Chapter 4
Methodology
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4.1 Research Problem

The UN Report on ‘Population Ageing’ has noted that “population ageing is pervasive, a
global phenomenon affecting every man and woman. The steady increase of older age
groups in national populations, both in absolute numbers and in relation to the working
age population has a direct bearing on intergenerational equity and solidarity that are the
foundations of society.” Every tenth person on the globe has crossed sixty years of age.
Second millennium closed with about half billion (550 million) world population of the
elderly. The graying population is forecast to reach one billion in 2020 and whopping two
billion by 2050. Thus we are just a decade away from globe becoming an elderly
billionaire.

Description given in the previous two chapters makes it amply clear that until a few
decades ago, the issue of the elderly was not in the forefront of the development agenda
in India. During the second half of twentieth century life expectancy in India at birth has
doubled from 32 to 64 years and absolute number of elderly persons has more than
trebled. Proportion of older persons has increased from 5.63 per cent in 1961 to 7.4 per
cent in 2001. Decadal growth rate of 26.06 per cent was registered in the elderly
population during 1991-2001. However, total population in the country grew
comparatively at lower rate (21.34%) during this period. Elderly dependency ratio has
witnessed ascendance from 9.8 in 1951 to 12.26 in 2001. Every fourteenth person in
India has crossed sixty years of age.

Ageing population, one of the greatest triumphs of the last century, is not a matter of
rejoice particularly when one looks at the state of older persons. Population ageing is a
poised to become a major issue in India, which is projected to age swiftly in the first half
of the twenty first century. She is likely to face the challenge of simultaneous
development and population ageing. Elderly persons somehow confront multiplicity of
problems. Their inability to cope with changing values and life styles and to mix with people leads to their social isolation. Sense of insecurity, feeling of loneliness, depression, redundancy, and deprivation aggravate their problems in the sunset years of life.

Old age which previously had an essentially been a private and family concern, became a social phenomenon so widespread that it attracted attention of comity of nations, governmental and non-governmental organizations, social workers and researchers anxious to endow this hitherto ignored category with graceful ageing. The gradual abuse, neglect, marginalization, and alienation of the elderly and fast changing role of the family as a traditional social unit that took care of them in their twilight years have brought forth the problems of this segment of society. Old age problems must be studied keeping in view the fact that senior citizens of today were born during first half of twentieth century.

Today, Indian society is passing through the phase of feminization of ageing. She has 76.6 million elderly with 39.4 million females and 37.2 million males unearthing the fact that females are outnumbering males. Sex ratio of elderly population is 1018, much higher than the overall sex ratio which is 933. Majority (54.04) of the elderly females who were ever married are widows. One bewilders learning that overwhelming majority of females is fully economically dependent on others in rural (70.6%) and urban (75.7%) areas. Percentage of non-dependent females in these communities is just 12.1 and 11.5 respectively. Whereas nearly half (51.1%) of the males in the rural and 29.7 per cent in the urban settings are fully dependent on others.

India had only two states (Himachal Pradesh and Punjab) among all the states and Union Territories whose population of the older persons was seven percent or more in 1971. It merits mention here that Himachal Pradesh attained statehood on January 25, 1971, immediately before conducting census of 1971. After thirty years, census 2001 also reported two states (Kerala and Himachal Pradesh) whose population of the elderly was nine percent or more of its total population. It is discernible that in both the census operations Himachal Pradesh emerged as the only state to have highest proportion of the older persons in India. It has also witnessed feminization of elderly population as
proportion of older females in the state is higher than males. Further, out of total 12 districts four (Hamirpur, Bilaspur, Kangra and Una) exceeded 10 percent of aged population in the state. Besides, proportion of women in 5 districts- Hamirpur, Bilaspur, Kangra, Una and Kinnaur is 10% or even more. It is indicative of the fact that proportion of older persons in the district of Hamirpur as at par with the world. Besides, every tenth male and female has crossed sixty in the district.

Literacy, an important demographic trait portrays quality of population and provides impetus to social development. It is recognized as one the most powerful instruments of change. District of Hamirpur has the distinction of having highest literacy rate among all the districts of Himachal Pradesh. It has improved from 74.9 per cent in 1991 to 82.5 in 2001 in the district. Rural and urban literacy rate is 81.9 and 89.9 respectively, significantly higher than the state and national averages. In rural areas male literacy is higher (90%) than the rural (75%) areas. However, it stands at 92.1 for males and 86.1 for females in the urban areas. Moreover, like rest of the country, the state of Himachal Pradesh has also been experiencing extension of benefits of development and socio-economic advancement for the last four decades. This has certainly brought observable change in almost all aspects of social life. There is emergence of new aspirations and new outlook of life among the masses. This is likely to influence their perception about old age problems among women.

