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Ethnobotanical studies of medicinal plants of barie/sarbal mountain range in District Anantnag of South Kashmir, J&K, India

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Abstract

The aim of this dissertation is to study the distribution of medicinal knowledge among the people of Kapran, Gwass, Nowgam Nard, and Heingpora, in particular, why some plant species are in need, collected and used by people of the area than those of less common plants. An ethno botanical study of medicinal plants was conducted in growing seasons from June 2018 to May 2019 in Braie/Sarbal mountain range of valley (Kapran) in J & K region of India. A total of 32 Informants were selected from 4 villages. A total of 50 plant species distributed across 49 genera and 24 families were identified to have medicinal importance. Population studies show that most medicinal knowledge is idiosyncratic. Plant morphology and taste are very important in individual cognitive models in recognizing the medicinal importance of plant species. Emic perception of efficiency is the variable that most accounts for the distribution of medicinal knowledge.

Keywords: Plants species, medicinal knowledge, medicinal importance

Introduction

The term 'Ethno botany' was used by first by W Harshberger, professor of university of Pennsylvania in 1895. In 1896 first work on traditional medical uses of plants was published by Leopold Glueck based on the research done over rural people in Bosnia

India has a long history of Traditional Medicine System (THMS). THMS flourished actually in Vedic period. The ancient healing system of India, include the authoritative texts of Aired, Substrata Semite and Charka Semite which were written around 1000 B.C the Indian Ayurveda System, well known across the globe flourished during this period. Turmeric, fenugreek, holy basil, ginger, garlic etc. are the constitutional herbs used in Ayurveda formulations. The preparation may be monoherbal or polyherbal.

Initially in beginning the Ethno-Botany experience a drastic change from the raw competition of data to a more perfect methodological and conceptual reorientation this led to arousal of sub-branch of Ethno botany known as academic Ethno Botany by Richard Evans Scathe's.

Now days when the Ethno botany has reached to its full swing. Modern tools and techniques are used for identification and preservation of specimens; special training is given to scholars of researchers to understand to anthropogenic and cultural aspects around the plants. The training includes linguistic training which is at least to transcribe local terms and comprehend native morphology, syntax and semantics.

Traditional herbal medicine has been a constant source of substances for the treatment of a various diseases (Kunwar *et al.* 2010). Medicinally important plants find their uses in Agriculture, Pharmaceutical, cosmetics and food industries. Using of plants as medicines to treat different ailments has been documented in history of almost all civilizations.

About 85% of the traditional herb medicines used for primary healthcare are derived from plants (Farnsworth, 2004) It is documented that 80% of the world believe in traditional medicines, particularly drugs from plants for their primary healthcare (Kala *et al.* 2006) [8] today according to WTO Report (2005). In Africa 80% of the people are dependent upon traditional medicines for their basic health care needs. In Asia and Latin America population continue to the use traditional medicine as a result of historical circumstances and cultural beliefs in China traditional medicines accounts for about 40% of all health care delivery. The percentage of population which has used traditionally medicine at least once is 48% in Australia, 70% in Canada, 42% in USA, 38% in Belgium, and 75% in France.

All the states of India are floristically rich regions. The state of Jammu and Kashmir is regarded as paradise on earth, and is also referred as bio-mass state of India. The Flora of Kashmir Himalayan comprises about 3054 species, Ladakh 880 species and that of Jammu comprise 500 species (Flora of Kashmir). The plants of the western Himalayas are well known for their medicinal properties, this area is a store house of medicinal and aromatic plants, which are used in pharmaceutical and perfume industries.

The important medicinal plants of Kashmir region include *Arnebia Benthani* (Kah-Zaban), *Aconitum Hetrophyllum* (Patris), *Artemisia absintium* (Thethwan), *Datura stramanium* (Datur), *Taraxicum official* etc.

Various such studies has been carried out by scholars in state which indicate the dependence of locals over traditional medicinal system, Bhat and Navchoo (1994), Khan *et al.* (2004), documented the medicinal use of plants by the migratory and nomadic Gujjars and Bakerwals in incessant supervise/survey of these species in the wild habitat is largely missing with the available data either qualitative (Dhar and Kachroo, 1983) ^[5, 6] or Ethno botanical (Dhar *et al.*, (1984) ^[4], Ara and Naqshi, (1922) ^[1].

