Chapter II
Literature Review, Rationale, Objectives and Hypotheses

In any research literature review is the starting point to have a clear idea about the nature of studies already carried out by previous researchers in a particular field. It helps the researcher to conceptualize the problem in a better way and in formulating the hypothesis aright. In the present study, findings of previous researchers on various aspects of violence against elderly people issues were reviewed and presented under the following sections:

2.1 Violence against Elderly Persons
2.2 Elderly People and Their Mental Health
2.3 Social Support of Elderly People and Their Coping Skills
2.4 Miscellaneous

2.1 Violence against Elderly Persons

Drawing on data from a case-control study of physical abuse of the elderly, Pillemer (1985) examined conflicting hypotheses: (1) that the increased dependency of an older person causes stress for relatives, who then respond with physical violence versus; (2) that the increased dependency of the abusive relative leads to maltreatment. The results of quantitative and qualitative analyses were consistent: the elderly victims were not likely to be more dependent, but were instead more likely to be supporting the dependent abuser. These findings have important implications for social exchange theory and for policy towards the aging.

Jeary (2005) reports on a Nuffield Foundation-funded qualitative research project into sexual abuse and sexual offending against elderly people,
undertaken with cooperation from HM Prison Service, the National Probation
Directorate and two social services departments. This is an under-researched
subject in the UK and the objective of this study was to contribute to the
knowledge base which informs the development of both policy and practice in
protecting vulnerable elderly people from sexual abuse and offending. The
paper presents findings relating to the abusers/offenders and their victims,
discussing the types of abuse, the circumstances, and the relationships between
perpetrator and abused. It reports on the impact of the sexual assaults on the
elderly victims, referring both to the immediate aftermath of the physical
violence and humiliation and to longer-term effects. There is discussion of
recurring themes which emerged in relation to the motivations and
characteristics of the perpetrators, including evidence that some were motivated
primarily by sexual gratification.

Biermann et al., (2011) did an epidemiological study to investigate
characteristics of assaults in the elderly aged 65 years and above from the
perspective of the victim and perpetrator. This population-based study included
23,142 assaults (according to §§ 224/226 StGB of German criminal law) that
were recorded in Bavaria, Germany, from 1999 to 2005. The population-based
ratio of serious crimes of battery for the elderly in comparison with the
reference population was markedly lower (0.10; 95% CI: 0.09–0.11) in suspects
aged more than 65 years and 0.08 (95% CI: 0.07–0.09) for the injured above 65
years. Elderly perpetrators differed significantly concerning the manner of
the assault (p < 0.001). They committed less crimes in urban areas (56.1% vs.
68.8%) and were victimized significantly more in rural areas (p < 0.001; 41.2%
vs. 30.2%). Violence in the elderly differs from that of the younger population.
Further research is warranted to establish prevention measures.

Drawing on data from a case-control study of physical abuse of the elderly, Karl
(1985) examined two conflicting hypotheses: (1) that the increased dependency
of an older person causes stress for relatives, who then respond with physical
violence versus (2) that the increased dependency of the abusive relative leads
to maltreatment. The results of quantitative and qualitative analyses are
consistent: the elderly victims were not likely to be more dependent, but were instead more likely to be supporting the dependent abuser. These findings have important implications for social exchange theory and for policy towards the aging.

The objective of Homer and Gildeard (1990) study was to assess the prevalence of abuse of elderly people by their carers and the characteristics of abusers and the abused. Information on abuse and risk factors was collected over six months from carers and patients. Risk factors were identified in the abused group and compared with those in a non-abused control group. Carers were interviewed at home; patients were examined in the wards of Putney and Barnes geriatric hospitals, London. All patients referred from any source for respite care to the geriatric services over a six month period and their carers. Results indicate that 45% of carers openly admitted to some form of abuse. Few patients admitted abuse. The most significant risk factor for physical abuse was alcohol consumption by the carer (p<0.001). Other significant risk factors were a poor pre-morbid relationship and previous abuse over many years. Abuse was often reciprocated and was associated with social dysfunction in many patients. Service delivery, respite care, and level of mental and physical disability were not significantly associated with abuse. The high level of abuse found in elderly patients in respite care was particularly associated with alcohol abuse and long term relationships of poor quality, which are difficult to change. Even with increased provision of services, care in the community may not be the best solution for these people.

