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ATTITUDES AS WE MOVE TOWARDS AN OLDER AUSTRALIA

What are the implications to dentistry of an expanding older population?

This thesis is submitted in partial requirement towards a Diploma of Public Health (Dent.), University of Sydney.

PATRICK JOHN SHANAHAN, B.D.Sc. (W.A.)
SUMMARY

This thesis aims to explore the demography of the Aged in Australia; how negative attitudes are formed early in life, and reinforced throughout life by various mediums. The persistence of these negative attitudes has certain implications for those who are responsible for caring for the Aged, as it can, and does, impinge on the quality of care provided. The writer considers this aspect under education of health professionals. Some basic concepts of psychology are introduced, and applied in the sections dealing with Attitudes of the Aged and Attitudes towards the Aged.

In the second part of this thesis the writer ties in what has been extrapolated from the previous sections, and then arrives at certain conclusions as to the implications for dentistry.

These conclusions are derived from the following FACTS.

1. The Aged are increasing in number;
2. They are living longer;
3. They are healthier;
4. The institutionalised Age represent only 5% of their number;
5. Government policy is to maintain them within the community as long as is possible with domiciliary services;
6. They are becoming more dentate, therefore, treatment needs are changing;
7. Different aged cohorts have different expectations. This is influenced by their life experience and its relation in historical time;
8. Negative attitudes towards the Aged, and of the Aged, create a barrier to the provision of optimal care.

In each section the writer arrives at certain conclusions, but throughout the thesis emphasis has been placed on the totality of the individual. For this reason co-operation with other disciplines is stressed.
Many disciplines have specialised knowledge, which limits their appreciation of peripheral issues. Gerontology, therefore, is the emergent discipline, which allows this mutual sharing of knowledge to the ultimate benefit of the Aged.

The writer has not focused solely on dentistry in researching this thesis. It has involved liaison with sociologists, psychologists, nurses, voluntary care personnel, administrators, demographers, statisticians, Offices of the Council for the Ageing, doctors involved in extended care, policy planners, nursing home supervisors, and the Aged themselves. From this diversity of individuals, the writer has become aware not only of a dental problem, but a real social issue which should concern us all.
ACKNOWLEDGEMENTS.

The author, Patrick John Shanahan, B.D.Sc (W.A.) wishes to acknowledge the assistance of Associate Professor Peter D. Barnard, Dept. Preventive Dentistry, University of Sydney, without whose encouragement and guidance this thesis would not have been completed.
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CONCLUSIONS

REFERENCES
1. INTRODUCTION

Currently, Australia's population aged 60 years or more is growing at a rate of 2.5 per cent per annum, nearly twice as fast as the population as a whole (Hugo and Wood, 1984). This 'ageing' of Australia's population in the 1980's was forecast by the demographers writing a decade ago, but as will be shown later (Demography), the population projections have significantly underestimated the rate of growth of the aged population.

The implications of this state of affairs has aroused the attention of many disciplines because of the impact it will have in the areas of politics, economics, medicine, sociology, welfare services and ethics. What is of even greater concern is how little is known about the aged.

Anna Howe (1981) in her book 'Towards an older Australia' remarks on the subject thus, "The position of older people in Australian society and the social implications of an expanding older age group have attracted remarkably little attention in this country, even though the demographic trends of ageing have been evident for some years now. Social debate in the post-war years has been dominated by the issues of youth; the persistent view of Australia as a young country has led to more concern being expressed about the declining birth rate, the major factor contributing to the ageing of the population, than the outcome in terms of the situation of the aged themselves".

What is happening in Australia is not unique, 'Ageing 2000' (United Nations, 1982) reports on the findings of an international survey on the problems of the aged. It was carried out by the Sandoz Institute (Geneva) in consultation with the United Nations Center for Social Development and Humanitarian Affairs, and offered as a contribution to the World Assembly on Ageing (Vienna, 26 July - 6 August, 1982).
It states, "Many nations find themselves with larger populations of elderly persons than ever before. Demographic ageing is a consequence of falling birth rates and increasing life expectancy, themselves a reflection of improved living standards and health care. As the title of this volume states, the world is faced with a challenge. This must not be construed only as a challenge to meet problems - it is also a challenge to recognise and make use of new potentials. In the more developed countries the problems for society and for the elderly individuals themselves is already felt acutely. In many countries at an earlier stage of development, the problems are barely perceived directly, are beginning to be understood vicariously, and thus are recognised as likely to become severe unless suitable and timely measures are taken".

The participating countries in this survey were - Australia, Brazil, Egypt, Federal Republic of Germany, France, India, Israel, Italy, Japan, Kenya, Nigeria, Philippines, Poland, Sweden, United Kingdom and the United States of America. In the overall summary of the results of this survey, which, of course, focused on what was seen as the major problems and the remedies each country would consider feasible solutions to meet those problems, there was one problem common to all - AGEISM.

'Ageism' is a word coined by Robert Butler (1975) and it refers to the social stereotyping of older people as well as the social discrimination against them. THIS, then becomes the theme of this thesis.

It is based on a review of current literature in addition to some of the writer's personal observations. As Anna Howe (1981) pointed out little had been written on the aged in Australia at the time she wrote her book in 1981, although this has changed over recent years with studies at the Australian National University in Canberra (Family Project) and Flinders University
in South Australia. The writer will be drawing on material from the United States and the United Kingdom for the most part, except where material relevant to Australia must be used as in 'Demography'.

The first Chapter will deal with Demography of the aged in Australia. It will focus on the changes which have taken place over recent years, the distribution of the well elderly, the homebound, and the institutionalised, and their numbers. A short description of research methods used will follow. Successive chapters will deal with Attitudes towards the Elderly, Attitudes of the Elderly and finally what are the implications for dentistry of this changing population.
1.1 REFERENCES


2. Howe, Anne L. 'Towards an Older Australia', 1981, University of Queensland Press.


2. DEMOGRAPHIC PROFILE OF THE AGED

2.1 Size of the Aged Population.

In the post-war years the aged population of Australia has more than doubled from 604,900 as enumerated in the 1947 Census to the estimated 1,401,500 in June, 1980. The 1981 population projection compiled by the Australian Bureau of Statistics (A.B.S.) indicated by the year 2001 the aged population could number 2,338,700 (Table 2.1).

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<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Age group (years)</td>
<td>At 30 June</td>
</tr>
<tr>
<td><strong>MALES</strong></td>
<td></td>
</tr>
<tr>
<td>1947</td>
<td>115.5</td>
</tr>
<tr>
<td>1954</td>
<td>143.1</td>
</tr>
<tr>
<td>1961</td>
<td>169.1</td>
</tr>
<tr>
<td>1966</td>
<td>161.4</td>
</tr>
<tr>
<td>1971</td>
<td>186.2</td>
</tr>
<tr>
<td>1976</td>
<td>215.3</td>
</tr>
<tr>
<td>1980</td>
<td>240.7</td>
</tr>
<tr>
<td>Projected(a)—</td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>262.2</td>
</tr>
<tr>
<td>1991</td>
<td>311.5</td>
</tr>
<tr>
<td>1996</td>
<td>325.8</td>
</tr>
<tr>
<td>2001</td>
<td>312.6</td>
</tr>
<tr>
<td><strong>FEMALES</strong></td>
<td></td>
</tr>
<tr>
<td>1947</td>
<td>125.8</td>
</tr>
<tr>
<td>1954</td>
<td>160.2</td>
</tr>
<tr>
<td>1961</td>
<td>184.7</td>
</tr>
<tr>
<td>1966</td>
<td>195.0</td>
</tr>
<tr>
<td>1971</td>
<td>209.2</td>
</tr>
<tr>
<td>1976</td>
<td>245.1</td>
</tr>
<tr>
<td>1980</td>
<td>280.2</td>
</tr>
<tr>
<td>Projected(a)—</td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>301.8</td>
</tr>
<tr>
<td>1991</td>
<td>348.5</td>
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<td>1996</td>
<td>353.3</td>
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<tr>
<td>2001</td>
<td>343.0</td>
</tr>
<tr>
<td><strong>PERSONS</strong></td>
<td></td>
</tr>
<tr>
<td>1947</td>
<td>241.3</td>
</tr>
<tr>
<td>1954</td>
<td>303.3</td>
</tr>
<tr>
<td>1961</td>
<td>333.8</td>
</tr>
<tr>
<td>1966</td>
<td>356.4</td>
</tr>
<tr>
<td>1971</td>
<td>395.6</td>
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<tr>
<td>1976</td>
<td>460.4</td>
</tr>
<tr>
<td>1980</td>
<td>520.9</td>
</tr>
<tr>
<td>Projected(a)—</td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>565.0</td>
</tr>
<tr>
<td>1991</td>
<td>660.0</td>
</tr>
<tr>
<td>1996</td>
<td>679.1</td>
</tr>
<tr>
<td>2001</td>
<td>655.7</td>
</tr>
</tbody>
</table>

(a) 1981 projection series. See Technical notes.
While the number of aged persons is increasing, the age structure of the population 65 years and over is also changing. In 1947, the median age of the aged population was 71.7 years. In 1980, this had increased to 72.2 years. It is estimated that by the year 2001 the median age could be as high as 74.1 years (Table 2.2).

### TABLE 2.2 AGED PERSONS: MEDIAN AGE (Years).

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<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>71.4</td>
<td>71.1</td>
<td>71.8</td>
<td>71.3</td>
<td>71.4</td>
<td>71.9</td>
<td>72.4</td>
<td>72.3</td>
</tr>
<tr>
<td>Females</td>
<td>71.9</td>
<td>71.8</td>
<td>72.8</td>
<td>72.9</td>
<td>72.8</td>
<td>73.3</td>
<td>74.1</td>
<td>74.0</td>
</tr>
<tr>
<td>Persons</td>
<td>71.7</td>
<td>71.5</td>
<td>72.4</td>
<td>72.1</td>
<td>72.2</td>
<td>72.7</td>
<td>73.3</td>
<td>74.1</td>
</tr>
</tbody>
</table>

(1) 1981 projection series See Technical notes.

Changes in the size and composition of the aged population are brought about by three factors - the number reaching age 65 years and so entering the aged population each year, the level of net migration of aged persons, and the mortality trends specific to the aged population. The importance of these three factors are examined below.

#### 2.1.1. Entrance to the aged population

Table 2.3 shows that the number of persons reaching age 65 each year has increased from 56,900 to 110,800 in 1980. This reflects in part the increase in the number of births 65 years previously. Births increased from 80,000 in 1881 to 138,000 in 1914. The increase in the number of entrants to the aged population has been affected by reduced mortality rates among younger persons, allowing a higher proportion to reach age 65.

Net migration of younger persons who survive to age 65 has also affected the number of new entrants into the aged population. At the 1976 Census 24.1 per cent of persons aged 65 had been born overseas.
### TABLE 2.3 AGED POPULATION: APPROXIMATE SOURCE OF CHANGE (,000).

<table>
<thead>
<tr>
<th>Year</th>
<th>Persons aged 65 years(a)</th>
<th>Deaths (prorated)(b)</th>
<th>Net migration</th>
<th>Estimated range in aged population(c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1946-47</td>
<td>56.9</td>
<td>40.8</td>
<td>n.a.</td>
<td>16.1</td>
</tr>
<tr>
<td>1953-54</td>
<td>71.1</td>
<td>47.7</td>
<td>n.a.</td>
<td>20.6</td>
</tr>
<tr>
<td>1960-61</td>
<td>73.5</td>
<td>54.7</td>
<td>n.a.</td>
<td>19.3</td>
</tr>
<tr>
<td>1963-66</td>
<td>82.9</td>
<td>64.2</td>
<td>n.a.</td>
<td>20.1</td>
</tr>
<tr>
<td>1971-72</td>
<td>90.8</td>
<td>69.3</td>
<td>1.7</td>
<td>22.3</td>
</tr>
<tr>
<td>1973-74</td>
<td>94.1</td>
<td>69.8</td>
<td>1.5</td>
<td>26.4</td>
</tr>
<tr>
<td>1974-75</td>
<td>94.9</td>
<td>72.3</td>
<td>0.9</td>
<td>29.1</td>
</tr>
<tr>
<td>1975-76</td>
<td>98.3</td>
<td>71.8</td>
<td>1.1</td>
<td>27.7</td>
</tr>
<tr>
<td>1976-77</td>
<td>104.3</td>
<td>71.6</td>
<td>0.7</td>
<td>34.0</td>
</tr>
<tr>
<td>1977-78</td>
<td>106.9</td>
<td>72.3</td>
<td>1.7</td>
<td>36.6</td>
</tr>
<tr>
<td>1978-79</td>
<td>108.2</td>
<td>71.0</td>
<td>1.9</td>
<td>41.4</td>
</tr>
<tr>
<td>1979-80</td>
<td>110.8</td>
<td>72.3</td>
<td>3.0</td>
<td>41.8</td>
</tr>
</tbody>
</table>

#### 2.1.2. Mortality trends in the aged population.

The 1981 ABS survey provided somewhat of a surprise, because the projections made by the National Population Inquiry (1975) and the ABS (1976, 1978) significantly underestimated the rate of growth of the aged population. Hugo ("Projecting Australia's aged population: problems and implications", Journal of the Australian Population Association, Volume 1, Autumn, 1984) points out "The major discrepancies between the projected and actual numbers of older Australians in 1981 are thus due to our failure to anticipate the rapid mortality decline among the older population which has occurred in recent years". Later he states "For the first time a decline in mortality has been dominated by decreases in mortality in the older age groups. It represents a new era in mortality decline which, if it continues will have significant implications for the ageing of the total population. The major cause of these changes has been the reduction in death from ischaemic heart disease" (Wood and Hugo, 1983).

#### 2.1.3. Migration

As shown in (a) above, the number of younger migrants who survive to become entrants to the aged population is significant. However, the available data on net migration among the aged population itself shows that its effect
on the number of aged persons is very small. In 1979-80 the net migration of aged persons was around 3,000 (Table 2.3).

The overall conclusion from Table 2.3 is that the growing number of new entrants into the aged population is the main factor in its increase in size since 1947; a secondary but increasingly important factor in the increase has been the decline since 1971 in the mortality rate of the aged.

The importance of a continuing decline in mortality to the size of the aged population in the future can be seen from an examination of the population projections which use differing assumptions of mortality levels.

Table 2.4 shows the projected size of the aged population in the year 2001 given in the ABS 1978 projection series A and C and the 1981 projection.

**TABLE 2.4 AGED POPULATION: PROJECTIONS (a) (,000).**

<table>
<thead>
<tr>
<th>Year</th>
<th>1978 Projections</th>
<th>1981 Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Series A</td>
<td>Series D</td>
</tr>
<tr>
<td>1981</td>
<td>1,412.4</td>
<td>1,416.1</td>
</tr>
<tr>
<td>1986</td>
<td>1,557.5</td>
<td>1,589.6</td>
</tr>
<tr>
<td>1991</td>
<td>1,728.8</td>
<td>1,815.3</td>
</tr>
<tr>
<td>1996</td>
<td>1,845.8</td>
<td>2,009.7</td>
</tr>
<tr>
<td>2001</td>
<td>1,891.3</td>
<td>2,149.9</td>
</tr>
</tbody>
</table>

For illustrative purposes series A and D of the 1978 projections show the difference in the projected size of the aged population in the year 2001, using the same fertility and migration assumptions, but different assumptions on mortality. Series A, which allows for no decline in mortality except for a slight decline in infant mortality, gives a predicted aged population of 1,891,300 in 2001. Series D, which assumes a decline in mortality rate of 1.5 per cent per year, predicts an aged population of 2,149,900. The 1981 projection which allows for lower fertility, higher migration and an annual 1.5 per cent decline in mortality (from the lower current mortality rate) predicts an aged population in the year 2001 of 2,338,700. The average annual decline in the standardised death rates for males and females was in fact 2.1 per cent and 2.7 per cent respectively.
2.2 Proportion of the population who are aged.

Between 1947 and 1980, the proportion of the Australian population who were aged rose from 8 per cent to 9.6 per cent and is estimated that by the end of the century this proportion will have risen to 11.7 per cent (Table 2.5).

### TABLE 2.5 POPULATION BY AGE: ACTUAL AND PROJECTED.

<table>
<thead>
<tr>
<th>Year</th>
<th>0-14 (000)</th>
<th>15-64 (000)</th>
<th>65 and over (000)</th>
<th>Total (000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947</td>
<td>1,899.1</td>
<td>5,026.6</td>
<td>604.9</td>
<td>7,574.4</td>
</tr>
<tr>
<td>1954</td>
<td>2,563.3</td>
<td>5,677.2</td>
<td>746.0</td>
<td>8,986.5</td>
</tr>
<tr>
<td>1961</td>
<td>3,177.0</td>
<td>6,457.0</td>
<td>894.2</td>
<td>10,508.2</td>
</tr>
<tr>
<td>1966</td>
<td>3,392.5</td>
<td>7,711.6</td>
<td>986.4</td>
<td>11,650.5</td>
</tr>
<tr>
<td>1971</td>
<td>3,707.8</td>
<td>8,333.3</td>
<td>1,091.1</td>
<td>12,532.2</td>
</tr>
<tr>
<td>1976</td>
<td>3,766.8</td>
<td>8,912.6</td>
<td>1,236.1</td>
<td>13,915.5</td>
</tr>
<tr>
<td>1980</td>
<td>3,697.4</td>
<td>9,517.0</td>
<td>1,401.5</td>
<td>14,615.9</td>
</tr>
<tr>
<td>Projected</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>3,751.1</td>
<td>10,573.2</td>
<td>1,565.8</td>
<td>15,933.2</td>
</tr>
<tr>
<td>1991</td>
<td>3,961.0</td>
<td>11,368.7</td>
<td>1,925.2</td>
<td>17,355.0</td>
</tr>
<tr>
<td>1996</td>
<td>4,313.3</td>
<td>12,102.3</td>
<td>2,166.2</td>
<td>18,581.9</td>
</tr>
<tr>
<td>2001</td>
<td>4,568.5</td>
<td>13,002.9</td>
<td>2,388.7</td>
<td>19,958.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>0-14 (Per cent)</th>
<th>15-64 (Per cent)</th>
<th>65 and over (Per cent)</th>
<th>Total (Per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947</td>
<td>25.1</td>
<td>66.9</td>
<td>8.0</td>
<td>100.0</td>
</tr>
<tr>
<td>1954</td>
<td>28.5</td>
<td>63.2</td>
<td>8.3</td>
<td>100.0</td>
</tr>
<tr>
<td>1961</td>
<td>30.2</td>
<td>61.3</td>
<td>8.5</td>
<td>100.0</td>
</tr>
<tr>
<td>1966</td>
<td>29.4</td>
<td>62.1</td>
<td>8.5</td>
<td>100.0</td>
</tr>
<tr>
<td>1971</td>
<td>28.7</td>
<td>62.0</td>
<td>9.3</td>
<td>100.0</td>
</tr>
<tr>
<td>1976</td>
<td>27.1</td>
<td>64.0</td>
<td>8.9</td>
<td>100.0</td>
</tr>
<tr>
<td>1980</td>
<td>25.3</td>
<td>65.1</td>
<td>9.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Projected</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>23.5</td>
<td>66.2</td>
<td>10.4</td>
<td>100.0</td>
</tr>
<tr>
<td>1991</td>
<td>23.0</td>
<td>65.9</td>
<td>11.2</td>
<td>100.0</td>
</tr>
<tr>
<td>1996</td>
<td>23.2</td>
<td>65.1</td>
<td>11.7</td>
<td>100.0</td>
</tr>
<tr>
<td>2001</td>
<td>23.0</td>
<td>65.3</td>
<td>11.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

While the proportion of aged persons is increasing Australia's population is still relatively young compared with most European countries and other countries where life expectancy is high. The United Nations Demographic Year Book in 1975 shows that the proportion of aged persons in the populations of Western Europe and Northern Europe was 14 per cent. In the same year, aged persons in Australia accounted for 9.6 per cent of the population. This is comparable with the North American figure of 10 per cent.