From time to time documentation of Ethno botanical studies were done in regions of Ladakh (Bhattacharya) 1989 ^[2], Kaul *et al.* 1995) ^[10, 11], Doda *et al.* 1994, Singh (1995) ^[11, 14] Bhaderwah hills (Kanpur 1995) ^[9] Little Tibet (Sharma, 1995) ^[11, 13] Uri Sector (Lone 2003), Muzaffarabad (Dar 2003) ^[4] and Samba valley Ishtiaq *et al.*, (a) 2006, (b) 2007.

Study Area

The state is divided into 22 districts and each district is rich and unique floristically. Each district is an abode of few to many medicinal plants. The district Anantnag also called Islamabad is located at 33.73° N 75.15° (Falling Rain Genomics, Inc-Anantnag Falling grain.Com) at an elevation of 1600m above sea level.

The study is oriented towards the ethnonotanical study of Braie\Sarbal mountain ranges of Kapran area of district Anantnag in J&K, India. In the foot hills of this mountain lie a fresh water pond known as Sarbal. Based on this pond the mountain is also known as Sarbal Mountain. The mountain contain two pastures named as Drag and Gagan-top. On east side of Braie Mountain lie small mountains called as "Kav Koot", which in turn is made up of four small hills namely "Dal, Kher Khan, Mujdan and Arishan" top. To west or left side of Bari Mountain lie two passes. One pass known as "Lanz Nard" which connect Kaparan with Daksum area of Kokernag valley. The other pass called "Marbel Pass" connects Kapran with Ramband District of Jammu Province. Keeping in view the lush green wealth of area, dependence of inhabitants upon the local herbs derived from adjoining hills and developing interest of government towards preservation, conservation, collection of medicinal plants and establishment of herbal gardens made me to orient my research over Ethno botanical studies of Bari\Sarbal mountain range of Kapran village in Kapran valley of district Anantnag.

Research design and technique of sampling

Several surveys were organized covering all villages around Sarbal mountain range. The information about Hakeem's and men concerned with collection and prescription of medicinal plants in the area was obtained from the local people. The indigenous knowledge about usage of plant, plant parts and products by local people to treat various ailments were gathered by personal interviews with them. First-hand

information about the medicinal uses of plants were obtained from the traditional healers, local medicinal men and women, head of some families, elder persons etc. All types of information about disease treatment, plant used, and methods of administration, preparation and dosage are enquired patiently and keenly. All this was personally observed and documented. Local name of plants were carefully noted. The area was surveyed for 1 year covering all the seasons of year the following materials and methods were used.

Significance of study

1. The output of study will provide knowledge that will help in management of medicinally important plants and provide access to Traditional Herbal Medicine. As a result of this, decisions with regard to establishment of a basic conceptual structure for development and management of medical sector.
2. The findings of study will be useful for government agencies, herbalists and in general to people concerned with healthcare.
3. Research of such kind will supply information on the valuable botanical resources, their distribution, characteristics and habitat.
4. This will also be helpful to eradicate the laggings between traditional methodologies, native cultures and experimental sciences.
5. The study will also provide a way to compile authentic and reliable information based upon concrete data that will enhance further development of modern drugs and pharmaceuticals.

Problem statement

The present status of Traditional Herbal Medicine shows a declining trend due to various menaces like overgrazing, over exploitation, tourist upsurge and deforestation. All these factors led to wastage of efforts made by the government to boost use of medicinal plants and their access. Thus bring destruction of medicinal plants. Since the Sarbal mountain range of Kapran also faces such challenges and Traditional Herbal Medicine has been little accessed, therefore there is a requirement of serious investigation. The research questions for this research.

1. What are the parts used for medicinal preparations by locals?
2. Which methods are used for preparation and how medicines are taken?

Justification of study

A study of Sarbal or Bari mountain range was necessary because the people residing in adjusting areas are mainly depended upon traditional herbal medicine due to lack of transport and medical facilities in the nearest areas, easy access to such herbs, poverty and long history of usage of TM over generations.

Objectives of study

General objectives

1. To explore the medicinal plant species diverseness and approach to them by Sarbal people.
2. Collection of medicinal plants from study area and prepare a herbarium out of them so that specimens can be preserved for future records.
3. Documentation and collection of information about local names and their usage traditional medicines by local people.

Specific objectives

1. Access quick observation of taxonomic characters of medicinal plants with attention on parts used in medicinal preparation and curing of an ailment.
2. To analyze the impact of the status of traditional Medicinal Knowledge on access of Traditional Herbal Medicines among the people of Sarbal.