Although the elderly are generally less likely to become the victims of violent crime compared to younger cohorts, they have unique and somewhat alarming patterns of victimization. In this regard Bachman and Meloy (2008) examined the extant literature on elderly victimization and presents homicide data from the Supplementary Homicide Reports and robbery and assault data from the National Crime Victimization Survey to illuminate the idiosyncratic vulnerabilities elderly individuals have to violence compared to their younger counterparts. In addition, research examined violence that occurs in nursing
homes as the result of staff-to-patient assaults and resident-to-resident assaults. Authors offered some steps for primary and secondary prevention of violence against the elderly people.

Hughes et al., (2012) did a systematic review and meta-analysis searching 12 electronic databases to identify primary research studies published between Jan 1, 1990, and Aug 17, 2010, reporting prevalence estimates of violence against adults (aged mainly ≥18 years) with disabilities, or their risk of violence compared with non-disabled adults. Authors included only studies reporting violence occurring within the 12 months before the study. We assessed studies with six core quality criteria, and pooled data for analysis. Findings revealed that of 10 663 references initially identified, 26 were eligible for inclusion, with data for 21 557 individuals with disabilities. 21 studies provided data suitable for meta-analysis of prevalence of violence, and ten for meta-analysis of risks of violence. Pooled prevalence of any (physical, sexual, or intimate partner) recent violence was 24.3% (95% CI 18.3-31.0) in people with mental illnesses, 6.1% (2.5-11.1) in those with intellectual impairments, and 3.2% (2.5-4.1) in those with non-specific impairments. We identified substantial heterogeneity in most prevalence estimates (I² >75%). We noted large uncertainty around pooled risk estimates. Pooled crude odds ratios for the risk of violence in disabled compared with non-disabled individuals were 1.50 (95% CI 1.09-2.05) for all studies combined, 1.31 (0.93-1.84) for people with non-specific impairments, 1.60 (1.05-2.45) for people with intellectual impairments, and 3.86 (0.91-16.43) for those with mental illnesses. Finally, authors concluded that adults with disabilities are at a higher risk of violence than are non-disabled adults, and those with mental illnesses could be particularly vulnerable. However, available studies have methodological weaknesses and gaps exist in the types of disability and violence they address. Robust studies are absent for most regions of the world, particularly low-income and middle-income countries.

According to Bachman and Meloy (2008), although the elderly are generally less likely to become the victims of violent crime compared to younger cohorts, they have unique and somewhat alarming patterns of victimization. This article
examines the extant literature on elderly victimization and presents homicide data from the Supplementary Homicide Reports and robbery and assault data from the National Crime Victimization Survey to illuminate the idiosyncratic vulnerabilities elderly individuals have to violence compared to their younger counterparts. In addition, research examining violence that occurs in nursing homes as the result of staff-to-patient assaults and resident-to-resident assaults is also highlighted. Policies aimed at both primary and secondary prevention of violence against the elderly are discussed.

As stated by Richard (1983) until 1978 no information was published about domestic mistreatment of the elderly in their homes by relatives or other domestic caregivers. Between 1978 and 1980 six separate investigations of neglect and abuse of elderly persons in their homes were conducted in the United States. Of these studies two were observational case studies, one was a review of medical records, two were mail surveys of human service providers and one was a field study with personal interviews with community practitioners and professionals. All of these investigations agree that a substantial but undocumented problem of domestic neglect and abuse of the elderly exists. The variety and severity of mistreatment ranges from reasonably benign to very severe, and causal theories are numerous. Therefore, author reviewed the existing and very limited state of knowledge in this new area of concern, and highlighted the findings of the Michigan field study with emphasis on a comparative analysis of findings among different kinds of community professionals and practitioners.

