

Evaluation of Demographic and socioeconomic profile of SC villages of Meerut under SCSP Mobile Health Care Programme

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Abstract

Introduction: The paper aims to study human population in five selected areas of Scheduled caste (SC) dominated population in Meerut with respect to Socio demographic and health status by collecting the data on age, gender, education, caste, religion, marital status, occupation, addiction, dietary habits etc. which are important in the assessment of the demographic, socio- economic and health status of a population.

Methodology: A team from Clinical Research Unit, Meerut conducted the Mobile Healthcare programme at five SC dominated villages in Meerut during February 2022 to March 2023. A questionnaire/screening form was used to evaluate demographic and socioeconomic elements during regular health examinations. Assessment of Mizaj (temperament) was done as per Unani parameters and free Unani treatment was provided to the needy individuals.

Result and Conclusion: A total of 6097 patients were enrolled during this period. The study shows that more females as compared to males visited the mobile OPDs. The literacy rate was very low. Majority of the patients were either unemployed or unskilled labours. The temperament of the patients was either *Balghami* or *Safravi*. The most common ailments found in the patients were arthritis, gastric problems, respiratory diseases and skin disorders.

Keywords: Demography, Scheduled caste, socioeconomic status, health status

Introduction:

Demography or population education is as old as human civilization. It is derived from two Greek word “*dêmos*” meaning people or society and “*graphía*” meaning description/writing (1). An idea on demography was also expressed by many ancient Unani philosophers and this can be found in

the writings of *Buqrat (Hippocrates)*, *Plato and Arastu (Aristotle)*. *Demography* is the scientific study of human populations primarily with respect to their size, their structure and their development. Governments and commercial companies can analyse and forecast population-related social, cultural, and economic developments by using demography. (2,3).

The Scheduled Castes (SCs) and Scheduled Tribes (STs) are officially designated groups of people among the most disadvantaged socio-economic groups in India. They occupy the bottom most rung of the social ladder. As per 2011 census report, they comprise about 16.6% and 8.6%, respectively of India's population (4,5). Around half of the SC population is concentrated in five States – Uttar Pradesh, West Bengal, Tamil Nadu, Andhra Pradesh and Bihar. The Scheduled Caste population of Uttar Pradesh is 41,357,608 as per the 2011 Census, constituting 20.6% of the total state population of 199,812,341. Uttar Pradesh holds 1st rank and 4th rank in terms of absolute number of SC population and its proportion to total population respectively among all the States and Union Territories of the country. (6). Meerut city has a population of 5485 of which 2844 are males and 2641 are females. There are 50.19% Scheduled Caste (SC) and 0 Scheduled Tribe (ST) of total population in Meerut city.

According to National Family Health Survey 2015–2016 the full immunization percentage of the Scheduled Caste children in the age group 12–23 months is 63 per cent. (H.). Social parity ethics demand special consideration and careful intervention to assist scheduled caste community in their advanced aspirations. Programmes focused on facilitating the community need to be developed into both empathy and sensitivity backed up by the supply of adequate resources. (7)

Promoting the socio-economic interest of SC and ST population is a constitutional mandate. It is also an area of priority and commitment for the present Government to promote the socio-economic empowerment and inclusive development of the SCs and STs. The commitment to ensure inclusive development of the most vulnerable and deprived community groups - especially SCs and STs - has been reaffirmed by the call for a New India by 2022, the 75th Year of India's Independence.

The concept of Scheduled Castes Sub-Plan (SCSP) was envisaged by the erstwhile Planning Commission of India with the objective to ensure adequate benefits under SCSP for the socio-economic and educational development of Scheduled Castes both in physical and financial terms. It mandated a planning process for the social, economic and educational development of SCs and improvement in their working and living condition. It seeks to improve the living conditions of the Scheduled Castes through provision of drinking water supply, link roads, house-sites, housing improvements, basic minimum services such as primary schools, health centres, veterinary centres, panchayat ghars, community halls, nutrition centres, extension of electricity and common work places/facility centres, etc.

