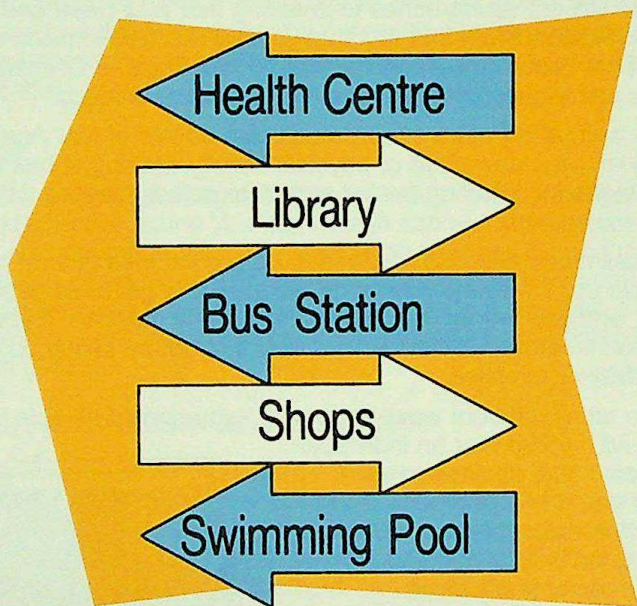




Keeping Mobile

A Help the Aged advice leaflet



Endorsed by

THE ROYAL ASSOCIATION FOR
RADAR
DISABILITY & REHABILITATION

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Keeping active and mobile is the key to an independent life. There is a great deal we can do to remain mobile - many conditions which may affect us in later life can be prevented, eased or even cured altogether by being a little more active each day.

This leaflet looks at how to remain active and mobile, and at the range of help and advice available. Addresses of the helpful organisations mentioned in the text are given at the end of the leaflet.

Health and fitness

Keeping fit and healthy will help you to stay mobile and independent. It is never too late to change your diet or take up some form of exercise to improve your suppleness, strength and staying power.

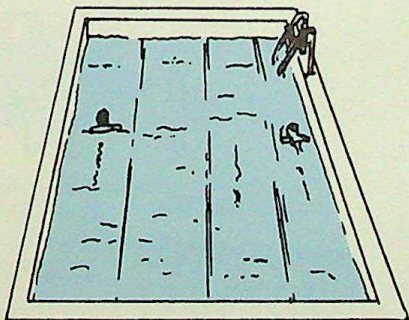
Physical activity

Whatever your age, regular, safe and enjoyable physical activity is an essential part of maintaining a healthy way of life. There are numerous benefits, from strengthening bones to ensuring that your heart and lungs stay in their best condition. The fact that you will feel better inside and out is a bonus. That doesn't mean we have to try and become Olympic athletes; it is just a question of increasing what we do already.

Being active and taking more exercise can also be lots of fun! Age is no barrier to taking up a new sport or physical activity. Getting fit has lots of other advantages too - feeling livelier and more active, meeting new people, enjoying a new activity.

If you don't get much exercise at present, it's a good idea to start gently and then build up. That way, your body will gradually get used to being more active, and you are far less likely to strain any muscles. If you are having medical treatment, talk to your doctor first before taking up a vigorous activity or exercise.

There are so many different ways to keep fit - you should be able to find one you enjoy! If you prefer an individual sport, you could take up walking or swimming; if you prefer company, there are classes and clubs for many activities which are a good way of meeting like-minded people. Many local authorities run classes for older people and some have classes specially for people with medical conditions such as heart disease and arthritis. Ring up your local sports centre or your council to find out what is available in your area.



If you have mobility problems at the moment, ask your doctor or physiotherapist for an exercise programme or class which will meet your needs. An organisation called EXTEND trains teachers to give "movement to music" classes to older or disabled people. If you would like to find out about any teachers in your area, contact EXTEND, enclosing a stamped addressed envelope, and a cheque or postal order for £1, to help cover their costs.

Overweight?

Surplus pounds can be a health hazard. They make it harder to enjoy exercise, may make any problems with arthritis worse, and can increase the risk of heart and chest troubles, diabetes, backache and varicose veins - all of which are likely to make you less mobile. If your mobility is severely restricted because of your weight, then it is time to seek specialist help through your doctor.

If you need to lose weight, the emphasis should be on cutting back on certain foods (such as very sugary or fatty foods), and **not** total restriction. It is very important to have a varied diet so you get all the nutrients you need for good health. Remember it's not healthy to be underweight, either! For further information on a healthy diet, see Help the Aged's leaflet "Healthy Eating".

Smoking

It is never too late to give up smoking. No matter what your age, it is the single most effective action you can take to improve your health. Your breathing will become easier, your circulation will improve and you will reduce the risk of developing diseases which can restrict your mobility. If you would like advice on giving up smoking, or cutting down the amount you smoke, you can contact the organisations QUIT or Action on Smoking and Health (ASH).

Arthritis, rheumatism and mobility

Rheumatic diseases affect at least 10 million people in Britain every year. Pain and stiffening in joints and muscles can seriously affect your mobility. However, help is available. Your doctor may be able to prescribe drugs to relieve your symptoms, a physiotherapist can give help with special exercises and an occupational therapist can give advice on mobility aids and on protecting your joints. Your doctor should be able to refer you to a physiotherapist or an occupational therapist for this sort of help.

You may be interested in alternative forms of medicine. However, consult your doctor first for a diagnosis of your condition. The Institute for Complementary Medicine can give details of registered practitioners in different forms of alternative medicine; please enclose three loose first-class stamps with your enquiry to help cover their costs.

Help is at hand

If you are having problems getting about, help is at hand! There are many kinds of "mobility aids" available, and if you find one that is right for you, you may regain much of your independence. The simplest mobility aid is a walking stick which can be helpful if just one of your legs needs extra support. If both your legs need support, then you may need to use two walking sticks, a walking frame or a rollator (see below). If you find it very difficult to walk at all, then you may need a wheelchair. If you are able to walk but find it difficult or tiring to get about as easily as you used to, then a "personal vehicle" may be worth considering (see page 6).

Walking sticks, walking frames and rollators

It is important that your walking stick is the correct length. It should be level with the wrist crease when your arm is held by your side. If two walking sticks are being used to give balance, they need to be longer because they will be held in front of you. A walking stick should have a rubber end called a "ferrule" which prevents it from slipping. Ferrules wear out quickly so they need to be checked regularly. Replacements can be bought from large chemists. Walking frames give even more support, are stable, and help increase confidence. Rollators are wheeled frames which are easier to manoeuvre and do not break up the pattern of walking. They are good for people with moderate balance problems.

Walking sticks, walking frames and rollators are all available free. Your doctor may refer you to the local hospital's physiotherapy or occupational therapy department, or your local social services department may provide them. Always seek advice from a physiotherapist or an occupational therapist on which walking aid is most suitable for you and on how to use it.

Wheelchairs

The NHS provides wheelchairs free to people who need them on a permanent basis. You don't have to be a full-time user; you may just need to use one regularly once or twice a week. If you think you need one, discuss it with your doctor, hospital consultant, physiotherapist or occupational therapist. They will fill in an application form, and the chair will then be supplied by your local Wheelchair Centre. In some areas, you may be able to refer yourself directly to the Wheelchair Centre; ask your local Community Health Council if this is possible.

Wheelchairs come in a wide variety of types and designs, so do think carefully about your own particular needs. For example, think about whether you will be using the chair indoors, outdoors or both. How long will you use it each day? Will you need to pack it away in a car? Ask your doctor, hospital consultant, physiotherapist or occupational therapist for advice.

Some types of wheelchair are not supplied free, for example occupant-controlled powered wheelchairs for outside use. The Disabled Living Foundation can provide information about commercial wheelchair suppliers and models.

The Disabled Living Foundation, the Mobility Information Service, the Banstead Mobility Centre and the Mobility Trust can all offer advice on choosing a wheelchair. Disabled Living Centres have a range of wheelchairs on display which can be tried out by appointment. Contact the Disabled Living Centres Council to find the nearest Centre to you.

Where you may be able to obtain a temporary wheelchair

- your local social services department or hospital
- your local British Red Cross (a small fee may be payable)
- your local Shopmobility scheme (see page 8)

Equipment for daily living

Everyday activities, such as getting out of the bath, doing the housework or climbing the stairs, may begin to cause problems if you have restricted mobility. However, there are a great many aids and adaptations which can make things very much easier. The Disabled Living Foundation and Disabled Living Centres can offer advice on what is available. You may be able to obtain the aids you need following an assessment by an occupational therapist from your local social services department.

If your home needs to be adapted on a larger scale, you might like to contact the Centre for Accessible Environments, who are happy to offer advice to people with disabilities. A local Disabled Living Centre may display larger equipment such as stairlifts (a chair that travels along a rail at the side of the stairway) so that you can try out what is available. You may also be able to get a grant to help you with the cost of adapting your home. Your local social services department or Citizens Advice Bureau should be able to advise you.

Second-hand equipment

If you want to buy or sell second-hand equipment, contact the Disabled Living Foundation. They keep a database of second-hand items, and can also suggest magazines and journals where sales might be advertised. However, any sale is a private matter between seller and buyer; the Disabled Living Foundation is not able to guarantee any of the equipment advertised in this way. A local Disabled Living Centre may also know of second-hand equipment for sale in your area.

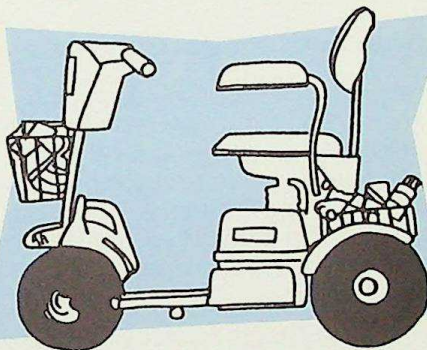
Some companies buy and sell second-hand equipment, such as electric wheelchairs, and these may come with a limited guarantee.

Possible places to see and try out equipment

- the occupational therapy department of the local hospital
- your local social services department
- the Disabled Living Foundation
- a local Disabled Living Centre
- the Mobile Advice Centre - contact Disability Scotland

Personal vehicles

There are several types of small battery or petrol-operated "personal vehicles" available commercially. They can be driven on pavements at up to 4 mph and some can be driven into shops. They cost from about £1,500 to buy when new. Another category of vehicle can be driven on the road at up to 8 mph. It is important to consider local traffic conditions and general road safety when thinking about buying a personal vehicle. For further information, see "Powered wheelchairs, scooters and buggies - a guide to help you choose", available for £2 from the Research Institute for Consumer Affairs. The Mobility Information Service and the Disabled Living Foundation can also give you advice.



Cars

If you have mobility problems, your own car can make all the difference to your independence.

Several organisations offer information and advice about buying and driving a car specially adapted for a person with a disability. These include the Mobility Information Service, the Mobility Advice and Vehicle Information Service (MAVIS) and the Banstead Mobility Centre.

Motability

An organisation called Motability helps people to use the higher rate mobility component of their Disability Living Allowance (DLA) or their War Pensioner's Mobility Supplement to buy powered wheelchairs, personal vehicles and cars through a hire purchase scheme. However, your DLA or Mobility Supplement won't necessarily cover all the costs: you may also have to pay a deposit, the cost of necessary adaptations, insurance, running costs and so on. Do check exactly what you will need to pay before committing yourself.

Exemption from VAT and road tax

People with disabilities do not have to pay VAT on equipment for daily living, wheelchairs, personal vehicles or on cars which have been specially adapted to carry a disabled person in a wheelchair. For more details, see leaflet 701/7/94, "VAT reliefs for people with disabilities", available free from your local VAT office (look under "Customs and Excise" in the phone book).

People who receive the higher rate mobility component of Disability Living Allowance don't usually have to pay Vehicle Excise Duty (road tax) on their car. For further information, see RADAR's mobility fact pack 3, "Money Matters" available for £2.

Orange Badge Scheme

If you have difficulty walking, or you are registered blind, or you have a disability which affects both your arms, you may be entitled to an Orange Badge. You should apply to your local social services department or if you live in Scotland, to the Chief Executive of your regional or island council. There may be a small charge. The Orange Badge can either be used in your own car, or someone else's car that you use regularly. The Orange Badge allows you to park on yellow lines, in spaces marked for disabled people, and at parking meters with no charge or time limit. The scheme operates throughout England, Scotland and Wales, with the exception of central London. For further information, see "The Orange Badge Scheme" leaflet, available free from the Department of Transport.

Getting around

If you do not have the use of a car, and you use public transport to get around, you may be able to get help with your travel costs. If you have difficulty using public transport, there may be a local transport scheme which can help.

Public transport

Bus and train passes are available for senior citizens and disabled people in most areas. They enable you to travel either free, or at a reduced rate, on local buses and trains. For more details about what is available in your area, you should contact your local council.

If you travel on British Rail, you can apply for either a Senior Railcard (for people over 60), or a Disabled Person's Railcard. For a yearly charge, the railcard will enable you to buy most rail tickets at a reduced rate. You can get an application form and further details from your local British Rail station.

Many coach companies also offer discounts to senior citizens. You should contact your local coach station to find out what they offer.

Local transport schemes

Volunteer drivers use their own cars to provide a door-to-door service. These schemes are often run by voluntary organisations, such as Councils for Voluntary Service (CVS), the Women's Royal Voluntary Service (WRVS) and Volunteer Bureaux. Your local council may also offer a similar service.