2.2 Elderly People, Their Mental and Physical Health Status

Jopp et al., (2006) examined the role of resources, beliefs & attitudes for happiness in old age. When individuals reach very old age, accumulating negative conditions represent a serious challenge to their capacity to adapt and are likely to reduce the quality of life. By examining happiness and is determinants in centenarians, this study investigated the proposal that
psychological resilience may come to an end in extremely old age. Data from the population based Heidelberg Centenarian Study indicated high levels of happiness. Basic resources (i.e., job training, cognition, health, social network, extraversion) explained a substantial proportion of variance in happiness, but some resource effects were mediated through self-referent belies (e.g., self-efficacy) and attitudes toward life (e.g., optimistic outlook). Results challenge the view that psychological resilience reaches a critical limit or that the self-regulatory adaptation system loses its efficiency in very advanced age.

Arthur (1978) discussed the importance of housing to the quality-of-life of the elderly and housing density was presented as a possible mediator of that quality. Two gerontological theories of social interaction, activity theory and disengagement theory, were compared for their ability to predict the effect of density upon the elderly. A case study was presented to facilitate that comparison. It was concluded that the general lack of finding deleterious effects of high housing density may be due to the need among the elderly for increased social interaction, as predictable from activity theory.

Berg (2008) examined within-individual and between-individual changes in life satisfaction in the oldest-old using different time metrics and studied life satisfaction within the context of psychosocial and health-related variables. Data were obtained from the Swedish OCTO-Twin Study of individuals aged 80 and older who were able to complete the Life Satisfaction Index-Z (LSI-Z). In Study I the association between life satisfaction and scales and questions regarding demographics, self-rated overall health and medically based health, functional capacity (instrumental and personal activities of daily living), cognitive function, depression, locus of control, and social network was investigated. Analyses indicated that social network quality, self-rated overall health, sense of being in control of one's life, widowhood, and depressive symptoms were associated with life satisfaction. A gender-specific pattern was found; self-rated overall health and depressive symptoms were related to life satisfaction in women, whereas widowhood was significantly associated with lower satisfaction among men. In Study II the associates identified in Study I;
perceived quality of social network, self-rated overall health, depressive symptoms, locus of control, and widowhood, in addition to financial satisfaction and the personality traits neuroticism and extraversion, were investigated as predictors of change in life satisfaction across four measurements over a 6-year period. Growth curve analysis showed a fairly consistent significant linear decline in life satisfaction. Certain markers predicted decrease in life satisfaction; the loss of spouse, particularly in men, and higher levels of depressive symptoms. Results suggest that life satisfaction is influenced by changes in psychosocial variables although there is an overall stability in level of life satisfaction in the oldest old. In Study III different time metrics were examined in the study of late life changes in life satisfaction. Findings of age-graded stability of life satisfaction, despite health-related losses distinctive of the oldest old, suggest that mortality-related processes could be more influential than chronological age. The study investigated changes in life satisfaction at 4 measurement occasions over a 6-year period using two competing parameterizations of time, chronological age and time-to-death. Growth curve analyses showed a linear decrease in both time-structures, but the time-to-death metric revealed a significantly better model fit. Notably, age, gender, SES, years to death, level or change in overall load of disease and self-rated health did not predict time-to-death related changes. Lower overall disease load was, however, related to higher levels of life satisfaction. In individuals with higher disease load, an external locus of control was related to lower satisfaction with life. Among those who rated their health as poor, a higher level of neuroticism was related to lower life satisfaction. The results suggest that a time-to-death metric was superior to chronological age to predict change in life satisfaction. In Study IV the relationships between life satisfaction and 25 specific chronic diagnoses were investigated. Problems with sleep, urinary incontinence and stroke were significantly related to life satisfaction in both men and women. Among men, angina pectoris and eczema were related to lower life satisfaction, whereas among women peptic ulcer was related to lower life satisfaction. The results confirm previous findings of a weak relationship between medically based measures of health and life satisfaction. However, health care and future studies of health and life satisfaction need to recognize and address that the meaning
and consequences of various diseases may differ among individuals and that
gender differences should be considered in this context. Overall findings from
the thesis demonstrate a homogenous decline in life satisfaction in the oldest-
old. Despite health-related losses, social network and personal resources
accounted for substantial inter-individual differences in life satisfaction. The
thesis demonstrated the need to analyse associates of life satisfaction at the
intra-individual level and within a broader context of psychosocial and health-
related variables also in late life.