Explanations of dimensions and theories of ageing discussed in previous chapters advocate relationship between sociological variables and old age problems particularly among the women. Some of the studies reported in the review of literature have investigated this relationship. About six dozens of studies on various aspects of old age problems among women conducted in different parts of the world and country have been reviewed. Merely two studies have been noticed on this area of growing concern in Himachal Pradesh which has otherwise demonstrated highest proportion of older persons, except Kerala among all the twenty eight states and seven union territories in the country. But not even single study was found to have been conducted in the district of Hamirpur which has the distinction of having highest proportion of elderly females (12.44%), among all the twelve districts of state of Himachal Pradesh.
In this background, it was thought that understanding of socio-economic, psychological and health problems among older women in a fast transforming society are very vital. This is because socio-economic development besides, tremendous advancement in healthcare overtly and covertly affect life of the elderly women. It would facilitate better comprehension of this area of sociological significance. This investigation is a modest endeavour to supplement this area of academic and sociological interest.

The study in hand is entitled as ‘Old-age problems among women and its implications: A case study of Hamirpur district’.

4.2 Objectives of the study

On the basis of foregoing description of burgeoning of elderly population, old-age problems and feminization of ageing, objectives of this study were formulated, which are as under:

(i) To analyze demographic trends of elderly population in Himachal Pradesh;

(ii) To know about socio-economic and health problems of the elderly women;

(iii) To understand various implications of problems of the elderly.

4.3 Hypotheses

The following hypotheses focusing on living pattern and socio-economic, health & psychological problems being faced by the elderly women have been considered;

1. Proportion of elderly women being abused increases with age.
2. Higher proportion of widows is subjected to abuse than married women in old age.
3. Cases of abuse of older women staying in joint families are lesser than the ones living either in nuclear and adopted families.
4. There is less prevalence of abuse of the elderly women inhabiting rural areas than in the urban areas.
5. Age and financial hardship has no association with each other.

6. In old age higher proportion of widows face financial hardship than the married women.

7. Lower proportion of elderly women staying in joint families has financial hardship than those living either in the nuclear or adopted families.

8. Proportion of women inhabiting urban areas having financial hardship is higher than those residing in the rural areas.

9. Advancing of age among older women and feeling of loneliness are not associated with each other.

10. Proportion of elderly women having feeling of loneliness is higher among widows than those who have living spouses.

11. Family type of the older women and feeling of loneliness are associated with each other.

12. There is a higher proportion of elderly woman having feeling of loneliness inhabiting urban areas than those residing in the rural areas.

4.4 Research Design

The main purpose of this study was to investigate old-age problems among women. For understanding this relationship necessary information pertaining to background variables such as age, education, structure of family, occupation, income, land ownership, type of house owned, caste, religion and marital status etc., about the respondents was elicited. In addition to this, information about living arrangement of respondents, socio-economic, health and psychological problems and steps to cop up with such problems and participation in household chores was also collected. For the purpose of analysis, background characteristics of the informants viz. age, marital status, family type, residence and household income were treated as independent variables and abuse of elderly women, financial hardship and feeling of loneliness among them as dependent variables.

Primary objective of any sociological research is to explore new facts or to verify and modify the existing ones about human behaviour or social life. The focus of such
undertaking is to analyze the interrelationship that exists between various factors and
social phenomenon. Methodology outlines how to proceed in conducting research. A
design is a systematically evolved blueprint of conditions and procedures which guides
the researcher about various steps to be followed in conducting research, that is,
collection and analysis of data.

Exploratory and descriptive designs are the most commonly used designs in social
sciences. An exploratory research design is a preliminary study to acquire knowledge of a
research problem about which a researcher is not much familiar or has a little knowledge.
A descriptive research design on the other hand lays emphasis on understanding the
present characteristics of a problem. In the present study, some aspects such as nature of
relations with family members, companionship of family members at different occasions,
participation in decision-making and household activities, provision of medical
attendance, problems being faced during illness, perception about self, quality of feeding,
bedding and clothing, financial hardship and efforts to normalize strained relations etc.
are exploratory in nature. After assessing the type and gravity of problems being faced by
the respondents, these were examined in relation to their socio-economic and
psychological characteristics. Although understanding of certain aspects of old-age
problems among the women followed exploratory research design, yet overall orientation
of the present investigation remained descriptive in nature.