The Mobile Healthcare Programme under SCSP is being carried out by the Central Council for Unani Medicine (CCRUM), Ministry of Ayush, through its peripheral Institutes for the benefit of the country's Scheduled Caste population. The program's goals include screening/examining the SC people for their health status in the OPDs and at health camps, as well as treating individuals with Unani medicine for their various illnesses. Additionally, through lectures, group meetings, health camps, and the distribution of information to the SC population, it seeks to raise awareness among the general public about various aspects of preventive, promotional, and curative health. (6). Under this program, the Clinical Research Unit (CRU) Meerut, one of the peripheral units of CCRUM, is providing healthcare services and creating awareness for maintenance and promotion of health of SC community since 2021. Five spots having predominant SC population were adopted under the programme. The total population covered under this programme is 15,566 out of which the total SC population is 8,584.

Details of the adopted spots -

Rali Chauhan: Rali Chauhan is a village located in Meerut Tehsil of Meerut district in Uttar Pradesh. The total population of this area is estimated as 3,183 which comprises of around 265 houses. SC population of the area is 1,749. The streets and roads are broad and well maintained. The area has open sewage. A Government Health Center is available in Rali Chouhan.

Mohiuddinpur Lalsana: Mohiuddinpur Lalsana village is located in Meerut tehsil of Meerut district in Uttar Pradesh, India. It is situated 9km away from Meerut, which is both district & sub-district headquarter of Mohiuddinpur Lalsana village. The total population of this area is estimated as 1,790 which comprises of 331 houses and SC population of the area is 1,091. One Government dispensary is available in the area.

Maithna Indersingh: Maithna Indersingh village is located in Sardhana tehsil of Meerut district in Uttar Pradesh. It is situated 20km away from sub-district headquarter Sardhana and 5km away from district headquarter Meerut. The total population of this area is estimated as 3,721 which comprises of 631 houses. SC population of this village is 2,191.

Batjeora: Batjeora village is located in Sardhana tehsil of Meerut district in Uttar Pradesh. It is situated 13km away from sub-district headquarter Sardhana and 10km away from district headquarter Meerut. The total population of this area is estimated as 2,249 which comprises of 366 houses. The village has total 1,146 SC populations and local language is Hindi.

Atmadnagar Allipur: This village is located in Sardhana tehsil of Meerut district in Uttar Pradesh. It is situated 6 km away from sub-district headquarter Sardhana and 16 km away from district headquarter Meerut. The total population of this village is estimated as 4,623 which comprises of 783 houses with 2,407 SC population..

Methodology

An observational and descriptive study was carried out under SCSP Mobile Healthcare Programme by Clinical Research Unit, Meerut. Mobile OPDs were organized in these villages on weekly basis. In these OPDs, screening of the patients was done and the demographic data like age, sex ratio, marital status, literacy, occupation, socio-economic status, health status etc was recorded in predesigned questionnaire/ screening forms. General health checkup was done which included recording of Blood Pressure, weight, pulse rate, respiratory rate and heart rate for timely detection of Diabetes, Hypertension, and Obesity. Screening of the children was also done for recording of weight, height, pulse rate, etc. and to rule out diseases like skin diseases (scabies, fungal infection), deficiency diseases (Anemia, Vitamin deficiency, Malnutrition, Goitre etc.) and respiratory diseases etc. After screening, the patients were registered and the details were recorded in the Case Record Forms (CRF). Assessment of Mizaj (temperament) of the patients was done according to approved parameters. Unani treatment was provided to the patients. No sample size was fixed and 6097 patients were enrolled from 16th February, 2022 to 31st March, 2023. The data was collected by their consent and also they were assured of confidentiality of the details. The data entered in CRF and Microsoft Excel Sheet was assessed by application of appropriate statistical tools.

Observation and Result

A total of 6097 patients were enrolled and assessed under SCSP Mobile Healthcare programme, conducted by Clinical Research Unit, Meerut from 16th of February, 2022 to 31st March, 2023.