In a cross-sectional survey, with 1558 men and 1553 women aged 65 to 87
years, Kvanme et al., (2011) aimed to assess the associations between mental
health (particularly anxiety and depression) and both the risk of malnutrition
and body mass index (BMI, kg/m2) in a large sample of elderly men and
women from Tromsø, Norway. The risk of malnutrition (combining medium
and high risk) was found in 5.6% of the men and 8.6% of the women.
Significant mental health symptoms were reported by 3.9% of the men and
9.1% of the women. In a model adjusted for age, marital status, smoking and
education, significant mental health symptoms (SCL-10 score ≥ 1.85) were
positively associated with the risk of malnutrition (odds ratio 3.9 [95% CI 1.7-
8.6] in men and 2.5 [95% CI 1.3-4.9] in women), the association was positive
also for subthreshold mental health symptoms. For individuals with BMI < 20.0
the adjusted odds ratio for significant mental health symptoms was 2.0 [95% CI
1.0-4.0]. Impaired mental health was strongly associated with the risk of
malnutrition in community living elderly men and women and this association
was also significant for subthreshold mental health symptoms.

Guglani et al., (2000) compared the psychological adjustment of grandmothers
from nuclear and extended families within British Hindu communities, and to
investigate the influence of cultural identity. Interviews were carried out with
Hindu grandmothers, mothers and granddaughters living in both nuclear and
extended families. Authors found that grandmothers were better adjusted in extended families than in nuclear families. This adjustment was in part mediated by the level of traditional belief
within the family. Elders whose granddaughters had an exclusively Indian or Hindu ethnic identity were better adjusted than those whose granddaughters included a British ethnic identity. This study confirmed findings from earlier studies that grandmothers in extended families were significantly better adjusted in comparison to those from nuclear families. Ethnic identity of the adolescent, independent of its salience and commitment to the adolescent, had a significant relationship to the grandmother's mental health.

Fredrik et al., (2000) evaluated the health status among the elderly in a village in Botswana and their pattern of health care utilisation. A descriptive study where all persons 60 years and older were invited to participate, including a medical examination, laboratory testing and a questionnaire aiming at gathering sociodemographic data. A group of 419 persons were identified as elderly in the village, out of which 337 were included. Main outcome measures-The general medical examination also included eye status, vision and hearing tests, nutritional status, blood pressure and registering of physical disabilities. Laboratory tests included haemoglobin, blood glucose, HIV antibodies and serum lipids. The questionnaire contained questions regarding family and civil status, self assessed general health, health problems experienced during the previous month, and health care utilisation. Questions also pertained to smoking, taking snuff, and alcohol consumption. Findings revealed that a majority (75%) of the elderly experienced good or only somewhat reduced health, while one quarter suffered more serious health problems. The most frequent health problems were related to the musculoskeletal system. Eye diseases, including cataract and blindness, were also common. The concentration of serum lipids is lower than the one found in the elderly population of Norway. Nutritional status indicated a relatively high prevalence (7%) of malnutrition. The majority of men were still married (87%), while most women were widowed (71%). Women reported more health problems than men, and they also reported more worries regarding their own life situation. There is a tendency for the elderly to seek assistance from the established clinics and other health facilities for their health problems. Worries are either kept to themselves or advice is sought from relatives. Traditional healers were not often
consulted for health problems or worries. Major health problems were identified among the elderly in this geographical area of Botswana. There is presently no health programme in Botswana aimed at the elderly. Some of the diseases and conditions found in this study could easily be identified and treated in the present health system through a health care programme.