Result and Discussion

The study reveals that Bari/Sarbal mountain range is rich in ethno-medicinal plant diversity. About 50 medicinal plants used by Jammu and Kashmir tribal have been collected from the study area. A Family wise analysis of 50 ethno-medicinal plants is carried out.

Table 1: Plant family used in medicinal preparations

| S. No. | Plant used for medicinal preparation | No. of plants of Family |
|--------|--------------------------------------|-------------------------|
| 1 | Asteraceae | 5 |
| 2 | Pteridaceae | 1 |
| 3 | Rosaceae | 7 |
| 4 | Lamiaceae | 4 |
| 5 | Boraginaceae | 1 |
| 6 | Apiaceae | 2 |
| 7 | Saxifragaceae | 1 |
| 8 | Liliaceae | 1 |
| 9 | Brassicaceae | 2 |
| 10 | Ranunculaceae | 3 |
| 11 | Athyriaceae | 1 |
| 12 | Caprifoliaceae | 1 |
| 13 | Asphodelaceae | 1 |
| 14 | Iridaceae | 1 |
| 15 | Malvaceae | 2 |
| 16 | Polygonaceae | 3 |
| 17 | Berberidaceae | 1 |
| 18 | Plantaginaceae | 1 |
| 19 | Paenoneacea | 1 |
| 20 | Caryophyllaceae | 1 |
| 20 | Valerianaceae | 1 |
| 22 | Violaceae | 1 |

The study reveals that leaves and roots are the most significantly used plant parts followed by stem, flower and seed.

Table 2: Details of plant used in medicinal preparation:

| S. No | Name of plant | Part used | | | | | | |
|-------|--------------------------------|-----------|-------|--------|--------|-------|-------|-------------|
| | | Root | Stem | Leaves | Flower | Seeds | Fruit | Whole plant |
| 1 | <i>Artemisia absinthium</i> | - | - | + | - | - | - | - |
| 2 | <i>Artemisia annua</i> | - | - | + | - | - | - | - |
| 3 | <i>Adiantum capillus</i> | - | - | + | - | - | - | - |
| 4 | <i>Achillea millefolium</i> | - | - | + | - | + | - | + |
| 5 | <i>Agrimonia eupatoria</i> | - | - | + | + | - | + | - |
| 6 | <i>Alchemilla vulgaris</i> | - | - | + | - | - | - | + |
| 7 | <i>Ajuga bracteosa</i> | - | - | + | + | - | - | + |
| 8 | <i>Arnebia benthamii</i> | - | + (R) | - | + | - | - | + |
| 9 | <i>Angelica archangelica</i> | + | + | + | - | - | + | + |
| 10 | <i>Anthemis cotula</i> | - | + | + | + | - | - | + |
| 11 | <i>Aconitum heterophyllum</i> | + | - | + | - | + | - | + |
| 12 | <i>Bergenia ciliata</i> | + | - | + | + | - | - | + |
| 13 | <i>Bupleurum candollei</i> | + | - | + | - | - | + | - |
| 14 | <i>Colchicum luteum</i> | + | + (C) | - | - | - | - | - |
| 15 | <i>Cichorium intybus</i> | - | - | - | - | + | - | + |
| 16 | <i>Capsella bursa pastoris</i> | - | - | - | - | - | - | + |
| 17 | <i>Caltha pastoris</i> | + | - | + | - | - | - | - |
| 18 | <i>Diplazium esculentum</i> | - | - | + | - | - | - | - |
| 19 | <i>Delphinium cashmeriana</i> | - | + | + | - | - | - | - |
| 20 | <i>Dioscorea deltoidea</i> | + | + (T) | + | - | - | - | + |
| 21 | <i>Dipsacus inermis</i> | + | - | + | - | - | - | - |
| 22 | <i>Dryopteris filix</i> | - | - | - | - | - | - | + |
| 23 | <i>Eremurus himalaicus</i> | + | + (T) | + | - | - | - | - |
| 24 | <i>Fragaria nubicola</i> | - | - | - | - | - | + | - |
| 25 | <i>Filipendula vestita</i> | - | - | + | - | - | + | - |
| 26 | <i>Geranium wallichianum</i> | - | + | + | - | - | + | + |
| 27 | <i>Geum urbanum</i> | + | - | + | + | - | - | + |
| 28 | <i>Hypericum perforation</i> | - | - | - | - | - | - | + |
| 29 | <i>Iris Kashmiriana</i> | - | + (R) | - | - | - | - | + |
| 30 | <i>Leonurus cardiaca</i> | - | - | + | - | - | - | + |