Dial-a-Ride/Ring-a-Ride schemes use converted cars and minibuses to provide a door-to-door service for older and disabled people. They will take you wherever you wish within a local area. You will need to book in advance and you may have to pay a mileage cost.

Shopmobility schemes loan wheelchairs and scooters to enable disabled people to shop independently. You can get a directory of all Shopmobility schemes by sending a 9" x 6" stamped addressed envelope to the National Federation of Shopmobility. Some WRVS groups also operate a special shopping service for people with disabilities. Contact your local WRVS group to find out what they can offer.

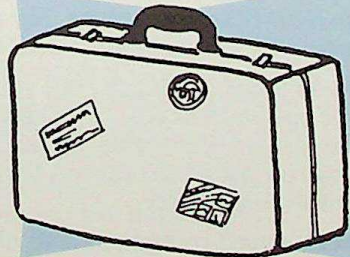
If you live in Greater London and have a disability, you may be entitled to a Taxicard. This will enable you to use taxis at a reduced rate. For more details, contact the Taxicard Section of London Accessible Transport Unit.

Where to find out about transport schemes in your area

- a disability organisation in your area, or the local Disablement Information and Advice Line (DIAL)
- your local social services department
- the Transport Co-ordinating Officer at the council
- your local WRVS
- SeniorLine, Help the Aged's free national information service on 0800 65 00 65

Travel advice

There are several organisations who offer information and advice about travel and transport. Tripscope can help you plan any trip, whether it is a short everyday trip or a long distance holiday. The Holiday Care Service can help people with mobility problems find an appropriate holiday. RADAR publishes annual holiday guides for disabled people, "Holidays in the British Isles" and "Holidays and travel abroad". Check with RADAR for current prices.



Financial help

If you are under 66 and have difficulties getting around, you may be able to claim a social security benefit called **Disability Living Allowance** (or DLA). There are two parts to Disability Living Allowance.

- DLA **care** component - for people who need help with personal care.
- DLA **mobility** component - for people who have difficulty walking or getting around.

DLA mobility component is paid at two rates:

- **Higher rate:** to qualify for this rate, you must be unable to walk, or have great difficulty walking, or be in serious danger if you do walk.
- **Lower rate:** you can qualify for this rate even if you can walk. However you must need guidance or supervision from someone else to make sure you are safe or to help you find your way around in a strange place.

To claim DLA, your disability must have started **before the age of 65** and you must **claim before your 66th birthday**. If you qualify for DLA, you will either receive it for life or for a fixed term.

The higher rate of DLA mobility component can be used to help you buy a powered wheelchair, a personal vehicle or a car through the organisation Motability (see page 6 of this leaflet for more details).

Sadly, if you become disabled after your 65th birthday, you can't get extra money to help with the costs of getting around. However, you may be able to claim a benefit called **Attendance Allowance** to help with the costs of your personal care.

For further information on Disability Living Allowance and Attendance Allowance, see Help the Aged's leaflet "Claiming Disability Benefits".

Incapacity Benefit and retirement

Incapacity Benefit replaced Invalidity Benefit and Sickness Benefit from 13 April 1995. Generally, you can't claim Incapacity Benefit after reaching pension age (60 for women, 65 for men).

If you are receiving Incapacity Benefit when you reach pension age, you will either remain on Incapacity Benefit, or change to the State Retirement Pension. This will depend on which rate of Incapacity Benefit you are receiving.

Help the Aged's leaflet "Claiming Disability Benefits" gives details about this new benefit, and how it affects people who were on Invalidity Benefit.

Helpful addresses

Action on Smoking and Health (ASH)

109 Gloucester Place
London W1H 4EJ
Tel: 0171-935 3519

Arthritis Care

18 Stephenson Way
London NW1 2HD
Tel: 0171-916 1500
Freephone helpline
0800 289 170 (12-4pm, Mon-Fri)

Banstead Mobility Centre

Damson Way
Fountain Drive
Carshalton
Surrey SM5 4NR
Tel: 0181-770 1151

British Red Cross Society

9 Grosvenor Crescent
London SW1X 7EJ
Tel: 0171-235 5454

Centre for Accessible Environments

60 Gainsford Street
London SE1 2NY
Tel: 0171-357 8182

Citizens Advice Bureau

see your local telephone book

Community Health Council

see your local telephone book

Department of Transport

Publicity Section
Floor 5, zone 3
Great Minster House
76 Marsham Street
London SW1P 4DR
Tel: 0171-271 5747

Disability Scotland

Princes House
5 Shandwick Place
Edinburgh EH2 4RG
Tel: 0131-229 8632

Disability Wales

Llys Ifor
Crescent Road
Caerphilly
Mid Glamorgan CF8 1XL
Tel: 01222-887325

Disabled Living Centres Council

First Floor
Winchester House
11 Cranmer Road
London SW9 6EJ
Tel: 0171-820 0567

Disabled Living Foundation

380-384 Harrow Road
London W9 2HU

DIAL (Disablement Information and Advice Line)

see your local phone book or contact:

DIAL UK

Park Lodge
St Catherine's Hospital
Tickhill Road
Balby
Doncaster
South Yorks DN4 8QN
Tel: 01302-310123

EXTEND

22 Maltings Drive
Wheathamstead
Herts AL4 8QJ
Tel: 01582-832760

Holiday Care Service

2nd Floor
Imperial Buildings
Victoria Road
Horley
Surrey RH6 7PZ
Tel: 01293-774535

**Institute for Complementary
Medicine**

PO Box 194
London SE16 1QZ
Tel: 0171-237 5167

**London Accessible
Transport Unit**

Britannia House
1-11 Glenthorne Road
London W6 0LF
Tel: 0181-748 7272
(London Taxicard)

**Mobility Advice and Vehicle
Information Service
(MAVIS)**

Department of Transport
Crowthorne
Berkshire RG45 6AU
Tel: 01344-770456

Mobility Information Service

Unit 2A, Atcham Estate
Shrewsbury
Shropshire SY4 4UG
Tel: 01743-761889

Mobility Trust

50 High Street
Hungerford
Berkshire RG17 0NE
Tel: 01488-686335

Motability

Gate House
West Gate
Harlow
Essex CM20 1HR
Tel: 01279-635666

**National Federation
of Shopmobility**

c/o Sutton Shopmobility
3rd Floor
St Nicholas Centre Car Park
St Nicholas Way
Sutton
Surrey SM1 1AY
Tel: 0181-770 0691

QUIT

Victory House
170 Tottenham Court Road
London W1P 0HA
Tel: 0171-388 5775

**RADAR (Royal Association
for Disability and Rehabilitation)**

12 City Forum
250 City Road
London EC1V 8AF
Tel: 0171-250 3222

**Research Institute for
Consumer Affairs**

2 Marylebone Road
London NW1 4DF
Tel: 0171-935 2460

Social Services Department

see telephone book under the name
of your local council

Tripscope

The Courtyard
Evelyn Road
London W4 5JL
Tel: 0181-994 9294

WRVS

see your local telephone book
or contact:
WRVS Headquarters
234-244 Stockwell Road
London SW9 9SP
Tel: 0171-416 0146



Stannah Stairlifts, the world's largest manufacturer of stairlifts, is committed to helping people with mobility difficulties stay in their own homes, rather than go through the upheaval of moving house or being confined to living in the rooms downstairs.

For many people, a Stannah stairlift brings a whole new lease of life as well as peace of mind. Because it can be installed in a matter of hours with no structural alterations, you don't have to worry about any fuss or disruption. A range of stylish models to suit different needs, fits almost any straight or curved staircase and is available in a variety of colour schemes. Operating the stairlift is simple, with constant pressure buttons for fingertip control and a range of safety features, including sensors to stop the stairlift if there is an obstacle in its path.

Stannah Stairlifts is renowned for designing products which offer maximum safety, comfort and convenience. The Company also has certification to the International Quality Management Standard ISO 9001.

For more information about Stannah Stairlifts, telephone 0800 715107 or write to:

Stannah Stairlifts Ltd, FREEPOST, Andover, Hampshire SP10 3SD.

This leaflet is endorsed by the Royal Association for Disability and Rehabilitation (RADAR) and sponsored by Stannah Stairlifts.

Help the Aged

St James's Walk

London EC1R 0BE

Telephone: 0171-253 0253



SeniorLine is Help the Aged's free national information service for senior citizens, their relatives, carers and friends.

Telephone: **0800 65 00 65** Minicom: 0800 26 96 26

10am to 4pm, Monday to Friday. Your call will be free of charge.

WORLD HEALTH
ORGANIZATION



REGIONAL OFFICE FOR
SOUTH-EAST ASIA

**AGEING AND HEALTH
IN THE
WHO SOUTH-EAST ASIA REGION**



WORLD HEALTH ORGANIZATION
Regional Office for South-East Asia
New Delhi



Message from Dr Uton Muchtar Rafei, Regional Director
WHO South-East Asia Region
on the occasion of World Health Day 1999

The last year of the present millennium is being dedicated by the United Nations to the older persons. In the last fifty years, the world has witnessed a growing percentage of the elderly. In every culture, as we grow older, perhaps the most valued aspect of the quality of life is likely to be our health. Clearly, healthy ageing is everyone's goal and an achievement to be celebrated by society as a whole. It is, therefore, fitting that this year, in the International Year of the Older Persons, WHO's chosen theme for World Health Day, on 7th April is: "Active Ageing Makes the Difference".

Life expectancy has risen sharply this century and is expected to continue to rise in virtually all populations throughout the world. The reason for this is the sharp decline in premature mortality from many infectious and chronic diseases during this century. Improvements in sanitation, housing, nutrition, and medical innovations, including vaccinations and the discovery of antibiotics have all contributed to the steep increase in the number of people reaching older age. Today many more people live into their 70s and 80s.

Currently there are some 580 million people aged 60 years and over, in the world. Of these, 355 million live in developing countries. It is estimated that by the year 2020 there will be 1000 million elderly people, of whom 700 will be in developing countries.

At the same time, world over, fewer children are being born. This trend of the ageing of the global population, is perhaps, one of the biggest challenges facing the world in the next century. It is also a great opportunity, for the elderly have much to contribute.

However, the growing numbers of older people means that more and more people will be at a higher risk of developing chronic and debilitating diseases. This will present new and serious challenges for national and international public health.

Health care professionals will need to be educated about the special physical and mental health changes typically related to ageing, and how to deal with these. Similarly, gerontologists and geriatricians must now play a more active role in policy development and programme implementation and management. At the same time, health policies must adopt a life-cycle approach, which tackle health problems from the very start, and enable people to grow older with a minimum of disabilities and chronic disease.

However, the elderly are not all frail and vulnerable. In fact, a vast majority of older people are physically and financially healthy and independent. Most lead active lives well into their later years. Successful ageing will depend on the kinds of choices that are made: policy choices by national governments, and by health and human service organizations, as well as lifestyle choices made by us, individually.

The WHO Regional office for South-East Asia has undertaken several measures for the improvement of the health of the elderly in the Member Countries, which include:

- Collection and dissemination of data on the social, economic and health status of the elderly in the countries of the South-East Asia Region. This includes organization of studies on morbidity and mortality patterns of elderly at country and inter-country levels;
- Promoting formulation of national policies and strategies for health care of the elderly and;
- Support to national elderly care programmes

Culturally, in the countries of the South-East Asia region, the family has been the main stay of care, at all ages, from a new born baby to adulthood and from adulthood to old age. This family bondage is a strong glue that holds together the fabric of our societies. WHO, therefore, recommends that government policies and planning strengthen the family and the community base to support the elderly.

To the elders of today, I would say that they should attempt to remain physically and mentally active to better enjoy their golden years. They should avoid behaviours dangerous for their health, such as excessive consumption of alcohol and tobacco. Perhaps, they should even form "golden age clubs" which can serve as self-help groups and further contribute to the society. At the same time, they should understand that society is changing and there are increasing demands on the younger generation in terms of work and finances. The elderly should make every attempt to understand these changes and adjust to them in a spirit of sharing and caring which has always been a part of the South-East Asian culture.

To the elders of tomorrow, I advocate that they should prepare for their golden age. Health protection in younger years is necessary for good health in older years. Thus, we advocate healthy life styles such as avoiding tobacco and alcohol, good nutrition, exercise and stress management. Also, it is important to plan financially for old age so that the increasing cost of living does not impair the life style in what could be the golden years of life.

On the occasion of World Health Day, I wish you all good health in youth and in old age.

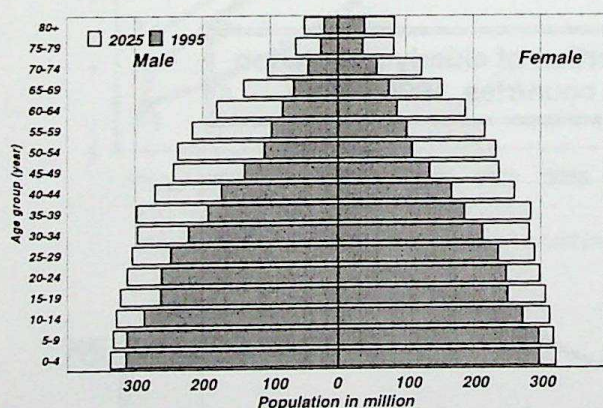
Dr Uton Muchtar Rafei

AGEING AND HEALTH IN THE WHO SOUTH-EAST ASIA REGION

During the 1980s and the 1990s, life expectancy at birth in most of the countries in WHO's South-East Asia Region (SEAR)* has steadily increased. In 1983, only 3 out of 10 Member States had reported life expectancy at birth of 60 years or more, whereas in 1997, seven of the ten countries have reported life expectancy above 60 years.