2.3 Social Support of Elderly People and their Coping Skills

Taylor et al., (2000) examined the potential moderating effects of social support and age among older adults exposed to an acute stressor. Using a sample of 651 older persons, data were gathered in the spring of 1992 and in the fall of 1993, approximately 60 days after the peak impact of flooding in the Midwest. The samples were split into two age groups: The young old (person's age 55-69 years), and the old (70 years of age and older). The analysis focused on whether those 55-69 years old were more or less vulnerable to depression when experiencing flood loss and/or loss of support than those 70 years and older. Results indicate a positive association between pre and post flood depression & a negative association between social support and post flood depression. For the youngest of the 2 older age group, there is also a positive association between flood exposure & post flood depression, controlling for prior levels of depression. Age interactions reveal that social support moderately the effects of flood exposure on depression only for the younger age group.

Neal (2005) examined the age differences in stress-buffering function of social support. The purpose of the study is to see if there are age differences in the relationship between chronic financial strain, emotional support, and life satisfaction among people aged 65 and older. Data from a nationwide survey of older people (N= 1,5180) indicate that emotional support tends to reduce the noxious effects of economic problems on life satisfaction for the sample as a whole. However, the findings further reveal that the potential benefits of emotional support arise primarily among the oldest-old. In contrast, emotional
support does not offset the negative effects of financial strain on life satisfaction among the young-old.

Sougleris and Ranzijn (2011) reported based on a study of older community-dwelling Australian adults which aimed to test whether a relatively unexplored construct, proactive coping, could have a role in purpose in life, personal growth, and life satisfaction. A total of 109 women and 115 men (Mean age = 75.04 yrs, SD = 6.66) completed a questionnaires. The results of hierarchical multiple regression analyses indicated that proactive coping was a highly significant predictor of all three measures of well-being, after controlling for age and health. The effect on personal growth and purpose in life was particularly strong. Proactive coping does seem to be an important variable in the psychological well-being of older adults. However, the correlational nature of the design, and the likelihood of some conceptual overlap between the well-being variables, suggest that these inferences can only be tentative. Designing psychological interventions to improve proactive coping may help to improve quality of life at older ages. There is a need for experimental research to further explore the causal influence of proactive coping and for further theoretical work to determine the exact nature of proactive coping.

Dickinson and Gregor (2006) examined that using computer has no demonstrated impact on the well-being of older adults it means technology is frequently presented as a panacea for the support needs of the aging population, based in part upon the commonly cited assertion that computer and internet use has an empirically verified positive effect on the well-being of older people. In this work they review the studies that the assertion is based on and conclude that they do not support it. While the original studies rarely make unsupportable claims, the secondary literature which cites them is frequently very misleading; limitations include failure to distinguish between the effects of training support and computer use; misattributing causality; inappropriately generalizing results from different population.
2.4 Miscellaneous

Pedrick-Cornell and Gelles (1982) stated that the rapid emergence of elderly abuse as a social problem has led to the public dissemination of data derived from exploratory research. Authors assessed the state of knowledge of elderly abuse and examined the limitations of current research on the extent, patterns, and causes of elderly abuse and offered some viable suggestions for the researchers and practitioners.

Fredrik et al., (2006) did a study to find out the associations between neighbourhood level violence/fear of violence and physical activity among elderly people, accounting for somatic health. A multilevel regression analysis was conducted by MlwiN using contextual level variables provided by the Oslo City Council. A group of 3499 inhabitants aged 74/5 (53.2% of all invitees) were covered in the study. Findings revealed that 20.5% of the elderly were physically active less than one hour a week. Somatic health was clearly associated with physical activity among both men and women. Neighbourhood level violence was associated with physical activity only for men, while fear of violence was only associated with physical activity for women. Differences in somatic health did not explain differences in physical activity between neighbourhoods. These differences were explained by socioeconomic variables, and neighbourhood level violence/fear of violence. In a sample of presumably healthy 75/76 year olds in Oslo, the associations between neighbourhood level violence and physical activity (among men), and fear of violence and physical activity (among women), are of the same sizes as those between somatic health and physical activity. These two dimensions of violence have, in contrast with somatic health, an explanatory function in exploring differences in physical activity between neighbourhoods in Oslo.