| | | | | | | | | |
|----|--------------------------------|---|-------|---|---|---|---|---|
| 31 | <i>Lactuca Kashmiriana</i> | - | - | + | - | + | - | - |
| 32 | <i>Lavatera Kashmiriana</i> | - | - | + | - | - | - | - |
| 33 | <i>Malva parviflora</i> | + | - | + | - | - | - | + |
| 34 | <i>Nepeta cataria</i> | - | - | + | + | - | - | - |
| 35 | <i>Oxyria digyna</i> | - | - | + | + | + | - | - |
| 36 | <i>Podophyllum hexandrum</i> | + | - | + | - | - | + | - |
| 37 | <i>Picrorhiza kurroa</i> | + | + (R) | + | - | - | - | - |
| 38 | <i>Prunella vulgaris</i> | - | + | + | + | - | - | + |
| 39 | <i>Polygonum amplexicaulis</i> | - | - | + | - | - | - | + |
| 40 | <i>Polygonum bistorta</i> | - | - | + | - | + | - | + |
| 41 | <i>Potentilla nepalensis</i> | + | - | - | - | - | - | - |
| 42 | <i>Paeonia emodi</i> | + | + (T) | + | - | + | - | - |
| 43 | <i>Sisymbrium officinale</i> | - | - | + | + | + | - | - |
| 44 | <i>Salvia moorcroftiana</i> | - | - | + | - | + | - | - |
| 45 | <i>Stellaria media</i> | - | - | - | + | + | - | - |
| 46 | <i>Saussurea costus</i> | + | + (R) | + | - | - | - | + |
| 47 | <i>Rheum emodi</i> | + | - | + | - | - | - | - |
| 48 | <i>Thalictrum foliolosum</i> | - | - | + | - | - | - | + |
| 49 | <i>Viola odorata</i> | - | - | - | + | - | - | - |
| 50 | <i>Valeriana wallichii</i> | + | - | - | - | - | - | - |

*R = Rhizoma, T= tuber, C=Corm

The common disease of the area are respiratory ailments, Urinary tract infections, Skin allergies, Dysentery, Diarrhea, Rheumatism, Fever, Headache etc.

About 50 species of belonging to 22 families are reported to be used to treat various plant and animal ailments.

Table 3: Plant part used for the preparation of medicines

| Parts used | Number of species | % of total |
|-------------|-------------------|------------|
| Leaf | 39 | 78 |
| Root | 17 | 34 |
| Corm | 1 | 2 |
| Fruit | 7 | 14 |
| Seed | 9 | 18 |
| Whole plant | 22 | 44 |
| Flower | 12 | 24 |
| Rhizome | 4 | 8 |
| Stem | 5 | 1 |
| Tuber | 2 | 4 |

Table 4: Mode of preparation of medicines

| Mode of preparation | Number of plant species | % of total |
|---------------------|-------------------------|------------|
| Paste | 15 | 3 |
| Powder | 10 | 2 |
| Decoction | 22 | 44 |
| Poultice | 9 | 18 |
| Infusion | 9 | 18 |
| Concoction | 7 | 14 |
| Used alone | 32 | 64 |

The root of administration is either internal or external according to study about 51 plants are administered internally while as 37 are applied externally:

Table 5: Route of administration of medicinal plants

| Root of administration | Number of plant species* | % of total | |
|------------------------|--------------------------|------------|----|
| External. | 37 | 74 | |
| Internal | Oral | 42 | 84 |
| | Nasal | 4 | 8 |
| | Ear | 2 | 4 |
| | Eye | 3 | 6 |

*Some species recounted as they are applied in multi-routes

Ranking and scoring

Medicinal plants found to be among the common ones were compared by ranking and scoring. Simple preference was

used to compare 6 medicinal plants and the results are given in table 5. Direct matrix ranking on 4 medicinal plants were compared and results were noted in table 6.