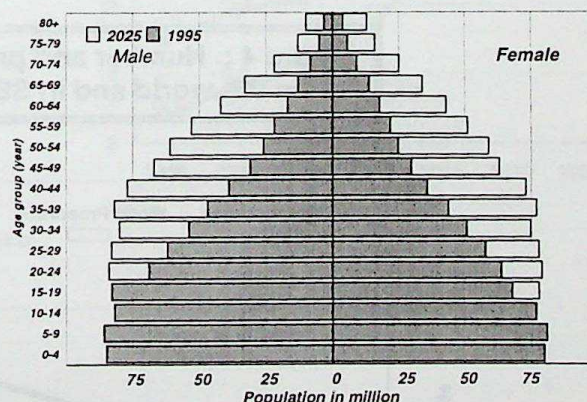
The trend of increase in number and in proportion of the elderly people in the Region will be further accelerated during the years to come. The proportion of elderly people - of 60 years and above - will increase from 5.3 per cent in 1980 to 12.4 per cent in 2025 for the whole Region. As compared to the changes in the global population pattern between 1995 and 2025, more dramatic changes can be seen in SEAR countries, during the same period (Fig. 1 and 2).

Figure 1: World population structure by age and sex, Year 1995 & 2025



Source: United Nations medium-variant predictions

Figure 2: Population structure in SEAR countries by age and sex, Year 1995 & 2025



This demographic transition effectively transforms most countries of the Region from "mature societies" to "ageing societies", that is, countries with an ageing population of more than 7 per cent by the turn of the century.

* WHO's South East Asia Region includes the following countries: Bangladesh, Bhutan, DPRK, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka and Thailand.

For example, during the last five decades, in India, life expectancy at birth, has doubled from 32 to 64 years. The absolute number of elderly** persons has more than tripled during the same period. By the year 2001, India will be inhabited by about 76 million elderly people who would constitute 7.7 per cent of the country's population. By the year 2020, it is estimated that the population of the elderly will increase to 142 million, or about 11% of the country population. The proportion of SEAR elderly population would be increasing from 18.1% in 1995 to 21.4% of the world elderly population in 2025. While proportion of India elderly will reach 14.4% in the same year (Fig. 3). With this trend continues, the number of the world and SEAR elderly population in 2025 would be more than double of 1995 (Fig. 4).

Figure 3: Proportion of elderly population in SEAR countries and in India against world elderly

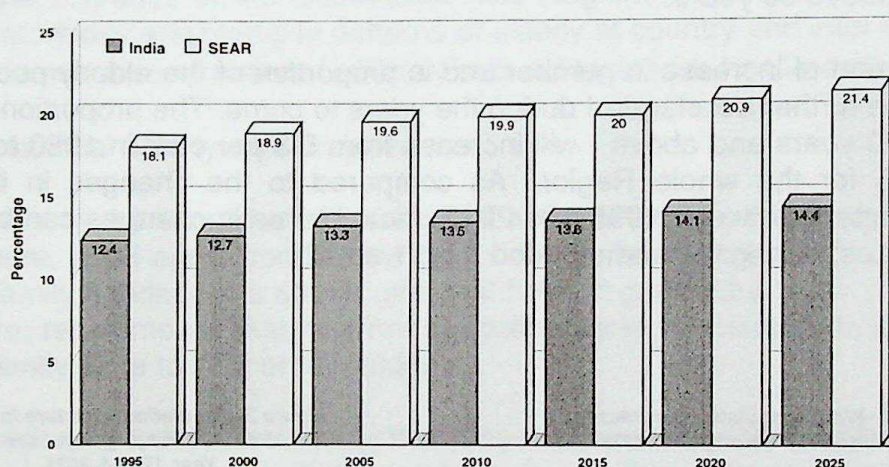
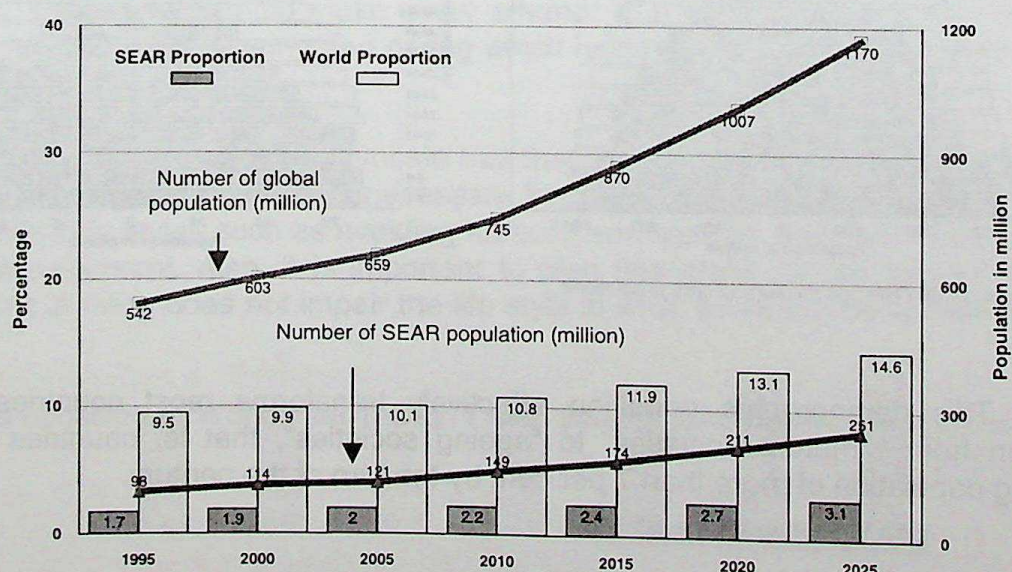


Figure 4 : Number and proportion of elderly population in the world and in SEAR countries, 1995 - 2025

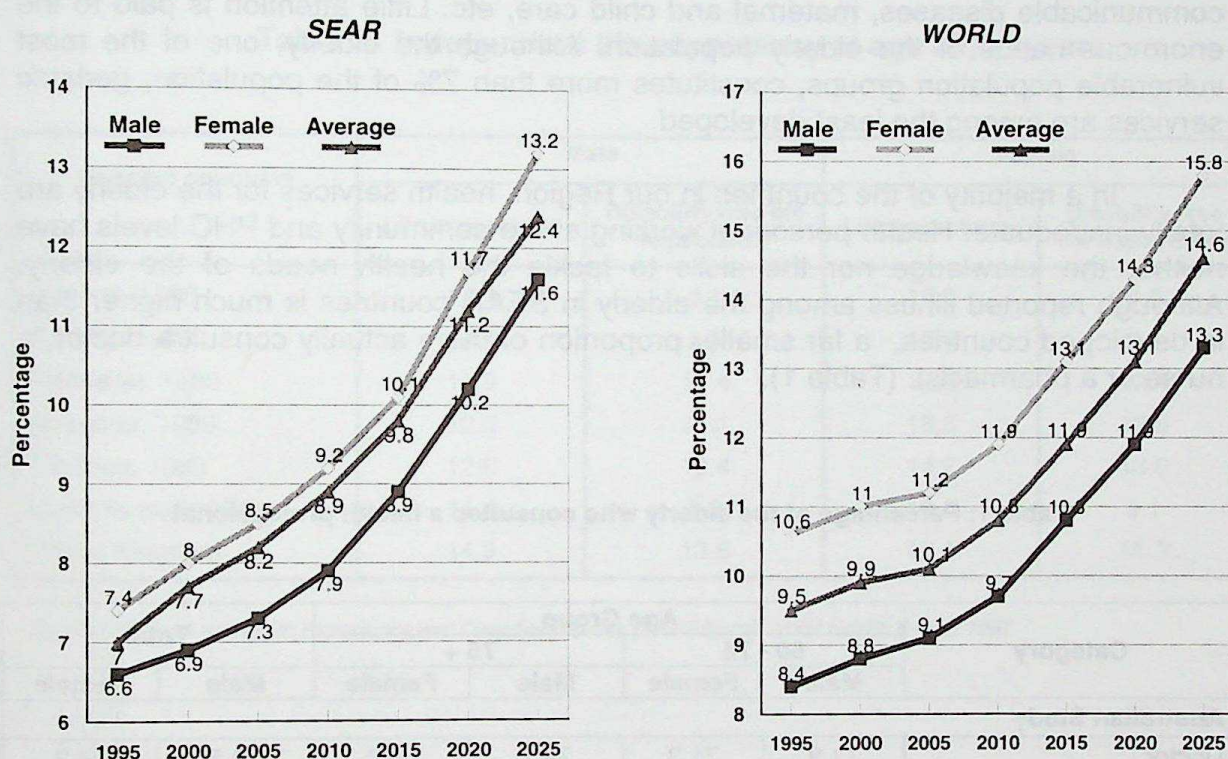


Source: Data derived from UN medium-variant predictions

** Definition of "elderly" covers "all people age 60 years and over"

Universally, women consistently have a longer life expectancy than men. They therefore, constitute both a larger accumulated number as well as proportion of elderly population. A similar pattern is seen in global and in SEAR countries' population. While the proportion of elderly women of the Region will be increasing to 13.2% in 2025, the proportion of elderly men will be at 11.6% (Fig 5).

Figure 5: Proportion of elderly population by sex in SEAR countries and in the world, 1995 - 2025



Source: Data derived from UN medium-variant predictions

THE CHALLENGES

The economic, social and health status of the fast-growing elderly population poses a great challenge. Many studies conducted in India and other developing countries reveal that a majority of the elderly population is economically dependent after their retirement. Many who do not have the benefit of a pension facility have to work for their livelihood well into the late years of their life, until they are physically exhausted.

At the same time, the joint family system and family values are gradually being eroded. With urbanization, migration of the young people of the family, and a decreasing cohesiveness of family bonds, the number of the lone elderly will also increase.

The health of the Elderly

The elderly are prone to suffer from chronic noncommunicable diseases, including hypertension, heart diseases, stroke, diabetes mellitus, cancer, respiratory diseases, urinary incontinence, arthritis, mental problems and oral/dental problems. SEAR countries continue to be major contributors to the worldwide blindness. It is estimated that in 1998, the number of blind people in the Region was about 11.8 million. Around 50-80% of these, are caused by cataract which is most common in those age 60 years and over.

Access to Health Services

National health services in our countries however still focus largely on communicable diseases, maternal and child care, etc. Little attention is paid to the enormous needs of the elderly population. Although the elderly, one of the most vulnerable population groups, constitutes more than 7% of the population, geriatric services are among the least developed.

In a majority of the countries in our Region, health services for the elderly are totally inadequate. Health personnel working at the community and PHC levels have neither the knowledge nor the skills to tackle the health needs of the elderly. Although reported illness among the elderly in SEAR countries is much higher than in developed countries, a far smaller proportion of them actually consult a doctor, a nurse or a pharmacist. (Table 1).

Table 1: Percentage of the elderly who consulted a health professional

Category	Age Group				Total	
	60 - 74		75 +			
	Male	Female	Male	Female	Male	Female
Australian Study						
Doctor	71.9	71.3	74.1	80.8	72.5	74.2
Nurse	3.3	8.7	0.0	7.1	0.1	8.2
Pharmacist	30.3	30.6	42.1	21.7	33.9	28.0
SEARO Study						
Doctor	29.3	32.1	28.7	33.7	29.2	32.4
Nurse	3.9	3.8	5.6	5.4	4.2	4.3
Pharmacist	2.3	2.1	2.3	2.8	2.2	2.3

Source: Ageing in South-East Asia - A five country study

PROMOTING HEALTHY AND ACTIVE AGEING

Ageing is a biological process common to all living beings, including humans. In fact, we all start ageing from the time we are born. The process cannot be stopped or reversed but it can be delayed and the optimum physical conditions maintained through healthy lifestyle choices.

Quality of Life

Economic, physical, social and emotional security are prerequisites for well-being and health in old aged people. Today, life expectancy has been increased and death can be delayed through improved medical technologies. But with longevity, individuals are at risk from a number of ageing related diseases and disabilities. Longer life is a benefit to individual and the community only if at the same time quality of life can be assured. Independent life expectancy is the ability to lead an active and disability-free life. Table 2 reflects independent life as a measure of quality of life for some of the SEAR countries and a few of the developed countries.

Table 2: Independent life expectancy at age 65, in years

Selected countries	Male		Female	
	Life expectancy	Disability-free life expectancy	Life expectancy	Disability-free life expectancy
Canada, 1986	14.9	8.1	19.2	9.4
Finland, 1986	13.4	2.5	17.4	2.4
Indonesia, 1989	11.5	11.4	12.8	12.4
Myanmar, 1989	12.0	11.1	13.5	12.8
Thailand, 1989	12.6	12.4	14.2	13.6
Netherlands, 1990	14.4	9.3	19.0	9.1
United Kingdom	14.3	13.6	18.1	16.9

Source: Network on Health Expectancy and Disability Process (REVES) and World Health Report 1997

Life Cycle Approach

Health and wellbeing in older age are largely a result of a life time's experiences. The best way to achieve good health and active ageing is to have a life-cycle health promotion approach to health. Good health is dependant on proper interventions, starting at the foetal and childhood stages such as balanced nutrition in young girls, avoiding smoking during pregnancy, breastfeeding babies, and providing proper nutrition and timely immunization to children. During adulthood, a healthy lifestyle should be maintained, especially avoiding tobacco and alcohol; undertaking regular physical exercise, and a balanced diet (Table 3).