The three main factors affecting the age structure of the population are net migration, mortality trends, and fertility rates.

2.2.1. Migration

Migration since 1947 has tended to keep down the proportion of aged in the Australian population. The large post-war migration consisted predominantly of young adults. Hugo comments on migration thus, "It is interesting to note that the relative discrepancy between the projected
and actual net gains of older migrants increased with increasing age, reaching almost two thirds for the 75+ age group. However, when we examine the distribution of the total discrepancy between the projected and actual older populations, we see that the largest contributor to the net migration shortfall is in 60-64 age group where it accounts for 13 per cent an over-estimation of mortality accounts for 87 per cent. On the other hand, net migration under projection accounts for less than 5 per cent of the discrepancy in the 75+ age group. Hence, although unanticipated net migration gains among the aged have been a significant contributor to the 1970's based projections underestimating the growth of the aged population, their contribution to this under-estimation has been less than a tenth that of our failure to anticipate decreased mortality among the aged. In fact, if we consider only the 65+ age group the proportion of the discrepancy contributed by net migration falls from 8.7 to 7.8 per cent.

2.2.2. Mortality.

The drop in the mortality rates has had a more complex effect on the age structure of the population. The mortality rate has declined for nearly all age groups since 1947 and this will result in a larger proportion of each cohort of births and of migration reaching age 65, although reduction in age-specific mortality can have the effect of reducing the proportion of the population who are aged 65 and over (by increasing the numbers of persons in the lower and middle age groups), there is little scope for this to occur in Australia's population. Low mortality in the younger age groups currently ensures that 95 per cent of persons survive to age 40 from birth. A possible further fall in the rate of infant mortality may push this proportion higher, but there is clearly little opportunity for declining mortality to influence significantly the relative size of the population in the younger age groups. Reductions in mortality could, however, increase
the size of the aged population substantially as higher proportions of the birth cohorts enter the 65 and over age group and those over 65 survive longer. Present downward trends in Australian mortality will therefore increase the proportion of the population 65 years and over.

2.2.3. Fertility

The major factor affecting the age distribution of the population at any time is the relative number of children born in each year, for it is the survivors of those varying numbers of births that, together with migrants, will make up the present population.

Between 1947 and 1971 while fertility was high, the proportion of the population aged 65 years and over, fluctuated between 8 and 8.5 per cent. Since fertility (and hence the relative size of the younger population) started to decline in 1972, the aged population has risen to 9.6 per cent of the population in 1980, and the 1981 population projection, which uses the assumption of a continuing low fertility, estimates the aged population as 11.7 per cent of the population in the year 2001. This is associated with a projected decline in the proportion of the population aged 0-14 years from around 25 per cent of the population in 1980 to 23 per cent in 2001 (Table 2.5). The combined effect of these two different movements is that the overall dependent age ratio should remain fairly stable until the end of the century (Table 2.6).

TABLE 2.6 DEPENDENT AGE RATIOS(a): ACTUAL AND PROJECTED.

<table>
<thead>
<tr>
<th>Year</th>
<th>Age group (years)</th>
<th>Dependent age ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-14</td>
<td>65 and over</td>
</tr>
<tr>
<td>1947</td>
<td>0.37</td>
<td>0.12</td>
</tr>
<tr>
<td>1954</td>
<td>0.45</td>
<td>0.13</td>
</tr>
<tr>
<td>1961</td>
<td>0.49</td>
<td>0.14</td>
</tr>
<tr>
<td>1966</td>
<td>0.47</td>
<td>0.14</td>
</tr>
<tr>
<td>1971</td>
<td>0.46</td>
<td>0.13</td>
</tr>
<tr>
<td>1976</td>
<td>0.42</td>
<td>0.14</td>
</tr>
<tr>
<td>1980</td>
<td>0.39</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td><strong>Projected(b)</strong></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>0.35</td>
<td>0.16</td>
</tr>
<tr>
<td>1991</td>
<td>0.35</td>
<td>0.17</td>
</tr>
<tr>
<td>1996</td>
<td>0.36</td>
<td>0.18</td>
</tr>
<tr>
<td>2001</td>
<td>0.35</td>
<td>0.18</td>
</tr>
</tbody>
</table>
2.3 Characteristics of the Aged.

2.3.1 Age and Sex Composition

As was noted earlier, the aged population is itself growing older. In 1947, persons aged 75 and over accounted for less than a third of all aged persons. In 1980, 35.5 per cent of the aged population were 75.5 years and over and it is estimated that by the year 2001 the proportion could grow to nearly 46 per cent (Table 2.7).

<table>
<thead>
<tr>
<th>TABLE 2.7 PERSONS AGED 65 YEARS AND OVER AS PROPORTION OF TOTAL AGED POPULATION (PER CENT).</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Actual</strong></td>
</tr>
<tr>
<td>Males</td>
</tr>
<tr>
<td>Females</td>
</tr>
<tr>
<td>Persons</td>
</tr>
</tbody>
</table>

Women outnumber men in the aged population. Over the last thirty years, the male/female ratio of the aged has declined from 88 males per 100 females in 1947 to 72 males per 100 females in recent years. The male/female ratio also declines with age, and in 1980 there were only forty males aged 85 years and over for every one hundred females in this age group (Table 2.8). These trends reflect, in part, the greater decline in mortality rates for aged females.

<table>
<thead>
<tr>
<th>TABLE 2.8 AGED PERSONS: MALE / FEMALE RATIO.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age group (years)</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1947**</td>
</tr>
<tr>
<td>1949</td>
</tr>
<tr>
<td>1951</td>
</tr>
<tr>
<td>1953</td>
</tr>
<tr>
<td>1955</td>
</tr>
<tr>
<td>1957</td>
</tr>
<tr>
<td>1960</td>
</tr>
<tr>
<td><strong>Projected(b)</strong></td>
</tr>
<tr>
<td>1966</td>
</tr>
<tr>
<td>1971</td>
</tr>
<tr>
<td>1976</td>
</tr>
<tr>
<td>2001</td>
</tr>
</tbody>
</table>
2.3.2. Marital Status

The marital status of aged men and women differs markedly. In 1976, 71 per cent of aged men were married compared with 35 per cent of aged women (Table 2.9). Over half of aged women were widowed. These differences in marital status become more pronounced with increasing age, with 79 per cent of women aged 85 years and over being widowed. Among the factors that contribute to these differences in marital status is the fact that women have tended to marry men who were slightly older than themselves. In addition, women's greater life expectancy compared with male's makes it likely that they will outlive their husbands. The demographic pictures of the very old population is becoming one of aged widows. One of the results of this difference in marital status is seen in the higher proportion of elderly women living alone in institutions.

TABLE 2.9 AGED PERSONS BY MARITAL STATUS, CENSUS 1976 (Per cent).

<table>
<thead>
<tr>
<th>Age group (years)</th>
<th>Married</th>
<th>Permanently separated</th>
<th>Never married</th>
<th>Widowed</th>
<th>Divorced</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>MALES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65-69</td>
<td>78.5</td>
<td>2.5</td>
<td>7.9</td>
<td>8.8</td>
<td>2.3</td>
<td>100.0</td>
</tr>
<tr>
<td>70-74</td>
<td>73.7</td>
<td>2.3</td>
<td>8.2</td>
<td>13.9</td>
<td>1.9</td>
<td>100.0</td>
</tr>
<tr>
<td>75-79</td>
<td>65.4</td>
<td>2.1</td>
<td>8.5</td>
<td>22.6</td>
<td>1.5</td>
<td>100.0</td>
</tr>
<tr>
<td>80-84</td>
<td>54.6</td>
<td>1.7</td>
<td>7.7</td>
<td>34.9</td>
<td>0.8</td>
<td>100.0</td>
</tr>
<tr>
<td>85 and over</td>
<td>39.7</td>
<td>1.5</td>
<td>7.6</td>
<td>50.4</td>
<td>0.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>71.1</td>
<td>2.3</td>
<td>8.1</td>
<td>16.7</td>
<td>1.9</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age group (years)</th>
<th>Married</th>
<th>Permanently separated</th>
<th>Never married</th>
<th>Widowed</th>
<th>Divorced</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEMALES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65-69</td>
<td>52.4</td>
<td>2.0</td>
<td>8.0</td>
<td>35.2</td>
<td>2.4</td>
<td>100.0</td>
</tr>
<tr>
<td>70-74</td>
<td>39.0</td>
<td>1.5</td>
<td>9.6</td>
<td>48.2</td>
<td>1.7</td>
<td>100.0</td>
</tr>
<tr>
<td>75-79</td>
<td>25.9</td>
<td>1.0</td>
<td>10.3</td>
<td>61.5</td>
<td>1.3</td>
<td>100.0</td>
</tr>
<tr>
<td>80-84</td>
<td>15.5</td>
<td>0.7</td>
<td>11.2</td>
<td>71.8</td>
<td>0.8</td>
<td>100.0</td>
</tr>
<tr>
<td>85 and over</td>
<td>7.7</td>
<td>0.4</td>
<td>12.6</td>
<td>78.8</td>
<td>0.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>35.5</td>
<td>1.4</td>
<td>9.6</td>
<td>51.8</td>
<td>1.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

2.3.3. Overseas born.

Compared with the population under 65 years of age, a higher proportion of the aged were born outside Australia. At the 1976 Census, nearly a quarter of the aged had been born overseas compared with almost a
fifth of the population under 65 years of age. The country of birth of the aged also differs from that of the younger population with a much higher proportion of the aged having been born in the United Kingdom and Eire. The comparative figures being 61.4 per cent for the aged and 38.6 per cent for the younger age group (Table 2.10)

**TABLE 2.10. POPULATION BY AGE AND BIRTHPLACE CENSUS 1976.**

<table>
<thead>
<tr>
<th>Place of birth</th>
<th>0-44</th>
<th>45-64</th>
<th>65 and over</th>
<th>0-44</th>
<th>45-64</th>
<th>65 and over</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>'000</td>
<td></td>
<td></td>
<td>Per cent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U K. and Eire</td>
<td>651.3</td>
<td>284.7</td>
<td>181.6</td>
<td>6.8</td>
<td>10.5</td>
<td>15.0</td>
</tr>
<tr>
<td>Greece</td>
<td>113.2</td>
<td>53.9</td>
<td>7.8</td>
<td>1.2</td>
<td>1.2</td>
<td>0.6</td>
</tr>
<tr>
<td>Italy</td>
<td>166.7</td>
<td>90.1</td>
<td>23.3</td>
<td>1.7</td>
<td>3.3</td>
<td>1.9</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>110.3</td>
<td>27.6</td>
<td>5.7</td>
<td>1.1</td>
<td>1.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Other Europe</td>
<td>284.8</td>
<td>184.3</td>
<td>47.4</td>
<td>3.0</td>
<td>6.6</td>
<td>3.9</td>
</tr>
<tr>
<td>Asia</td>
<td>185.9</td>
<td>42.7</td>
<td>12.0</td>
<td>1.9</td>
<td>1.6</td>
<td>1.0</td>
</tr>
<tr>
<td>Other countries</td>
<td>205.6</td>
<td>45.8</td>
<td>18.9</td>
<td>2.1</td>
<td>1.6</td>
<td>1.5</td>
</tr>
<tr>
<td>Total overseas-born</td>
<td>1,717.8</td>
<td>703.1</td>
<td>295.9</td>
<td>17.8</td>
<td>36.1</td>
<td>24.5</td>
</tr>
<tr>
<td>Total Australian-born</td>
<td>7,920.1</td>
<td>1,996.4</td>
<td>913.1</td>
<td>82.2</td>
<td>73.9</td>
<td>75.5</td>
</tr>
<tr>
<td>Total</td>
<td>9,638.0</td>
<td>2,701.5</td>
<td>1,209.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Having described the total population aged 65 years and over, a dissection of that population is relevant to ascertain the numbers who contributed to the handicapped population, the type of handicap affecting them, the severity of the handicap, and where they are located - in institutions or in their own homes.

2.4. **THE WORLD HEALTH ORGANISATION'S DEFINITIONS OF IMPAIRMENT, DISABILITY AND HANDICAP.**

The World Health Organisation has produced a manual which concerns itself with improving information on the consequence of disease. The need for this arose because the sufferers from chronic disease, the health professionals, and the policy makers or planners lacked a conceptual framework. Each found it difficult to come to terms with the consequence of disease.

For this reason, they have arrived at certain definitions which clarify impairment, disability and handicap.
2.4.1. Impairment

Definition.

In the context of health experience, an impairment is any loss or abnormality of psychological, physiological or anatomical structure or function.

Note: 'Impairment' is more inclusive than disorder in that it covers losses, e.g., the loss of a leg is an impairment, but not a disability.

Characteristics.

Impairment is characterised by losses or abnormalities that may be temporary or permanent, and that include the existence or occurrence of an anomaly, defect, or loss of a limb, organ, tissue or other structure of the body, including the system of mental function. Impairment represents the exteriorisation of a pathological state, and in principle it reflects disturbance at the level of the organ.

2.4.2. Disability

Definition.

In the context of health experience, a disability is any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being.

Characteristics.

Disability is characterised by excesses or deficiencies of customarily expected activity performance and behaviour, and these may be temporary or permanent, reversible or irreversible, and progressive or regressive.

Disability may arise as a direct consequence of impairment or as a response by the individual, particularly psychologically, to a physical, sensory, or other impairment. Disability represents objectivation of an impairment, and as such it reflects a disturbance at the level of a person.
Disability is concerned with abilities, in the form of composite activities and behaviours, that are generally accepted as essential components of everyday life.

Examples include disturbances in behaving in an appropriate manner, in personal care (such as excretory control) and the ability to wash and feed oneself, in the performance of such activities of daily living, and in locomotor activities, such as the ability to walk.

2.4.3. Handicap

Definition.

Handicap, in the context of health experience, is a disadvantage for a given individual, resulting from an impairment or disability that limits or prevents the fulfilment of a role that is normal (depending on age, sex, social and cultural factors) for that individual.

Characteristics.

Handicap is concerned with the value attached to an individual's situation or experience when it departs from the norm. It is characterised by a discordance between the individual's performance or status and the expectations of the individual himself or of the particular group of which he is a member. Handicap thus represents socialisation of an impairment or disability, and as such it reflects the consequence for the individual - cultural, social, economic, and environmental - that stem from the presence of the impairment or disability.

Disadvantage arises from a failure or inability to conform to the expectations or norms of the individual's universe.

Handicap thus occurs when there is an interference with the ability to sustain what might be designated as 'survival roles'. 
For this reason, a classification modelled on the skills required to meet such 'survival roles', and graded from zero to 9, the higher values representing increasing difficulties to complete various routine tasks, has been devised.

2.4.4. **List of Dimensions of Handicap**


<table>
<thead>
<tr>
<th>DISEASE or DISORDER</th>
<th>IMPAIRMENT</th>
<th>DISABILITY</th>
<th>HANDICAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>(intrinsic situation)</td>
<td>(exteriorisation)</td>
<td>(objectified)</td>
<td>(socialised)</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>IMPAIRMENT</th>
<th>DISABILITY</th>
<th>HANDICAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>language</td>
<td>speaking</td>
<td></td>
</tr>
<tr>
<td>hearing</td>
<td>listening</td>
<td>orientation</td>
</tr>
<tr>
<td>vision</td>
<td>seeing</td>
<td></td>
</tr>
<tr>
<td>skeletal</td>
<td>dressing, feeding, walking</td>
<td>physical independence, mobility</td>
</tr>
<tr>
<td>psychological</td>
<td>behaving</td>
<td>social integration</td>
</tr>
</tbody>
</table>

These are the twelve central areas covering mental and physical functions.
2.5. HANDICAP IN THE AUSTRALIAN AGED POPULATION

Introduction

The Handicapped Persons Survey carried out by the Australian Bureau of Statistics (ABS) in 1981 stands as a significant advance. It was national in coverage, included all age groups, sampled house holds and institutions, and distinguished mental and physical conditions using the standardised World Health Organisation (W.H.O.) definitions. The sample for the survey consisted of two parts. The first part covered some 33,000 households throughout Australia, including private dwellings plus non private dwellings such as hotels, motels and boarding houses. The second part consisted of a sample of 5,300 patients from 723 institutions or health establishments.

Concepts of impairments, disability and handicap were based on those outlined by the W.H.O. in its International Classification of Impairment, Disability and Handicap. (described in previous section).

A disabled person - a person who had a disability or impairment in any of twelve areas covering mental and physical functions.

A handicapped person - a limitation to some degree in ability to perform activities or tasks in the areas of self-care, mobility, communication, employment or schooling.

The aged - population aged 65 and over.

2.5.1. Patterns of Handicap

The A.B.S. Handicapped Persons Survey reported a total of 1.9 million disabled persons in Australia of whom 1.3 million were handicapped. The prevalence rate of handicap in total population was about 87 per thousand, but it was 315 per thousand among the aged. However, in absolute numbers, the aged accounted for only a third of the handicapped persons (Table 1).
<table>
<thead>
<tr>
<th></th>
<th>Age group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-20</td>
<td>21-64</td>
</tr>
<tr>
<td>Number handicapped ('000)</td>
<td>174.8</td>
<td>639.1</td>
</tr>
<tr>
<td>Prevalence of handicap per thousand population</td>
<td>34</td>
<td>80</td>
</tr>
<tr>
<td>Number handicapped in institutions ('000)</td>
<td>7.2</td>
<td>22.3</td>
</tr>
<tr>
<td>Handicapped in institutions as percentage of all handicapped</td>
<td>4.3</td>
<td>3.4</td>
</tr>
<tr>
<td>Age distribution of handicapped in institutions (%)</td>
<td>6.5</td>
<td>20.1</td>
</tr>
</tbody>
</table>

That the aged are a minority of the handicapped population tends to be obscured by their majority representation in the small but more readily identified institutional population. Only 8.8 per cent of the handicapped population were in institutions, but this proportion rose from around 3-4 per cent for those aged under 65 to some 18 per cent for those aged 65 years and over. The aged handicapped made up almost three quarters of the institutional population.

2.5.2. Disabled and Handicapped.

There is a marked increase in the proportion of handicapped at older ages, with 85 per cent of the disabled aged 75 years and over also being handicapped.
2.5.3. **Age**

The numbers of handicapped and severely handicapped persons are detailed by age and sex in Table 2. Although the aged comprise just under 10 per cent of the total population, one third of all those with handicaps were aged 65 years and over, but half of those with severe handicaps were in this older age group.

The prevalence of handicap in the aged population averaged 306 per thousand. Rates increased steadily from 218 at age 65-69 to 472 per thousand for those aged 80 and over. Severe handicaps increased even more dramatically with age, from 86 at age 65-69 to 369 per thousand in those aged 80 years or over. (Table 2(b) on next page).

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number</th>
<th>Prevalence Rate per '000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>a) All Handicaps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-20</td>
<td>105.2</td>
<td>69.6</td>
</tr>
<tr>
<td>21-50</td>
<td>150.4</td>
<td>151.5</td>
</tr>
<tr>
<td>51-64</td>
<td>192.7</td>
<td>144.4</td>
</tr>
<tr>
<td>65-69</td>
<td>53.8</td>
<td>60.4</td>
</tr>
<tr>
<td>70-74</td>
<td>47.5</td>
<td>58.8</td>
</tr>
<tr>
<td>75-79</td>
<td>34.3</td>
<td>62.3</td>
</tr>
<tr>
<td>80+</td>
<td>30.7</td>
<td>88.9</td>
</tr>
<tr>
<td>0-64</td>
<td>448.3</td>
<td>265.8</td>
</tr>
<tr>
<td>65+</td>
<td>166.3</td>
<td>270.4</td>
</tr>
<tr>
<td>Total</td>
<td>618.9</td>
<td>645.8</td>
</tr>
</tbody>
</table>
2.5.4. **Sex**

Women made up a bare majority of the total handicapped population, at 51 per cent, and a slightly larger majority, 58 per cent, of those with severe handicaps. Prevalence rates of all handicaps were lower among females than males in the age group 51-64, were roughly equal between 65 and 74 years, and were considerably higher in the females aged over 75 years. A similar pattern applied for severe handicaps, except that in the pre-retirement age range, 51-64, female and male rates were roughly equal.