Table 6: Result of simple preference ranking for 6 medicinal plants against respiratory problem (cough and cold), 5= most, 1= least preferred.

| Plant species | Respondents | | | | | | | | | | Total | Rank |
|----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-------|------|
| | R ¹ | R ² | R ³ | R ⁴ | R ⁵ | R ⁶ | R ⁷ | R ⁸ | R ⁹ | R ¹⁰ | | |
| <i>Adiantum capillus</i> | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 5 | 3 | 2 | 30 | 3rd |
| <i>Ajuga bracteosa</i> | 4 | 5 | 3 | 2 | 3 | 5 | 4 | 4 | 5 | 4 | 39 | 2nd |
| <i>Arnebia benthamii</i> | 5 | 4 | 5 | 4 | 5 | 5 | 4 | 2 | 4 | 5 | 43 | 1st |
| <i>Caltha pastoris</i> | 2 | 2 | 3 | 4 | 3 | 4 | 1 | 2 | 2 | 3 | 26 | 4th |
| <i>Eremurus himalaicus</i> | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 12 | 6th |
| <i>Paonia emodi</i> | 1 | 2 | 1 | 1 | 1 | 3 | 1 | 3 | 1 | 1 | 15 | 5th |

Result of 4 informants (I₁- I₄) against 3 use values by direct matrix ranking on four medicinal plant species is given in below table:

Table 7: Direct matrix ranking on four medicinal plant species of four informants (I₁-I₄) against 3 use values.

| Use value | <i>Laviteria kashmiriyana</i> | | | | <i>Artemisia absinthium</i> | | | | <i>Bergenia ciliata</i> | | | | <i>Caltha palustris</i> | | | |
|-------------|-------------------------------|---|---|---|-----------------------------|---|---|---|-------------------------|---|---|---|-------------------------|---|---|---|
| | I ₁ | | | | I ₂ | | | | I ₃ | | | | I ₄ | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| MD | 5 | 4 | 2 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 3 | 3 | 2 |
| FD | 3 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 5 | 1 | 3 | 2 |
| OR | 4 | 4 | 1 | 2 | 4 | 1 | 2 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Grand Total | 36 | | | | 30 | | | | 60 | | | | 43 | | | |
| Rank | 3 rd | | | | 4th | | | | 1st | | | | 2nd | | | |

0=no use, 5=best, MD=medicines, FD =food and OR= Ornaments

The agreement of people of medicinal values of each species was tested by calculating informant agreement ratio (Table 7) the medicinal plant use reports obtained during the study indicated that some medicinal plants are cited by more than 22 informants the reliability of ethonobotanical information

obtained from informants were confirmed by visiting each informant 2 times during the study. Results of informant agreement ratio (IAR) values for 15 categories of disease are indicated below:

Table 8: Informant agreement ratio (IAR)

| S. No | Disease category | No. of medicinal plants used | %of total medicinal plants | No. of medicinal citations | IAR value |
|-------|---|------------------------------|----------------------------|----------------------------|-----------|
| 1 | Gastric problems | 5 | 5.4 | 17 | 0.75 |
| 2 | Diarrhea | 5 | 5.4 | 14 | 0.69 |
| 3 | Fever and headache | 5 | 5.4 | 30 | 0.86 |
| 4 | Constipation | 4 | 4.3 | 19 | 0.83 |
| 5 | Respiratory diseases (Asthma, cough & cold) | 16 | 17.1 | 32 | 0.51 |
| 6 | Skin Problems | 11 | 11.8 | 20 | 0.47 |
| 7 | Urinary track infections | 4 | 4.3 | 14 | 0.76 |
| 8 | Rheumatism, Joint pain | 11 | 11.8 | 27 | 0.61 |
| 9 | Tooth ache and bleeding | 4 | 4.3 | 12 | 0.72 |
| 10 | Snake poison | 2 | 2.2 | 26 | 0.96 |
| 11 | Menstrual problems | 5 | 5.4 | 21 | 0.80 |
| 12 | Warts boils and sores | 11 | 11.8 | 13 | 0.17 |
| 13 | Cancer | 6 | 6.4 | 15 | 0.64 |
| 14 | Diabetics | 2 | 2.2 | 5 | 0.75 |
| 15 | Kidney stones | 3 | 3.2 | 18 | 0.89 |
| 16 | Total | 94 | | 283 | |

$IAR = N_{ur} - N_t / N_{ur} - 1$ N_{ur} = Number of mentions in each category. N_t = Number of taxa used in each category.