Out of 6097 patients, 23.26%, 26.24%, 17.42%, 14.37% and 18.71% patients belonged to Maithna Indersingh, Atmadnagar Allipur, Batjeora, Mohiuddinpur Lalsana and Rali Chauhan respectively. (Figure 1) On assessment of gender-wise distribution of patients in each adopted spot, it was revealed that in Maithna Indersingh 547 (8.97%) were male and 871 (14.29%) were female. In Atmadnagar Allipur, out of the 1600 patients, 713 (11.69%) and 887 (14.55%) were male and

female respectively. A total of 1062 patients were enrolled in Batjeora, among them 422 (6.92%) were male and rest 640 (10.5%) were female. In Mohiuddinpur Lalsana and Rali Chauhan, number of males were 406 (6.66%) and 467 (7.66%) respectively while 470 (7.71%) and 674 (11.05%) were female respectively.

Marital Status of the patients is described in Figure 2. Among total of 6097 patients, 5324 (87.32%) were married while 773 (12.68 %) were unmarried.

Distribution of patients according to age group is briefed in table 1 and it was observed that 36.51% (highest) patients belonged to age group 41-60 years while 8.73% (least) belonged to age group below 20 years.

Figure 1 Distribution of patients in different villages of Meerut according to Gender

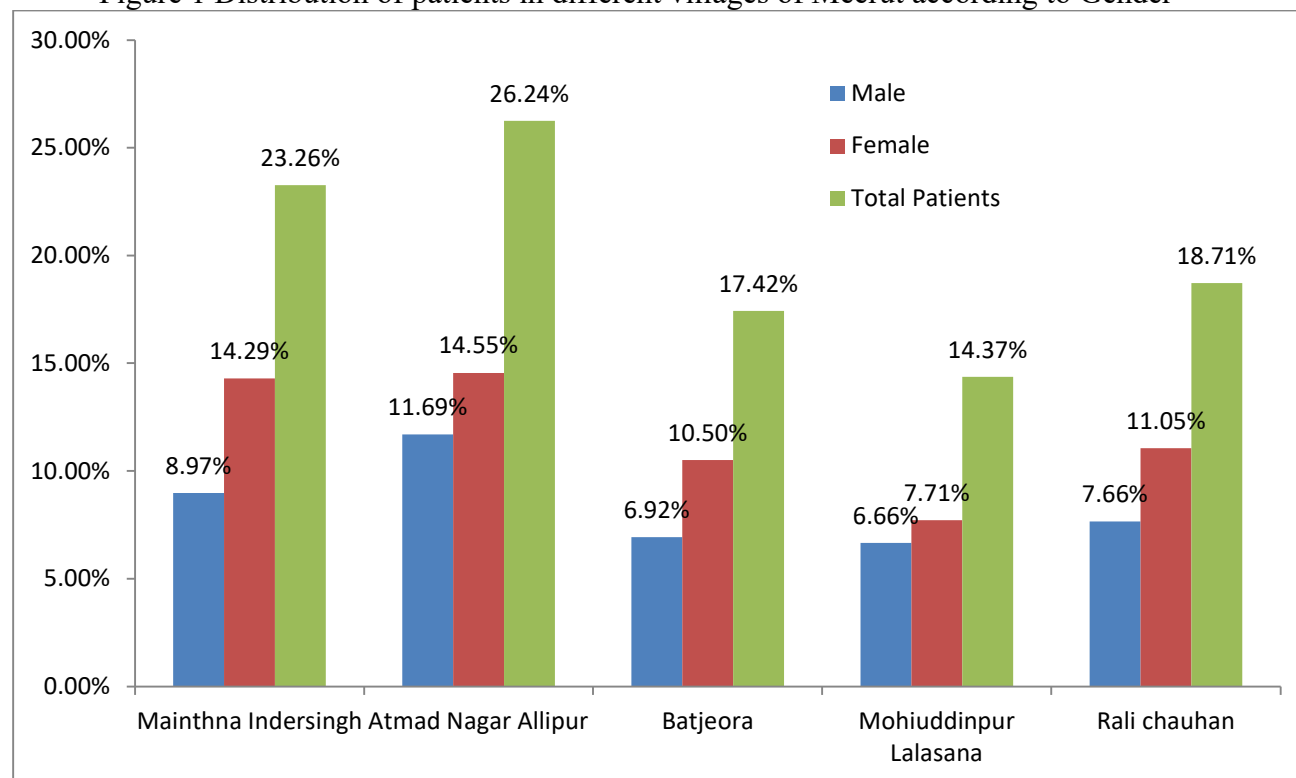


Figure 2 Marital status of the patients

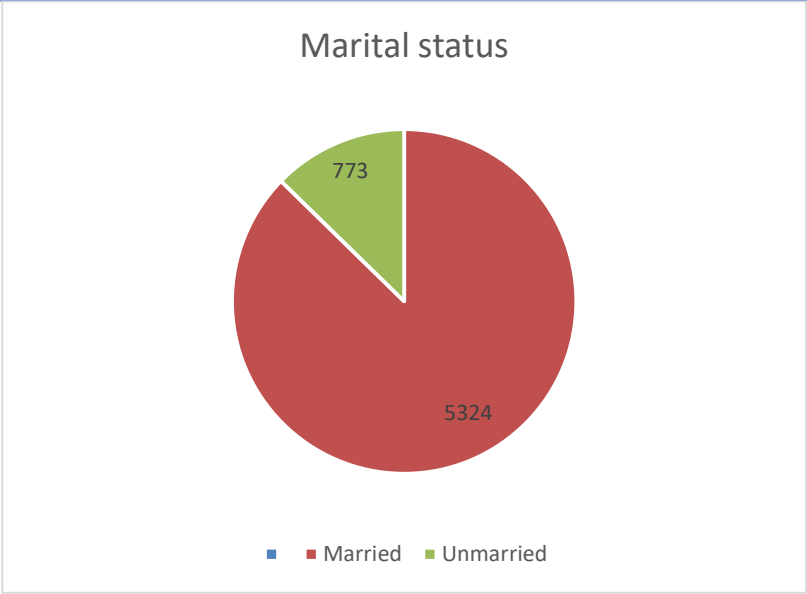


Table 1 Age Distribution of the patients

Age Group in years	Total	Percentage
0-20 years	532	8.73%
21-40 years	2068	33.92%
41-60 years	2226	36.51%
>60 years	1271	20.84%
Total	6097	100%

Among the patients enrolled in the study, 81.78% patients were Hindus while 18.22% were Muslims. (Table-2). Distribution of patients according to caste showed that out of 6097 patients, 4755 (77.99%) patients belongs to Scheduled caste, 1182 (19.39%) were from OBC and rest 160(2.63%) were from other caste. (Figure-3)