The data reveal the "crossover" effect reported in other studies. Kendig et al. (1983:59) found that on most functional health status measures women tend to have better ratings than men in late middle age, but that this situation is reversed at older ages. It seems that, while fewer men survive to very old age, those who do generally enjoy better health than women of the same age.

2.5.5. **Severity of Handicap**

The severity of handicap clearly increases with age. In the age groups under 65 years approximately one third of all handicaps were severe,
whereas in the 80 years and over age groups, over three-quarters of all handicaps were severe handicaps. Females had higher proportions than males at older ages. This trend was particularly evident in the 80 years and over age group where 83 per cent of the handicapped females were severely handicapped compared with only 63 per cent of the males.

2.5.6. Relationship between mental and physical disability conditions.

The overall prevalence of mental disorders was 28 per thousand while the prevalence of disabling physical conditions was 121 per thousand (Table 3). Some sixteen persons per thousand suffered from both mental and disabling physical conditions, a rate almost five times that which would be expected if the two types of disability were assumed to be independent. The A.B.S. refers to the possibility of under-reporting of mental disorders in households, as the reason for the above occurrence.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Prevalence rates by type of disabling condition</th>
<th>Persons with both mental and physical conditions as percentage of persons with</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mental</td>
<td>Physical</td>
</tr>
<tr>
<td>0-14</td>
<td>15</td>
<td>45</td>
</tr>
<tr>
<td>15-44</td>
<td>20</td>
<td>67</td>
</tr>
<tr>
<td>45-64</td>
<td>42</td>
<td>206</td>
</tr>
<tr>
<td>65-74</td>
<td>46</td>
<td>342</td>
</tr>
<tr>
<td>75+</td>
<td>105</td>
<td>518</td>
</tr>
<tr>
<td>0-64</td>
<td>23</td>
<td>90</td>
</tr>
<tr>
<td>65+</td>
<td>67</td>
<td>404</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>121</td>
</tr>
</tbody>
</table>
People suffering from mental disorders often had disabling physical conditions as well, whereas the converse was not the case. Overall, 56 per cent of those with mental disorders had physical disabilities as well, while only 13 per cent of those with physical conditions had mental disorders. The proportion of persons with mental disorders who also had physical disorders increased with age from 36 per cent in the 5-14 age groups to 68 per cent in the 55-64 age group and 90 per cent for the group aged 75 and over. In contrast, the proportion of persons with physical disabilities who also had mental disorders was almost constant across the age groups. Importantly, in the aged population, 83 per cent of persons with mental disorders also had physically disabling conditions; only 17 per cent of aged persons who had mental disabilities had mental disabilities only.

2.5.7. Institutionalisation and Handicap.

Persons with severe handicaps constituted the population from which the overwhelming majority of aged institutional residents were drawn. Some 82 per cent of the aged in institutions had severe handicaps (Table 4).

While persons in institutions usually had severe handicaps, only a minority of those with severe handicaps were in institutions. Some 90 per cent of all those in institutions were severely handicapped compared to only 36 per cent in households, but 80 per cent of those with severe handicaps lived in households. A higher proportion of aged males with severe handicaps (76 per cent) were cared for in households than was the case for the aged females, some 33 per cent of whom were in institutions. It is worth emphasising this point, the majority of persons with severe handicaps were in households, even at advanced ages.

The age related increase in rates of residence in institutions of persons with severe handicaps is seen in Table 4. This rate rose from 1 per 1000 for the under 20 age group to 167 per thousand for the group aged
80 years and over. Once again female rates rose more quickly with age than male rates. Between ages 65 and 74, sex differences in rates of institutional residence were marginal, but then diverged markedly, reaching 201 per thousand for females aged 80 years and over compared with 91 per 1,000 for males. Data in Table 4 shows that among those aged 65 to 69, 87 per cent lived in households and only 13 per cent lived in institutions, while the group aged 80 or over, 45 per cent of those with at least one severe handicap lived in institutions.

<table>
<thead>
<tr>
<th>TABLE 4</th>
<th>Household and Institutional Residence of Persons with Severe Handicap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers (000's)</td>
<td>Prevalence Rate per '000</td>
</tr>
<tr>
<td></td>
<td>Males</td>
</tr>
<tr>
<td>a) Households</td>
<td></td>
</tr>
<tr>
<td>0-20</td>
<td>30.3</td>
</tr>
<tr>
<td>21-50</td>
<td>47.7</td>
</tr>
<tr>
<td>51-64</td>
<td>45.8</td>
</tr>
<tr>
<td>65-69</td>
<td>15.5</td>
</tr>
<tr>
<td>70-74</td>
<td>13.5</td>
</tr>
<tr>
<td>75-79</td>
<td>13.6</td>
</tr>
<tr>
<td>80+</td>
<td>12.1</td>
</tr>
<tr>
<td>0-64</td>
<td>123.8</td>
</tr>
<tr>
<td>65+</td>
<td>54.7</td>
</tr>
<tr>
<td>Total²</td>
<td>179.3</td>
</tr>
</tbody>
</table>

b) Institutions

|          |       |         |         |       |         |         |
| 0-20    | 4.3   | 2.7     | 6.6     | 2     | 1       | 1       |
| 21-50   | 6.3   | 5.0     | 11.3    | 2     | 2       | 2       |
| 51-64   | 5.4   | 3.7     | 9.1     | 5     | 4       | 4       |
| 65-69   | 3.3   | 2.8     | 6.1     | 14    | 10      | 12      |
| 70-74   | 3.3   | 5.8     | 9.1     | 19    | 26      | 23      |
| 75-79   | 3.2   | 9.8     | 13.0    | 31    | 64      | 51      |
| 80+     | 7.2   | 35.0    | 42.2    | 91    | 201     | 167     |
| 0-64    | 16.0  | 11.4    | 27.0    | 2     | 2       | 2       |
| 65+     | 17.0  | 53.4    | 70.4    | 28    | 64      | 49      |
| Total²  | 33.9  | 67.1    | 101.0   | 5     | 9       | 7       |
Lastly, institutionalisation is strongly related to the type of disabling condition underlying the handicaps. Details are given in Table 5. Those in institutions were more likely to have a mental disorder than those in households. While around 90 per cent of both the institutional and household handicapped population had a physically disabling condition, mental disorders characterised over two thirds of the institutional population, but only around 20 per cent of those in households. Those with mental disorders were more likely to be institutionalised: whereas only 9 per cent of the total handicapped population was institutionalised 24 per cent of the handicapped with mental disorders were in institutions. Mental disorders were particularly associated with institutionalisation of non-aged handicapped persons; fully 83 per cent of non-aged people in institutions had mental disorders compared to 55 per cent of the aged handicapped in institutions.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number of handicapped persons ('000)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Household</td>
</tr>
<tr>
<td></td>
<td>Mental</td>
</tr>
<tr>
<td>0-14</td>
<td>41.7</td>
</tr>
<tr>
<td>15-44</td>
<td>65.3</td>
</tr>
<tr>
<td>45-64</td>
<td>76.4</td>
</tr>
<tr>
<td>65-74</td>
<td>20.3</td>
</tr>
<tr>
<td>75+</td>
<td>16.4</td>
</tr>
<tr>
<td>0-64</td>
<td>183.4</td>
</tr>
<tr>
<td>65+</td>
<td>36.7</td>
</tr>
<tr>
<td>Total</td>
<td>220.2</td>
</tr>
</tbody>
</table>
Rates of institutionalisation were much higher for the handicapped with mental disorders, than for those with physical conditions only; and, these differences were more dramatic at younger ages, even though the aged handicapped had much higher rates of institutionalisation. In the under 65 age group, less than one per cent of handicapped persons with physical conditions only were in institutions, compared to 10 per cent of those with both types of disorders. The corresponding figures for the aged population were 10, 47, and 56 per cent. In both age groups it is clear that the main contrast is between those with physical conditions only, and those with mental disorders with or without disabling physical conditions.

2.5.8. Differences Within the Aged Handicapped Population.

Until the data from the A.B.S. survey became available, the size of the aged population (handicapped) could only be guessed at something between the 5 per cent known to be in nursing home care at any one time and the total aged population. Much more certain estimates can now be made.

The magnitude of the aged population with severe handicaps is estimated to be 234,000, some 16.4 per cent of the total Australian population aged 65 or over. This population is made up of persons whose mental and/or physical disabilities are such that they need assistance from others in the areas of self-care, mobility, or communication. Some 72,000, or 31 per cent, are males while the remaining 162,000 or 69 per cent are females, reflecting the predominance of women in the elderly population.

Institutions accommodated approximately 72,000 or 31 per cent of the aged population with severe handicaps while the majority, some 162,000 or 69 per cent, lived in households.

Further demographic differences can be noted from the available data. Firstly the populations in institutions tended to be considerably older; 60 per cent of the aged handicapped in institutions were aged 80 years and
over, compared to 31 per cent in the community. A higher proportion of the aged inhabitants in institutions, 76 per cent, were women compared with 67 per cent in the community.

Secondly, the institutional population tended to have more handicaps, and more had severe handicaps, than the household population. The aged handicapped in households had an average of 1.6 handicaps compared to 2.3 for those in institutions.

Thirdly, the association between institutionalised and mental disability found for all ages holds at older age, but there is a shift in the balance of mental and physical conditions. Only some 10 per cent of the aged handicapped in households had mental disorders compared to 55 per cent in institutions; both these levels are somewhat lower than for the total handicapped population where the proportions were 19 per cent and 62 per cent respectively. Possible under-reporting has been noted for mental disorders in households, and the much higher prevalence of physical handicap at older ages means that mental disorders account for a smaller proportion of the increased total.

Possible under-reporting of mental disorders has already been noted, and the much higher prevalence of physical handicap at older ages means that mental disorders account for a smaller proportion of the increased total. Nonetheless, some of the handicapped aged with mental disorders, 55 per cent, were institutionalised than was the case for the physically disabled, only 18 per cent of whom were in institutions.

While these differences point to the aged handicapped populations in the community being relatively younger and less dependent than that in institutions, four sub-groups can be defined in each population on the basis of age (under 80, 80 and over) and severity of handicap (not severe, severe).
Those aged under 80 and who were not severely handicapped can be labelled the "least dependent" sub-groups, and those aged 80 and over and who are severely handicapped labelled the "most dependent" sub-groups. The composition of the household and institutional aged handicapped population in terms of these four sub-groups is shown in Table 6.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Severity of Handicap</th>
<th>Households No. ('000)</th>
<th>%</th>
<th>Institutions No. ('000)</th>
<th>%</th>
<th>Total No. ('000)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 80</td>
<td>Not severe</td>
<td>171.5</td>
<td>47.8</td>
<td>4.6</td>
<td>5.9</td>
<td>176.1</td>
<td>40.3</td>
</tr>
<tr>
<td>Severe</td>
<td>112.7</td>
<td>31.4</td>
<td>28.2</td>
<td>36.3</td>
<td>140.9</td>
<td>32.3</td>
<td></td>
</tr>
<tr>
<td>80 and over</td>
<td>Not severe</td>
<td>23.5</td>
<td>6.5</td>
<td>2.7</td>
<td>3.5</td>
<td>26.2</td>
<td>6.0</td>
</tr>
<tr>
<td>Severe</td>
<td>51.3</td>
<td>14.3</td>
<td>42.2</td>
<td>54.3</td>
<td>93.5</td>
<td>21.4</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>359.0</td>
<td>100.0</td>
<td>77.7</td>
<td>100.0</td>
<td>436.7</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The "least dependent" sub-group was the smallest component of the institutional population and the largest component of the household population, accounting for 6 per cent and 49 per cent of the aged handicapped populations respectively. Numerically, this low-dependency institutional sub-group was composed of some 4,600 persons. Another 2,700 in institutions were in the sub-group aged over 80 but without severe handicaps. These two sub-groups might be seen to be most amenable to the provision of alternative forms of care. The "most dependent" sub-groups made up over half the institutionalised aged handicapped but only 14 per cent of the handicapped aged in households. In absolute numbers however, this last household sub-groups still out-numbered the institutional sub-group.
2.5.9. References


Working Papers No. 8, Department of Immigration and Ethnic Affairs, Canberra.

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Table 2.2. Aged Persons: Median Age (Years).
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Table 2.4. Aged Population: Projections (a) (,000).
Table 2.5. Population by Age: Actual and Projected.
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Table 2.8. Aged Persons: Male/Female Ratio
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Table 3. Mental and Physical Disabling Conditions.
Table 4. Household and Institutional Residence of Persons with Severe Handicaps.
Table 5. Type of Disabling Conditions by Type of Residence.
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3. PROFESSIONAL INTEREST AND RESEARCH

Two specialist groups are involved in the care of the elderly, they are Geriatric Medicine and Gerontology.

'Geriatric Medicine' is a branch of Medicine, dealing with the health problems of the aged, both with the treatment and prevention of disease and injury.

Medical schools are expanding their research and training programmes as professional interest in the areas of the aged grows.

As opposed to Geriatrics, there is the science of Gerontology. This field is an interdisciplinary field, incorporating the study of biological, psychological, medical, sociological and economic factors, having a bearing on old age. It is based on the premise that the solutions to the problems of the ageing require the co-operative effort of specialists in many fields. Biologists contribute their knowledge and research concerning the biological processes involved in ageing; psychologists study changes in mental abilities, personality and behaviour with age; sociologists study the social roles and status of older people and other aspects of group behaviour in old age. Obviously, there is a great deal of overlap among the activities of the various specialists, a fact that is recognised and accepted in the multi- or inter-disciplinary approach. This latter statement could be qualified somewhat as the writer sees it in Australia. At present, it seems that the field of Gerontology in Australia is dominated by sociologists and psychologists. These disciplines receive a substantial amount of training in research methodology, and as such have devoted considerable attention to developmental research methods.

It is appropriate at this point to briefly explain how these research methods operate and some of their shortcomings. The measuring instruments
or tests employed in developmental investigations suffer from problems of reliability, validity, and adequacy of standardisation. In addition, the decision on what kind of research design to employ is seldom easy to make.

Because of the high cost of research, especially long-term longitudinal research, advances in the knowledge of developmental psychology and sociology are often difficult to achieve. In a 'longitudinal' investigation, the same individuals are followed up and re-examined over a period of several months or many years. But most behavioural research on ageing is based on 'cross-sectional' investigations, in which different age groups of people are compared on some characteristics to determine how that feature varies with age. Cross-sectional studies are less expensive than longitudinal studies, and, with effort, can be completed in a relatively short period of time. The writer will describe the operation of such investigations at the end of this section.

Cross-sectional studies do not require long term commitments on the part of researchers, and subjects are not so easily lost as a result of moving away, dying, or loss of interest in the project. A possible shortcoming of the cross-sectional studies is that they necessitate some kind of matching of the different age groups at the outset. For example, in studying the relationships of intelligence to age, one would certainly want to match the various age groups on education before comparing them on intelligence. The problem is that matching is often difficult to accomplish, and even differences in educational opportunity could still affect the results of the investigation. The main difficulty in interpreting the results of a cross-sectional study is that the investigator cannot be certain whether the observed differences among age groups are produced by the ageing process itself, by generational or cultural differences, or by time-related changes in the attitudes and values of society.

With regard to the validity of research findings, both cross-sectional and longitudinal studies have limitations. Since a person's age is related
to the cultural context in which he or she was brought up, cross-sectional studies confound (i.e. mix-up) the effects of age and cohort differences. Longitudinal studies, on the other hand, tend to confound the age of the person with the time at which the behavioural or other measurements are made. Time of measurement is an important variable because the physical, social, and psychological context in which the measurements take place changes with time. Furthermore, changes in scores on the same tests administered to the same individuals at different times may be the results of practice effects or increasing familiarity of the material rather than to age per se.

A third type of age-related comparison is the TIME LAG DESIGN. In this type of study several cohorts are examined, each at a different time period. The subjects in a time lag study are all of the same age at measurement, but they were born at different times (i.e. they belong to different cohorts) and are measured or examined at different times.

In summary, a cross-sectional study confounds age and cohort differences, a longitudinal study confounds age-related differences with differences due to time of measurement, and a time lag study confounds cohort differences with differences related to time of measurement. Only by the combination of all three types of studies can one hope to unravel the true effects of age on human characteristics, free of the confounding effects of cohort differences and the time at which the measurements were made.
Here is an example of a longitudinal study framed to test a cross-sectional finding.

3.1 **Effect of time lapse on consistency of self-health and medical evaluation of elderly persons.**

The validity of the self-health rating of elderly people in a selected sample was tested by Maddox (1962), who found that "for two out of three subjects (65 percent) self-assessment and medical evaluation of health are congruous." The results of an opportunity to test this cross-sectional finding on a longitudinal basis are reported in this study by Heyman and Jeffers (1963). How is health evaluated as ageing progresses? Is it a change in health faced realistically, or do those in poor health assess themselves less realistically than do those in good health?

Age, sex, and occupation classification are commonly assumed to have some bearing on health inasmuch as with age:

a) Disability in general seems to increase,

b) Women tend to outlive men, and

c) "There is a tendency towards increasing disability in the poorer occupational groups," (Hobson, and Pemberton, 1955).

In spite of this, according to a National Opinion Research Center Survey, "most older persons interviewed considered themselves as being well. Only one of every five people thought his health was poor," (Shanas, 1961). There remains, however, the problem of consistency of self-health and medical evaluations.

The questions to be explored in the present investigation are:

(a) Whether people tend to remain realistic in their own health estimates, without substantial changes over a period of time; (b) Whether changes with time in both subjective and objective evaluations of health are affected by the factors of age, sex, and occupational classification.
3.1.1 Methodology - Subjects.

...The 256 subjects composing the original panel represent a wide spectrum within the occupational groups in the Piedmont region of North Carolina, with 54.7 percent of the subjects or their spouses in the upper socio-economic level and 45.3 percent in the lower when dicotomised into non-manual and manual occupational groups according to the United States Census Bureau Classification....

The present study is based on information obtained from the 182 subjects (71.0 percent of the original panel) who returned on an average of three years later, for a second series of two day examinations. Of the 256 on the original panel, 32 (12.5 percent) had died in the interim, 8 (3 percent) had moved from the community, 19 (7.4 percent) could not return because of serious illness of self or in the home, and employment (full or part-time) prevented 3 (1.1 percent) from returning. The remaining 12 (5.0 percent) were reluctant to continue the series for a variety of reasons....

3.1.2 Variables.

The three principal variables in this study were: physical functional rating, self-health rating, and health attitude score. The instruments of these variables were identical on the two series of examinations.

3.1.2.1. Physical Functional Rating.

The physical functioning rating (P.F.R.), modified and adapted in the Duke University geriatrics research program from that in use by the United States Army and Veteran's Administration, was the physician's estimate of the subject's capacity to function effectively in daily living and was determined after comprehensive examinations, which included a medical history, physical and neurological examinations, as well as opthalmological and dermatological examinations. The tests also included an
audiogram, chest X-ray, electroencephalogram, electrocardiogram, ballistocardiogram, and routine blood and urine studies. The physician indicated the existence of physical impairment in the subject and assessed on a rating scale the degree of limitation of function in everyday life situations.

For statistical purposes of this particular study, subjects were divided into those with 20 percent or less degree of physical disability (high P.F.R.) and those with more than 20 percent disability (low P.F.R.). In the initial series of examinations, 80.9 percent of the total subjects fell into high P.F.R., while only 66.2 percent were in this high category on the second series, a decline with time on this health rating.