4.5 Universe

Conducing a study by single person over a large area or interviewing a large sample to
collect information is a herculean task owing to limitation of time, resources and money.
Difficulties are compounded more when study is to be conducted in a hill state like
Himachal Pradesh which has many such areas which remain accessible for a limited
period during the year. The state consists of 12 districts namely: Sirmour, Solan, Shimla,
Kinnaur, Bilaspur, Mandi, Kullu, Lahaul & Spiti, Kangra, Hamirpur, Una and Chamba.
The present study has been conducted in Hamirpur district which lies in the Western part
of the state of Himachal Pradesh. All the elderly women living in rural and urban areas of
Hamirpur tehsil of the district constituted universe of the study.
4.6 Sample

In the first phase, Hamirpur district was chosen for the present study. This district was chosen because conditions of elderly women in this part of state are more or less similar to their conditions in rest of the state. Also because, owing to common normative and value system, beliefs, etiquettes and attitude towards the elderly members of family in most of the districts, Hamirpur district was selected. This district has highest proportion of elderly females (12.44%), males (11.67) and older persons (12.07).

The second phase consisted of selection of tehsils. Hamirpur district has five tehsils namely; Tira Sujanpur, Nadaun, Hamirpur, Barsar and Bhoranj. It was decided to take Hamirpur tehsil which comprised of 354 villages and a town. In the third phase selection of villages and towns was considered. Selection of villages posed a problem as they were located at varying distances, some of them in far flung areas and their elderly population ranged from 4 to 199 persons. It was very difficult to include all the villages in the study. Therefore, it was decided to include all those villages which had a population of 500 or more. This was done with a view that there will be adequate number of respondents in the populous villages. On the basis of this criterion nine villages were included in the study. Hamirpur is the only town in tehsil Hamirpur. It was decided to include this town in the study sample.

The fourth phase consisted of selection of households from the selected villages and town. Since 12.44 per cent of the population constitutes of older persons in the district with the females outnumbering the males, their approximate concentration in each selected village and town was prepared. This exercise helped in having estimate and availability of sufficient number of older women. Total population of these villages is 10700, whereas the population of elderly females is expected to be 540. Names of villages, their population and number of elderly females in descending order is as follows; 1. Daragaon-2084 (104), 2. Anukalan-1485, (78) 3. Chowki Kankari-1255 (64), 4. Amned-1225 (62), 5. Chamned-1155 (59), 6. Darahi-1130- (58), 7. Utpur- 1042 (52), 8. Lahar-770
(36), and 9 Kaidru-554(27). However, 605 elderly females inhabit Hamirpur town. Population as per Census 2001 was taken as the base for this computation. It was decided to draw 25 per cent sample of elderly women from the selected villages and the town. Thus, the study sample consisted of 285 elderly women, 135 from the villages and 150 from the town. The details of sample are depicted in table 4.1.

Elderly women were the subjects of the study. Therefore, it was decided to take older women as unit of study.

### Table 4.1 Details of Sample

<table>
<thead>
<tr>
<th>Village/Town</th>
<th>Population (Persons)</th>
<th>No. of Households</th>
<th>Elderly women</th>
<th>Women Selected</th>
<th>Women interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daragaon</td>
<td>2084</td>
<td>423</td>
<td>104</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>Anukalan</td>
<td>1485</td>
<td>301</td>
<td>78</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Chowki-Kankari</td>
<td>1255</td>
<td>254</td>
<td>64</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Amned</td>
<td>1225</td>
<td>241</td>
<td>62</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Chamned</td>
<td>1155</td>
<td>234</td>
<td>59</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Daruhi</td>
<td>1130</td>
<td>229</td>
<td>58</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Utpur</td>
<td>1042</td>
<td>211</td>
<td>52</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Lahar</td>
<td>770</td>
<td>156</td>
<td>39</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Kaidru</td>
<td>554</td>
<td>114</td>
<td>27</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10700</strong></td>
<td><strong>2163</strong></td>
<td><strong>540</strong></td>
<td><strong>135</strong></td>
<td><strong>135</strong></td>
</tr>
<tr>
<td>Hamirpur</td>
<td>17252</td>
<td>3489</td>
<td>605</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td><strong>27952</strong></td>
<td><strong>5652</strong></td>
<td><strong>1145</strong></td>
<td><strong>285</strong></td>
<td><strong>285</strong></td>
</tr>
</tbody>
</table>
Figure 4.1 Town and villages-wise number of respondents

[Diagram showing town and villages-wise number of respondents.]