Table-2 Distribution of the patients according to Religion

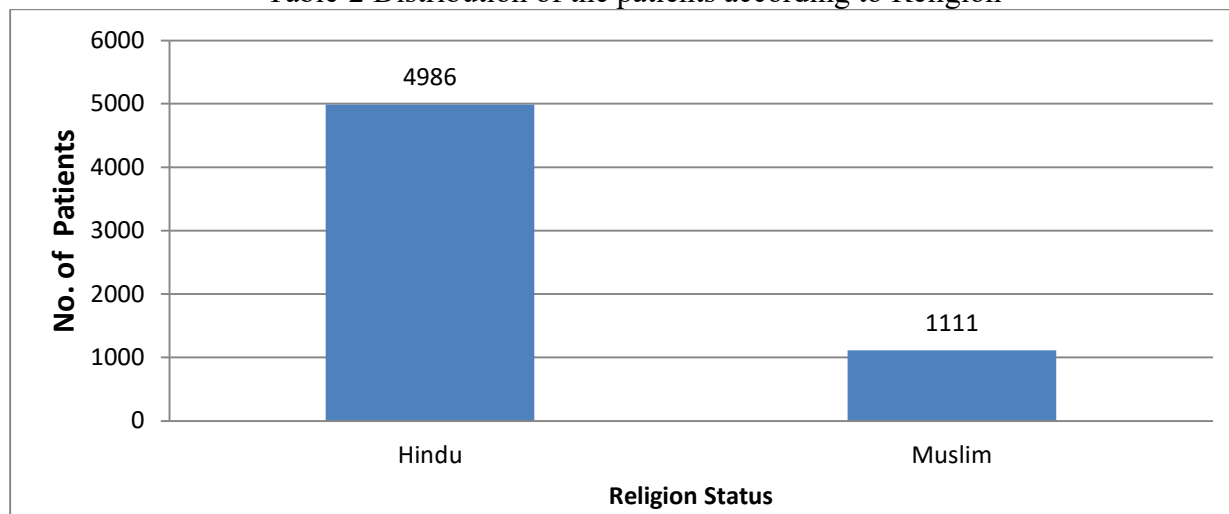
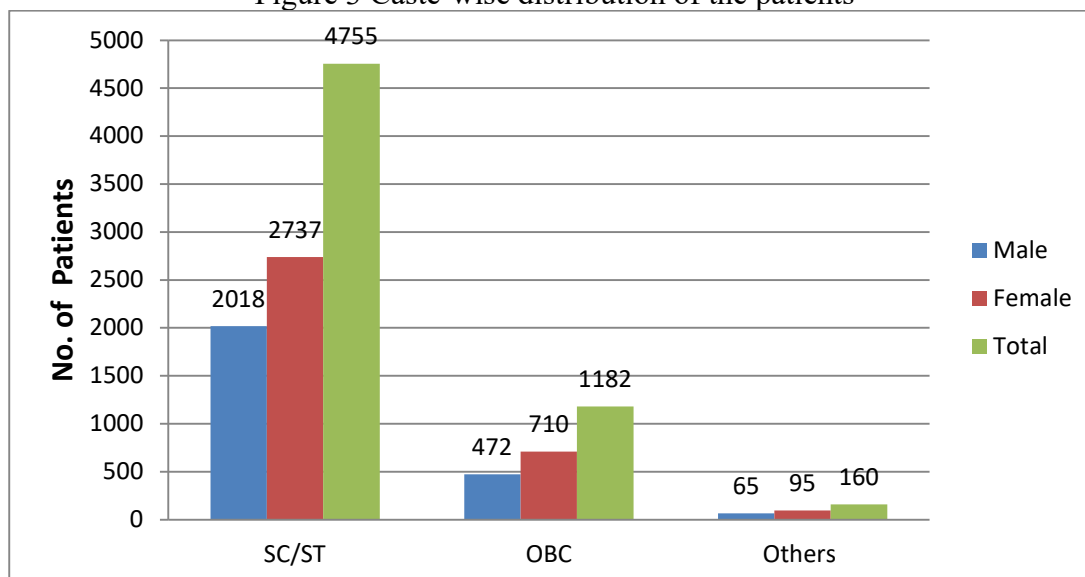