3.1.3. Self-health Rating.

The second variable was the subject's own rating of his health. In the course of securing a detailed social history, the subject was asked, "How would you rate your health at present?"

The dividing point for the total group of subjects in this study was between the combined categories of Poor and Fair responses on the one hand (in the initial series, 29.7 percent; in the second, 30.5 percent) and those of Good and Excellent on the other (initial series, 70.3 percent; second, 69.7 percent).

3.1.4. Health Attitude Score. The Third Variable.

This was based on eight agree-disagree items, taken from the Activities and Attitudes Inventory developed by Cavan, Burgess, Havighurst, and Goldhamer. This inventory and tests of its validity and reliability are described in detail in Personal Adjustment in Old Age (Cavan et al, 1949), and Older People (Havighurst and Albrecht, 1953).

The Health Attitude Score, also remained essentially unchanged for the present subjects from the first examination to the second. 61.0 percent of the subjects scored high (4 or higher) on the initial series and 58.2
percent on the second. That is, statements such as, "I feel just miserable most of the time," "I am perfectly satisfied with my health," or "My health is just beginning to be a burden to me," and others of similar import were answered on the second examination much as they had been answered in the first.

From studies such as the above certain conclusions can be reached by applying statistical analysis.
3.1.5. References


4. **ATTITUDES TOWARDS THE AGED**

In the introduction to this thesis the writer mentioned the word "AGEISM". As described by Robert Butler, it is the process of social discrimination against the aged, which is reinforced by stereotypic images of the aged. This social discrimination pervades all areas that concern the aged - whether it be finance, housing, health, or social welfare services. An important qualification is given by Hendricks (1977) - Aging in Mass Society, Myths and Realities, Hendricks, J. and C.D. Winthrop. "The extent to which the public in general holds a negative view towards the elderly is questionable, though in the past it may have been more extensive."

Many of the organisations involved in caring for the aged are commercially orientated and therefore profit orientated, however, many are non-profit agencies dependent upon voluntary, religious, and Government support for financial and physical resources.

Stereotyping of the aged has gone on since time began, and it has continued throughout all civilisations; why it should persist today almost without diminution is not too difficult to understand, because in its most basic interpretation, it is a reminder to the observer of his own mortality. It is a reality to each and everyone of us, and though it's onset might be delayed, it is inevitable.

This introduces the subject of individual ageing. There are tremendous variations between individuals as to the onset of aging - it may be chronologically advanced or it may be retarded. Biologic ageing often-times does not coincide with the expected physical or visible changes one would assume to be in evidence in persons of a certain chronological age. For example, a person at a chronologically young 50 may exhibit biological signs of ageing compatible with a person of 70. The onset of ageing is determined genetically, exposure to the environment, life style, previous
work experience, and present state of health.

Therefore, blanket stereotyping of the aged as a group cannot be considered valid for all members because of the individual variations. Persons should be considered in a subjective rather than objective light. To illustrate this point, take the example of my mother. She is 82 years old. Observing her from across the room one would see an old woman. On the basis of this observation many people would apply stereotypic conclusions, such as, "she is old, not with it, traditional in her thinking, lives in the past, and not of much value to the community". It would be erroneous to apply these values to her, because if one crossed the room and engaged her in conversation they would discover a person not much different to themself. She goes for an early morning swim, is up to date with current happenings; looks after her everyday affairs - accounts and other sundries, without the intervention of another party; drives a car; is involved with the various generations of her family; pays taxes; and contributes to the society around her. Many persons, who are chronologically old, such as my mother exist today in a similar independent fashion; and now it is time to invalidate many of the misconceptions people have of the aged.
4.1 COMMON MISCONCEPTIONS

4.1.1. Most old people are sick and should be in institutions.

WRONG. It was demonstrated - Demography - that only 5 - 6 per cent old people live in institutions. This percentage is duplicated in the United States and in other Western industrialised countries (Shanas, E. Old people in Three Industrial Societies). Agreed there are handicapped aged persons living in their own homes and receiving domiciliary care. but the A.B.S. Handicapped Persons survey showed the aged were a minority of the handicapped representing one third of the total handicapped population of 1.3 million. Three quarters of the institutional population were aged handicapped, so it can be seen that the numbers of the aged handicapped out in the community represents a minority as opposed to the group under 65 years of age.

One reason for the above common misconception is the fact the early gerontological research that filtered into the public consciousness and reinforced existing misconceptions was based largely on institutionalised older people.

4.1.2. Most old people are poor.

WRONG. The Social Indicator (Table 8.16, Social Indicator No. 4, 1984). shows the highest rate of home-ownership is among those aged over 65 years - at 75.3 per cent. The overall figure for home-ownership inclusive of all other age groups was 24.7 per cent. For all households the owned outright figure was 37.4 per cent. What the aged have experienced is inflation which has eroded their capital reserves. So their position is one of asset-rich, dollar-poor.

4.1.3. The aged have no sex life.

WRONG. Although older people experience a decline in sexual activity and strength of sex drive, it has been shown (Finkle, A.L., et al. Sexual potency in aging males, J Am Med Assoc, 170: 1391-1393, 1959) that, given
the condition of reasonably good health and partners who are also physically healthy, elderly persons continue to be sexually active into their seventh, eighth, and ninth decades.
In this next section the writer will deal with how early formation of negative attitudes towards the aged can arise because of manner in which they are depicted in literature, television, and even in jest.

4.2 DISCRIMINATION TOWARDS THE ELDERLY CAN OCCUR EARLY IN LIFE

(Seefeldt, 1977) reported that very young children understand the concept of being old, establishing negative stereotypic attitudes towards age and the elderly based on physical characteristics. Children's attitudes towards old age and old people frequently become progressively negative with age: Many values, attitudes, and beliefs internalised in childhood remain in some form throughout life and may become augmented in later years. Janz et. al. (Jantz, 1976) also found significant age differences in children's attitudes towards the elderly. This study showed that at all age levels children had limited knowledge of older people, reported fewer interactions with elderly persons, and did not perceive the older individuals in a positive manner. Studies, as above, and (Britton, 1969 and Sheegan, 1978), involved adolescents and young adults also showed predominantly negative attitudes towards old people, viewing old age as a most unpleasant experience. The Hickey and Kallish study (Hickey and Kallish, 1968) including age groups from elementary schools through to college, concluded that these groups observed old people and old age generally progressively negative for successively older age groups. Other studies, (Auerback and Levenson, 1977) and (Winberger and Willham, 1975), of similar age groups have shown the same conclusions: The image of the elderly person in our society is not a positive one. Ageing is viewed as an increasingly negative process.

Further studies on attitudes of graduate students showed substantial evidence of negativity towards older people with views of ageing as a time of physical and mental deterioration, poor health, loneliness, resistance to change, and failing mental powers, (1933). Students perceived old age as a time of devaluation of status, of inactivity, lack of interests and
a loss of role in society, according to many research studies, (1955 & 1962),
the pertinent factor for such emphatic negative attitudes towards the elderly
and the ageing process by young individuals is that they are concerned about
their own ageing. Palmore, (Palmore, 1973), states that 'prejudice towards
the elderly is an attempt by the young generations to shield themselves
from the fact of their own eventual ageing and death and to avoid having to
deal with social and economic problems of increasing numbers of old people.'

4.3 HOW ARE THESE NEGATIVE ATTITUDES REINFORCED?

4.3.1. Literature

This happens in many subtle ways. Ansello, (Ansello, 1977),
systematically analysed almost 700 circulating children's picture books for
behavioural and trait characteristics of older characters. Constricted
development and ageism was apparent. While few demonstratively hostile or
unequivocally negative portrayals were noted, the role of the older
characters was minimized through peripheral story involvement, repetitive
and routine behaviours, and flat, undimensional physical and personal
development. The cumulative effect of the portrayals was to stereotype the
older character as unexciting, unimaginative, not self-disclosing, and not
self-sufficient. Old age seemed boring: There was a significantly limited
range of older characters, especially within the behavioural domain.

4.3.2. Television

Yet another way in which attitudes can be influenced is by television.
Hiemstra, Goodman et. al. (Hiemstra, Goodman, 1983), described an examination
of recent television advertisements primarily in respect to the treatment
of older persons. The purpose was to analyse the advertisements to determine
if older people and images of ageing are portrayed in negative or stereotypical
ways.

A total of 136 commercials were selected for constant analyses. The
sample of older persons and people of other age groups were viewed and
coded by a minimum of two judges. The most significant finding was the absence of the elderly in television commercials. Only 11 of 358 human characters were judged to be 60 years of age or older. Of the 136 human characters judged to be central figures, only 6 were thought to be 60 or older.

The article provides several implications for educators. They centre around the notion that the educator must become assertive in helping both the older person and the Madison Avenue executive take steps to portray the older person more positively and realistically.

Most people agree that television is a powerful medium in promoting communication, providing information, and influencing attitudes. The importance of the medium is dramatically illustrated at election time when candidates spend millions to reach to 96% of American households with television sets.

This power, the money spent on advertising - 5.5 billion dollars by the 100 largest advertisers in 1979, (1980), and the large number of potential viewers can also be a source of trouble for other people, for example, the elderly. Several authors and researchers have shown that the elderly generally are portrayed negatively in television commercials. In addition, while there has been considerable research on the impact of television on younger viewers, the effect of the medium on adult and elderly viewers has not received much attention, (1977). The elderly also watch a considerable amount of television, (1980). Most programs shown on the three major networks are aimed at youth or young adults.

Yet, older viewers also use a large number of products and spend a considerable amount of money each year: "The survey of 45-64 years olds, found that more than 50 percent of all discretionary spending - any income left over after fixed expenses are paid - is in the hands of this age group (1982)." Thus, a tempting target for advertisers appears to exist.
4.3.3. **Humour**

Unlikely as it may seem, in the last decade, several social scientists have suggested that humour provides a rich source of data on attitudes towards old age and the ageing process (1971, 1977, 1977), and in their independent investigations, have concluded the majority of jokes depict old age and ageing negatively. In addition, they have found that many of the jokes focused upon the physical and mental abilities, appearance, and age concealment. Further, they have noted that women are treated more negatively than men. These conclusions have led Davies, (Davies, 1977), to call for action to curtail the proliferation and continuation of jokes which express negative attitudes about ageing and stigmatise the elderly.

In conclusion, it has been demonstrated that there is early formation of negative attitudes towards the aged. These are constantly being reinforced and they seem to persist. As ageing is an inevitable process to which we all are subjected, so it should be put into a context which is more in keeping with the reality of the situation. Not all old people are as depicted in their stereotypic negative form, most are healthy, independent, and providing positive inputs in our society. Many are the carers of people less fortunate than themselves, they should not be denigrated as a group. Ageing is projected as degeneration and devastation, a historical carry over of research in geriatric institutions, but this is simply not the case. Ageing can have a positive aspect because the older person has learnt adaptation as a compensatory mechanism, a case of mind or intellect being able to accept what, in a younger person, would be totally unacceptable. Courage and fortitude, humour, and charity represent the greater majority of the aged.

This should be the thrust of campaigns to break down the traditional and erroneous negative stereotypes held of the aged.
4.4. ATTITUDES TOWARDS THE AGED.

4.4.1. By the Community.

The writer has already described in an earlier section early formation of attitudes, and how these attitudes persist in the various age groups. It is appropriate now to interpret how the community at large views the aged and why. Simone de Beauvoir in 'Old Age' printed in 1970, (Simone de Beauvoir, 1970), and centering on France, was scathing in her comments on the treatment of the aged. She stated, "It is common knowledge that the condition of old people today is scandalous"; and later, "as a general rule society shuts it's eyes to all abuses, scandals, and tragedies so long as these do not upset it's balance; and it worries no more about the children in state orphanages; or of juvenile delinquents, or of the handicapped, than it does about that of the aged. In the last case, however, this indifference does on the face of it seem more astonishing, since every single member of the community must know that HIS future is in question; and almost all of them have close personal relationships with some old people."

Her contention is that, apart from some exceptions, the old man no longer DOES anything, he is defined, therefore, as an EXIS. The active members of the community exist as DOERS, or as a PRAXIS. The PRAXIS cannot reconcile the EXIS. This is why the active members in the community see him as a different species, one in whom they do not recognise themselves. She maintains that old age arouses a biological repugance; as a kind of self-defence one rejects the old man, rather than creating an inter-personal relationship which is based on reciprocity.

The writer has spoken to some young people and asked them how they feel about the aged. Some commented, "They disgust me", or "I don't want anything to do with them". Maybe Simon de Beauvoir's theories hold true - I hope not. How widespread is the problem? It is not possible to determine such a subjective response because of the infinite variables, enough to say it does exist. Many of the injustices concerning the aged seem to be being
redressed, and hopefully the following statement will hold true for Australia.

"Ultimately, a country will not be judged for it's affluence or it's technology, but how it treats it's young and it's old." Australia's response to the social issues of the aged has been a positive one, which reflects much credit upon our society; however, merely by providing aid in financial terms could reinforce negative attitudes held. Much more complex inputs are required if attitudes are to change. This is an issue which concerns all of us.

4.4.2. **By the Government**

The involvement of the Commonwealth Government in the affairs of the aged is one of deep commitment in a broad sphere of activities. To mention but a few - age pensions, medical, dental, and optical services, geriatric hospitals, nursing homes, transport subsidies, financial assistance to charitable agencies, and advisory offices, among others. The Table below shows clearly the dependency of the aged upon the Government for financial support.

**Hugo. TABLE 5**

**AUSTRALIA: Persons receiving the Aged Pension, 1971 - 1983**

<table>
<thead>
<tr>
<th></th>
<th>1971 (JUNE)</th>
<th>1981 (JUNE)</th>
<th>1983 (DEC.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Aged Pensioners</td>
<td>758,700</td>
<td>1,327,900</td>
<td>1,557,296</td>
</tr>
<tr>
<td>Percentage of total population</td>
<td>5.9</td>
<td>9.0</td>
<td>10.1</td>
</tr>
<tr>
<td>Percentage of workforce</td>
<td>13.5</td>
<td>19.7</td>
<td>22.3</td>
</tr>
<tr>
<td>Percent 65-69 receiving pension</td>
<td>54.6</td>
<td>66.4</td>
<td>77.3</td>
</tr>
<tr>
<td>Percent 70+ receiving pension</td>
<td>70.2</td>
<td>93.1</td>
<td>97.2</td>
</tr>
</tbody>
</table>

**Sources:** Department of Social Security (1983) Pocket Compendium of Income Stats, December issue, Stats Sect., Canberra, ACT.

77.3 percent of persons aged 65-69 received a pension, and in the 70+ age group 97.2 percent were pension recipients. The reason for the increase between the two groups is that assessment is much more stringent in the age groups 65-69, the pension being almost double that of the 70+ (B) pension. As the population grows older and the number of persons aged 65 years and over increases, so it becomes expedient for any Government in office to recognise the voting potential of this group. If the Government is seen to be deficient in caring for the aged, it is not difficult to conceive for a combined lobby to unseat the Government by exercising it's wishes at the ballot box.

The response to the increasing numbers of aged persons in Australia by the Government has been to initiate a project at the Australian National University in Canberra - The Ageing and the Family Project; this was established in 1980. The main aim was to contribute to the development of social gerontology in Australia. The first major report provides a detailed account of the circumstances of older Australians in the community, with particular attention to the vulnerabilities and resources which influence their need for health and welfare services. Many of the State Governments now have a Minister for the Aged, and in South Australia they have recently appointed a Commissioner for the Aged, the first within Australia. The objectives of the Commissioner are to achieve proper integration of the ageing in the community, to create social structures where the ageing are able to realise their full potential, to create a climate in which the ageing are accorded dignity, to ensure the multicultural nature of the community is reflected in planning and implementation of programmes and services for the ageing, to achieve a proper understanding within the community of the problems of the ageing, and to modify social structures and attitudes as much as is practicable.

Because so much Commonwealth Government expenditure involves the Aged - 10.6% in 1981, the Government sees it as a very urgent priority to
establish where the most need exists. So their concern is not entirely altruistic, but rather a more pragmatic response in spending the "welfare" dollar wisely.
4.5. ATTITUDES OF HEALTH PROFESSIONALS TOWARDS THE AGED.

One of the most important issues is that of the attitudes of the health professional towards the aged. Unfortunately, the same negative stereotyping of the elderly that exists through childhood and young adulthood continues to be present (Cicchetti, 1973, Kahana & Coe, 1969, Spence, Feigenbaum, Fitzgerald & Roth, 1968). Data indicates that students in the helping professions are disinclined or unwilling to work with the elderly. Geiger, (Geiger, 1978), examining how future professionals view the aged, reported that students had misunderstandings and misconceptions about the aged and the ageing process. Many lacked knowledge about the most basic facts about the aged and did not give first preference to work with the elderly. Studies have shown that many physicians, (Gruber, 1977, Braceland, 1972, Sinex, 1979, Wolk & Wolk, 1971, Mead, 1979), dentists, (Tryon, 1981, Beck, Ettinger, Glen, Paule & Holtaman, 1979, Effenbaum, 1971, Kiyak, 1981, Stiff & Phipps, 1964), and other health professionals have the same negative attitudes towards the elderly as the general population. (Kasberg & Harris, 1978, Coe, 1967, Holtzman, Beck & Coggan, 1978, Solomon, & Vickers, 1979). Ageing related attitudes are important to understand because they affect interpersonal interactions in the delivery of health care to the older population. Negative attitudes towards the elderly diminish the accessibility and quality of health care. (Solomon & Vickers, 1979, Wilson & Hafferty, 1980). These negative attitudes toward the elderly, therefore, can create serious problems in the delivery of health care to the older population.

In this youth orientated society, there is a tendency among health workers and society at large to think of the aged as a homogeneous population that is in a continuous state of physical and mental deterioration (Skilton, 1977). This stems from the practitioners, myths, lack of knowledge and misinformation regarding older people. There are great differences in the rates of physiologic, psychologic, and sociologic aspects of ageing from one individual to another and also each person. These factors and the
heterogeneous nature of the aged, are important in determining the physical and mental status in later years. In absence of severe diseases and social complexities, elderly individuals tend to remain interested and actively involved in life's challenges.

Only 5% (U.S.) of the 65 and older age group are institutionalised in long term care facilities and hospitals. 95% of the people older than 65 live in the community with varying degrees of independence. Most of these will seek all types of health care in the community, Kappelman et. al., 1981).

Many health providers try to avoid personal contact with the elderly patient (Maxwell, Sullivan, 1980). Butler, (Butler, 1975), states that there are negative attitudes towards the elderly by health professionals because they lack understanding and have limited professional contact with a variety of old people; he believes that health professionals are threatened by their own fears and insecurities of the ageing process. Avoidance corresponds to the health professionals, frustration stemming from the incapacity of the elderly to recover from their chronic illnesses; health professionals often doubt their ability to deal with chronic ailments.

Stereotyping of the elderly by health professionals must be modified before health providers can deal effectively with health problems of the aged.

A lack of interest and discrimination towards the elderly will limit access to care.

Health professionals must help ageing patients adapt to their existing circumstances. It is the responsibility of the health provider to evaluate and help maintain the optimal functional activity of each elderly patient. If growing health needs of the elderly are to be effectively met, attitudes towards the elderly must be improved. Stereotyping is a cultural sensibility
that can be modified through study and education, (Butler, 1979). There is a need for inclusion of gerontologic and geriatric training in professional education. The training of health professionals in these disciplines has been almost non-existent, (Wright, 1973, Kent, 1977, Massler, 1978, Needham, 1968, Rossman, 1976). The need exists to study specific factors that influence health professionals willingness to treat elderly patients.
4.6. References


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5. ATTITUDE OF THE AGED

5.1. INTRODUCTION

In attempting this section, Attitudes of the Aged, the writer is going to develop some of the themes, which ultimately have a bearing on the individual's subjective and objective attitudes. This requires some discussion on psychological developmental processes with age; what constitutes Normal Ageing; some of the current theories of Social Gerontology; for those individuals who are institutionalised, the effects of such a setting upon them psychologically; and finally, the importance of health in determining the aged person's social interactions.