- Hamirpur: 150
- Daragaon: 26
- Utpur: 13
- Chamned: 15
- Amned: 15
- Anukalan: 19
- Chowki-Kankari: 16
- Kaidru: 7
- Lahar: 10
- Daruhi: 14
4.7 Tools and Techniques of Data Collection

The data for the present study was collected from primary and secondary sources. The primary data was collected with the help of an interview schedule. It was designed after a careful review of available literature on old-age problems among women and ascertaining necessary information on different aspects of the research problem. It consisted of two parts: A and B. Part A contained questions on personal and family background of the respondents, such as age, caste, education, occupation, income, religion, family type and size, type of house, land holding, and marital status etc. Part B, had questions on various aspects of living arrangement of older women and their socio-economic, health and psychological problems. It also included questions on nature of respondents' relations with family members, their participation in various activities, and provision of medicare during sickness, quality of feeding, bedding and clothing and efforts to normalize strained relations etc.

Before launching the field work, a preliminary survey was undertaken to collect information on certain crucial areas of the present study to know various aspects of the research problem. Interview schedule was pre-tested on 25 respondents. After pre-testing, necessary additions, deletions, alterations and modifications were made in it. Language of some questions was simplified and some questions were deleted and replaced with new ones. Final format of the interview schedule was used in the field to collect data from the respondents. In order to keep the uniformity of the data collection, the researcher herself conducted all the interviews with the selected respondents.

Principal source for the study of demographic and socio-economic aspects of the elderly in India and states was the national decennial census reports. In fact census taking on regular basis was initiated in India in 1881 and since then a new census is taken once in ten years. The recent census was taken in 2001. The census of India while enumerating the people also collected information on some demographic and socio-economic attributes of each individual such as sex, age, literacy and education, marital status, work-
force participation, religion, language, rural-urban residence etc. Besides important secondary sources of data for this study were various publications of the Population Division of the United Nations, wherein information on various aspects of the population are presented for different countries of the world, for example the World Population Prospects, the 2004 Revision: Volumes I and II. Apart from these two sources, the information available from large size representative sample demographic and health surveys such as National Family Health Survey(NFHS-I) 1998-99, NFHS-2, NFHS-3, Sample Registration System, the National Sample Survey was also used. In order to understand the future course of elderly population in India and states the Population Projection of India and states prepared by the Technical Group on Population Projections constituted by the National Population Commission, May 2006 was used. An attempt has been made to retrieve latest information from internet.

Information about older persons of the country and state, physical topography, administrative history, socio-economic and cultural background of the people and area under study was extracted from secondary sources. The sources include: gazetteers, census reports, statistical outlines, revenue records, panchayats’ records, books, journals, newspapers, articles, internet, annual reports, etc.

Apart from interview schedule and secondary sources, yet another technique of data collection namely ‘observation,’ both participant and non-participant was employed in the study to supplement the data collected through interviews. Usually it was possible to observe ways of life of the people in village communities during the course of interviewing the respondents.