Peter (1992) had written an article on population aging and social policy. According to Peter, as the life course currently is structured, old age is socially defined as a stage of life beginning in the early sixties, in which retirement from work and many other social responsibilities is expected. Few incentives exist for
older persons to make productive contributions to the society, and obstacles to their engagement in productive activities exist. Consequently, large transfers from the working population to the retired are required, and potential contributions of the elderly to societal well-being are lost. Further, adult children often face a long period of being responsible for their aging dependent parents. Changes occurring in the older population challenge this existing arrangement. Not only is the ratio of the older to younger adults increasing, but also an increasing proportion of adults entering old age have the ability to make significant contributions (i.e. they are well educated, healthy, economically secure, and politically astute). Concern over this growing mismatch between older people's abilities and the roles they are expected to fill leads to a discussion of social policy. How might social policy increase the productivity of the elderly and/or reduce the burden of supporting a growing dependent older population. Three major categories of policies responsive to this question are considered. The outcome of these policy debates will significantly shape the future of aging in the United States.

The article of Malin (2002) presents an analysis of boundary work in the context of care for the elderly, where violence appears to be widespread but is still relatively unacknowledged. Talk about aggressive patients was formulated in a particular way among workers in a nursing home. Nursing home staff described how the elderly residents sometimes slapped, pinched, or hit them. Although staff members could describe these acts as intentional, although they could hold patients responsible, and although this violence could end in injuries, demarcations were made such that aggressive acts were constructed as somehow not really "violence". As "violent" is an inherently exclusionary label, this downplaying can be seen as an effort to avoid pushing persons outside the boundary of normalcy and of continued acceptance. Placing the elderly's violence outside the boundaries of violence means that the elderly remain "care takers", the staff "caregivers", and the nursing home a "caring context".

Cambodia experienced violence during the rule of the Khmer Rouge in the 1970s. Many who died were the children or spouses of today's elderly.
According to Zachary et al., (2006), this may have resulted in an erosion of family support in a country where formal channels of assistance are virtually absent. This article examines the extent to which current Cambodian elderly experienced deaths of children or spouses, forced migration, and separation from family during the Khmer Rouge period and the extent to which these experiences are associated with adverse welfare conditions of older adults. Data come from a 2004 representative survey of persons aged 60 years and older. More than one in four report that a child died from violent causes during the Khmer Rouge period. More than one in five report death of multiple children. A striking, and on the surface counterintuitive, conclusion is that the impact of deaths on welfare is modest. The reasons, elucidated in the article, include close family integration, high fertility among the current generation of older adults, the probability that losses depended on family size, and the pervasiveness of poverty.

While recent decades have witnessed sharply divergent trajectories in the well-being of children and the elderly, little research explores the social-structural forces behind these trends. Scott and Stewart (1992) examined several key elements of Preston's theory relating relative age group size to the well-being of children and the elderly. First considered is the degree to which membership in a relatively large age group enhances well-being; second, the role of family structure in promoting well-being; third, differences between these processes for children and the elderly. An analysis of three indicators of group well-being—poverty, mortality, and suicide rates—for U.S. states provides mixed support for Preston's theory. Among the elderly, group size is inversely related to suicide and mortality, but unrelated to poverty. Contrary to Preston's view, larger group size diminishes the well-being of children. However, consistent with Preston's theory, family structure is substantially more important for the well-being of children than for the elderly.

Esther (2005) investigated differences between the general elderly population and elderly new immigrants from former Soviet Union countries in regard to the incidence of elder abuse and neglect, victims' characteristics, and perpetrators'
characteristics. In addition, the study sought to examine predictors of various types of abuse and neglect. Data collection was conducted over a 1-year period, during which 120 new cases of abuse and neglect were identified. Forty-eight of these cases were elderly new immigrants from former Soviet Union countries. Both groups significantly differed in terms of victims' and perpetrators' characteristics. Being a new immigrant was found to be a significant predictor of physical abuse and neglect. Implications for intervention and policy are discussed.