Figure 3 Caste-wise distribution of the patients



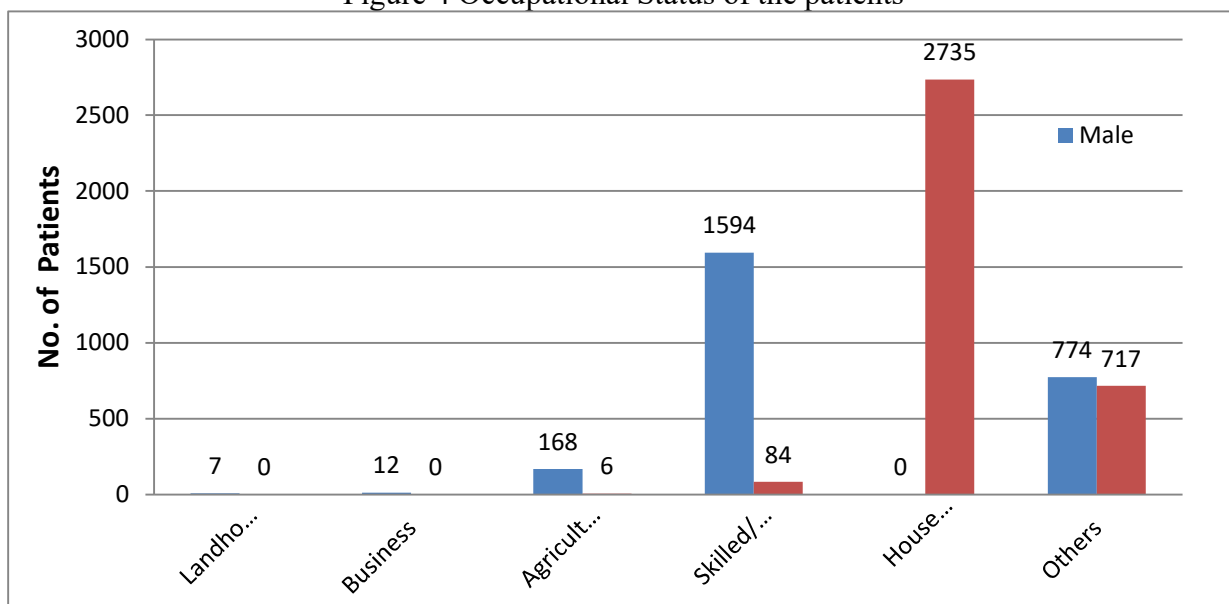
Education qualification of patients is represented in Table 3 and it reveals that 2308 (37.85%) patients were Illiterate, 2901 (47.58%) had gone to primary school, 298 (4.89%) were 10th passed, 394 (6.46%) were 12th passed and least were graduate i.e. 196 (3.22%).

Table 3 Educational Status of the patients

Variables	Male	Female	Total
Illiterate	877 (14.38%)	1431 (23.47%)	2308 (37.85%)
Primary School	1212 (19.88%)	1689 (27.70%)	2901 (47.58%)
High School	143 (2.35%)	155 (2.54%)	298 (4.89%)
Intermediate	211 (3.46%)	183 (3.00%)	394 (6.46%)
Graduate & Above	112 (1.84%)	84 (1.38%)	196 (3.22%)
Total	2555 (41.91%)	3542 (58.09%)	6097 (100%)

While assessing the occupational status of the population, it was observed that, out of 6097 patients, 2735 (44.86%) females were housewives, 1678 (27.52%) were skilled/unskilled labors, 174 (2.85%) were agriculture labors, 7 (0.11%) were landholders and 12 (0.20%) were business men. (Figure 4)

Figure 4 Occupational Status of the patients



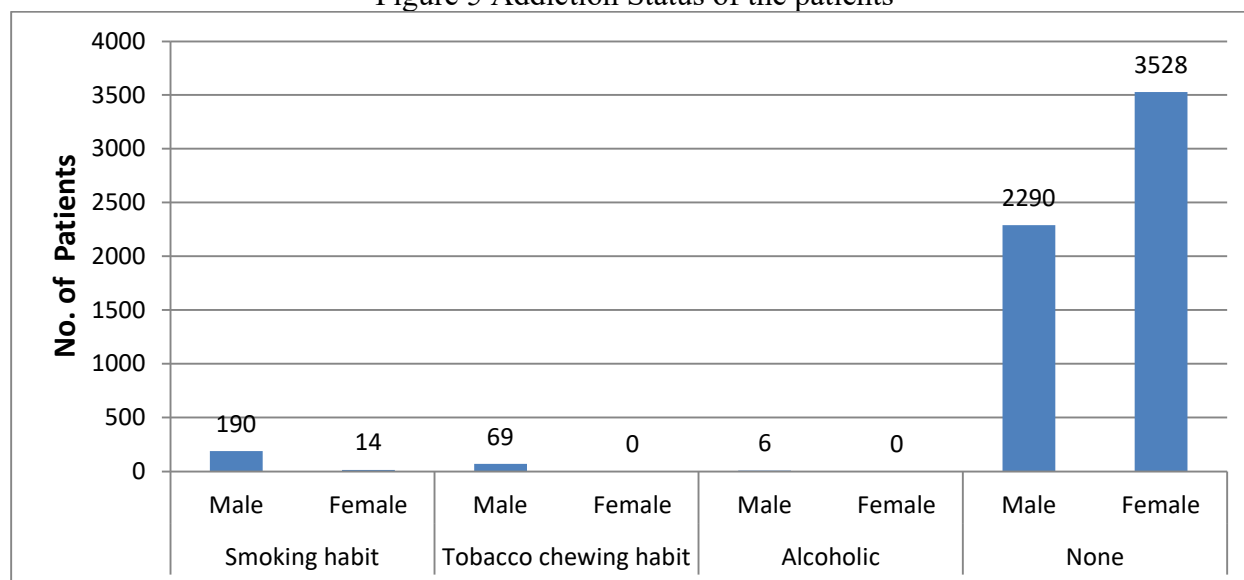
Most of the patients (73.27%) were pure vegetarians and about 22.21% of patients were non vegetarians while rest 4.61% was vegetarians who ate eggs. (Table 4)