Table 3 : Action towards active ageing

Factors	Individual Action	Policy Action
Foetal Environment	<ul style="list-style-type: none"> ❖ Ensure balanced nutrition in young girls and pregnant or lactating women ❖ Avoid smoking during pregnancy 	<ul style="list-style-type: none"> ❖ Focus health promotion activities on girls and women ❖ Increase awareness about importance of balanced nutrition for girls and women
Childhood Environment	<ul style="list-style-type: none"> ❖ Breastfeed babies for at least four months ❖ Ensure balanced nutrition and adequate physical exercise for your children ❖ Have your child immunized and observe good hand and food hygiene to prevent infection 	<ul style="list-style-type: none"> ❖ Promote breastfeeding, legislate against advertising for milk powder, and fortify foods/water in areas of malnutrition ❖ Ensure access to immunization programmes ❖ Improve sanitation and housing and reduce domestic overcrowding
Smoking	<ul style="list-style-type: none"> ❖ Stop smoking – cessation is beneficial at any age ❖ Educate your children about the ill effects of smoking 	<ul style="list-style-type: none"> ❖ Ban tobacco advertising ❖ Ban sale of tobacco to children ❖ Provide health education in schools and workplace
Alcohol	<ul style="list-style-type: none"> ❖ Maintain moderate drinking limits ❖ Seek professional help if you think you may drink excessively 	<ul style="list-style-type: none"> ❖ Ban sale of alcohol to children
Physical Activity	<ul style="list-style-type: none"> ❖ Exercise regularly from the earliest years through to older ages; walking, climbing stairs, and housework are effective forms of exercise 	<ul style="list-style-type: none"> ❖ Incorporate exercise into school curricula ❖ Create workplaces which provide exercise facilities ❖ Encourage sports for seniors
Diet	<ul style="list-style-type: none"> ❖ Consume a diet high in fibre and low in animal fat and salt ❖ Reduce your weight if you are overweight and maintain normal body weight 	<ul style="list-style-type: none"> ❖ Increase consumer awareness about direct links between good nutrition and health
Adult Diseases	<ul style="list-style-type: none"> ❖ Make above-listed life style adjustments ❖ Make use of available prevention programmes (screening and vaccination) ❖ See your doctor at regular intervals 	<ul style="list-style-type: none"> ❖ Implement evaluated prevention programmes ❖ Ensure access to safe maternity services ❖ Provide accessible and affordable health care for all and reduce environmental threats
Social Integration	<ul style="list-style-type: none"> ❖ Stay involved in your family, your community, a club, or a religious organization ❖ Be aware of and speak out against ageism ❖ Continue to educate yourself and all your children 	<ul style="list-style-type: none"> ❖ Support activities that foster social cohesion ❖ Provide access to life-long learning ❖ Promote solidarity among the generations
Gender	<ul style="list-style-type: none"> ❖ Be aware of and speak out against gender discrimination and prejudice ❖ Educate boys and girls to avoid gender stereotyping 	<ul style="list-style-type: none"> ❖ Implement legislation against gender discrimination in education, jobs, health care, property rights, marriage and inheritance laws ❖ Promote health education on the dangers of high risk life styles by targeting population groups that are particularly at risk ❖ Integrate gender analysis in health research and health care programmes
Income Security	<ul style="list-style-type: none"> ❖ Be informed about public and private measures intended to protect income security over the life course 	<ul style="list-style-type: none"> ❖ Provide income security and access to appropriate health care for older persons ❖ Fight age discrimination in the workplace

Source: Ageing – Exploding the myths; WHO/HSC/AHE/99.1

WHO efforts

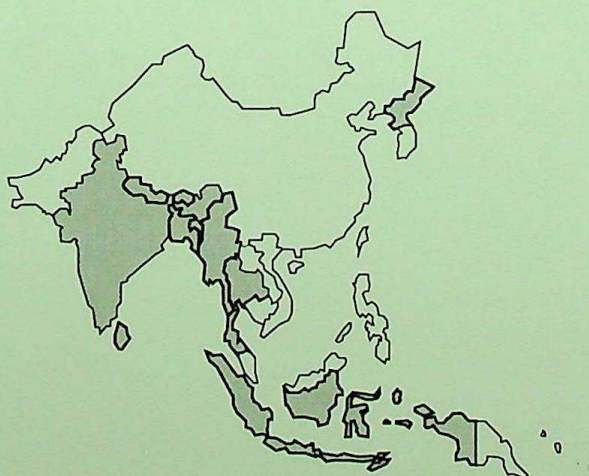
Over the years, WHO has made substantial efforts to improve the health care of the elderly. The principal focus of WHO's activities has been on community participation and family care. "Promotion of traditional family ties" has, therefore, been put ahead of "institutional care". Making optimal use of the available PHC services is the cornerstone for supporting the traditional family care.

In collaboration with its Member States, the WHO Regional Office has been concentrating its efforts in several areas of elderly care. These include:

- creation of awareness among policy makers and the general population;
- collection and dissemination of information on socioeconomic and health status of elderly people through organization of intercountry and country studies;
- supporting formulation of appropriate national policies, strategies and programmes; and
- establishment of institutions or centers of excellence for health care of the elderly
- improving health workers' knowledge and skills on health care for elderly.

WHO is supporting the training of health personnel as a top priority. Various studies of the determinants of healthy ageing have been supported under WHO programmes. Several countries in this Region have also recently initiated WHO-supported programmes on Ageing and Health.

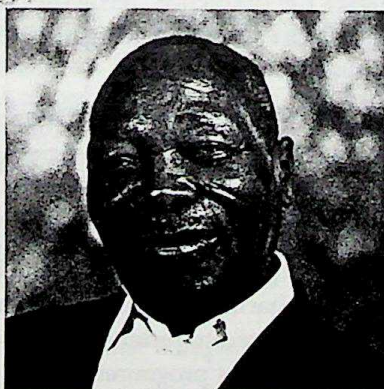
WHO will continue its efforts to promote the concept of "active ageing" in a spirit of broad partnership with all the actors, including governments, professional organizations and institutes, the mass media, the education sector, and international and national nongovernmental organizations.





International Year
of Older Persons

Ageing



Exploding the myths



Ageing and Health Programme
World Health Organization

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Foreword

The ageing of the global population is one of the biggest challenges facing the world in the next century. It is also potentially a great opportunity. Older people have a lot to contribute.

Older people are often viewed as a homogeneous group from mainly industrialised countries, who no longer contribute to their families and societies, and may even be a burden. The truth could not be more different. The majority of older people prove these notions wrong every day, and it is an example that has inspired the WHO to focus on ageing.

The theme of World Health Day 1999, in the International Year of Older Persons, "Active Ageing makes the difference" recognises that it is key for older people to go on playing a part in society. Active Ageing involves every dimension of our lives: physical, mental, social and spiritual.

There is much the individual can do to remain active and healthy in later life. The right life style, involvement in family and society and a supportive environment for older age all preserve well-being. Policies that reduce social inequalities and poverty are essential to complement individual efforts towards Active Ageing.

Maintaining health and quality of life across the lifespan will do much towards building fulfilled lives, a harmonious, intergenerational community and a dynamic economy. WHO is committed to promoting Active Ageing as an indispensable component of all development programmes.

Gro Harlem Brundtland, MD, MPH
Director-General
World Health Organization



Ageing: Exploding the myths

We are all ageing – every day of our life. John H. Glenn, Jr. was 77 years old when he went into space for a second time as part of a scientific experiment to explore the secrets of ageing. Every one of us started to age before we were born and we continue to do so throughout our entire life course. Ageing is a natural process and should be welcomed, because the alternative would be premature death.

Life expectancy has risen sharply this century, and is expected to continue to rise, in virtually all populations throughout the world. The number of people reaching old age is therefore increasing. There are currently 580 million people in the world who are aged 60 years or older. This figure is expected to rise to 1,000 million by 2020 – a 75% increase compared with 50% for the population as a whole.

Health is vital to maintain well-being and quality of life in older age, and is essential if older citizens are to continue making active contributions to society. The vast majority of older people enjoy sound health, lead very active and fulfilling lives, and can muster intellectual, emotional and social reserves often unavailable to younger people.

This brochure outlines how the principles of Active Ageing help maintain health and creativity throughout the lifespan and especially into the later years. It explodes some common myths about ageing and older people, and suggests ways that individuals and policy makers can turn principles into practice to make Active Ageing a global reality.



Myth No. 1: Most older people live in developed countries

In fact the reverse is true. Most older people, over 60% of them, live in developing countries. There are currently about 580 million older people in the world, with 355 million in developing countries. By 2020, there will be 1,000 million, with over 700 million in the developing world.

Life expectancy has risen and is expected to go on rising in almost every part of the world. The reason for this is the sharp decline in premature mortality from many infectious and chronic diseases during this century. Improvements in sanitation, housing, nutrition and medical innovations, including vaccinations and the discovery of antibiotics have all contributed to the steep increase in the number of people reaching older age.

Sharp increases in life expectancy have been accompanied by substantial falls in fertility all over the world, mainly due to modern contraceptive methods. In India, for example, total fertility rates (that is, the total number of children a woman is expected to have) have decreased from 5.9 in 1970 to 3.1 in 1998. In Brazil, fertility rates dropped from 5.1 in 1970 to 2.2 in 1998. This decline is even more

Living in an ageing world requires:

- ▶ acknowledging older people as a valuable resource and combating 'ageism'
- ▶ enabling older people to be active participants in the development process
- ▶ providing adequate health care and health promotion for older people
- ▶ promoting intergenerational solidarity

pronounced in China, where the 'one-child-per-family' policy was officially introduced in 1979. Total fertility rates fell from 5.5 in 1970 to the current 1.8, which is below the 2.1 replacement level.

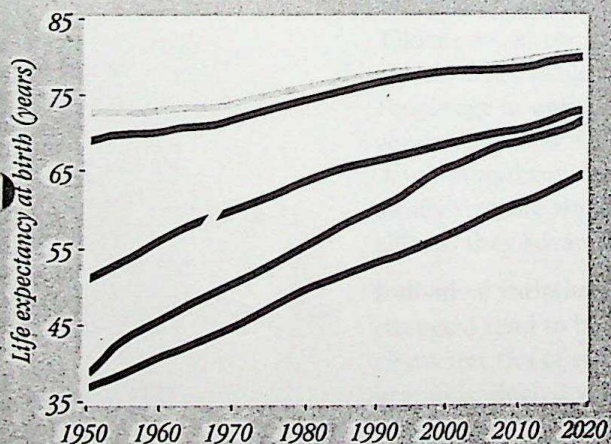
This trend by which more people live to reach older age while fewer children are born is referred to as 'population ageing'. It has been particularly rapid in developing countries. While it has taken France 115 years for the proportion of older people to double from 7 to 14%, it will take China only 27 years to achieve the same increase, between 2000 and 2027.

Living in an ageing world

As more people reach a 'ripe old age', they also enter a period in their lives when they are at higher risk of developing chronic diseases, which in turn may result in disability. In fact, chronic diseases including cardiovascular diseases, diabetes and cancer are predicted to be the main contributors to the burden of disease in developing countries by 2020. Infectious diseases – although declining – will continue to add to the burden of disease in those regions.

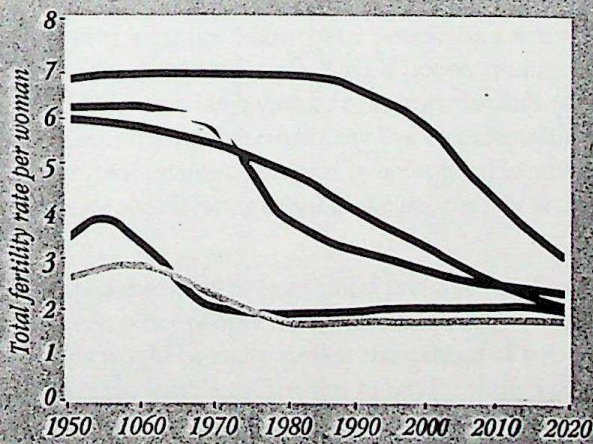
It is projected that in many countries with fertility rates below replacement level, the proportion of older people is expected to exceed the proportion of the very young (aged up to 19 years) by 2050. However, there is mounting evidence from developed countries that people are maintaining better health in later life than ever before. It is estimated that in 1996, there were 1.4 million fewer disabled older persons in the USA, than would have been expected if the health status of older people had not improved since the early 1980s.

