th August 2014.
- Mr. Arijit discussed the tools being used for the survey, the scope of work and about the E-Chikitsa data entry software.
- Mr. Jha gave Mr. Arijit permission to conduct the baseline survey and gave him the village list – Buxer II
- However, he had mentioned that land acquisition process is still going on for the project. Once it is finalized, one or two additional villages may be added to the existing list of villages.
- Mr. Jha said the survey and the mobile medical units would only be required in those villages; rests of the villages are not relevant for the study.
- Mr. Jha said SJVN Pvt. Ltd does not have any Memorandum of Understanding with Octavo Solution Pvt. Ltd so Mr. Arijit should submit the findings of the survey to HelpAge India Pvt. Ltd.
- Mr. Arijit asked Mr. Jindal for a formal approval, for the identified villages. Mr. Jha was in leave.

  Mr. Arijit contacted Mr. Jha over phone quite a number of times and emailed him for formal approval (3 times). He not yet succeed.

Annexure 2: Local Administration Contact Details

SL. No.	Name of Gram Panchayat	Name of Village	name	**Designation**	Mobile Number
1.	Pavni	Pavni	Ram Bhajan Singh	Pradhan	9934218496
2.	Chunni	Kanaknarayanpur	Suresh Singh/ Manisha Devi	Pradhan	9431875107
3.	Chunni	Dharmagatpur	Suresh Singh/ Manisha Devi	Pradhan	9431875107
4.	Pavni	Katgarwha	Ram Bhajan Singh	Pradhan	9934218496

Annexure 3: Names of Asha & Anganwadi Workers

SL. No.	Village Name	Aganwadi Worker Name	Name of ASHA worker
1.	Pavni	Rita Devi/ Radhika/ Kunti	
2.	Kanaknarayanpur	Usha Kumari	Vandana Mourya
3.	Dharmagatpur	Sauik Devi	Sarita devi

Annexure 4: Details of Local NGO Operating in the Areas

SL. NO	NGO Name	Address	Contact Number
1	Geeta Mahila Utthan Samiti	Rajendra Nagar, Ara, Bhojpur, Bihar	9334540571
2	Bhagwan Buddha Vikas Seva Samiti	North Mandir, Near Bansghat, South of Kali Mandir Patna.	2525752, 9431429483
3	Satyabhama Datvya chikitsa kendra	298-Priyadarshani Nagar, Naya Tola Kumhrar, Patna-26	
4	KARUNA	Hanuman Nagar, East Railway Gumti	9431039788
5	Gram Vikas Sansthan	H/o Satrughan Pd. Singh Kurji Balupar, Patna-800013	9334248899
6	Yuva Kalyan Vikas Kendra	Medi X-ray Premises, Narayan Plaza, Boring Canal Road, Patna	9334343740
7	Nishika Security & Intelligence Services Pvt. Ltd	FF-3, Lav-Kush Tower, Exhibition Road, Patna	2320431
8	Sristi Foundation	8th floor, Rashmi Complex, Kidwaipur, Patna	0612-3090308, 9431072233
9	Mega International	Sarswati lane, Lohanipur, Kadamkuan, Patna	

Annexure 5: Health facilities details and contacts number (PHC&CHC) in the Survey Villages

SL. No.	Name of the PHC/ CHC	Village Name	Designation	Contact Number
1.	PHC Chausa	Chauss	Mo I/c	06183-273638

Annexure 6: Pictorial Evidences of MMU Unit at Buxar-II

Annexure 7: Questionnaire for Mobile Medical unit Parking Facility

Field supervisor village observation schedule

SL .No	Question	Response		
1.	Name of the Village			
2.	Name of the Gram Panchayat			
3.	Name of the Block			
4.	Name of the District			
5.	Name of the State			
6.	Total Population in the Village			
7.	Total number of old age persons in the Village	**Male_____**		**Female_____**
8.	Name of the centre point of the village MMU parking point	**Hamlet Name_____**		
9.	Mobile medical unit parking time	**1st half**		**2nd half**
		YES	**NO**	**REMARK**
10.	Easily accessible by four wheeler			
11.	Availability of Parking facility			
12.	Availability of drinking water facility			
13.	Availability of electricity			
14.	Availability of toilet facility			
15.	Availability of Primary Health Unit in the Village			
16.	Availability of doctor in the Village			
17.	Parking place is common property?			
18.	Available of network connectivity			
19.	Available of storage facility (like medicines, register, files)			