4.8 Collection of Data

The requisite information was collected through the semi-structured pre-tested schedule; containing open-ended, close-ended and multiple response type of questions during January 2009 to May 2009. Thus, primary data were collected over a period of four and half months.
All the respondents were personally contacted by the researcher. The help of many personnel such as members of Panchayati Raj Institutions (Ward Panch, Up-Pradhan, Pradhan, BDC members, Zila Parishad members), members and office bearers of 'Mahila Mandals' 'Yuva Mandals' 'Self-help groups' local volunteers and teachers was obtained to contact the respondents. After approaching the respondent, a rapport used to be established with her. Each respondent was interviewed either in her house or outside her dwelling place, wherever found available. In case of urban respondents ward councilors were approached for this purpose. Before interviewing the respondents, the purpose of the study was explained to them. They were fully assured that the information being disseminated by them would be kept confidential and nothing untoward would happen to them. They were also enlightened about the fact that the study was purely of academic nature and had no other motives. Though the interview schedule was in English, yet in order to obtain correct information and to make the respondents feel at home during the course of interview each of the questions was narrated in Pahari – the local dialect, and Hindi, used for conversation in this region. An atmosphere of privacy was maintained between the respondent and the researcher in order to facilitate healthy interaction during the process of interview. The responses given by each respondent were carefully recorded in the interview schedule. On an average, each interview consumed an hour. In case the respondent was not available at the time of field study or refused to be interviewed, then the respondent available in consecutive household was considered for interview. Majority of the respondents, with a few exceptions showed a keen interest in disseminating the requisite information and were very hospitable and cooperative. Fifteen ‘Focus Group Discussions’ (FGDs), one each in all the nine sample villages and six in the Hamirpur town were organized with some people, in both the sampling units (rural and urban) to collect qualitative information related to different aspects of old-age problems among the women.

4.9 Data Analysis and Interpretation

After the data collection each interview schedule was thoroughly scrutinized. The interview schedules having incomplete information were excluded. Then a coding design
was prepared and responses of schedules were coded accordingly. The data were then analyzed on computer using Statistical Product and Service Solutions (SPSS).

The multivariable tables were generated. The data was then decoded. Further, these tables were edited and reframed in MS-Word and MS Excel. The analysis and interpretation of data was done on the basis of frequencies and percentages. For testing association between characteristics of the respondents and old-age problems among women, Chi-square test of significance was applied. Inferences were drawn on the basis of statistical analysis. Secondary data were also used to support the results. Brief description of methods used is given below:

1) **Mathematical Methods**

Mathematical methods give snapshot view of any piece of information. In the present study, the data collected have been analyzed using mathematical methods such as simple average and percentage method where needed.

2) **Statistical Method**

Statistical methods provide an indispensable tool for collection, organizing, analyzing and interpreting data expressed in numerical terms. The statistical methods used in the study are:

   i) Descriptive Statistical Measures

   ii) Hypothesis Testing

i) **Descriptive Statistical Measures**

These are used to describe the characteristics of the sample of population in totality. They limit generalization to the particular group of individuals observed or studied. The statistical analysis based on the computation of descriptive statistical measures is mostly applied in action research and provides valuable information about the nature of the particular group. Following descriptive statistical techniques were used in the present study.
3. Chi-Square Test

This is a non-parametric test. Non-parametric data does not follow the normal curve of the probability and have unequal or un-measurable scale intervals between categories. Chi-square test is a test, which describes the magnitude of difference between observed frequencies and the frequencies expected under certain assumptions. With the help of Chi-square test, it is possible to find out whether such differences are significant or insignificant that could have arisen due to fluctuations of sampling. The information gathered through interview schedule from the respondents about awareness and adoption of family planning is in the form of nominal data. Hence Chi-square test is considered more appropriate in the present study. In the chi-square test, the only problem is to decide as to how the expected frequencies have to be arrived at. There is no hard and fast rule of it and the method of arriving at the expected frequencies would depend upon the nature of the problem. Once the expected value has been arrived at, the calculation of chi-square and its interpretation are very easy and involve the following steps:

a) Calculation of the expected frequencies, denoted by E.

b) Find out difference between observed and expected frequencies, denoted by (O-E).

c) Square up the various values of (O-E) or find out (O-E)^2 and divided each value of (O-E)^2 by the respective value of E or the expected frequency.

d) The value of (O-E)^2 and this will be the value of $X^2$. In other words $= (O-E)^2/E$.

e) Compare the calculated value of chi-square with the independent value of chi-square (available in tables) for the desired level of significance.

f) If the calculated value of Chi-square is more than the relevant table value the difference between observed and expected value is significant. If the calculated value of Chi-square is less than the table value the difference between observed and expected frequencies is not significant and could have arisen due to fluctuations of sampling.
The equation for chi-square is stated as follows:

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

Where, O refers to the observed frequencies

E refers to the expected frequencies

$\chi^2$ is symbol for chi-square test

4) Diagrammatic Method

In the present study the data collected have been analyzed with the help of ‘bar diagrams’, ‘pie diagrams’ and graphs to make it more comprehensible.