Conclusion

The present study showed that the area is rich in medicinal plant diversity which is used to treat different human and animal disease, besides used in other fields other than ethno botanical uses. This diversity is because of feasible topography, climate and land use patterns. The dependence and trust of people over herbal medicine to treat various health issues account for survival of medicinal plants in the area. The ways and means used to treat primary health problems used herbal traditional knowledge by the natives of people surrounding Bari/Sarbal Mountain inside their dependence upon medicinal plants. This may reflect the culture of people inhabiting the area and their faith in traditional medicine, low means of income, lack of infrastructure and low affordability of modern medicines. Thus there is a need to acquaint others about medicinal plants and traditional practices in the study area.

The present study also reflect that traditional medicinal knowledge is concentrated among senior citizens of age group

40-70 years e.g. 75% of the key informants selected belong to this age group (appendix) the reason behind this lie upon two factors.

- 1 Knowledgeable elders and traditional healers do not pass on their knowledge to anyone even to their family members because this is a source of their livelihood and earning.
- 2 The younger generations do not have interest to receive such knowledge because of modernization and awareness via social media.
- 3 Thus we can say that medicinal plants of the area and knowledge base are under threat. Further, disturbances of habitat by over population and demand of agriculture land and settlements in the lowlands are the major threats to the medicinal plants of the area.
- 4 The results of this study also showed that Sarbal is rich in medicinal plant species compared to the total plant species recorded from the area during this study. Majority of such medicinal plants are also distributed near their

farm lands, road sides and herbal gardens, indicating the deliberate efforts of locals to protect such species and the knowledge associated with them. Therefore there is a need to encourage and promote such practices among

such people. It can be concluded from the study that there is a significant relationship between the status of traditional medicinal knowledge and asses to medicinal plants among the people surrounding Sarbal.

Appendix: List of Informants along with their sex, age and educational Background

| S. No. | Name of informant | Sex | Age | Qualification | Residence |
|--------|--------------------|-----|-----|-----------------------|-------------|
| 1 | GH Rasool Mir | M | 62 | 5 th pass | Kapran |
| 2 | Haja Bano | F | 48 | Illiterate | Kapran |
| 3 | Gull Bhat | M | 68 | 8 th pass | Kapran |
| 4 | Mohd Akbar Lone | M | 60 | 8 th pass | Hengipora |
| 5 | Fatah | F | 60 | Illiterate | Hengipora |
| 6 | Shah Nawaz | M | 35 | 10 th pass | Hengipora |
| 7 | Mir Sakib | M | 27 | 10 pass | Gwass |
| 8 | Mumeh joo | F | 58 | Illiterate | Gwass |
| 9 | Sarfaraz khatana | M | 40 | 10 th pass | Gwass |
| 10 | Fateh khan | M | 52 | 3 rd pass | Kapran |
| 11 | Gulzar Ahmad Beg | F | 57 | 8 th pass | Kapran |
| 12 | Rehana Chodri | F | 35 | 5 th pass | Nowgam Nard |
| 13 | Abdul Salam | M | 70 | 5 th pass | Nowgam Nard |
| 14 | Samadullah khatana | M | 56 | Illiterate | Nowgam Nard |
| 15 | Raja Bagium | F | 65 | Illiterate | Nowgam Nard |
| 16 | Zoon | F | 80 | Illiterate | Nowgam Nard |
| 17 | Jawahera | F | 37 | 7 th pass | Hengipora |
| 18 | Mohamd Altaf | M | 40 | 10 th pass | Hengipora |
| 19 | Sarwer naikoo | M | 30 | 8 th pass | Hengipora |
| 20 | Abdul Salam Ganie | M | 45 | 4 th pass | Hengipora |
| 21 | Mehbooba Akhtar | M | 42 | 5 th pass | Gwass |
| 22 | Gullam kak | M | 58 | illiterate | Gwass |
| 23 | Sheikh Tajamul | M | 28 | 10 th pass | Gwass |
| 24 | Nazir Mantoo | M | 39 | 3 rd pass | Kapran |
| 25 | Haseena begam | F | 37 | illiterate | Kapran |
| 26 | Zareena | F | 48 | illiterate | Kapran |
| 27 | Parweena | F | 40 | 5 th pass | Kapran |
| 28 | Jahangir khatana | M | 25 | illiterate | Nowgam Nard |
| 29 | Samud | M | 62 | illiterate | Nowgam Nard |
| 30 | Haleema begum | F | 39 | Illiterate | Nowgam Nard |
| 31 | Qadir Lone | M | 70 | Illiterate | Hengipora |
| 32 | Jaha ara | F | 47 | 8 th pass | Hengipora |

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