Other observations of the surveyor about Village & Villagers

_____

_____

Field supervisor remember

Please drawing the map of Village

Name of the supervisor	Date

Annexure 8: Village Schedule

Village Schedule : Part 1: General Information on Villager Conditions						
Sl. No.	**Question**	**Details Response**				
1.	State					
2.	District					
3.	Name of the Tehsil/Block					
4.	Name of the Village					
5.	Name of the Panchayat					
6.	Total Population of the village					
7.	Total Number of Households in the Village					
8.	Total Number of old age population in the village (55 years and above)	Male_____	Female_____			
9.	Main approach to Village	Pucca Road=1	Kuccha Road=2	Both=3	Other=4	
10.	Nearest Primary School (distance from Village)	Name				
		Distance (Kms)				
11.	Nearest Town (distance from village)	Name				
		Distance (Kms)				
12.	Nearest Hospital (distance from village)	Name				
		Distance (Kms)				
13.	Nearest Primary Health Unit (distance from village)	Name				
		Distance (Kms)				
14.	Nearest Mandi for Vegetable and Fruit Milk & Products, Egg, Fish, Mutton,	Name				
		Distance (Kms)				
15.	Nearest Petrol Pump(distance from village)	Distance (Kms)				
16.	Name of ASHA Worker (working In the Village)					
17.	Name of the Aganwadi Worker (working In the Village)					
18.	Major sources of drinking Water facility in the village	Tube well -1	Well -2	River -3	Pond -4	Tap water -5
19.	Major sources of occupation in the Village					
20.	Power Supply in the village	Available=1		Not Available =2		
21.	Status of power supply	Very Inadequate=1	Just adequate=2	Adequate=3	None=4	
22.	Status of Transport Facility available in the village for goods	Very Inadequate=1	Just adequate=2	Adequate=3	None=4	

Respondent details:

Name:	
Designation:	
Mobile Number:	
Landline Number :	
Date of Interview	

Annexure 9: Data table of the baseline Survey

Table 1: Distribution of sample household (who have reported elderly population)											
			Family Status			Caste wise Family Distribution					
District	Block	Village	BPL	APL	Total	Gen	SC	ST	OBC	Other	Total
Buxar	Chausa	Dharmagatpur	0	12	12	0	0	0	12	0	12
			3	14	17	5	0	0	12	0	17
	Chausa	Kanaknarayanpur	12	11	23	0	0	0	23	0	23
			27	39	66	4	1	3	58	0	66
	Chausa	Katgharwa	18	30	48	3	1	0	44	0	48
			33	18	51	0	0	0	51	0	51
	Chausa	Pavni	74	31	105	1	12	0	92	0	105
			70	30	100	0	39	0	61	0	100
			16	17	33	0	14	0	18	1	33
			16	22	38	14	2	0	22	0	38
Grand Total			**269**	**224**	**493**	**27**	**69**	**3**	**393**	**1**	**493**

Table 2: Age-group distribution of sample households																		
Village	Total Members		0-18		19-54		Elders Age											
							55-60		61-65		66-70		71-75		76-80		> 80	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Dharmagatpur	185	124	69	28	87	80	11	5	4	4	3	1	5	3	4	2	2	1
Kanaknarayanpur	561	400	240	126	241	214	39	35	19	12	10	4	6	4	4	5	2	0
Katgharwa	686	585	232	228	363	292	46	31	14	13	16	10	6	8	6	2	3	1
Pavni	1827	1514	814	630	777	686	111	108	47	45	42	25	15	12	15	5	6	3
Grand Total	**3259**	**2623**	**1355**	**1012**	**1468**	**1272**	**207**	**179**	**84**	**74**	**71**	**40**	**32**	**27**	**29**	**14**	**13**	**5**

Table 3: Access and preference to medical facilities for common ailments						
Village	Sub centre/ PHC	Govt. Hospital	Chemist shops	Private clinics/ doctors	Traditional Healing	Divine Healing
Katgharwa	11	93	73	51	0	0
	73	87	19	21	0	0
Dharmagatpur	18	19	1	18	0	0
	26	28	0	28	0	0
Kanaknarayanpur	69	40	4	74	0	0
	27	22	13	66	0	0
Pavni	113	143	116	139	1	0
	162	113	49	160	0	0
	155	128	2	152	0	0
	126	101	4	122	0	0

Table 4: Household preference in consulting medical facilities for common ailments						
Village	**Sub centre/ PHC**	**Govt. Hospital**	**Chemist shops**	**Private clinics/ doctors**	**Traditional Healing**	**Divine Healing**
Katgharwa	11	93	73	51	0	0
	73	87	19	21	0	0
Dharmagatpur	18	19	1	18	0	0
	26	28	0	28	0	0
Kanaknarayanpur	69	40	4	74	0	0
	27	22	13	66	0	0
Pavni I	113	143	116	139	1	0
	155	128	2	152	0	0
Pavni II	126	101	4	122	0	0
	162	113	49	160	0	0

Table 5: Awareness among elders on their rights				
Village	**Total elders > 55**		**Elders aware of their rights**	
	Male	**Female**	**Male**	**Female**
Dharmagatpur	5	1	0	0
	1	0	0	0
Kanaknarayanpur	15	11	3	0
	42	28	13	0
Pavni I	64	29	31	0
	56	40	0	0
Pavni II	28	15	0	0
	19	12	0	0
Katgharwa	23	6	21	0
	23	8	14	0

Table 6: Involvement of elders in social, cultural and religious activities										
Village	**Total elders> 55**		**Involvement of elders in**							
			Social activities		**Religious activities**		**Cultural activities**		**Village meetings**	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
Dharmagatpur	6	1	0	0	5	1	0	0	4	0
Kanaknarayanpur	57	39	27	2	25	27	5	2	28	0
Pavni	167	96	35	0	134	92	14	0	142	2
Katgharwa	46	14	30	1	12	11	12	1	31	0

Table 7: Incidences of Abuse reported/observed In Elderly Households				
Site name	**N/A**	**Abuse Reported**	**Abuse Observed**	**No Abuse**
Dharmagatpur	35	0	0	14
Kanaknarayanpur	74	1	0	85
Pavni	447	0	1	178
Katgharwa	118	1	0	75