Table 4 Dietary habits of the patients

Diet	Total	Percentage
Veg	4467	73.27%
Non Veg	1349	22.12%
Veg + Egg	281	4.61%
Total	6097	100%

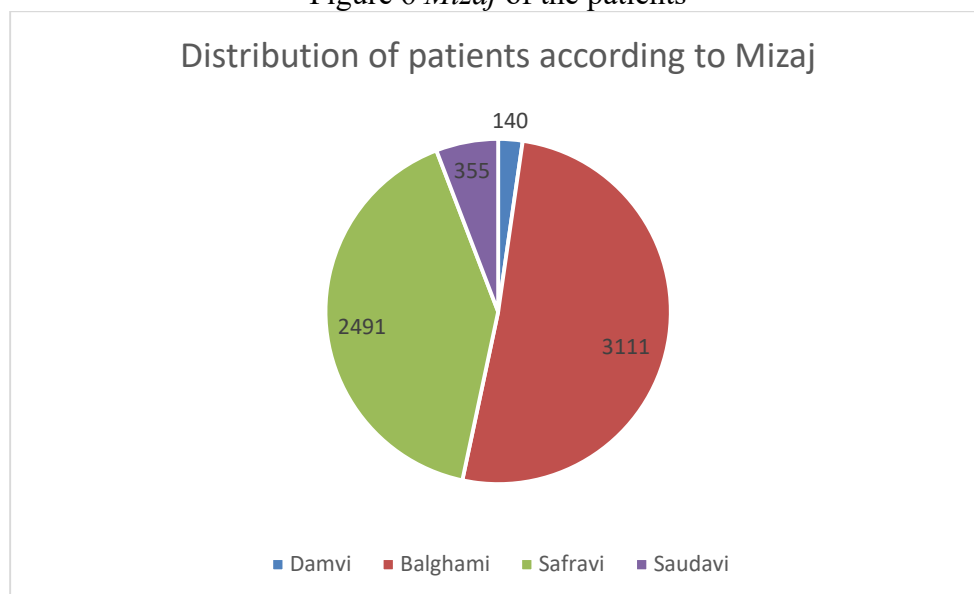
Addiction habit of patients is depicted in Figure 5 and it showed that majority of the patients 5818 (95.42%) were not having any addiction habit. 204 (3.35%) patients were smokers, 69 (1.13%) patients had tobacco chewing habits, and 6 (0.10%) were alcoholic.