Life expectancy at birth is increasing



Source: United Nations Population Data

Total fertility rates are decreasing



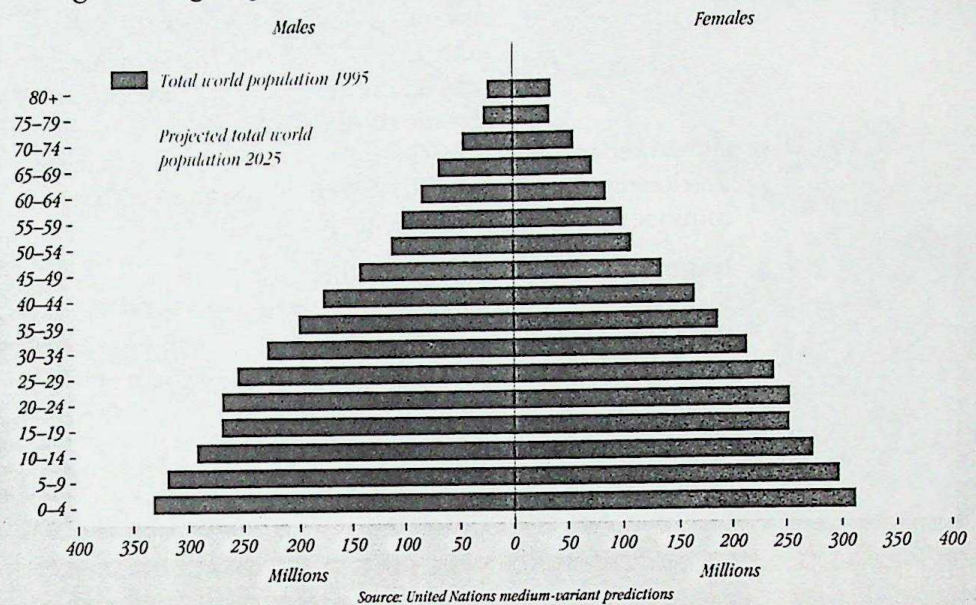
Source: United Nations Population Data

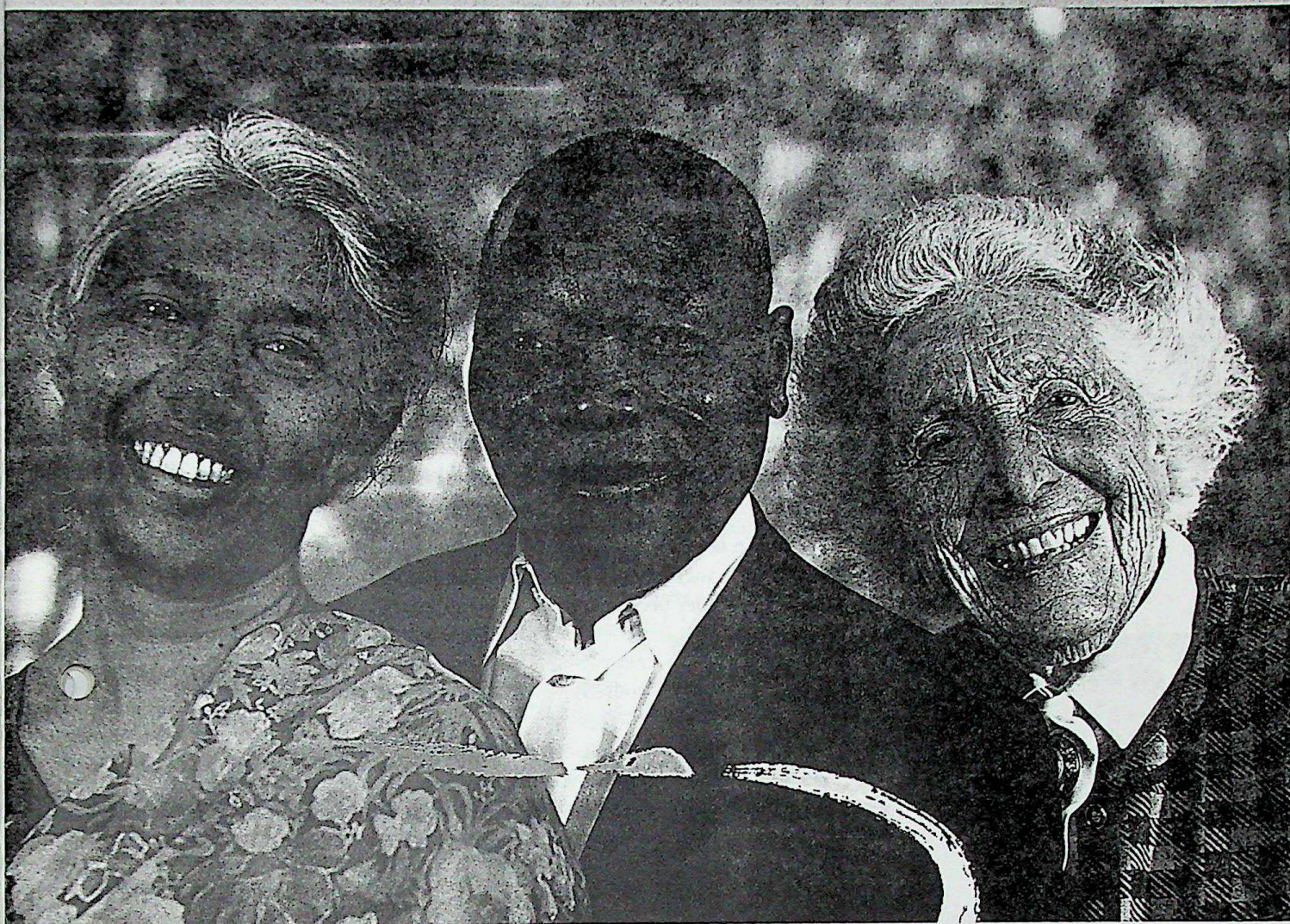
■ Nigeria
■ India
■ Brazil
■ China
■ USA
■ Norway

Valuing older age

Social perceptions of the value and benefits of old age vary in different cultures. In many African and Asian countries, words which describe older people characterise them as 'someone with knowledge'. However, in some cultures these traditional values are in danger of being eroded. It is important to recognise that ageing is not an affliction but a great opportunity to make use of resources acquired over the life course, and that older people can be a tremendous asset to families and the community.

Living in an ageing world





Myth No. 2: Older people are all the same

'Older people' constitute a very diverse group. Many older people lead active and healthy lives, while some much younger 'older people' have a poorer quality of life. People age in unique ways, depending on a large variety of factors, including their gender, ethnic and cultural backgrounds, and whether they live in industrialised or developing countries, in urban or rural settings. Climate, geographical location, family size, life skills and experience are all factors that make people less and less alike as they advance in age.

Individual variations in biological characteristics (e.g. blood pressure or physical strength) tend to be greater between older people than between young ones: the characteristics of two ten-year-olds would be more similar than those of two eighty-year-olds. Such diversity leads to considerable difficulties in interpreting results from scientific studies on ageing, which are often conducted on particular, well defined groups of older people: the findings may not apply to a large proportion, or even the majority of older people.

The differences are further increased by disease experiences throughout life which may accelerate the ageing process. Many studies have shown that there are wide variations in patterns of disease in people from different ethnic and cultural communities which remain largely unexplained. For example, immigrants and their descendants who move from the Indian subcontinent to countries across the globe have higher rates of coronary heart disease than the population of the countries to which they moved.

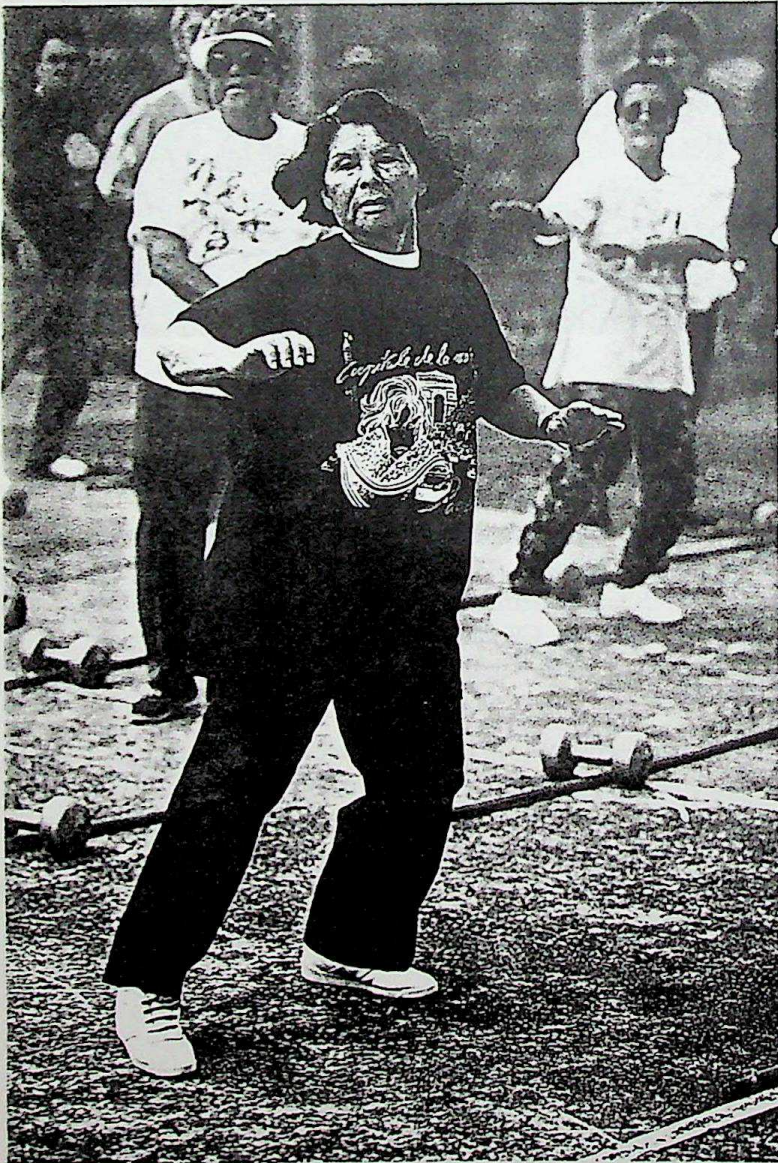
Why such difference?

A genetic component may contribute to how *long* we live. However, health and activity in older age are largely a summary of the experiences, exposures and actions of an individual during the whole span of life.

Our life course begins before birth. Research has suggested that foetuses undernourished in the womb grow up to be adults more likely to suffer from a variety of diseases, including coronary heart disease and diabetes; they also seem to age faster than people who receive good nutrition during early life. Malnutrition in childhood, particularly during the first year of life, childhood infections such as polio and rheumatic fever, and exposure to accidents and injuries all make chronic and sometimes disabling diseases more likely in adult life. Life style factors in adolescence and adulthood, such as smoking, excessive alcohol consumption, lack of exercise, inadequate nutrition or obesity, greatly add to disease and disability at any age in adulthood.

Differences in education level, income, and in social roles and expectations during all stages of a person's life increase the diversity of ageing. Throughout the world, the average education of older people is below that of younger people. Such

differences are important because higher levels of education are associated with better health. It is well known that children's health is directly linked to their mothers' education levels. Women with more education have fewer and healthier children. People with higher education levels at all ages tend to adopt and maintain healthier life styles, and have better access to health care and health information.



Life style choices for Active Ageing should start early in life and include:

- ▶ *participating in family and community life*
- ▶ *eating a balanced, healthy diet*
- ▶ *maintaining adequate physical activity*
- ▶ *avoiding smoking*
- ▶ *avoiding excessive alcohol consumption*

Poverty is clearly linked to a shorter life span and poorer health in older age. Less well-off people tend to live in more harmful environments where they are more likely to be exposed to higher levels of indoor air pollution and to the risk of diseases such as diarrhoea and respiratory infections. Poor housing structure and overcrowding increase the risks of accidents and transmission of infectious diseases; in many developing countries, the home may be used as a workplace where hazardous substances are stored.

Social isolation, because of widowhood or divorce for example, has adverse effects on health. Playing a part in family life, and being a member of a community or religious organisation have beneficial effects on health,

improve a person's self-worth and enable older people to make a greater contribution to society.

For older people living in poverty, access to adequate nutrition is often in jeopardy. Malnutrition is still one of the major contributors to disease and disability in the developing world. Although the percentage of malnourished people has declined worldwide, WHO figures indicate that 840 million people were still below the nutrition threshold (representing the minimum dietary requirements) in the early 1990s. Older people are particularly vulnerable. Studies in the developing world suggest that older women, for example, are likely to deprive themselves of food in favour of the young in times of shortage.

Promoting Active Ageing

Although the individual may not have control over early life experiences and other factors such as poverty or low education, actions taken during the remaining life course greatly affect health in later life. Information about healthy life styles needs to be promoted, including the importance of a balanced, healthy diet, adequate exercise, the avoidance of smoking and excessive alcohol consumption. In addition, policy decisions to encourage healthy, active ageing must include the creation of supportive social and environmental conditions throughout life. Equity, provision of efficient basic services and participation by all in society are essential concepts if the opportunities and potential of a rapidly ageing world are to be realised.





Myth No. 3: Men and women age the same way

Women and men age differently. First of all, women live longer than men. Part of women's advantage with respect to life expectancy is biological. Far from being the weaker sex they seem to be more resilient than men at all ages, but particularly during early infancy. In adult life too, women may have a biological advantage, at least until menopause, as hormones protect them from ischaemic heart disease, for example.