4.10 Difficulties during data collection

Collection of data from the respondents was not a smooth affair. It was really a tedious exercise to contact and interact with the respondents. Besides travelling on foot to approach the selected respondents, some of the respondents had to be contacted in the fields, religious congregations, social gatherings and local markets etc. The real problem was faced on having interface with the respondents and their family members. The situation used to be handled to ensure that the family members are kept away during the process of interviewing of the respondents. The people in general and a number of respondents in particular often misconstrued the researcher to be a government official from the department of Women Empowerment and Social Welfare or Health department deputed to have an assessment of state of elderly women. Many of such respondents would start narrating their woes and seeking financial help. Besides many used to be introvert and would take talking about their problems as encroachment into their personal life. It used to pose a problem of establishing rapport. In order to do away with the initial hesitation of among the respondents and to allay their apprehensions services of available personnel used to be taken. Such personnel included members of Panchayati Raj Institutions in the rural areas and members of Municipalities in the urban areas,
'Anganwari' workers, local educated persons and members of 'Mahila Mandals'. They used to be found quite helpful in mediating between the respondents and the researcher. Such an exercise used to make the respondents convinced about motives and intentions of the study. It ultimately used to facilitate healthy interaction with the respondents and extraction of the desired information. The respondents used to be assured that the information obtained would be kept strictly confidential and would be used only for research purpose. In nut shell, a lot of precious time and energy was consumed in approaching and convincing the respondents.

4.11 Significance of study

The significance of the study lies in its academic importance and practical utility. In fact that it is presumably the first study of its kind not only in the district of Hamirpur but also in Himachal Pradesh exclusively covering the area under study. Since the study region has been registering consistent growth in population of elderly women, the study throws light on various socio-economic, health and psychological problems this segment of population is facing in their twilight years. This investigation also enlightens about intangible factors including social institutions- family, marriage, caste, religion and education, beliefs, values, attitudes, perceptions, rituals and tangible factors such as income, land ownership, type of house and place of residence which affect old-age problems among women. It is discernible from this study that there is a significant gap between the problems being faced by women in old age and what policy makers think about. If necessary steps are not taken to bridge it, the elderly women, who otherwise are repository of knowledge, wisdom and experience, are likely to have worse time in the days to come. The study further reveals that fast spread of education, impact of modernization, ever growing individualism and materialism together are shaking the age old beliefs, rituals, values, customs and traditions which held the aged women in high esteem in the study area. Hence it emerges that more orientation of such cultural traits and social institutions to the needs, expectations and aspirations will go a long way in promoting the well being of elderly women. The findings of the study unearthed that there is imminent need to evolve multi-pronged strategy. Sensitization of the younger generations towards the needs of elderly women, inculcating sense of responsibility for
elderly females among members of family, developing a sense of taking pride in serving the women in their evening of life are some of the initial steps to be taken.

The present study has many limitations some of which are being given below;

i) Information about the problems being faced by elderly women was elicited from them only. The information they disseminated was not cross checked from other family members.

ii) Primary information was collected from one out of the total twelve districts in the state.

iii) Respondents were taken from nine villages out of total three hundred fifty four villages of the sampled tehsil.

Despite these limitations, however, our study casts some light on the socio-economic, health and psychological problems among the elderly women.

**Meaning of Technical Terms**

Many technical terms have been used in different chapters while interpreting the facts and figures and analyzing the information in this study. Some of the more important terms so used are being described as under:

**Age:** It is measured in terms of the completed number of years.

**Sex ratio:** It refers to number of females per 1000 males in a population.

**Feminization of aging:** It refers to elderly females outnumbering the males\(^1\). During the NFHS-2 (1998-99), feminization of elderly had not started in India. However, the data obtained from Registrar General's Office based on Census of India 2001 shows 76.6 million elderly with 39.4 million females and 37.2 million males, meaning sex ratio being favourable to females, indicating beginning of feminization of ageing in India. The chances of women surviving men in the later years is increasing over the decades leading to increased life expectancy at 60 years and longer years of dependency.
**Elder abuse:** Also called mistreatment or maltreatment, elder abuse is harmful behaviour directed towards older persons by informal or formal caregivers who the older person loves, or trusts or on whom they depend for assistance. Elder abuse usually occurs in one of two locations: in elder’s home, usually called domestic abuse, and maltreatment in nursing homes or other long-term-care facilities referred to as institutional abuse. The World Health Organization offers the following general definition of abuse: “a single or repeated act, or lack of appropriate action, occurring within a relationship where there is an expectation of trust, which causes harm or distress to an older person.” Most researchers have opted to use the following definitions to operationalize the types of abuse and neglect encountered:

(i) **Psychological abuse:** when an older person is subjected to repeated or chronic verbal assaults which insult, threaten, humiliate or exclude. This also includes lack of affection, social isolation or denying the person the chance to make or participate in decisions which are in their own interests are included.