Peter (1982) analysed survey data to discover how fear of crime affects the elderly. Fear of crime is a less severe problem for the elderly than previous reports suggest. However, fear was related to neighborhood dissatisfaction and low morale, and, to a lesser extent, to involuntary isolation. The data did not support previous assertions that fear of crime was the most serious problem facing the elderly and there was no evidence that social support reduces the negative effects of fear on well-being.

Zachary et al., (2008) examined interactions between older adults living in rural areas of Thailand and Cambodia and their adult children. Thai data come from the Survey of the Welfare of the Elderly (N = 3,202 older adults and 17,517 adult children). Cambodia data were from the Survey of the Elderly in Cambodia (N = 777 older adults and 3,751 adult children). Results indicate that older adults in rural areas were not being abandoned, and supportive expressions such as visits and provision of material goods depend on living proximity, characteristics that relate to the needs and dependency of the older adult, and the life circumstances of adult children. These findings support an extension of an altruistic perspective that incorporates notions of vulnerability of older adults.

Martins et al., (2004) evaluated if the effects of particulate matter (PM$_{10}$) on respiratory mortality of elderly people are affected by socioeconomic status. The daily number of elderly respiratory deaths were modelled in generalised linear Poisson regression models controlling for long term trend, weather, and
day of the week, from January 1997 to December 1999, in six different regions of São Paulo City, Brazil. The regions were defined according to the proximity of air pollution monitoring stations. Three socioeconomic indicators were used: college education, monthly income, and housing. Main results: For a 10 μg/m³ increase in PM$_{10}$, the percentage increase in respiratory mortality varied from 1.4% (95% CI 5.9 to 8.7) to 14.2% (95% CI 0.4 to 28.0). The overall percentage increase in the six regions was 5.4% (95% CI 2.3 to 8.6). The effect of PM$_{10}$ was negatively correlated with both percentage of people with college education and high family income, and it was positively associated with the percentage of people living in slums. Conclusions: These results suggest that socioeconomic deprivation represents an effect modifier of the association between air pollution and respiratory deaths.

Lori Brown et al., (1994) investigated the reported association between low serum cholesterol concentration and severe depressive symptoms in an elderly population. Participants who completed their interview, including the Centers for Epidemiologic Studies' depression scale and consented to measurement of their cholesterol concentration were included in the study. Subjects—3939 men and women aged ≥ 71. χ² analysis, t tests, and multivariate regression analysis of the association between low cholesterol concentration and severe depressive symptoms. All analyses were stratified by sex, and multivariate analyses were adjusted for age, self reported health, physical function, number of drugs used, and weight loss. Findings revealed that depressive symptoms, cholesterol concentration, weight, and use of drugs were all associated with age in men and women. The relative odds of severe depressive symptoms (score ≥ 16) for those with low cholesterol concentrations (<4.14 mmol/l) were 1.9 (95% confidence interval, 1.1 to 3.3) for the older group of men and 1.8 (1.1 to 2.9) for the older group of women. This association was also observed when depressive symptoms were analysed as a continuous rather than a categorical variable. In multivariate models that adjusted for age, self reported health, physical function, number of drugs used, and weight loss, the association was substantially weakened. After several factors relating to health had been
controlled for, no significant association between low cholesterol concentration and severe depressive symptoms was found.

2.5 Rationale

The purpose of the present research was to understand the nature of violence experienced by the elderly population as well as their mental and physical health status. Very few studies have been carried out in the field of violence against elderly people across the world. No such study report was available on this issue from Kolkata. The study was carried out in Kolkata covering male and female elderly people.

2.6 Operational Definitions

Violence: The synonyms of violence are aggression, force, conflict & destruction. It may be defined as a specific form of force that involves the effort to destroy or injure an object perceived as an actual or potential source of frustration or danger or as a symbol there of. Sometimes it implies the aggressive action which is clearly destructive in its intent.