In the later sections, this initial development of the underlying basic themes will do much to explain many of the why's and wherefore's of the current activities and movements within the ranks of the aged. So rather than deal in absolutes which one can rarely validate because of the infinite variables, the writer will opt for this developmental approach, hoping to clarify somewhat the very complex patterns which influence the formation of attitudes within the individual aged person, and that group of individuals which go to form what many people consider such an amorphous conglomerate, but who do, in fact, represent a rich tapestry of unrecognised and unused human resources.

Such is the pervading influence of society's ignorance and neglect, that it finds its expression in the continuing negativism towards the aged. On reading this discussion, the writer hopes that it will have prompted some response from the reader in that it lays to rest the stereotype of the aged, and creates a better understanding of this group, and their expectations.
5.2. Age and the Development Process

Any discussion on the aged should include some basic appreciation of the 'psychological' development process. While Freud and his early psychoanalytic colleagues would probably disagree, few students of human behaviour today are willing to grant that psychological makeup is totally fixed early in life or inevitably linked to psychological states. As one of the first to depart from Freud's position, Erikson (1963) attracted widespread attention to the proposition that personalities continue to evolve throughout the adult life course in a gradual yet continuous manner. Even those who do not accept Erikson's concept of specific stages, do find a developmental framework useful in discussing qualitative changes in the attitudes and reactions to one's social world. The basic argument of nearly every developmental process is that for individuals to remain reasonably satisfied, over the course of life, they must undergo slight modifications in the ways they think of themselves or their environment. Although allowance needs to be made for individual personality, world view and cultural milieu, developmental psychologists assume that people everywhere face similar developmental tasks in the process of adjustment to changing life circumstances. During the 1930's a Viennese psychologist, Buhler, outlined a five stage pattern of psychological development.

Phase 1 and 2: Age 25-29. Establishment and independent life style.


Phase 4: Age 50-60. Physical or emotional crises. Resolution either by creation of new interests to compensate for diminishing physiological capabilities or retreat, leading to an eventual restriction of social life and introversion of one's interests.

Phase 5: Age 60-65. Occupational retirement, nagging illnesses, social retreat.
Erikson's (1963) eight stages of development also encompass the entire life cycle, but his differs from Buhler's in that the emphasis is on a series of crises which must be overcome. According to Erikson, each stage consists of solving a development task, in terms of one or other of two possible choices. Erikson's concern with childhood development is revealed in the first five stages, all of which are concluded before biological maturity.

Following the resolution of identity crises during adolescence, young adults move into the sixth stage, one of INTIMACY, in which they either create mutually satisfying relationships or find themselves ISOLATED, with little regard for others. Throughout most of adulthood and into the middle years (no age parameters), the choice is between GENERATIVITY, a reaching beyond selfish concerns to contribute something of lasting value, or STAGNATION, accompanied by feelings of boredom, self indulgence and bodily preoccupation. The final stage is one of consummation, a time of ego integrity versus a sense of DESPAIR. On the one hand, successful resolution of the previous crisis will leave one prepared for accepting life for what it is, without a longing for living life anew. Older individuals who have a sense of integrity, will have a feeling of wisdom in their own choices. On the other hand, those who have not satisfactorily adjusted to changes that have occurred along the way will find themselves filled with despair and foreboding over the prospect of years of retirement and their ultimate demise. In short, they will be devoid of a sense of integrity, both psychologically and socially (Erikson, 1963). Viewing Erikson's last two stages as too gross a picture of the majority of adult life, Peck (1968) subdivided the later years into middle and older age categories. In the middle years, four developmental issues must be confronted if favourable adjustment is to follow. Thus individuals need to arrive at a point where they value intellectual pursuits, seek sociability free from sexual connotations and
are capable of keeping their emotional investments flexible whilst appreciating the possibility of new life experiences, if they are to retain a sense of well being. If adaptation is to be maintained in the years following retirement, Peck contends new sources of gratification must be elaborated along with an ability to transcend not only bodily functioning but personal skills in order to contribute to the lives of others.

Many developmental psychologists have modified the enumerated theories, but, in essence, they all confirm a sequential life cycle development process. One other is worthy of mention, Gould (1975) studied over 500 middle class adults ranging in age from 16-60. It is unfortunate that Gould did not include later age phases in his research since the stages he does describe provided empirical validation of Erikson's heuristic suggestions. Gould outlined seven developmental stages in adult life with fairly distinct age limitations. As might be expected, people in the youngest categories tend to align themselves as members of the parental family unit. But in the next phase, between 18 and 21, some changes have taken place, so that by the third phase, independent adult attitudes have become stabilised. The fourth phase lasting from 29 until age 36, marks the beginning of self-reflection and deeper feelings, while the next phase, up to age 43, is characterised by some personal and marital unrest, although financial worries are no longer as overriding as they were previously. Life becomes stable once more in the sixth period, with relationships and emotional ties increasing in importance. By Gould's seventh phase, time has become the central issue, with typical concerns converging on the allocation of temporal resources and health. As there are shortcomings with Gould's concepts, so also does this apply to Freud, Buhler, Erikson and Peck. Clearly human beings do not live out their lives unaffected by social prescriptions. Older persons reared around the turn of the century tend to evaluate the stresses they encounter later in life in terms of the social philosophy and values of their youth, of which subsequent
generations are not even aware. Similarly, these lifespan models do not take into account sex differences (possible) in developmental tasks. Both Neugarten and Lowenthal (1975) report from their respective studies that the dominant goals and problems faced by women and men may actually run at odds. Neugarten's (1968) research reveals that women do not experience the same occupational or health-related stresses as men: Instead they must learn to deal with new-found opportunities for self expression and a freedom from overriding family obligations. Indeed, in her cross sectional analysis of aging, Lowenthal (1975) found that in most circumstances, sex differences proved to be greater than the differences she discovered between developmental stages. In contrast to Neugarten's data, Lowenthal notes that women in their middle years faced more critical stresses and anxieties than men. As women reach the last phases of life, they leave behind many of the crises of the middle years, turning their attention to a new range of developmental tasks. Men in their middle years are most frequently apprehensive over perceived financial strictures to be dealt with in the future and present occupational boredom: By retirement they have advanced to more immediately hedonistic concerns. According to Lowenthal, men and women also react differently to transitional crises; perhaps somewhat surprisingly, men tend to rely more on the interpersonal relationships to see them through.
5.3. **NORMAL AGEING**

The Duke Longitudinal Study as reported in "Normal Aging", edited by Erdman Palmore extended for the period 1955-1969. Because precise measurements were required for medical and psychological assessment of the subjects, it presented a special problem in developing a panel of older subjects. The reported experience of survey research indicated that subjects' refusal to participate was a function of age in the later years. Since the proposed examinations of panelists was costly and continued participation in the panel was vital, the Duke investigators chose to recruit volunteers rather than attempt to involve a random drawn sample of non-institutionalised subjects.

A snowball technique was used to create a pool of volunteers 60 years of age and older. Initially the median age of panelists was 70, and they ranged in age from 60 to 94. From this pool a panel was created that reflected the age, sex, ethnic and socio-economic characteristics of the population in Durham, North Carolina. As the author of Chapter 1, Ewald Busse said, "the purpose of this procedure was to maximise the variety of controls which might be introduced subsequently, not to give the appearance of random sampling without its substance." The primary inducements originally offered was a free annual physical examination. Four years were required to accumulate the basic panel of 256 subjects on whom baseline data were made. The mean time between the initial and first longitudinal observation was 33 months with a standard deviation of approximately 6 months. The second, third and fourth observations were completed in 20, 14 and 12 months respectively.

A description of the timing of these observations and panel attrition are shown on Table over page.
<table>
<thead>
<tr>
<th>Observation</th>
<th>Dates</th>
<th>No. with complete records</th>
<th>% of 256 who returned</th>
<th>% of non-returnees who were:</th>
<th>died</th>
<th>ill</th>
<th>refused</th>
<th>other</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>5/55-5/59</td>
<td>256</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>II</td>
<td>9/59-5/61</td>
<td>192 (+10)</td>
<td>71</td>
<td>43</td>
<td>23</td>
<td>20</td>
<td>14</td>
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</tr>
<tr>
<td>III</td>
<td>1/64-3/65</td>
<td>139 (+1)</td>
<td>52</td>
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<td>10/66-7/67</td>
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<td>41</td>
<td>68</td>
<td>18</td>
<td>1</td>
<td>13</td>
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</table>

Most panelists seem to have been motivated by the medical examination and have, in fact, been examined between longitudinal observations. It was essential to maintain the panelists and this was reinforced by frequent social interaction in the form of greeting cards on special occasions, occasional telephone contact, and a solicitous attention on those days when the panelists were brought to the medical centre for examination.

The degree of identification with the project is reflected in a relatively low rate of attrition for reasons other than by death or serious illness through four observations over the past decade. After the second longitudinal series, in which 20% of the 74 participants refused, refusals were minimal.

For each panelist, approximately 788 pieces of information were coded in each series of observations for each subject. Of these 336 were medical; 109 psychiatric or neurological; 109 psychological and 234 social. Medical determinations included history and current status of systems, with special attention being given to cardiovascular ratings, serology, ophthalmology and audiology. A summary rating of physical functioning was developed for estimating the presence or absence of pathology and associated degree of disability. An index estimating cardiovascular functioning has also been developed.
The psychiatric or neurological variables focus on aspects of mental status and functioning, both current and historical, among the panelists. Detailed electroencephalograph evaluations supplement the findings of the neurological examination.

Psychological variables include Wechsler Adult Intelligence Scale scores, assessment of reaction time in a variety of learning experiments and summaries of Rorschach responses.

Sociological variables include life style indicators, work status and history, family relationships and level of activity and of life satisfaction, including an adaptation on Cavan Activities and Attitudes Scale.

On the basis of this study, Pallmore formulated 48 tentative hypotheses about NORMAL AGING living in the COMMUNITY.

His penetrating observations make fascinating reading which casts ridicule on many of the stereotypic pictures held of the aged. In his summary, he states, "The longitudinal analysis made possible the discovery of general persistence in activities and attitudes, the substantial numbers with improving health and with increase in sexual activities, the patterns of hypochondriasis and denial of illness over time, the general stability of intelligence, the factors predicting longevity, and so forth. The interdisciplinary teamwork made possible the analysis of such relationships as those between social activities and psychological attitudes, between socio-economic status and health, neurological symptoms, intelligence, hypochondriasis activities and attitudes; among cholesterol, cardiovascular disease and intelligence; among intellectual functions, EEG, and deafness; and between physician's evaluation of health and the panelist's own health evaluation."

Pallmore continued, "Another basic theme is that the well known patterns of declining health and physical functions do apply in general to
a majority of the aged. This theme first occurs in the analysis of changes in the physical functioning rating over time and is repeated with variations in the findings of increased neurological symptoms, increased skin lesions, increased alterations in bloodvessels, slower reaction times, and decreased sexual activity.

But in contrast to this general theme of declining physical functions, there are several qualifying and contrapuntal themes. One is that there are many exceptions to this pattern. A substantial minority of the panelists actually showed improvements in physical functioning, in skin conditions, in blood vessels, and increased sexual activity. Thus the process of physical aging is not necessarily an irresistible and irreversible force. Health and functioning can and do improve for some aged persons just as they do for younger persons.

A second contrasting theme is that while physical functioning tends to decline on the average, social and psychological functioning shows little or no decline. The average scores on activities and attitudes show no significant decline among the men and only small declines among the women over a 10 year period. The protest of intelligence showed little decline after a 3 year interval.

When required to make a choice of risky alternatives, the aged showed no more cautiousness than the young. The aged were able to recall "high arousal" (meaningful) phrases as well as the young. Most panelists showed no particular concern about illness or death, and most had a fairly realistic evaluation of their health and age category. Most did not feel neglected or lonely even though they tended not to live with their children or relatives.

Pallmore noted the rather striking fact that despite substantial impairment of physical functioning, EEG abnormalities, cardiovascular diseases
and impairments in vision and hearing, most of these aged persons remained functioning residents in the community, living fairly mobile and independent lives. This is a significant testimony to the ability of the normal aged to compensate for their various physical ailments and remain socially and psychologically healthy. This theme is a bright counterpoint to the more sombre theme of physical decline.

In his closing paragraph, Pallmore stated, "Finally, there is the theme of individual and group variations among the aged and the attempts to account for this variation on grounds other than simple chronological age. It is pointed out that the aged show EVEN MORE INDIVIDUAL VARIABILITY than the young. And even when there are significant mean differences between the young and the old, there is a considerable overlap between the scores of young and old. For example, even though the average aged person tends to have slower reaction times than the average younger person, many of the above average aged are faster than many of the below average young. Thus attempts are made to get behind the stereotype of the uniformly and inexorably declining aged person and to account for the great variation in the level of functioning. For example, socio-economic status is generally found to be related to physical, mental and social functioning. Persons in the upper socio-economic groups generally have better health, better vision, fewer neurological symptoms, less hypochondriasis, less sexual activity and more life satisfaction. For another example, the large variation in life satisfaction is partly related to physical functioning and partly to the amount of activity engaged in. The correlation of changes in activity with changes in satisfaction indicates that when activities are curtailed, satisfaction tends to decline."

Pallmore stressed that this sample was not a probability sample and the use of volunteers resulted in a somewhat better-than-average group in terms of most variables. Also, successive samples after attrition placed limitations
on the study, and, as time went by, the survivors who returned for repeated examinations tended to represent more and more an elite group physically, mentally and socially. This is one of the inevitable limitations of longitudinal studies which must be recognised. He was not able to say whether these findings would or would not apply to those below-average aged who did not volunteer in the beginning or who dropped out because of illness, death or lack of interest.
5.4. THEORIES OF SOCIAL GERONTOLOGY

Prior to discussing the theories themselves, it is desirable to consider some of the difficulties involved in accounting for social patterns of aging. Not the least of these has to do with the wisdom behind or the need for a theory applicable to only the later years. There is less than complete agreement among gerontologists themselves that the social nature of aging requires its own explanation. Granted, theories do have a certain value, aiding in the collection of data and the organising of existing information, plus giving direction for the implementation of policy changes. Still, the question remains why old age should demand its own, perhaps singular interpretation. By the time people reach their later years, have they not already weathered many personal changes and life course crises, which should help them to adjust to whatever further changes may be thrust on them? In one way, NO, since for nearly every other age-related transformation in life, most people undergo what psychologists call "ANTICIPATORY SOCIALISATION", the learning of a new role preparatory to actually assuming it. In addition, whilst it is true that adapting to change is a lifelong process, the adjustments made after one turns 60 or 65 are carried out against a backdrop of involuntional changes in physical and social realms.

With regard to aging some social scientists have suggested a perspective, focusing on the nature of the transitional episodes throughout life may be sufficient to account for whatever change takes place during old age. In all fairness, it must be made clear the theories themselves do not seek to explain the totality of social aging, they generally limit themselves to expositions of how people adjust to advancing age. The means by which people reach a satisfactory structuring of their lives after the age of 65 are part and parcel of one of the more important unanswered questions about the life cycle. As older people become more visible on the
national scene, it is predicted that even greater emphasis will be placed on providing an accurate prediction of what awaits us all in our later years. (Havighurst, 1968; Maddox, 1970). In constructing their explanations, social scientists are forced to treat all members of a category as though they are nearly identical. It is the only way by which any useful generalisations can be made; though in the case of human beings they recognise the risks involved in making such an assumption. The aged do not, however, constitute a homogeneous aggregate; the same factors that are know to differentiate people at the earlier stages of life continue to operate unabated through the later phases. To adequately discuss the social and social-psychological processes integral to the way older people adjust to their situations, it is necessary to distinguish the consequences of ageing per se from those more appropriately attributed to discontinuities in personal lifestyle or to situational constraints and generational effects. While there is no denying the importance of the latter, they do not actually reflect mature age changes as much as they do differences between cohorts or individuals (Maddox, 1965; Schaie, 1967). To date, gerontological theory occupies an underdeveloped area within the field, but the last decade has been marked by a rapid growth and sophistication in the depiction of the social variables involved in ageing. The major theories all speak to essentially the same problem and, in a way, complement one another in many important respects.

PRINCIPLE THEORIES IN SOCIAL GERONTOLOGY

5.4.1. Disengagement Theory.

As one of the original theoretical attempts, disengagement theory, with its assertion that ageing is a process of quietly receding from view or at least of withdrawing from active participation, quickly met with criticism from all sides. Especially vocal were those activity theorists who contend older people do not change their minds about the importance of being involved even
when they can no longer keep pace with the world around them.

The Disengagement Theory was the first major theory system proposed by social gerontologists. Cumming and Henry (Growing Old, Cumming et. al. 1960; Cumming and Henry, 1961), clearly enunciated what it is to be regarded as the inevitability and universality of the process. Society retracts because of the need to fit younger people into the slots once occupied by older people no longer as useful or dependent as they were, and in order to maintain the equilibrium of the system. This theory is now discredited, in favour of a more developmental approach. Developmentalists conceive of personality as continually evolving, with adjustment at each successive stage reflecting earlier coping strategies as well as the matrix of the environment.

5.4.2. The Activity Perspective.

The activity theory of ageing presumes, almost the converse of disengagement, that restitution, in the form of compensatory activities, must take place. By keeping active, it is presumed people will remain socially and psychologically fit. The theory has received very little support and is criticised as an oversimplification of the questions involved.

5.4.3. The Aged as a Sub-Culture.

Rose (1965) suggested the possibility of an ageing sub-culture, very much the counterpart of the widely recognised youth movement associated with the late 60's. By becoming their own reference group, by recognising their common predicament, Rose claims older people will develop a new basis for adaptation, even to the point of evolving into a social movement with a political voice. This was criticised by social gerontologists also; they expressed reservations, asserting instead that it all depends on a person's psychological make-up and habitual methods of coping. It is true they noted, that roles themselves may be discontinuous but people are not; the
repertoire of responses developed throughout a life-time is not suddenly abandoned on the threshold of old age.

5.4.4. The Age Stratification Theory.

This is an attempt to formulate a whole life concept of ageing. Age stratification views old age as a process of becoming socialised to new or revised role definitions, reflecting a fluid relationship between people, their social contexts and their opportunities. How much change must be accommodated by the individual is difficult to predict; it is dependent upon an intertwined series of feedback loops revolving around the size of the ageing population, the available roles and differences in the timing of individual and social needs.
5.5. INSTITUTIONAL ACCOMMODATION - RECENT RESEARCH

ITS RELEVANCE TO POLICY

The question of the institutional setting and its effect on the residents is a subject which is receiving considerable attention worldwide. In including it as a consideration of attitudes of the aged, it may seem somewhat out of place, however, there is no doubt that the institution has a pronounced influence on the attitudes of the institutional aged, and is a powerful medium in modifying them. Therefore, it is pertinent to consider the institution as an influence on the subjective attitudes of the institutionalised aged.

Fine, in a thoughtful and provocative analysis of Australia's social policy towards institutional care, said (1) "As we move towards the twenty-first century Australia remains committed to a high level of provision for institutional services for aged persons. Despite the publication of a number of official reports in the last decade calling for a reversal of this policy, of which the McLeay report is the most recent and the most emphatic (McLeay 1982; Fine, 1983), as yet there have been no concrete proposals for a real move in this direction. Actual policy initiatives have been restricted to linking the growth in nursing home bed numbers to increase in the aged population."