(ii) **Material/financial abuse:** misuse of money, possessions or property. This includes fraud or using an older adult’s funds for purposes contrary to their needs and interest.

**Neglect:** It refers to refusal or failure by those responsible to provide food, shelter, health care or protection for a vulnerable elder. The older person has poor hygiene or inadequate clothing or shows signs of malnutrition or untreated medical conditions or under medicated, lack assistance when eating or drinking.

**Passive or active neglect:** the withholding or items or care necessary for daily living, and can be intentional (active or physical) or non-intentional (passive).

**Self-neglect:** It has been identified as a form of abuse. It consists of a person’s failure to provide adequate care for him/herself. This form of abuse is different from the others in that there is no abuser involved. However relatives or others may be aware of the problem and fail to help.

**Geriatrics:** It is science dealing with the diseases, debilities, and care of aged persons. It is also study of the physical process and problems of aging; gerontology.
**Gerontology**: It is a branch of science that studies aging and the special problems of the aged.

**Senility**: It refers to the state or quality of being old, especially, being afflicted with the infirmity of body and mind that sometimes comes with old age. It is a condition of weakness of mind and body, usually associated with advanced age, characterized by the inability to remember simple, recent events, general confusion and bewilderment, and increasing debility.

**Rural-urban areas**: In the Census of India 2001, the definition of urban area adopted is as follows:

1. All places with a municipality, corporation, cantonment board or notified town area committee, etc.
2. A place satisfying the following three criteria simultaneously:
   i) Minimum population of 5,000;
   ii) At least 75 per cent of male working population engaged in non-agricultural pursuits; and
   iii) A density of population of at least 400 per sq. km. (1,000 per sq. mile).

**Household**: A ‘household’ is usually a group of persons who normally live together and take their meals from a common kitchen unless the exigencies of work prevent any of them from doing so. Persons in a household may be related or unrelated or a mix of both. However, if a group of unrelated persons live in a census house but do not take their meals from the common kitchen, then they are constituent of a common household. Each such person is to be treated as a separate household. Common kitchen is an important link in finding out whether it is a household or not. There may be one member households, two member households or multi-member households.

**Young and old populations**: The populations which have a higher proportion of children and young persons are termed as young populations, while those with lower proportion of children and a higher proportion of adults and old population are known as old
population. Ageing of a population is a process whereby the share of older persons in a population grows relative to that of younger persons. It is imperative to understand the distinction between individual person's ageing and the ageing of the populations. The former moves only in one direction and increases as the time passes. However, the populations can get older or younger in the sense the proportions of different age groups may undergo changes with the passage of time. The populations of the more developed nations are aged.

**Measures of ageing**: There are several measures of ageing. Some of the measures which are in vogue are briefly described as under:

i) **The proportion or percentage**: The ageing of the population is measured with the use of simple measure—the proportion or percentage of elderly people in the total population, for example in India according to the 2001 census, the percentage of population of age 60 years and above is 7.4 per cent.

ii) **Old dependency ratio**: It refers to the ratio of elderly persons to total working population. The old dependency ratio indicates the burden of elderly persons (60 years and above) on the working population of age 15-59 years.

iii) **Median Age**: It is a measure to divide the population into two equal sizes—one having the population at ages above the median and the other below it. It is considered to be an appropriate single measure of the average age of the population. Population with median ages below 20 is usually classified as 'young' and the one having median age 30 years and above is classified as 'old'. Those having the median age between 20-29 years are termed as 'intermediate'.

iv) **The age-sex structure of population**: It is depicted with the help of a graphic measure—the age pyramid.
Present analysis has used all of the above mentioned measures at appropriate places.

**Successful aging:** Successful aging has been described as the maximization of the benefits associated with aging and the minimization of the losses. One criterion for aging successfully is the maintenance of good health and well-being late into the life span. One pathway to enhanced health and well-being is through involvement in productive activities. Productive activities are those that produce goods or services, whether paid for or not. Activities included in this definition are volunteering, working, and care giving.
REFERENCES


7. Ibid.

8. Ibid.