Elderly People: ‘Old’ or ‘Old Age’ or ‘Pensioner’ carry many meanings which are often implicit or even deliberately hidden. For e.g. we have to ask whether older people feel old and define themselves as old, or whether young people see them as separate and ‘old’. What are the boundaries? What are the experiences of being old? These words can be taken as unproblematic. For e.g. old age is defined as beginning at 65 in many context, but that is to oversimplify and to obscure differences of meaning, power and culture.

Psychological General Well-Being: People are different. They live in a variety of situations and they do not feel the same way through out their life. From a
practical viewpoint it is important to know how different persons feel with regard to their day-to-day concerns like their health or family.

**Subjective Happiness:** Subjective happiness which is measured the happiness of life like feelings, sociability & emotion.

**Life Satisfaction:** The word ‘Life Satisfaction’ which means to assess satisfaction with people’s lives as a whole but sometimes it does not assess the specific domain like health & finances and it allows to integrate and weigh these domains in whatever way which was choosing by subjects.

**Security and Insecurity Feeling:** It means the person’s health and sex appropriateness, abilities, self-confidence, self-acceptance, worthiness, present, past and future beliefs and conviction, shame and guilt feeling, sociability and emotions.

**2.7 Objectives**

1. To study the demographic and socio-economic background of the elderly people staying in Old Age Homes in and around Kolkata.
2. To study the casual and contributory factors responsible for staying in old age homes.
3. To study the nature of violence experienced by elderly people in West Bengal.
4. To study the perceived psychological general well-being of the elderly people.
5. To study the satisfaction in life of the elderly people.
6. To study the subjective happiness of the elderly people.
7. To study the general mental health i.e., feeling of security and insecurity of the elderly people.
8. To study the nature of social support for the elderly people.
9. To suggest need-based measures for course corrective measures.
2.8 Hypotheses

The following hypotheses were formulated for verification:

1. Male and female elderly people do not differ significantly in terms of feeling of insecurity.
2. Male and female elderly people do not differ significantly in terms of feeling of neglect.
3. Male and female elderly people do not differ significantly in terms of mental harassment.
4. Male and female elderly people do not differ significantly in terms of physical violence.
5. Male and female elderly people do not differ significantly in terms of social support.
6. Male and female elderly people perceive family environment to be comfortable.

7. Psychological general well-being of male and female elderly people differs significantly.
8. Psychological general well-being of married and unmarried elderly people differs significantly.
9. Psychological general well-being of elderly people who experienced any sort of neglect and who did not experience the same differs significantly.
10. Psychological general well-being of elderly people who experienced any sort of mental harassment and who did not experience the same differs significantly.
11. Psychological general well-being of elderly people who experienced physical violence and who did not experience the same differs significantly.

12. Subjective happiness of male and female elderly people differs significantly.
13. Subjective happiness of married and unmarried elderly people differs significantly.
14. Subjective happiness of elderly people who experienced any sort of neglect and who did not experience the same differs significantly.
15. Subjective happiness of elderly people who experienced any sort of mental harassment and who did not experience the same differs significantly.
16. Subjective happiness of elderly people who experienced physical violence and who did not experience the same differs significantly.
17. Life satisfaction of male and female elderly people differs significantly.
18. Life satisfaction of married and unmarried elderly people differs significantly.
19. Life satisfaction of elderly people who experienced any sort of neglect and who did not experience the same differs significantly.
20. Life satisfaction of elderly people who experienced any sort of mental harassment and who did not experience the same differs significantly.
21. Life satisfaction of elderly people who experienced physical violence and who did not experience the same differs significantly.

22. Feeling of insecurity of male and female elderly people differs significantly.
23. Feeling of insecurity of married and unmarried elderly people differs significantly.
24. Feeling of insecurity of elderly people who experienced any sort of neglect and who did not experience the same differs significantly.
25. Feeling of insecurity of elderly people who experienced any sort of mental harassment and who did not experience the same differs significantly.
26. Feeling of insecurity of elderly people who experienced physical violence and who did not experience the same differs significantly.