The continuing commitment of the Commonwealth Government to institutional care was spelt out in the A.L.P. policy on Aged Care prior to the 1983 election. This policy reads in part, "On the residential side we see our task to moderate growth in the nursing home sector, while continuing to pursue more equitable geographic distribution of nursing home beds, and to increase the availability of hostel accommodation." (Blewett, 1983).

The lack of any clear policy from the current opposition tends to give approval to this continuing state of affairs. In contrast to actual policy emphasis, however, the public agenda of aged persons services has focussed
upon the issue of 'community care.' Despite the ideology of a new direction, aged person's policy on institutional care continues to be aimless with no immediate prospect for renewed attention to matters concerned with the nature of the institutional setting.

UNDERSTANDING INSTITUTIONAL ACCOMMODATION

For many years now it has been popular, in medical and social research as well as in the broader sphere of public opinion, to criticise the use of institutional accommodation as being both expensive and socially and psychologically damaging to the recipients. Ironically, this criticism has grown along with the growth in institutional facilities for aged persons. General findings from research:

Practically all researchers have found high regulatory regimes in which residents are managed, cared for, and made the passive recipients of services, to have far reaching and damaging consequences. A large number of studies have confirmed that residents of nursing homes and other similar facilities show:

"poor adjustment, depression and unhappiness, intellectual ineffectiveness because of increased rigidity and low energy.... negative self-image feelings of personal insignificance and impotency, and a view of the self as old. Residents tend to be docile, submissive, show a low range of interests and activities, and to live in the past rather than the future. They are withdrawn and unresponsive in relationships to others. There is some suggestion that they have increased anxiety which at times is focussed on feelings of death.... other investigations have reported marked increases in mortality rates...." (Lieberman, 1969).

TO THIS LIST CAN BE ADDED A NUMBER OF SOCIAL CONSEQUENCES, SUCH AS CESSATION OF INVOLVEMENT WITH FORMER FRIENDS, NEIGHBOURS AND COLLEAGUES, a loss of social and financial independence and the inevitable social segregation that accompanies admission (Bowker, 1982; Davies and Knapp 1981; Crandall, 1980 and Bennet and Eisdorfer, 1975).
Despite this general picture some apparent anomalies also emerge from the research. Some individual residents appear to benefit greatly, and on admission become more sociable, assertive and active. In other cases some of the research into hostel-type accommodation has found that when fairly homogeneous groups of residents have regarded their new accommodation as superior to what they previously had, and where they experienced relatively little interference from management and staff, a positive, activating 'community'of residents has developed (Hochschild, 1973; Keith-Ross, 1977, 1980). The class background of the residents in these studies also appears to have been important.

The Work of Goffman and Kleemeier

The work of the above has been of extreme importance as it has provided a conceptual model for much of the work that has succeeded them. Both writers focussed their attention upon the institution itself, as if it were separate from, and in contrast to, the society which produced it. In fact it was the assessment of the ways in which the institutional residents differed from the apparently unregulated life they claimed was led by people outside that has come to be the most important feature of their work as interpreted by their followers.

Goffman's most significant contribution to the study of institutional accommodation was summed up in his identification of the total institution. By this he indicated those 'social establishments (Whose)....encompassing or total character is symbolised by the barrier to social intercourse with the outside and to departure'. Goffman saw similarities between institutions for the aged and gaols, concentration camps and mental hospitals, each of which acted to control and regulate the behaviour of the 'inmates,' as he termed them.
Other similarities were also identified which distinguished life within 'total institutions' from the outside:

"First, all aspects of life are conducted in the same place and under the same single authority. Second, each phase of the member's daily activity is carried on in the immediate company of a large batch of others, all of whom are treated alike and required to do the same thing together. Third, all phases of the day's activities are tightly scheduled...the whole sequence of activities being imposed from above by a system of formal rulings and a body of officials. Finally, the various enforced activities are brought together in a single rational plan designed to fulfil the official aims of the institution." (Goffman, 1968). Residents were manipulated for the benefit of staff and to suit the official aims of therapy, behaviour control or thought reform with the ultimate result being a series of behavioural adjustments which led to the 'mortification of the self'. Goffman articulated here the anxieties of a whole generation of middle America, and middle Australia too, has responded. Probably, the best Australian study 'The Nursing Home as a Total Institution' was based on work carried out in Sydney by Jo Harrison and co-authored by Cherry Swain. It was scathingly critical of the impersonal and arbitrary regime operating in the anonymous nursing home (Swain and Harrison, 1979).

Kleemeier's work was more specifically focussed upon what he termed 'special settings for the aged.' He formulated a scheme explicitly designed to direct attention in further research to three 'descriptive dimensions' of the environment of residential settings in order to allow the classification and assessment of their impact upon the 'lifestyle of the inhabitant.' However, he emphasised that the effects of special residential environments were not simply the direct result of the characteristics of the physical or social setting, and instead he proposed, there was a complex interaction between the characteristics of the residents and that of the environment.
A particular environment might well be supportive and motivating for one person, but destructive and unsuitable for others (Kleemeier, 1961).

The three dimensions formulated by Kleemeier were:
1. the segregation dimension
2. the institutional or control dimension
3. the congregate dimension

Both Goffman and Kleemeier chose as their unit of analysis the institution itself, cut off from the historical and social processes that have produced it. Goffman himself wrote of the dangers involved in such an approach, "physical boundaries such as walls may in the last analysis be an incidental feature of organisation, not an analytical one." (Goffman, 1968).

This means that instead of critically examining the way in which a society enables a nursing home to operate, through determining who shall be entitled to use it, what resources will be available, what types of programs it can offer, what forms of staff organisation and what types of social relationships will develop, the focus of attention is comfortably adjusted to what goes on in the individual home.

Neither writer paid much attention to the ways in which staff and work are organised. Their focus was almost entirely upon the ways in which residents were affected. This led to a preoccupation in their analysis with the residents' individual adjustment to life within the institution, but the features which cause such outcomes are obscure. What is most significant, and most limiting, is the impression created that institutions are 'discontinuous' or distinct from the remainder of society. It is this dicotomous thinking which has formed their most lasting contribution to further research and popular thinking on the subject, and continues to exercise the minds of policy makers, and consumers of services in Australia.
5.6. Studies.

5.6.1. Psychometric Studies

These focus all attention upon what happens within the institution or environment. The concern is with fitting individuals into the appropriate setting, rather than with the social and economic features of institutions. Notable researchers to have used such an approach or with modification were Pincus (1968), Kahana (1974), Bennett and Nahemow (1965), and Lawton (1970, 1977).

5.6.2. Relocation Studies

One alternative to merely studying what goes on within the individual aged persons home is provided by relocation research. This focusses upon longitudinal studies of populations transferred from one environment to another. The way in which residents adapt to a new setting may be due either to enduring characteristics of the residents themselves, to the effects of the new environment or the relocation process. A range of studies have found that the latter is indeed of overriding importance, although some controversy exists over some of the findings (Goffman, 1981; Horowitz and Schultz, 1983; Borrup 1983; Yawney and Slover, 1973).

Tobin and Lieberman (1976) found that most of the psychological despair and withdrawal evident in institutional populations was also present in those awaiting admission. This they attributed to 'separation and anticipation of loss.'

Schulz and Brenner proposed that the loss of control and predictability associated with admission and permanent residence in aged care institutions will account for many of the undesirable effects.

5.6.3. Political Economic and Social Policy Studies

Most of this work is aimed at gaining reforms in order to overcome particular situations of neglect or abuse.
Peter Townsend (1962) demonstrated the importance of broad frames of reference in understanding the phenomenon of institutional care, in his British study, THE LAST REFUGE. Townsend and his co-workers surveyed all the residential homes for the aged in England and Wales, attempting to answer the double question, "Are long stay institutions for old people necessary in our society and, if so, what form should they take." Many of the homes were literally workhouses, their titles changed following World War II. He found that while many residents were unable to care for themselves, physical incapacity was not the main reason for admission to these facilities. Social isolation and a lack of 'social resources' (family members as well as other formal and informal sources of help) combined with homelessness and financial insecurity to force aged people to seek admission. The depersonalisation found to occur within many of the homes was represented as the manifestation of an ongoing process of social inequality.

This brought about a dilemma which Townsend posed as follows: "Within an institutional setting, how can we segregate persons according to their physical or social condition, and also give them the advantages of living in a "normal" community?" (Townsend, 1962).

He claimed it would be best to abolish the whole system altogether but the impact of the study has been more modest reform of some of the worst homes and a gradual process of change in the conditions underlying admission (Jones and Fowles, 1984).

5.6.4. Ethnographic Studies

An alternative view of the operation of nursing homes and other homes for the aged has been developed in a number of detailed case studies based upon participant observation research. This approach is known as an ethnographic one, and has been favoured by anthropologists and sociologists. Works by Jules Henry (1963), Gubrium (1974, A., B) and Kayser-Jones (1981)
in particular are valuable in that they have helped to develop broader social perspectives upon the events that play out within the individual homes studied. Unfortunately this work is less well known than many of the other studies already outlined. Henry and Kayser-Jones were able to demonstrate the link between large scale social organisation, the administrative systems within which individual homes operated, and the actual conditions under which residents lived. A comparison of a Californian private nursing home and a Scottish Geriatric Hospital by Kayser-Jones, the former said to have an excellent reputation, clearly pointed to organisational deficiencies and lack of support facilities aggravating patient insecurity and suspicion and a low quality of psychological, social and even medical support. In contrast, the Scottish home appears professional, intimate, and well supported by a range of further NHS medical and paramedical staff (Kayser-Jones 1981).

In conclusion, the writer has attempted to demonstrate the way in which the dominant perspectives upon institutional care have helped to justify the view that there is little that can, or needs to be done about the conditions encountered within residential care settings. The writer hopes to have also shown how alternatives to these views can be utilised in the development of a deeper understanding of the situation we are faced with in Australia.
5.7. **PSYCHOLOGY OF HEALTH**

As has been seen in the section on "normal Ageing", health has its subjective as well as its objective aspects. The physician makes an assessment of the patient's health based on the presence of pathology: the patient. However, evaluates his health in his own way. The two evaluations, that of the doctor and that of the patient, sometimes agree; sometimes they do not. An individual's assessment of his health in old age, as in youth and in middle age, is based upon various factors, some of which may be quite separate from medically verified conditions. Some old people with major or minor impairment think that they are well; other old people with similar complaints think that they are sick.

Ethel Shanas in "Old People in Three Industrial Societies" gives an example of self-assessment of health in the case of three old people in the United States. Mrs. Robinson, Mrs. Slayton, and Mrs. Igoe, are all widows in their 80's. Mrs. Robinson and Mrs. Slayton are both quite feeble, yet Mrs. Robinson says her health is poor and Mrs. Slayton says her health is good. Mrs. Igoe, on the contrary, seems physically well, yet she says her health is poor. In view of their reported impairments, only Mrs. Robinson seems to make a realistic assessment of her health. Mrs. Robinson is obviously in poor health and describes her health as "poor". Mrs. Slayton, too, is in poor health and describes her health as "good." Mrs. Igoe, on the contrary, seems to be in good health but says that her health is "poor". Mrs. Robinson is a health realist; Mrs. Slayton, a health optimist, and Mrs. Igoe, a health pessimist.

Shanas could not determine from the data why among old people with apparently the same degree of impairment some say they are sick and others say they are well, nor could she find what are the causes either of health realism, health pessimism or health optimism. However, she indicated she could isolate those factors that are associated with reports either of sickness or of good health.
Her study investigated the differences in the evaluation of health by the younger aged (those under 75) and the older aged (those over 75), and by men and women; also whether old people in the three countries - U.S., U.K., and Denmark, differ in their health evaluations. She went on to demonstrate that there is a direct relationship between physical incapacity as measured by her measure of incapacity and health evaluation and further to investigate the psychological differences, if any, between the sick (those persons who consider themselves in poor health) and the well (those persons who feel that their health is fair or good). Shanas felt that the self-assessment of health could be as closely related to subjective feeling states as to objective measures of incapacity. The final task she allotted in the study was to see whether old people themselves share the common image of the elderly as and decrepit or whether they tend to describe the health of other old people in the same fashion as they describe themselves.

In previous sections the writer has introduced various indices of incapacity. Shanas has used yet another - the Index of Incapacity of the Cross-National Study. It focussed on the ability of the old person to perform minimal tasks which make him independent of others for personal care.

5.7.1. Index of Capacity of the Cross-National Study.

This is a modification of Peter Townsend's scale, which he used in Great Britain for his study on nursing homes in England and Wales. Investigating old people living at home, Townsend was impressed "that the presence of a particular disease does not necessarily indicate for any given person the inhibition of activity which results from it." He decided that the most useful approach to the measurement of incapacity was one that attempted to score the consequences of disease or injury, and he began by developing a scoring system for those activities that an old person living alone would have to perform and the faculties he would have to employ to maintain life,

The Cross-National index of incapacity reduces the number of items in the Townsend index. It includes no measure of sensory impairment and since the conditions of life in each country varies greatly, no measure of the ability of the old person to maintain himself alone.

The index requires an answer to six questions from the old person.
1. Can he go out of doors?
2. Can he walk up and down stairs?
3. Can he get about the house?
4. Can he wash and bathe himself?
5. Can he dress himself and put on shoes?
6. Can he cut his own toe nails?

Scores on the index of incapacity may range from 0 to 12. The ability to perform a task only with difficulty is assigned a score of one, and complete inability to perform a task is given a score of two. A score as high as seven or more means that a person can do all of the tasks only with difficulty and at least one task not at all, or that he can do some of the tasks with difficulty, and some, not at all.

5.7.2. Results of Study of Incapacity Scores in U.S., U.K. and Denmark.

In each of the three countries more than half of all ambulatory and housebound old persons living at home have ZERO scores on this index. That is, these persons are able to function without any limitation as measured on the index. An additional quarter of the elderly have scores of one or two - that is, they have some difficulty with one or two items of the index or they are not able to perform one at all. More than three-quarters of the elderly, then have only minimal incapacity as measured by this index. At the other extreme, the proportion of ambulatory and housebound seriously
affected by incapacity, i.e. scores of 7 or more, is 5 of every hundred in Denmark, 6 of every hundred in Britain and 4 of every hundred in the U.S. Note the national differences.

Shanas' Study confirmed this fact - in all three countries, the overwhelming majority of old people live NOT in institutions but at home. From 9-14% of old people living at home are housebound or bedfast. About half of all old people living at home, however, report no limitation in getting about or in their capacity for personal care. More than 75% of all old people living at home, therefore, report only minor incapacity for self-care.

5.7.3. The Sick and the Well.

Shanas wanted to see if subjective attitudes were in any way related to the state of health of the aged person. So in her survey she included several questions on subjective attitudes. She asked people whether they were lonely, whether time passed slowly for them, and how their health compared with the health of other people their age. The first two questions were inter-related, since both deal with the old person's feelings of alienation. Loneliness in the aged has been defined as....."a vague sense of being alone and...dissatisfied about the nature of his actual contacts."

Shanas found that when living arrangements were held constant in each country, a comparison between those who were in good health and living alone and those in poor health and living alone, a higher proportion of the latter said they were often lonely. This comparison also held true when asked if time passed slowly for them.

Shanas also investigated how old people see themselves in relation to others of their age: Do old people see the health of other old people as similar to their own? If they are sick, do they see other old people as sick? If they are well, do they see other old people as well? Are there differences in how persons of different ages, men and women, and old people
in the three countries studied evaluate the health of their contemporaries?

An old person's self-evaluation of his health determines how he sees the health of other people. In each country, the majority of persons who think their health is poor are convinced that their health is worse than the health of other old people. The majority of persons who think their health is good, on the contrary, are equally convinced their health is better than the health of other people.

Apparently, those among the aged who feel that they are in poor health are sure that other old people cannot be as sick as they are, while those who feel they are in good health are equally sure that other old people do not share their same robust condition.

In each country, persons aged 80 and over are the most likely of all old people to report their health is better than the health of others their age. As has been said earlier, those over 80 still living in the community are a population of survivors. Apparently, so many of their contemporaries have either died or been institutionalised that those who remain at home see themselves as a particularly strong group. They are convinced that their health is better than the health of others, the general feeling being expressed as "I fell so well...it's the other people my age that must be aged sick."

**PSYCHOLOGY OF HEALTH**

In conclusion, the writer turns to Robert Peck, who has given one of the best statements of the importance of health in later life. Peck argues that one of the major developmental tasks that face old people is "body transcendence" and "body preoccupation." The old person MUST DECIDE WHETHER HE IS TO DOMINATE HIS BODY, OR WHETHER HIS BODY IS TO DOMINATE HIM.
Peck says, "For people to whom pleasure and comfort mean predominantly physical well-being, this (decline in health) may be the gravest, most mortal of insults. There are many such people whose elder years seem to move in a decreasing spiral, centred around the growing preoccupation of their bodies. There are other people, however, who suffer just as painful physical unease, who enjoy life greatly...in their value system, social and mental sources of pleasure and self-respect may transcend physical comfort alone."

5.7.4. Self-evaluation of Health.

Shanas found that the majority of old people in Denmark, Britain and the U.S. say that they are in good health for their age. There was no clear-cut relationship among old people in any of the three countries between advances in age and either an increase or a decline in the proportion of old persons who feel that their health is good. In each country, more old men than old women are likely to be optimistic about their health. And, finally, old people in Britain, both men and women are MORE likely than old people in Denmark or the U.S. to say that their health is GOOD.

5.7.5. Evaluation of Health and Age and Sex Differences.

In all three countries most old people living at home say that their health is good. Only a minority of old people say that their health is poor. The older population included both 65 year olds and centenarians. A whole generation lies between these two extremes. It was expected that when all persons over 65 were divided into age cohorts, those in the oldest cohort, 80 and over would be LESS LIKELY than those in the younger cohorts to say that their health is GOOD, and MORE LIKELY to say that their health is POOR. Shanas anticipated this finding since on an objective index of incapacity the average person over 80 living at home reported more incapacity than the average person within the 65-69 or the 70-74 age cohort.
The data, however, showed that there is no marked decline with age in the proportions of old people who feel that their health is good. About the same proportion of persons in every age category say that their health is good. Indeed, persons over 80 still living at home tend to make more optimistic evaluations of their health than those in the immediately younger age group, that is, those aged 75 to 79. In each country, it is among women aged 75 to 79 that Shanas found the smallest proportion of those who say their health is good.

The proportion of old people who felt their health was poor clearly rises with age only among the old women in Denmark. Among old men in Denmark and among both old men and old women in Britain, and in the U.S. there was no marked increase with age in those who say that their health was poor.

Even though the proportion of old people who say that their health is good for their age remains stable with advancing years, why was there no rise in the proportion of those who say their health is poor? Can it be that the old person's self-assessment of health is a poor index of his physical functioning? Maddox in his study of self-assessment of health of elderly volunteers in Durham, North Carolina, found that roughly 2 of every 3 subjects displayed "a reality orientation" in their subjective evaluation of health. Among those whose self-assessment of health differed from the findings of medical examinations, the optimists as distinct from the pessimists were older, relatively active, male and had modified their work role.

In Shanas Study there was no medical assessment of the subjects. An old person's self-assessment of his health, however, correlates highly with his self-reported incapacity. Shanas argued there were several valid reasons why the proportions of those in the survey who reported themselves in good health did not markedly decline with age and why the proportions who reported poor health did not rise with age. One reason,
as Maddox showed that those over 80 who remain in the community even if frail, were apparently more optimistic about their health than younger persons with an equivalent degree of handicap. Another reason must surely be that the frailest members of the oldest group, those who would be likely to say their health is poor, have already been institutionalised.

Men were more likely than women to say that their health was good. This finding was expected, since men reported less incapacity than women. This difference in health attitudes between men and women is consistent for all age groups in both Denmark and Britain, except for the years immediately following retirement. In Denmark, as in the U.S. (but not in Britain) in the years just after 65 men were more likely to say that their health was poor, that is, as opposed to women. After the age of 70, this pattern was lost, and the former reasserted itself.