Figure 5 Addiction Status of the patients



Mizaj (temperament) of the patients was also assessed in the study. Out of 6097 patients, 3111 (51.03%) were *Balghami*, 2491 (40.85%) were *Safravi*, 355 (5.82%) were *saudavi*, and 140 (2.30%) were *Damvi*. (Figure 6)

Figure 6 *Mizaj* of the patients



There were 1924 (31.56%) patients that were acutely diseased. 3263 (53.52%) patients had sub-acute disorders while 910 (14.92%) patients were suffering from chronic ailments (Figure 7). Out of 6097 patients, 2015 patients were suffering from musculoskeletal disorders like arthritis, backache, frozen shoulder etc., 1295 patients had gastrointestinal diseases like gastritis, fatty liver, gastric ulcers, anorexia, IBD, constipation etc., about 980 patients had respiratory symptoms like common cold, dyspnea, sore throat etc. and 566 patients had skin disorders as shown in Table 5.

Figure 7 Chronicity of Disease among the patients

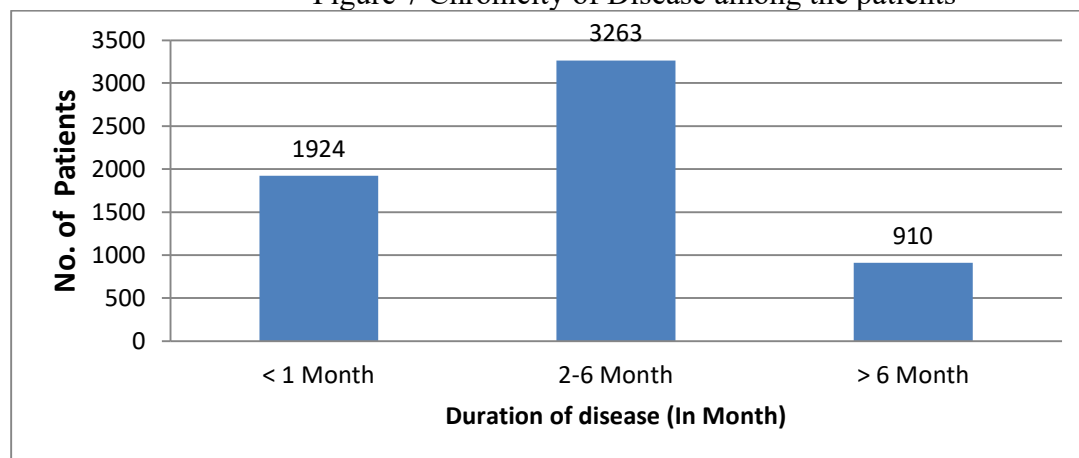


Table 5 Disease Distribution among the patients

Diseases Name	Sex	No. of patients
Cardiovascular system	Male	12
	Female	8
	Total	20
Gastrointestinal system	Male	639
	Female	656
	Total	1295
Musculoskeletal system	Male	707
	Female	1388
	Total	2095
Nervous system	Male	62
	Female	193
	Total	255
Respiratory system	Male	556
	Female	424
	Total	980
Skin	Male	263
	Female	303
	Total	566
Urogenital system	Male	76
	Female	291
	Total	367
Others	Male	240
	Female	279

	Total	519
Total	6097	

Discussion and Conclusion

There have been multiple studies investigating the demographics of patients utilizing free clinics in rural areas of India. Health service utilization has been associated with several socio-demographic factors such as age, gender, socio-economic status and literacy status. In our study when patients were distributed on the basis of age, it was seen that most of the patients belonged to the age group of 40- 60 years. The number of female patients was more than males. This data also reflects that due to the excessive burden of work and poor nutritional diet, females are more susceptible to have an illness and visited Mobile OPDs frequently. 47.58% of the patients were educated up to the level of primary school. While assessing the occupational status, majority of the patients are housewives, the reason for the same is due to higher number of female participated in the study. These findings are in consonance with another study carried out on SC population in Bhopal. (8). It has also been revealed that most of the adopted population does not have any addiction, as only few of them practiced smoking and tobacco chewing. As far as, prevalence of disease in SC population is concerned, it is inferred that musculo-skeletal disorders were the most prevalent disease in the adopted population for which patients were seeking Unani treatment. The other prevalent diseases were gastrointestinal diseases, respiratory diseases and skin diseases. The findings also support the observation study conducted on utilization pattern of Unani medicine by different researchers. (9, 10)

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Conflict of Interest

None

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