Currently, female life expectancy at birth ranges from just over 50 years in the least developed countries to well over 80 in many developed countries, where the typical female advantage in life expectancy ranges from five to eight years. As a result, the oldest old in most parts of the world are predominantly women. However, longer lives do not necessarily translate into healthier lives and patterns of health and illness in women and men show marked differences. Women's longevity makes them more likely to suffer from the chronic diseases commonly associated with old age. We know, for instance, that women are more likely to suffer from osteoporosis, diabetes, hypertension, incontinence, and arthritis than men. By reducing mobility, chronic disabling diseases such as arthritis have an impact on the capacity to maintain social contacts and thus on the quality of life. Men are more likely to suffer from heart disease and stroke, but as women age, these diseases become the major causes of death and disability for women too. The common view that heart disease and stroke are exclusively men's problems has obscured recognition of their significance for older women's health and more research is necessary in this area.

Gender and health in older age

While some of the differences between women and men are due to biological characteristics, others are due to socially determined roles and responsibilities, i.e. gender divisions and gender roles. Historically, women have not always lived longer than men. In Europe and North America, the gap only started to grow as economic development and social change removed some of the major risks to women's health. With greater control over the size of their families and improvements in living conditions and hygiene, women's risk of dying in childbirth decreased. At the same time, the gender division of labour meant that men were taking on more occupational risks as industrialisation spread to more countries. As a result, male deaths from occupational causes have historically always been higher than among females.

Men have also taken more risks when it comes to life styles. They have tended to smoke more than women, for example, resulting in higher levels of death from lung cancer. Recent figures from the Russian Federation show that, between 1987 and 1994, while life expectancy fell for both men and women, the steepest decline was

for men, with a fall of over seven years and in some parts of the country even more. A number of factors contributed to this fall, but research has suggested that many of the causes of death, such as accidents and violence, pneumonia and sudden cardiac death were linked with alcohol consumption. Life style factors combined with occupational risks have contributed to greater numbers of premature deaths among males, particularly in industrialised societies.



The impact of gender discrimination

In some societies, the biological advantage of women is reduced by their social disadvantage. The natural advantage in women's life expectancy is significantly reduced in societies where female infant mortality is higher and where girls face discrimination. Social and economic disadvantages also have important repercussions in many other areas. For example, in all countries, inequalities in income and wealth in earlier life mean that older women tend to be poorer than older men. Women everywhere still earn less than men and are often concentrated in lower-paid jobs. In industrialised countries, women's income from pensions and social security is still lower than that of older men. It is lower because women more often than men interrupt their careers to take care of children and other family members. In fact, in both developed and developing countries, women's entry into paid work only rarely frees them from responsibility for domestic labour, and this double burden on women often takes its toll on their health. In developing countries, where most people do not benefit from public income security schemes in old age, older women are almost always dependent on their families.

Because women live longer than men, they are also more likely to become widowed. This trend is compounded by the fact that most women marry men who are older than themselves. In fact most women can expect widowhood to be part of the later years of their adult life. In some societies, social norms of widowhood impose restrictions that have negative effects on the widow's well-being. Inheritance rights, in particular, are often not well established or non-existent in practice. While the vast majority of older women in developed countries cope with adjustments to widowhood, it remains one of the leading factors associated with poverty, loneliness and isolation.

International action plans developed at recent UN world conferences encourage countries to review their legal frameworks for eliminating discrimination between men and women. Issues covered include equal access to education for boys and

girls, combating all types of discrimination against girls and eliminating negative traditional practices, such as female genital mutilation. Many of these early interventions against inequality will set a life course trajectory that is more conducive to healthy and active ageing. In addition, NGOs and women's organizations in both developed and developing countries are giving more attention to the urgent issues faced by older women today. There are some encouraging examples of older women themselves forming advocacy groups and starting self-help projects that lead to empowerment and a better quality of life.

Gender analysis examines the origins of biological differences, disadvantage, and inequality between women and men. The objective of gender analysis is to improve the quality of life of both women and men as they age.

An improved quality of life for both women and men can be achieved through:

- ▶ *more equal distribution of work, caring and leisure activities between men and women throughout the life course*
- ▶ *educating boys and girls to understand and avoid gender stereotyping*
- ▶ *combating gender discrimination in all aspects of life, including jobs, pay, education and access to health care*
- ▶ *mainstreaming gender analysis in all areas of healthy ageing*



Myth No. 4: Older people are frail

Far from being frail, the vast majority of older people remain physically fit well into later life. As well as being able to carry out the tasks of daily living, they continue to play an active part in community life. In other words, they maintain high 'functional capacity'.

As in all aspects of ageing, there are differences in the way functional capacity is maintained in different groups of older people. Although women live longer than men, they tend to experience more disabling diseases as they grow older compared with men of the same age. There is also a wide variation in the perceived need for certain functional abilities among older people. In some societies, for example, fetching water and firewood are tasks traditionally carried out by women. Maintaining maximum functional capacity is as important for older people as freedom from disease.

Life style and ageing

The capacity of our biological systems (e.g. muscular strength, cardiac capacity) increases during the first years of life, reaches its peak in early adulthood and declines thereafter. How fast it declines, however, is largely determined by external factors relating to adult life style, including smoking, alcohol consumption, diet and social class. The natural decline in cardiac function, for example, can be accelerated by smoking, leaving the individual with lower functional capacity than would normally be expected for his/her age. The gradient of decline may become so steep as to result in disability.

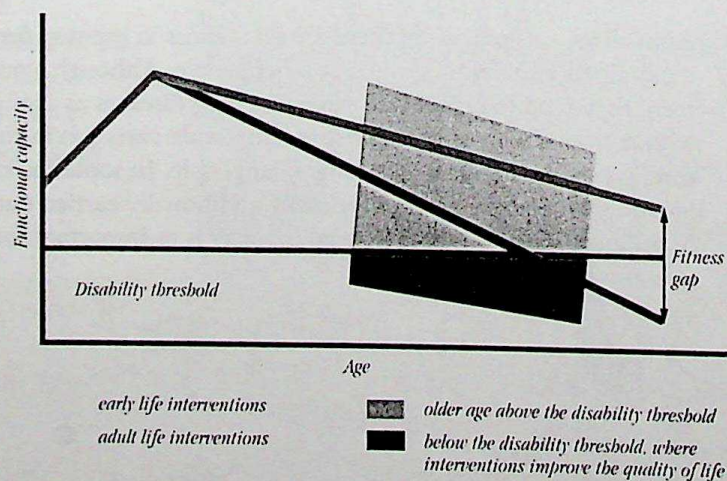
However, the acceleration in decline caused by external factors may be reversible at any age. Smoking cessation and small increases in the level of physical fitness, for example, reduce the risk of developing coronary heart disease including in later life. For those who are disabled, improvements in rehabilitation and adaptations of the physical environment can help reduce the progression of disability.

Many chronic diseases which reduce functional capacity are the result of an unhealthy life style. According to the 1996 'The Global Burden of Disease' Report, alcohol use is the leading cause of male disability in industrialised countries, and the fourth largest cause in men in developing regions. The report further states that non-communicable diseases, which are largely preventable, including cardiovascular diseases and cancers, are a major cause of disability in both industrialised and developing countries. Since many developing countries are still coping with infectious diseases and malnutrition, this sharp rise in non-communicable diseases is creating a double burden.

Social factors, which the individual can usually do little to change, also affect functional capacity. Poor education, poverty, and harmful living and working conditions all make reduced functional capacity more likely in later life. In some countries, people with poor functional ability are more likely to become institutionalised, which in itself can lead to dependence, particularly for the small minority of older people who suffer from loss of mental function and/or confusion.

Policy decision makers should, therefore, take social factor into account. Policies which benefit people who already have disabilities (e.g. public transport legislation, structural changes to buildings etc.) can do much to improve quality of life.

Functional capacity throughout life



Health policy measures for maintaining maximum health and activity in later life include:

- ▶ *promoting the benefits of healthy life styles*
- ▶ *legislation on sales and advertising of alcohol and tobacco*
- ▶ *ensuring access to health care and rehabilitation services for older people*
- ▶ *adapting physical environments to existing disabilities*

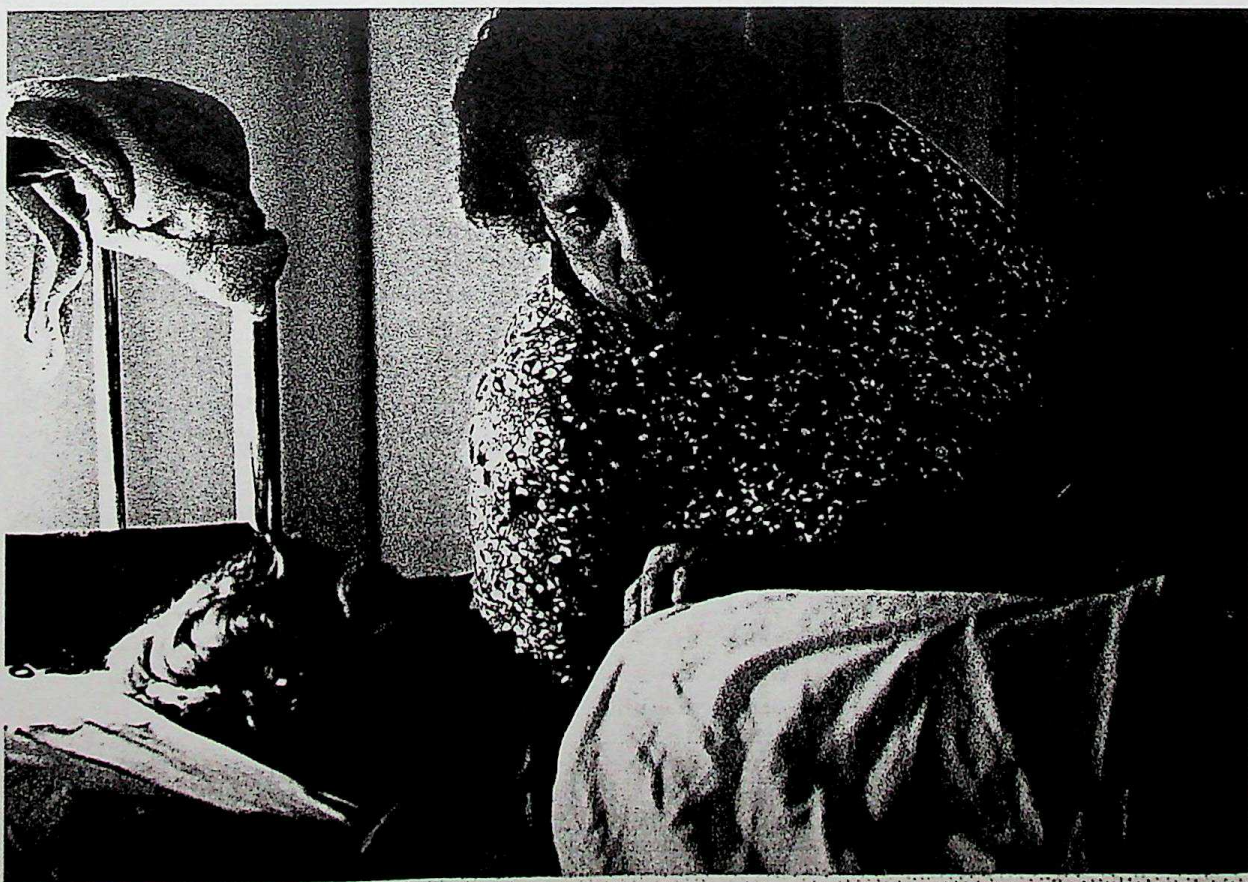
Older people who need care

The vast majority of people remain fit and able to care for themselves in later life. It is a minority of old people, mostly the very old, who become disabled to the point that they need care and assistance with the activities of daily living.

Various measures have been developed to forecast the care needs of an ageing population. One of the most commonly used projections is to estimate disability-free life expectancy. The most recent findings for developed countries show that severe disability is declining in older people at a rate of 1.5% per year. United States estimates, for example, predict the number of severely disabled older people will fall by half between the year 2000 and 2050 if current trends continue.

About one-fifth of older people in developed countries currently receive formal care, i.e. medical or social services. Only one-third of such formal care is provided in institutions while two-thirds is home-based. In fact, in recent years, many developed countries have moved away from providing care in institutions in favour of care that allows older people to remain in the community, in their own homes, for as long as possible.

Older people are both the receivers and the providers of care. As well as caring for grandchildren and their own children, many older people care for other family members, especially their spouses and sometimes their own, often very aged, parents. In fact, many of the 'young' old provide care for the very old. Such care is often provided out of affection, but also out of a sense of obligation and with the expectation of reciprocity. The demands of providing such care may be stressful and sometimes detrimental to the caregiver's own health. Recognising caregiver stress and assisting the informal family caregiver, who is most often a woman, should be an important policy objective in the design of caregiving strategies.





Myth No. 5: Older people have nothing to contribute

The truth is that older people make innumerable contributions to their families, societies and economies. The conventional view that perpetuates this myth tends to focus on participation in the labour force and its decline with increasing age. It is widely assumed that the fall in numbers of older people in paid work is due to a decline in functional capacity associated with ageing. In fact, declining functional capacity does not by any means equate to inability to work. Indeed, the physical requirements of many jobs have been reduced by technological advances, permitting severely disabled people to be fully economically productive. In addition, the fact that there are fewer older people in paid work is more often due to disadvantages in education, training and particularly to 'ageism', than to older age *per se*.