5.7.6. **Relationship between health evaluation, mobility and incapacity index.**

The self-evaluation that old people make of their health was highly correlated with their reported restriction of mobility, their sensory impairments and their overall incapacity score. In general, if an old person says his health is poor, he has some physical basis for his self-judgement.

In each country, the more mobile the old person is, the more likely he is to say that his health is good. The highest proportion of persons who say that their health is good is found among those who can go outdoors without restrictions. The highest proportion of persons who say that their health is poor is found among the housebound. In Denmark, and the U.S., six out of every ten housebound persons, and in Britain four out of every ten housebound persons, say that their health is poor. Persons whose mobility was restricted but who could still go outdoors were less likely than the housebound to say their health was poor, and far less likely than the totally mobile to say that their health was good. Obviously, whether an old person thinks that he is in good health or in poor health is related to his ability
to be active and get about. In each country, old people with sensory impairments were more likely than other old people to say that their health was poor. The old person's self rating of his health was a guide to his degree of incapacity as measured by Shanas' index. For each country and for both sexes the higher the incapacity score, the greater the proportion of old people who feel that their health is poor. Interestingly enough, in all three countries there were a group of health optimists, persons with incapacity scores of 7 or more who thought their health was good. The proportion of health optimists ranged from 12% in Denmark to 27% in Britain. Some of those with only minimal impairment score 0-2 on Shanas' scale, consider themselves to be in poor health and therefore should be labelled "health pessimists." In each country, however, optimism about health among the aged was more usual than pessimism.

A country by country comparison of the relationships of self-rating of health and reported mobility and incapacity emphasised once more the cultural differences between the three countries. The majority of people would not say that their health was good when they were housebound or unable to go about alone. Similarly, persons with high incapacity scores usually would not say their health is good. The writer has already commented on the health optimism of the British: these old people, when housebound or restricted in mobility, were almost twice as likely as the Danes or the Americans to say their health is good. Further, a substantial proportion of old people in Britain continue to describe their health as good in the presence of high incapacity scores.

In conclusion, the writer hopes to have pointed up some of the factors which help to mould the individual's subjective attitudes, the cultural differences and those factors which determine the aged person's social patterns.
5.8. ATTITUDES OF THE AGED TOWARDS THEMSELVES

The self perception of the aged was evaluated in a Harris Poll conducted in the U.S.A. in 1974, where they were asked the best and the worst things about being old. 43% said that the best thing was having more leisure time and free time; this was the highest followed by independence, freedom from responsibility at 31%, and next financial security at 27%. The worst thing about being old was poor health at 70%, this was followed by loneliness 20%, and financial problems 17%.

Individual attributes which determine an aged person's concept of himself could include physical functional abilities, perceptual, and cognitive skills, economic resources, educational background, and personality type. Previous life experience provides a pervading influence across other attributes which affect their environment and present activity.

The negative attitudes the community directs towards the aged creates a negativism within the aged themselves. The image of the old common to most comes largely from study of the indigent old. The elderly have rarely spoken for themselves on the subject. What has been said about them comes primarily from the observations of others. Who can tell the extent to which these observers convey to the old their own revulsion at which in the light of their own youthful vigour, they see as loneliness, despair, physical deterioration or mental confusion?

A study conducted by Hellebrandt, (Hellebrandt, 1980), gives a picture somewhat at variance with such an objective view of the aged. This was a selected group, and certainly not a typical, representative sample of what you could expect to find, but it does prove a point. She conducted a survey among the ADVANTAGED OLD, of SOUND MIND, WELL EDUCATED, and with sufficient economic resources to live INDEPENDENTLY in a manner of their OWN CHOOSING. Letters were sent to one hundred and ten persons in a Community Village. The recipients were mostly retirees or on the verge of retirement from university and college positions. In each letter
an effort was made to express that each participant should feel an
obligation to fill the gap in human knowledge that exists with respect
to the ageing of the educated and the affluent who are AMBULATORY and
in GOOD HEALTH.

The gloomy cheerless picture of the elderly as obsolete discards
was nowhere to be found amongst these respondents. Most of the letters
received were realistic and upbeat. A trace of pessimism was discernable
only in 14 of 108 responses. There was no sign of frank depression in
spite of nearly universal awareness of physical deterioration, the dark
side of ageing was virtually invisible. No agony of loneliness, no
boredom, no self pity, no lack of motivational drive, no desolation,
no supression of independence, no significant degree of disillusionment,
no yearning for past roles or status, no unbridled disengagement from life.
Very little fear was expressed.

The optimism of this group was most heartening, yet it has been
duplicated by another study which showed some women over the age of 80,
widowed, able to move about freely, and of independent means, have found
this time of their lives to be the most fulfilling they have experienced.
If the reader were to recall Neugarten and Lowenthal's studies, then it
possibly can be explained by the fact that the aged widow has probably
been fulfilling a carer role for her more elderly husband; this shedding
of responsibility leaves her with a potential for development, which has
previously always been subliminal to her carer role.

The despair as depicted by Simone de Beauvoir, (Simone de Beauvoir,
1970), seems most unreal when compared to the intellectually advantaged,
ambulatory aged person. Many of the stereotypes of the aged could
probably be validated at earlier periods in their lives, so, in fact, it
might not be a consequence of the ageing process, but merely a
continuation of what has already existed. Is a person per se lonely
because he is old? Or is he a person who has always been subject to
feelings of loneliness? Stereotypes can have little relevance in depicting the aged when there is such a complexity of inter-relating factors, yet this process is almost universally applied to the aged without any qualification.

5.8.1. Cohort Differences

It is pertinent to this discussion to distinguish certain differences within the aged population. Mannheim (Mannheim, 1952), defined a generation as a group of individuals in a generalised period of historical time who have shared experiences of the same qualitative nature and who share an awareness or consciousness of themselves because of such experiences. For example, if we take the current 80 year olds, who can be labelled the 'old cohort', and the 65 year olds, whom we will label the 'new cohort', they have had specific and different life experiences. The 'old' cohort have experienced two World Wars, a Depression in 1930, and the productive years of their lives in terms of being able to provide for themselves in their retirement has been virtually non-existent. They are generally poorly educated in today's terms, having had to leave school early as the First World War and the Depression intervened. Social services were not in evidence. This population was proud and independent, and did not look to the Government for social or economic assistance. In fact, some even considered social security as charity. They had been thrown onto their own resources, and were very self sufficient.

The 'new' cohort has experienced different times. They were too young for World War 1, left school early because they had to supplement the family income during the Depression. Many served in World War 2, and at its conclusion, benefitted from the post-war reconstruction programmes. A National Health Service and a comprehensive social security system providing welfare benefits has been their experience. Economic times have been good in the 50's, 60's and 70's; for these
reasons their expectations will be much greater than those of the 'old' cohort.

It is important to recognise such differences when considering the aged as a group. It reinforces the non-homogeneous nature of the aged, and the influences to which it is subjected. This will be borne out in their expectations from the Government and society at large.
5.9 ATTITUDES OF THE AGED TOWARDS THE GOVERNMENT

The writer has shown the dependency of the aged as a group upon the Government. When 77.3% of those in the 65-69 age group are dependent on the age pension, and this figure increases to 97.2% for those over the age of 70, then the aged are very powerful in lobbying support for their cause. THE COHORT DIFFERENCES are also a factor in explaining much of the militancy which is in evidence today. The emergent 65 year olds of today share little of the neutrality which was associated with their contemporaries of 20 years ago. Today they are visible because of increasing numbers; healthier too, because of improved health care; more articulate because of better education; more affluent because their lives have not had the same historical experiences. Agreed, the number on the age pension is not inconsiderable, but the writer feels that there will be a shift away from the Government's involvement, if only because the aged do not wish to be seen as a dependent group. In addition to that, the aged are a movement now and they are seeking to redress many of the societal imbalances.

They will not accept whatever munificence the Government is prepared to hand out merely as grateful beneficiaries any longer, but are now making their demands very clear. This aggressive stance is totally out of character with what has been the resigned acceptance associated with the aged of earlier times. This could be interpreted as a clear pointer that the aged have still a role to play; they are demanding recognition as active members of the community rather than as discards and a drain on community resources; they have a right to a better existence than the Government and the community are prepared to offer; and they are going to make it happen.

This activity seems to be in a defined age cohort, the 'young old', those in the 65-69 age group, but as more of the later 50's and earlier 60's enter this 65+ age group, so there will be a more concentrated effort to reverse many of the issues which trouble the aged of today.
5.10 References


5.11 References


5.12 References


5.13. References


5.14 References

Old People in Three Industrial Societies.
Ethel Shanas, Peter Townsend, Dorothy Wedderburn, Henning Friths, Poul Milhoj, Jan Stehouwer.

5.15 References


6. **IMPLICATIONS FOR DENTISTRY OF AN EXPANDING OLDER POPULATION**

6.1. **Introduction**

It is now appropriate to build up a composite picture of what we can extrapolate from what has already been described. Attitudes towards the aged obviously need to be altered, both in the community and at the provider level. The aged population defines where the major responsibility lies when 77.3 percent aged 65-69 years are receiving an aged pension, and this increases to 97.2 percent for those over 70 years. The reason for the increase is the stringent testing which is applied for the 65-69 age group, where the pension payable is almost double that for those 70 years and over. Many of the constraints are lifted in this second class of pension-items such as assets held, holiday home, and capital are given far more lenient interpretation. So the Government will be asked to provide financial assistance for this needy group. 5-6 percent of the aged are handicapped, located in institutions, hospitals, and nursing homes. These are a vulnerable group, also unable to help themselves and at present receiving only token attention.

It has also been suggested that the age cohorts-old, old (80+) and the young, old (60+) may be different in what dental needs they present with, and what their expectations will be. Because of differing historical and economic times, the young, old are expected to be better educated, more financially secure, and more politically articulate, and for these reasons, it is conceivable their expectations will be much more demanding. However, even this latter group does have some physical impairment, and require investigation as to their dental requirements. Their physical disability could impair their capacity to maintain the oral environment or gain access to dental care when it becomes necessary.
The frail elderly - a group living in their own homes - are an invisible group, very much at risk. Their dental needs have never been established. The domiciliary care providers are not dental personnel, but in all probability are Silver Chain nurses, Meals on Wheels helpers, social workers, or other voluntary workers. The frail elderly exist outside institutional care because Government policy is to maintain them in the community with support services. With regard to their dental needs, domiciliary care is only sought when the situation has become so acute that the voluntary helper calls for the domiciliary dental unit. Hardly an adequate solution for a group of aged persons, who are socially, physically, and economically disadvantaged.

The next most logical step is to try and interpret some information from previous discussion on attitudes to health of the aged, and bring them into focus with regard to dentistry. The first conclusion that can be made is that mobility is the main barometer of an aged person's self perception of health. This clearly was highlighted in Shanas' "Old People in Three Industrial Societies". Dentistry, at least dental needs, do not compromise mobility; therefore, crisis dentistry to relieve acute situations is the type of treatment which they think is most appropriate to their needs; also the carers, not being dental in orientation, would only become aware of a dental problem when a crisis intervened. So at present, the provision of dental treatment of those who are handicapped, primarily will be met on a 'demand' basis rather than on a 'needs' basis.

Dental surveys of the institutionalised population the world over show uniformly a figure of 50-85 percent unmet dental needs. The question which can now be posed is this, and it is a 'loaded' question: "When a person has lost the capacity of enjoying and seeking a quality of life in its most optimal form because of mental or physical handicap, how realistic is it to meet the total dental needs of the individual?" The answer to this question is a moral, ethical, and professional dilemma. It requires
the input of disciplines to arrive at a treatment plan which, having considered the totality of the individual and his functional needs, will not compromise him further. Institutionalised populations are dependent on nursing care because of their handicaps, and in many instances a modicum of treatment would suffice, they are easily accessible and their immediate dental needs such as comfortable, clean dentures, prophylaxes to remove supra- and sub-gingival calculus, and routine appraisal of their oral hygiene is not too complicated a brief.

The frail elderly are not so accessible or easily reached. They require a different approach altogether. Transportation to facilities or provision of an expansion of domiciliary dental services become fundamental to this group. In assessing their dental needs realistically, the dentist has to have consummate judgement. This aged person is a survivor with a handicap which does not entail institutional care. He has adapted to his handicap. In defining his absolute dental needs and meeting them, one creates an optimal oral environment, but in so doing it may upset that balance, delicate oftentimes, to which that aged person may have psychologically adapted. The dental need was not a priority in the eyes of that person.

The dentist may be confronted with this situation in the institutional setting. Although it does not relate specifically to the aged segment, but the younger group of handicapped, it is relevant to this discussion. Many of the patients are aged 18-25 years, victims of the road toll; many have irreversible brain damage. They have mended their injuries elsewhere and are physically fit. They have their own natural teeth which may require attention. They are unable to articulate acute pain, the nursing staff can only do rudimentary oral hygiene, the patient is often unable to swallow and is tube fed. This individual may live to be 40, 50, or 60 years of age. Any dental treatment will need to be carried out under general anaesthesia. Do you treat that person as a long term proposition or just his immediate needs? The writer would opt for the latter solution, but could one be
justified in carrying out a full clearance with no denture replacement? The brain damage is irreversible, he is tube fed, quality of life - there is none, oral hygiene is all but impossible with no swallowing reflex. Certainly, logic would suggest that it might not be an inappropriate solution, but the general anaesthetic would put the young person at risk. Do you accept the risk or do you opt for a continuing problem which can never be resolved?

Though the writer has strayed from the aged, it is necessary to appreciate such problems do exist and need to be resolved. It does demonstrate the basic tenet of dentistry for the handicapped. When and when not to intervene is the crucial issue. It is necessary to climb under the skin of that person, and establish what the priorities really are.

The real challenge to dentistry is that of an expanding older population, many who are handicapped, rejected by the community at large, with needs unmet, socially and dentally. Are they not worthy of a better existence?

Dentists in dealing with this segment of patients with very individual needs, will not only require technical skills, moral and ethical integrity, but also compassion and an ability to communicate. The dentist will be expected to be able to perform in an inter-disciplinary situation using all of the available resources—nursing, medical, and social.

DENTAL EDUCATORS TAKE NOTE.

6.2. The implications will be considered under the following headings:

6.2.1. Education
6.2.2. Personnel
6.2.3. Treatment needs
6.2.4. Facilities
6.2.5. Financing
6.2.6. Techniques and Materials
6.2.7. Community Dental Health Education.
6.2.1. Education

Levenson, Thornby and Tolletti (1980) highlight some of the obstacles to the implementation of geriatric training in the medical school curricula thus, "The need to incorporate curricula in gerontology and geriatrics into the education of medical students is well accepted. However, there are at least two main obstacles to curriculum incorporation. The first is lack of knowledge about geriatrics and gerontology curriculum design on the part of educators, responsible for such tasks. In the absence of this knowledge inertia may prevail, with the result that no effort or suboptimal efforts at incorporation will be made. The second obstacle to incorporation into the curriculum is the negative attitudes towards ageing, and the aged. Educators who dislike caring for the elderly usually are not prime movers of curricula development nor do they serve as appropriate role models. Students who share these attitudes can defeat attempts at curriculum incorporation and the curriculum itself. The net result of this negativism is suboptimal health care of the geriatric population".

As that situation exists in medicine so also does it apply in dentistry whereby negative attitudes prevail. A recent study by Ettinger (1974) which was undertaken in the dental schools of eleven developed western countries revealed that only about 10% of these dental schools offered a course in geriatric dentistry. The schools trained (or failed to train) dental students in geriatrics through occasional lectures (60%), or organised series of presentations - usually in the senior years (20%), other forms of instruction (5%), or no instruction at all (5%). These data indicate the relatively low priority that the subject matter has in the training of future dentists. When the content of the instruction was analysed, it became clear that the five most popular topics considered in
geriatric dentistry were, in fact, clinically related items, which one would expect to be part of any oral medicine or removable prosthodontic course. The five least popular topics were more gerontological and related to the "true needs" of the homebound and institutionalised elderly.

Ettinger concluded that the training in geriatric dentistry, in fact, reflected the approach taken in the traditional dental curricula of these countries, despite the fact that such approaches had failed to provide adequate oral health care to the elderly.

Geriatric dentistry training programmes when incorporated into dental curricula still often fail to change the students' stereotyped view of the aged and the ageing process. Many reasons can be found for this lack of success in geriatric dentistry training programmes. Geriatrics and gerontology remain marginal in dental education. Even when the subject matter is introduced, it often fails to receive generalised support from other faculty members who could be role models for dental students. The material is often poorly integrated in the total dental curriculum and, therefore lacks the training process. Existing training programmes have brought dental students into contact with a population of elderly that is usually institutionalised, in poor health and with extreme problems. Unprepared exposure to such people has discouraged many dental students from dealing with their multi-faceted problems. Due to the limited curriculum time allotted to geriatric training, the emphasis has been on understanding the sociological, biological, emotional, political and economic aspects of the ageing process. Finally, much more emphasis has been placed on imparting knowledge than on changing stereotyped and negative attitudes towards the ageing process.

Ettinger in another paper (1978) claims that the very programmes which are meant to educate the students, tend to sensitise the students.
Dental schools use nursing homes and institutions to depict poor oral health as many of the residents (50-80 per cent) have unmet dental needs. This, in turn, reinforces already existing negative attitudes, because so many have 'poor' oral status. Therefore, he made the following recommendations. "It seems that coursework in geriatric dentistry should be spaced intermittently throughout the four years of dental school and have the following objectives:

1. To impact upon the prevailing stereotypic thinking about the elderly through:
   (a) Identifying myths and stereotypes associated with ageing.
   (b) Describing the social and cultural aspects of ageing.
   (c) Emphasising empathetic approaches to teaching about the elderly.
2. To describe the biological aspects of ageing as well as the psychological processes involved in adjustment to ageing.
3. To present the epidemiological and clinical aspects of ageing including:
   (a) need and demand for clinical service
   (b) treatment planning
   (c) scheduling
   (d) office design
   (e) patient management techniques.
4. To identify resources available to the elderly including:
   (a) aid in financing care
   (b) social services
   (c) day care centres
   (d) community centres
   (e) religious institutions
   (f) health services.

5. To provide clinical experiences with institutionalised and non-ambulatory elderly, including:
(a) nursing homes
(b) hospitals
(c) home care programs.

Ideally, the geriatric curriculum should follow approximately in the sequence outlined above. It is important to begin the progress in the first year. Studies on medical and dental students have consistently demonstrated that students' attitudes become hardened and more cynical as they progress through school (Backer, 1958).

The process of education must begin by improving their knowledge about the aged and ageing. It must show how our modern, technological society has often isolated older persons; deprived them of a role and identity in society and created a fear of ageing which, results in stereotypic thinking - even among the elderly themselves. Knowledge about the variation and biology of ageing may help to change misconceptions and attitudes”.

He continues, "Teaching by example, communication, kindness and empathy for the elderly, may help to stimulate a professional responsibility in our students and our graduates. Experiences with ambulatory elderly prior to experiences with institutionalised elderly should also help the students to prepare themselves for the negative reactions stimulated by the poor oral health in the latter group. Programmes in preventive dentistry, prosthodontics, oral diagnosis etc. are the bases for geriatric dentistry. It is essential to blend patience and ingenuity with clinical judgment that permits one to adapt the 'ideal' dentistry taught in most university dental clinics to the characteristic needs of the elderly or handicapped patient".
6.2.2. Personnel

6.2.2.1. Institutional

The treatment requirements of the institutional population will be mainly prosthetic needs, although there will be some restorative and simple periodontics also. Inputs will be required for dental health education, oral hygiene advice and supervisory care. The Government institutions are mainly concerned with the 'heavy' nursing, that is, intensive nursing; this is where the most handicapped groups of aged persons exist. The commercial nursing homes have an emphasis towards the less intensive nursing care.

The most appropriate personnel for this population, therefore, would be dentist, hygienist, and prosthodontist.

6.2.2.1.1. Dentist

It would be imperative for the dentist to possess certain pre-requisites. He should be experienced; capable of working with other disciplines; compassionate; innovative; have a good background knowledge of behavioural science; be familiar with drugs used in geriatric care and their consequences; and have a knowledge of the incapacitating nature of most of the medical conditions affecting the aged.

This type of dentist we do not have at present; there is a pressing need for training to be implemented along the above lines. Where he comes from is another question. We are concerned with the negative attitudes of the health professional, and certainly individuals who are prepared to pursue the dental care of the incapacitated aged are a rare breed. In the first instance, it is conceivable some dentists in private practice would be prepared to provide their services on a sessional basis.
6.2.2.1.2. **Hygienist**

She would work under the dentist's directions, and would be expected to carry out scaling and prophylaxis procedures; would be conversant with the peridontal status of those patients who have standing "natural teeth, and who have been assessed as deriving benefits from dental care. The hygienist would provide oral hygiene instruction and monitor it subsequently", in addition to a roving commission which would be to establish a dental involvement in the total nursing care of the patient. Such a position would do much to highlight the future dental involvement of the profession in the institutional care of the aged. Any problems relating to the oral care of the patient, which required other than routine care would be directed to the dentist.

6.2.2.1.3. **The Prosthetist**

He is new to the dental team, legislation having been passed to recognise chairside status for the dental technician. It is somewhat controversial, but in this instance the writer is sure there can be positive advantages in his participation. It goes without saying that he must work to the dentist's prescription and to his diagnosis; in this respect he would not be accorded the freedom to pursue his chairside status with this disadvantaged group, as would be his prerogative outside the institution. Although it does seem this restriction does not afford him status other than that of a dental technician, it is implied that he is a dental technician at a more advanced level than his colleagues, and with a bias towards having the requisite skills and temperament to understand the problems of the handicapped aged.

The writer has not included the dental therapist in the team, as he perceives the direct treatment of the handicapped aged as being the sole province of the dentist. The therapist does not have the depth of knowledge
of a dentist, and if dentistry is to be seen in its true perspective as part of the team providing comprehensive oral care to this group of handicapped persons, it should be the dentist who should assume that responsibility as the most adequately trained member of the dental team. He makes his decisions after consultation with other disciplines, and the responsibility for those decisions and the subsequent treatment should be his and his alone.

6.2.2.2. Domiciliary Care

The medical problems found in the institutional population are more acute than in the group requiring domiciliary dental care. The demography of the aged handicapped has already been described in an earlier chapter. Their handicaps render them homebound, for this reason dental treatment has to be brought to them. It is not easy to define the needs of the homebound, as surveys, that is, direct dental surveys, have not reported. Spencer (Melbourne) has just completed a survey in Melbourne to assess the needs of this group, but the findings are not yet to hand.

We could conclude, however, that their needs will be mainly prosthetic in the older cohorts (80+), but restorative and periodontal care will be more common in the young, old cohort (65-69). Until this group has been thoroughly researched as to their dental needs, and how their incapacity compromises treatment, both in access and delivery, it is impossible to predict the composition or structuring of the domiciliary dental unit. This group of persons should receive the greatest priority as they have never been surveyed as to dental status and dental need.
5.3 TREATMENT NEEDS

6.3.1. Institutional Population

Surveys conducted in institutions in the United States, United Kingdom and Australia point to an accumulation of dental needs, this figure being put at 50-58%. Ettinger and Manderson in a survey of such a population in Edinburgh, Scotland, found in a randomly selected population of four hundred and forty-two persons that:

(1) 71% of the sample required treatment.
(2) Only 52% would benefit from treatment as the other 19% were so physically and mentally impaired that it precluded treatment.
(3) 91% were edentulous.
(4) 73% of those wearing dentures required adjustment and replacement.
(5) Of forty-one persons examined with natural teeth present, five persons required fillings, fifteen required periodontal treatment. Of those requiring treatment, 70% DID NOT WANT TREATMENT.
(6) 83% of those interviewed were taking medication, such as corticosteroids, mono-amino oxidase inhibitors, diuretics, anti-hypertensives, and broncho-dilators.
(7) The medical conditions primarily were arthritis, disseminated multiple sclerosis, Parkinson's disease, and cerebro-vascular disease.

This gives a picture of what one could expect to find in an institution, and the problems which would impinge on the delivery of dental care.

A survey based on needs and not status being undertaken in Western Australia has so far involved only the major Government institutions in the Perth metropolitan area. A random sample showed 80% requiring dental care, evaluation of the results has not been complete. There was no attempt made to qualify the existing medical conditions, and the examiner's criteria was "Would the individual benefit from treatment?"
What was worthy of note was the universal recognition of the urgency of the problem of dental care for the institutionalised by the nursing and medical staff. Certain steps should be taken immediately.

(1) Legislation requiring that EVERY person have a dental examination on admission to a nursing home or hospital, so that the dental needs are defined. An assessment should then be made by the admitting physician as to the suitability of dental treatment for that patient, and if appropriate steps are taken to implement the dental treatment.

(2) Nursing staff should be thoroughly conversant with oral hygiene procedures and the assessment of the effectiveness of such measures. In those patients who present with special problems a dental advisory unit should be readily available.

(3) There should be facilities available for dentures to be cleaned, adjusted and polished. Many of the denture requirements are very minor. The cost of such inputs would not be substantial. These steps should be initiated immediately, and action should be forthwarming from the dental professions, the care of the institutional population is not wholly that of the Government.

6.3.2. Community at Large

6.3.2.1. Peridontal Needs

Tissue and bone atrophy, diminished salivary flow, a poor healing rate, decreased masticatory efficiency, dietary deficiency, reduced pain sensitivity, and reduced taste sensitivity are the norm for the elderly. Unfortunately, so is neglect of oral hygiene. Surveys carried out in various countries do not give an entirely accurate assessment of tooth loss, because they only qualify the dental status in terms of natural teeth, complete dentures, combination of dentures and natural teeth, or no teeth present.
The United States National Health Survey (1960-62) considered the 75% rate of periodontal disease among adults 18-79 to be underestimated because twenty million persons in the survey population were excluded because they were completely edentulous. Periodontal disease is the leading cause of tooth loss and Ingle (1975) estimated in 1969 the total cost of prevention and treatment of periodontal disease including costs for extractions and full denture replacements was $2.3 billion!

Chilton and Miller (1977) summarise the United States' periodontal disease problem:

"The prevalence of periodontal disease is world wide. It occurs from early in the first decade right through to old age. It accounts for over 50% of missing teeth in adults and results in tremendous economic and social burdens, both upon the individual and upon the society. The effect of missing teeth or a totally edentulous mouth upon the nutritional status of an individual can only be estimated, but it is surely well beyond that of a slight inconvenience. Prevention is the only answer. Preventive programs are long overdue, and even more affluent nations like the United States have failed to place periodontal disease on the head of the list of chronic diseases to be eradicated".

The Australian Bureau of Statistics Dental Health Survey (1979) found that of the one and a quarter million (1,278,000) Australians aged 65 years or more -

- 11% have natural teeth only
- 23% have a combination of natural and denture teeth
- 65% have dentures only
- 1% have no teeth.

There are no data available of the prevalence of either impaired function, the quality of dentures worn, or both, by Australians. However, in Denmark where, like Australia, 88% of people in the 65-74 age group wear dentures, Christensen (1977) reported 64% of full dentures had faulty occlusions, 33% had poor retention and failing stability. This alarming situation could be anticipated in Australia.
Besides this observation, another pertinent to this discussion, was noted. Over time a change had taken place in the percentage of persons with dentures. In thirty years, Danes aged 35-44 years with removable dentures have decreased from 57% to 31% of the sub-population - a large reduction of 26%. A similar trend has occurred in the United States where Gift (1979) reported in persons 60 years or older wearing at least one complete denture, a 22% reduction over the fifteen years, 1960-74.

There are two reasons for stressing these data; firstly, to point up the maintenance requirements for persons with dentures; and secondly, to predict changes towards more dentate persons in Australia as we approach year 2000. The consequences of the latter will be more need for the whole spectrum of dental services for our geriatric population. The definition of periodontic services required, whether they be simple or complex needs, has not been qualified, nor has the prevalence of periodontal disease in this aged population been reliably established. This is a priority area of research, the existing periodontal needs of the population 65 years or more. In concert with that study incorporation of a longitudinal study for persons 45-49, would give a data base for changing trends.

6.3.2.2. Restorative Needs

The A.B.S. Survey (1979) indicated that only 38% of persons 65 or older have visited a dentist within the last three years, and 52% have not seen a dentist for at least five years. This group have the lowest service utilisation of any age cohort. This can be explained in part by the number of edentulous persons, the lack of finance, physical impairment, plus attitudinal factors related to their previous dental experiences. Yet it should be borne in mind that people are becoming more dentate in this age group. Trends in the U.S. and Denmark demonstrate this. Anna Howe and John Spencer (Melbourne) have made the observation that there will be
twenty million more teeth to be maintained in the year 2000, due to these trends. Most of these teeth will have been restored, so replacement restorations will be necessary; endodontics, and periodontics, also will be necessary to meet these changing needs.

6.3.2.3. Root Caries

The disease of root caries is not a new phenomenon. Anthropological digs have jaw and dentition remains which demonstrate that root caries not only occurred in these ancient people, but also was often the dominant form of dental caries as compared to coronal caries. Caution would have to be taken in interpreting these findings as they may be those of a given social subset of the total population; the likelihood is negligible that the unearthed remains are, in fact, a representative sample of the original population. Intra-oral examination of New Guinea's primitive natives whose diet is thought to be similar to those of many hunter/nomadic people, revealed that carious lesions on their root surfaces were fare more common than caries lesions on the crowns of their teeth.

However, interesting though these observations may be the dental profession's interest in the disease currently represents a pragmatic recognition of an oral disease for which our suspicions run high and our knowledge low. One of these suspicions is that root caries may become the dominant active dental decay process in adults over the next fifty years. In fact, given how little we know about this disease of root caries it may already be the dominant active dental decay process. Certainly the factors behind these shifts have already been identified - demographic ageing, increased retention of teeth, widespread exposure to fluoride, possible changes in professional and lay preventive habits, and the current lack of feasible and widely utilised methods to prevent gingival migration associated with periodontal disease. These factors all suggest that more people will
enter the middle and late adult years with more teeth which are still subject to periodontal disease and which, therefore will be susceptible to root caries.

Research is required in this area.
6.4. **FACILITIES**

The area where it will be necessary to make adjustments will involve:

(1) private dental practice  
(2) nursing homes  
(3) domiciliary services.

6.4.1. **Private Dental Practice**

The responsibility for the ambulatory aged person's dental needs is that of the general dental practitioner. In that context, although the aged person may be mobile, it may only be by virtue of a wheel chair, walking frame, or leg and arm braces. For this reason access to dental facilities should be via a ramp, rather than steps, and, if not at ground level, a lift should be available. In future design of dental surgeries this should be a prime consideration.

Also, the contour type dental chair is inappropriate to a person who has limitation of movement, for this reason the option of the upright dental chair, though historical and considered antiquated, would be desirable.

6.4.2. **Nursing Homes**

Provision for routine dental procedures should be available in nursing homes, not necessarily all, but there should be sufficiency to permit access to dental care for those aged handicapped persons. The equipment need not be elaborate. Portability would allow use of that equipment in other nursing homes, obviating the need for duplication, and thereby reducing capital costs. Buses operating between nursing homes could be used for the transportation of patients to facilities.

6.4.3. **Domiciliary Care**

There should be an expansion of this area of dental services. If the provision of dental hospital services was transferred to private dental
practice, Staff dentists in the Dental Hospitals and Clinics could be
deployed for domiciliary dental services. Also it would free the Dental
Hospital and Clinics which are in central locations, and strategically
placed for transport access. Research of the need for domiciliary dental
services should be a matter of urgency, and the response to that need
should be an allocation of funds for the purchase and equipping of vans to
provide suitable cover. If School Dental Units are underutilised, maybe
they could meet a dual role.

It is conceivable that there will be difficulties in the deployment of
Staff dentists so the duty schedules should be amended to cover this
future eventuality.

6.5. **FINANCING**

Accessibility to dental care is limited not only by the unsuitability
of dental facilities for older persons, but also by cost. The usual method
of meeting dental fees are:

(1) Fee for service - totally met by the State Government, via State
    Health allocation.

(2) Fee for service - totally met by Commonwealth Government, e.g., Veteran
    Affairs Department.

(3) Fee for service - partially met by the patient
    - partially met by Health Fund.

(4) Fee for service - partially met by patient
    - partially met by State Government, via State Health
      allocation, where a subsidy has been introduced to
      assist isolated country areas.

6.5.1. **State Government**

Where aged persons are Pension Card holders they are entitled to free
dental treatment at the various State Government Dental facilities.
There the patients are treated by Staff Dentists. The cost may not be totally met if the aged person is in receipt of some income, however, the cost is not usually very substantial. The expensive forms of treatment, such as crown and bridge and molar endodonties are infrequently used items of treatment for this group. One difficulty with this system is that a long waiting list precludes the expeditious delivery of dental care. From the Government's point of view, funds can only meet what is allocated via the Health Budget and as the financial resources are limited, the waiting list acts as a control of expenditure. Besides the above arrangements, several State Governments provide a subsidy within their Health Budget. This is a special provision outside the normal budgetary circumstances. The Western Australian Government operates a Country Dental Subsidy Scheme. This is intended to service country areas where Government Dental facilities are not available. The fee scale is that of the Department of Veteran Affairs.

THE PATIENT HAS HIS OWN CHOICE OF DENTIST. The dentist has total clinical freedom, and he can prescribe molar endodontics or bridge work, but only at the Schedule of fees. The patient has to meet any gap. It works well and certainly the concept is worthy of consideration for wider application. The extension to the Metropolitan area and utilising private dental services would relieve the backlog at the Dental Hospitals, thus freeing Hospital dentists for other duties. The State Government would have difficulty funding it in the initial period because of the backlog, but rather than have a centralised problem as at present, it could be considerably reduced by such an approach.

Governments need to see Geriatric Dentistry as much of a priority as the dental care of school children. Since we are seeing the dramatic effects of fluoridation in the diminishing needs of our younger population, so the shift to this other needy group should take place.
6.5.2. Commonwealth Government

In cases of eligible persons, the Commonwealth Government will totally meet the fee claimed by the dentist, e.g., in the case of Veteran Affairs. The dentist is on a panel of dentists, which provide dental services to ex-servicemen and their widows. The fees are at level pitched below those applicable to private practice. However, dentists accept this fact, and the fees are reviewed annually.

6.5.3. Direct payment by patient and Health Fund Contribution

Since the advent of Medicare many aged persons have not opted for dental benefits. The reasons given for this was loss of income on retirement, higher rate of edentulousness among the elderly; significantly reducing their demand for dental care. Utilisation of dental services by the aged is at a lower level than that of the general population (1977 National Medical Care Expenditure Survey). The analysis of the effects of Medicare on the Private Health Funds is not available from the Bureau of Statistics, however, the Marketing Manager for Medibank Private did provide the following information. The Commonwealth Government set up a Working Party to look at the effects of Medicare on the Private Health Funds' membership. What did show was that there was a large withdrawal of the younger members, therefore affecting the percentage in the next age group. In dissecting the percentage distribution Pre- and Post-Medicare, these trends were readily apparent. The Survey was conducted by the Voluntary Health Insurance Association of Australia.

What does also show is that the ancillary cover is still predominantly in the 25-64 age group, and that there has been little change in the 65+ age group, indicating that the pensioners are relying on Government services, and that the service utilisation will continue to be low without Government programmes.
<table>
<thead>
<tr>
<th>Age Group</th>
<th>Medibank Private</th>
<th>All V.H.I.A.A.</th>
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<tr>
<td>20-24</td>
<td>14%</td>
<td>6%</td>
</tr>
<tr>
<td>25-64</td>
<td>75%</td>
<td>74%</td>
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<tr>
<td>65+</td>
<td>11%</td>
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<td>12%</td>
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<tr>
<td>post-Medicare</td>
<td>77%</td>
<td>.76%</td>
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<td></td>
<td>14%</td>
<td>12%</td>
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6.6. MATERIALS AND TECHNIQUES

Over the past decade there have been considerable advances made which have helped to reduce the unit cost of dental services. Specifically, acid etch, light activated composites have provided a very satisfactory alternative to the more sophisticated and expensive porcelain bonded to gold crown and bridge work. It has eliminated the costly impression materials, gold and porcelain, the fabrication costs, and reduced chairside time. This, in turn, is a cost saving handed on to the patient, thereby reducing the cost of the service item from the dentist to the patient.

6.6.1. Composite Resins

In their initial form, the composites were chemically activated. Problems arose in the durability of the restoration, and its aesthetics were prone to discolouration and poor resistance to abrasion. They required extensive finishing, and subsequent polishing did not provide a surface resistant to staining. Development over recent years has resulted in a composite which is light activated rather than chemically, and with a reduced particle size, benefitting strength and stain resistance.

Light activation has been a significant advance as it allows the dentist to build up the restoration incrementally thereby eliminating time spent in reduction and polishing procedures. The resultant surface because of minimal polishing retains marginal integrity and a surface resistant to discolouration and surface breakdown. They not only have a cost advantage, but are very aesthetic and durable.
6.6.2. **Glass Ionomer Resins.**

The use of the above has also expanded the parameters of dentistry. They are very versatile and are used in children's dentistry with great success, but can also be used in geriatric dentistry for restoring cervical abrasion areas and root caries. Because they contain fluoride not only do they serve as a restoration of lost tooth structure, but also give protection against further caries. The bond created by the glass ionomer to dentine is astounding in its integrity. Again it eliminates costly chairside time. Local anaesthetic is not necessary, cavity preparation is minimal, and it is not necessary to use high speed handpieces. The essentials are a good evacuation system, and the ability to maintain a moisture free environment whilst placing the glass ionomer.

6.6.3. **Intra Osseous Integrated Implant**

One of the most interesting advances is that of the intra osseous integrated implant. It is still in the research phase of its development, and the cost to the patient needs to be rationalised considerably. However, it seems to provide a solution for those patients unable to accommodate conventional dentures. In this technique, implants are surgically positioned in the alveolus at strategic points. They are biologically tolerated in the vast majority of cases. After six months the implant is surgically exposed, to reveal the screw at the head of the implant. This is removed, and into the threaded channel a male precision attachment is positioned in the body of the implant. A denture is then constructed with female attachment corresponding to their male counterparts. The denture thereby derives its fixation by a mechanical aid rather than by utilising denture bearing areas often unsuitable for retaining a complete denture, usually a mandibular denture.
6.7. **COMMUNITY EDUCATION.**

The public health programmes should focus on the special needs for the dental care of the aged. Information regarding the scope of existing dental facilities should be readily available. A programme devoted to improving the periodontal status of adults would do much to initiate some reversal of the inevitable loss of teeth because of periodontal disease. Periodontal disease is insidious and painless until the advanced stages, and not well understood by a public which has been educated to perceive dental disease as caries exclusively.

There should be attention drawn to oral surveillance, at least once every two years. The early detection of oral cancer, considerably reduces the likelihood of metastases from a malignant lesion. Another aspect of an education programme is that relating to denture maintenance, and the sequelae of ill fitting dentures, namely fibrous flabby ridges and accelerated resorption.

**CONCLUSIONS:**

There is much to be done in this neglected area of dental care for the aged. It requires very different appreciations of persons seeking oral care in that many will have handicaps and will need more careful management not only in a dental context, but also in a holistic sense. Some patients may not derive any tangible benefits by meeting total dental needs. Careful assessment needs to be made, so that the aged person's social equilibrium is not altered.
6.8. References


6.9. References


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