The widely held belief that older people have nothing to contribute also relies on the notion that only paid occupations count. However, substantial contributions are made by older people in unpaid work including agriculture, the informal sector and in voluntary roles. Many economies worldwide depend to a large extent on these activities, but few of them are included in the assessment of national economic activities, leaving the contribution made by older citizens often unnoticed and undervalued.

Valuing what older people have to offer means:

- ▶ *recognising older people's roles in development*
- ▶ *enabling older people to participate in volunteer activities*
- ▶ *supporting the contributions that older people make to society, particularly their caring activities*
- ▶ *promoting lifelong learning opportunities*

Older people in paid and unpaid work

Due to financial insecurity, many older people, particularly in developing countries, work in agricultural production until very late in life. A large proportion of these are women, as many agricultural activities are inseparable from domestic tasks, including crop production and animal husbandry.

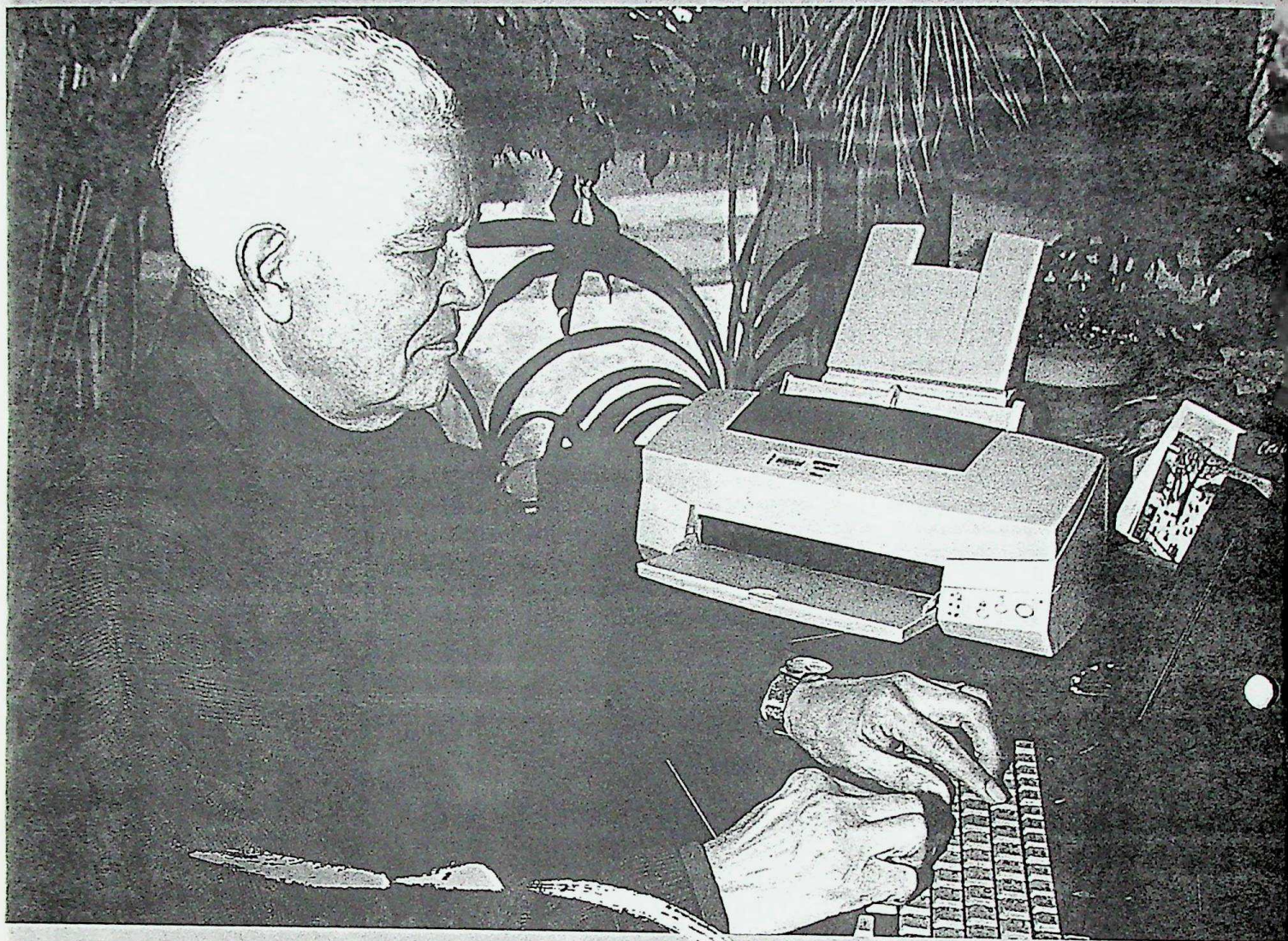
Work in the so-called informal sector is difficult to measure, as it is not part of the market economy and so often remains 'invisible'. The International Labour Organization defines this sector as consisting generally of 'small-scale, self-employed activities, with or without hired workers'. This includes usually low-wage occupations, like petty trading, selling street food and domestic work. Many

older people, especially in the developing world, support themselves and others through work in this sector. The informal sector also refers to caring activities within the family, including the provision of shelter, child care and health care. It is estimated that over 2 million children in the United States are being cared for by their grandparents, with 1.2 million of them living in their grandparents' home. Older people therefore provide shelter, food, education, and transmit cultural values to their grandchildren, while enabling mothers to enter the workforce. In developed and developing countries alike, many older people also provide financial help to their adult children or grandchildren. These transfers often involve substantial amounts of money.

Caring for ailing spouses or relatives is traditionally done by older women, but increasingly also by older men. In many developing countries with less established health-care systems, older women act informally as nurses and midwives within their communities. In some countries, where up to 30% of the adult population are infected with the AIDS virus, older people will have to care for their adult children, after whose death they will have to raise their orphaned grandchildren. Even in developed countries, care for the chronically ill is largely provided by informal family care-givers. Such care often remains 'invisible' because it has not been quantified and valued in national accounts.

In developed and developing countries alike, skilled older people often act as volunteer teachers and community leaders. In the United States alone, over three million people aged 65 and above are involved in voluntary activities in schools, religious institutions, health and political organizations. Another example is the senior executive service in which retired senior experts make themselves available for advice, business and training free of charge. Many voluntary organisations in many parts of the world would not function without the contribution made by older people.





Myth No. 6: Older people are an economic burden on society

Older people contribute in innumerable ways to the economic development of their societies. However, two concurrent developments have contributed to the myth that societies will not be able to afford to provide economic support and health care for older people in the years to come. One of these developments is the growing realisation of the sheer numbers of citizens who will be living to older ages in the next century. The second development is the greater emphasis on market forces in almost all parts of the world, and the related debate about the proper role of the state in providing income security and health care for its citizens.

There has been growing concern in many, particularly industrialised, countries about the levels of state expenditures for social protection and whether costs could be reduced by opening social protection to more private sector competition. This worldwide debate has unfortunately placed the entire emphasis on the cost to society of providing pensions and health care for older people rather than on the continuing and significant economic contributions that older citizens make to society. It has given rise to the widely held myth that older persons are generally economically dependent and thus a burden on society. The facts, however, demonstrate that this is not a true reflection of reality. Two important considerations – work and public pension protection – must be taken into account.

Older persons work

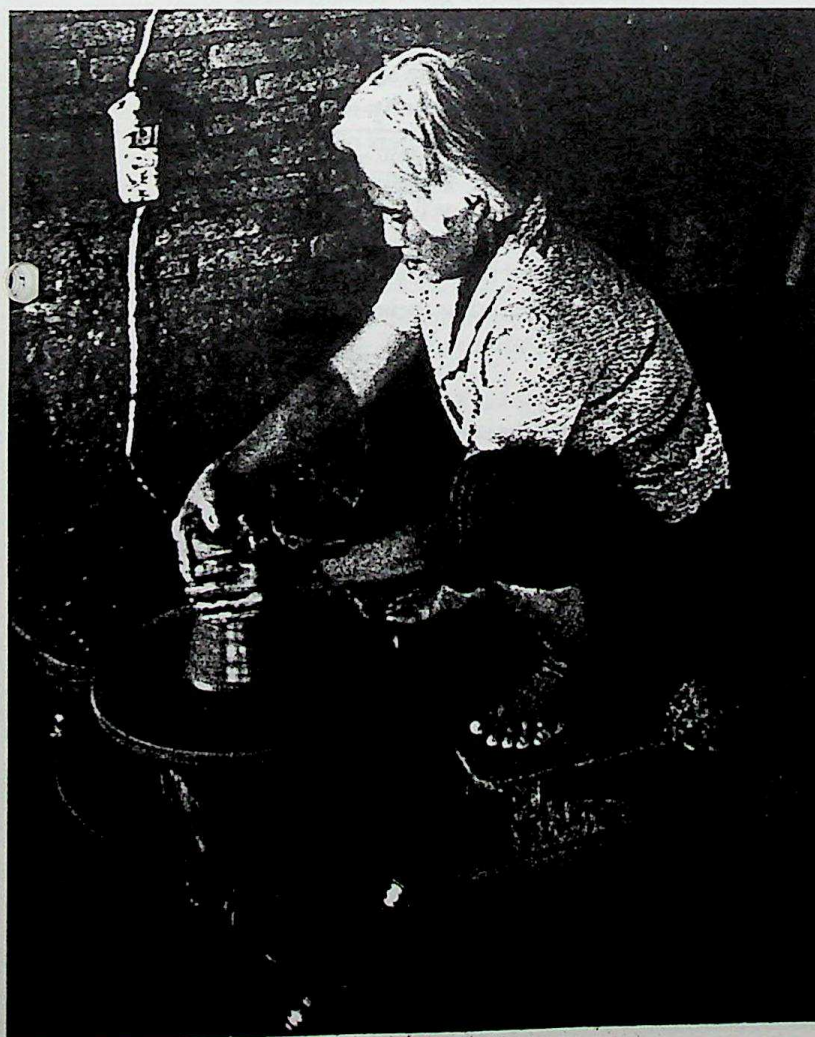
Most older persons around the world continue to work, in both paid and unpaid jobs, making a significant contribution to the economic prosperity of their communities. There is no economic or biological basis for retirement at a fixed age (often 60 to 65 in developed countries). In fact, in national economies which are dominated by agriculture, most older people, men and women, continue to work in farm production until they are physically unable to carry out their tasks, which is often very late in life. And in developed societies, there is a growing recognition that older people should be fully enabled to work as long as they desire. Age should in no way prevent or hinder a person from getting a job and indeed the benefits of age should be recognised and rewarded.

In periods of high unemployment, it has been easy to argue that older persons should be encouraged to leave paid employment to free up places for younger job seekers. Research has, however, demonstrated that the reality of the labour market is far more complex and that the early withdrawal by older workers from the labour force does not necessarily translate into jobs for the young. The unemployed job seeker may not have, for example, the necessary training or skills to take the place of the older worker. Indeed, experienced older workers are needed to ensure that productivity is maintained and that labour force stability can be counted on by employers and customers.

Pensions protect against poverty

Many older persons are now covered by both public and private pension schemes which protect them from poverty, particularly in the more developed economies. The worldwide growth of such schemes is related to the industrialisation of economies, to urbanisation, and the loosening of traditional family bonds. These pension programmes represent a collective approach to the sharing of resources between people of working age and those who have retired from the labour force.

Income security concerns not only older people, but also their children. In many developing countries, population ageing has added urgency to the problem of poverty among older people. While in the past, families were willing and able to care for their parents, they now find themselves in a changing world which severely limits their ability to assume these traditional roles.



Investing in an ageing population means:

- ▶ *life-long learning programmes to increase the possibilities of older people finding employment*
- ▶ *eliminating age discrimination in the workplace*
- ▶ *promoting income security policies to provide adequate income protection for older people through reliable public and private pension arrangements*
- ▶ *access to adequate health care to prevent poverty due to ill health.*
- ▶ *adapting pension policies to provide maximum individual choice and labour market flexibility*

The many decades of social security experience in Europe, North America, Australia, New Zealand and other countries has proved that a collective approach to ensuring income security and health care for older persons works. It is estimated that in many industrialised societies, more than half of the older population would fall into the poverty trap if they did not have public pension benefits. Recent experience has also demonstrated the constant need to adapt and adjust these programmes to changing economic and social conditions. Without adaptations (e.g. modifications in retirement ages, survivors benefits, flexible retirement), the capacity of the pension programmes to provide benefits in the future would be severely endangered.

The 20th century experience with social security protection also demonstrates the important link between income status and health. Poverty is closely associated with ill health. Ill health and incapacity are

major threats to income security in many developing countries where poor nutrition and living conditions leave many people too weak to produce enough to cover their subsistence needs. In the developed countries, it is far more rare for ill health alone to prevent people from earning their living. However, it is not uncommon for health problems and disabilities to coincide with unemployment, thereby throwing people into chronic situations of employment insecurity.

Access to health care is vital in order to help workers regain work capacity and to ensure that children grow up into healthy adults able to participate productively in society. Health policy must, therefore, adopt a life-cycle approach which tackles health problems from the very start, enabling people to grow older without disabilities and chronic diseases.

The growing number of older people who expect health care and old-age pensions should not be viewed as a threat or a crisis. It is an opportunity, rather, to develop policies that will ensure decent living standards for all members of society, young and old, in the future. Countries need to develop strategic frameworks for the coordination of health, social and economic reforms as well as to raise the level of public understanding of the policy choices to be made. It is the need to examine and make appropriate changes to health, social and economic policies, not the ageing of populations, that is the biggest challenge facing societies today.



Action towards Active Ageing

Factors	Individual action	Policy action
Fetal environment	<ul style="list-style-type: none"> Ensure balanced nutrition in young girls and pregnant or lactating women Avoid smoking during pregnancy 	<ul style="list-style-type: none"> Focus health promotion activities on girls and women Increase awareness about importance of balanced nutrition for girls and women
Childhood environment	<ul style="list-style-type: none"> Breastfeed babies for at least 4 months Ensure balanced nutrition & adequate physical exercise for your children Have your child immunised and observe good hand & food hygiene to prevent infection 	<ul style="list-style-type: none"> Promote breastfeeding, legislate against advertising for milk powder, and fortify foods/water in areas of malnutrition Ensure access to immunisation programmes Improve sanitation & housing and reduce domestic overcrowding
Smoking	<ul style="list-style-type: none"> Stop smoking – cessation is beneficial at any age Educate your children about the ill effects of smoking 	<ul style="list-style-type: none"> Ban tobacco advertising Ban sale of tobacco to children Provide health education in schools and workplace
Alcohol	<ul style="list-style-type: none"> Maintain moderate drinking limits Seek professional help if you think you may drink excessively 	<ul style="list-style-type: none"> Ban sale of alcohol to children
Physical activity	<ul style="list-style-type: none"> Exercise regularly from the earliest years through to older ages: walking, climbing stairs, and housework are effective forms of exercise! 	<ul style="list-style-type: none"> Incorporate exercise into school curricula Create workplaces which provide exercise facilities Encourage sports for seniors
Diet	<ul style="list-style-type: none"> Consume a diet high in fibre and low in animal fat and salt Reduce your weight if you are overweight and maintain normal body weight 	<ul style="list-style-type: none"> Increase consumer awareness about direct links between good nutrition and health
Adult Diseases	<ul style="list-style-type: none"> Make above-listed life style adjustments Make use of available prevention programmes (screening and vaccination) See your doctor at regular intervals 	<ul style="list-style-type: none"> Implement evaluated prevention programmes Ensure access to safe maternity services Provide accessible and affordable health care for all and reduce environmental threats
Social integration	<ul style="list-style-type: none"> Stay involved in your family, your community, a club, or a religious organisation Be aware of and speak out against ageism Continue to educate yourself and all your children 	<ul style="list-style-type: none"> Support activities that foster social cohesion Provide access to life-long learning Promote solidarity among the generations
Gender	<ul style="list-style-type: none"> Be aware of and speak out against gender discrimination and prejudice Educate boys and girls to avoid gender stereotyping 	<ul style="list-style-type: none"> Implement legislation against gender discrimination in education, jobs, health care, property rights, marriage and inheritance laws Promote health education on the dangers of high risk life styles by targeting population groups that are particularly at risk Integrate gender analysis in health research and health care programmes
Income security	<ul style="list-style-type: none"> Be informed about public and private measures intended to protect income security over the life course 	<ul style="list-style-type: none"> Provide income security and access to appropriate health care for older persons Fight age discrimination in the workplace



Ageing and Health at WHO

The major challenge facing the Ageing and Health Programme is to understand and promote the factors that keep people healthy into older ages. Since health and well-being in older age are largely a result of experiences throughout the lifespan, work on ageing and health takes a holistic approach, involving other WHO programmes, such as primary health care, gender analysis, non-communicable diseases, mental health and rehabilitation. The programme is extending the impact of its work by collaborating with a number of academic institutions and non-governmental organizations. WHO's Ageing and Health Programme must be a catalyst for action.

Active Ageing in the International Year of Older Persons 1999

The United Nations is marking 1999 as the International Year of Older Persons, with the theme 'Towards a Society for All Ages'. A key principle will be the concept of Active Ageing, whereby people of all ages are encouraged to take steps to ensure greater health and well being in the later years for themselves and for their communities.

WHO is taking a worldwide lead in promoting Active Ageing. During the International Year of Older Persons, the WHO Ageing and Health Programme is initiating the Global Movement for Active Ageing. This is a network for all those who are interested in moving policies and practice towards Active Ageing. The Global Movement will be inaugurated by a global walk event, the Global Embrace, on Saturday, 1 October 1999. In time zone after time zone, ageing will be celebrated in cities around the world through individual walk events. The Global Embrace is therefore an around-the-clock-around-the-world party to which all countries are invited. It was conceived to inspire, to inform, to promote health and to provide enjoyment and good company. It will link local projects to a global community of similar concerns and to people all over the world.

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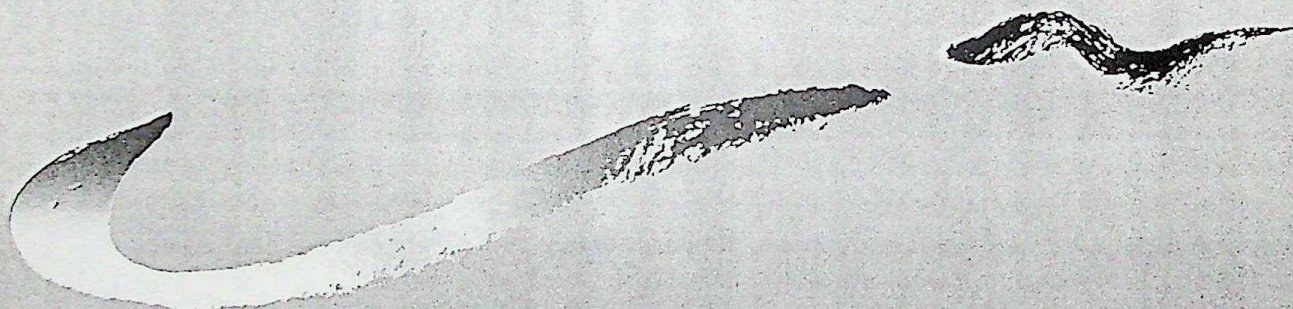
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*Growing old need not detract
from the joys of life!*

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Editor speaks —

When is a person old? Number of years may not be the best way of defining it. Some people over 80 years are still very active. Others, much younger, may have all the problems of the elderly. One way of defining the elderly may be by the ability to function well in the social setting. But this is often subjective. Presently, the accepted norm is to include persons above 65 years among the old.

There are about 35 million people over the age of 65 years in India. The Census might be expected to give the correct figure. It may not, because many of the elderly may not remember their age. With reduced infant mortality and improved health, the proportion and absolute numbers of the elderly will increase in the coming decades.

The elderly have special needs. They are social, psychological and physical. It is difficult to draw the line between normal declining functions due to ageing process and diseases. Older people are more prone to chronic diseases of heart and blood vessels, brain, kidney and liver, cancers

and complications of such diseases as diabetes.

In our country, infectious disease continue to take their toll, especially with the reduced resistance due to altered immune responses. Several diseases may co-exist in the elderly. Defects in sight and hearing are common. There are problems with feet and joints, aches and pains, varicose veins and many others.

Added to the physical problems are the social and psychological. They are probably more important than the medical. An advantage in our country is the strong family ties. The elderly continue to live with their extended families. They get physical, mental and financial support. In turn, they give social and psychological support to the younger members of the family.

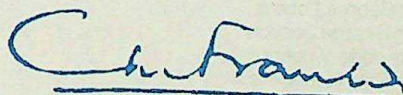
Gerontology, the science dealing with old age and geriatrics, the branch of medicine dealing with the special problems of health in old age have not fully developed in India. The problems of the elderly must be understood and dealt with in our culture and social milieu. Many of the apparently health-

related problems may be psychological and social. Unnecessary medication and over-drugging must be avoided.

One of the major disabilities in the elderly is due to inflammation of joints (arthritis). Arthritis is not a single disease. It is a manifestation of many different diseases.

Rheumatoid arthritis is one of them. It provides a dramatic example of a local, chronic, destructive, inflammatory reaction leading to disability and pain. There is abnormal functioning of the immune system. Ordinarily, this system is essential for survival. It is the defence against invasion by bacteria and other organisms, and for removal of foreign and dead material. But in certain conditions, the system mediates tissue destruction.

Many joints may be involved in Rheumatoid Arthritis. The common ones are those of hands and feet. Others also may be involved. Soft tissues around the joints are also affected. Many other parts of the body and organs may be affected, so much so some people call it Rheumatoid Disease.



Dr C M Francis

From the Director's Desk.....

Once I was invited to a birthday party in honour of a venerable old lady in one of our metropolitan cities. She was seventy-two years old or so, and practically bedridden for a few years. Quite a number of the family friends had gathered. And the family had put

up a grand show of celebrations. But hardly anyone who came to the party bothered to even wish the old lady, let alone spend time talking to her. The party seemed to be their priority and it really did not matter on whose name that party was drawn up.

This may be an extreme case. However, in our urban environment it need not be an isolated one. One thing is certain, as we hurtle towards urbanization, modernisation and industrialization, we are losing our values. In India, though, the concept of the joint family and the extended family is still prevalent, especially in rural areas, with modernisation and consumerism gaining hold on the

urban sector, these values are fast declining. A throw-away culture, arising out of consumerism, is gaining ground day by day.

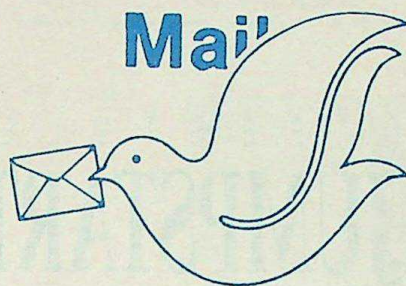
This can be stretched to any extent. A thinking that "Whatever is useless is to be discarded" is being applied even to the human being. Hence the philosophy and practice of euthanasia is also gaining ground. Against this growing tendency, we need to uphold certain basic and fundamental values. Respect for the aged used to be the order of the day.

But this situation is changing now. As urbanization is on the increase, bringing with it any number of

Contd. on - 3

• You all have done well to publish a rather comprehensive issue of Health Action on AIDS (Vol. 3 No. 11). I appreciate your editorial and the remarks by Fr. Vattamattom in it. AIDS is one serious problem which is a tremendous responsibility and privilege for Mission Health Care Personnel to work at since so many other private or public medical services do not want to have anything to do with AIDS patients. We must take up the opportunity and challenge.

I am seriously concerned about the article in this issue on AIDS and its Homeopathic Cure written by one Dr. A. Sastry (Page 40). It is so full of obviously unproved and unwise statements that I feel that Health Action, should have printed a disclaimer on the same page if at all you felt the article needed to be printed. Dr. Sastry should present the



world with a randomized, controlled, masked, double blind clinical trial with statistically significant results before claiming that AIDS can be

either prevented or cured by Homeopathy.

If this article is widely published as it might well be now that it has appeared in your fine magazine I fear that a great deal of harm may be done to AIDS patients or those who think they have nothing to fear as long as they take the so called preventive regimen. By printing his address and office hours Dr. Sastry has blatantly advertised his services and whether they are completely charitable or not, especially for those quite willing and able to pay, a person may have to get AIDS to find out!

Dr RON SEATON M.D.
Consultant, CMAI

(We are thankful to you for your letter. We shall be happy to follow the guidelines suggested by you — Ed.)

Contd. from - 2

problems, especially that of accommodation, and the situation of more and more women forced to take up jobs, caring for the aged at home is becoming increasingly difficult.

Hence establishment of homes for the aged in urban areas is becoming a necessity. Such a situation becomes a difficult and even painful experience for the elderly. This has to be tackled with much caution.

Though the number of years in not necessarily a sign of old age, a conventional understanding is that any one above the age of 65 could be considered as aged. However there are any number of exceptions where people in their seventies and even eighties are very active on the one hand and on the other, there are those who feel that they are already old even though they may be below sixty.

As per the conventional definition (above 65 years) it is estimated that there are about 35 million aged people in India.

One factor which perhaps we may not fully understand is that practically all of these aged people belong to a different era, and are of different thinking — a generation away. Hence there is a need for a good deal of patience and understanding on the part of present day society. It is not enough that the aged are "taken care of" but an assurance that they are being "cared for" and being "cared about" is needed.

This can best be done in an extended family atmosphere. Hence it is important that we re-adjust our life styles to give aged people the home-care they require. It should clearly be understood that getting old starts from the day we are born — hence the lifestyles we set for our old people will be the life-styles that will be ours when we grow old!

Establishing homes for the aged, however well managed they maybe, is not a proper solution as far as the aged person is concerned. However, should it be necessary that some people have to be taken care of in a home for the aged, then utmost care should be taken that all their needs are met.

One of the criteria to judge the civilization of a nation is how they treat their aged. Moreover, our elderly people are treasure houses of experience and wisdom which the younger generation could benefit from — literally a mutual benefit situation where we can add life to years as far as the elderly are concerned and add years to life as far as the younger generation is concerned.

Fr John Vattamattom SVD
Managing Director

L I F E S T Y L E C A P S U L E S

JUMPSTART YOUR DAY!

Dr Hans Diehl and Dr Aileen Ludington

Many people can't face food when they crawl out of bed. A quick cup of coffee is a standard adult breakfast. An increasing number of small children arrive at school having eaten nothing at all.

★ *Why bother with breakfast?*

A group of scientists spent 10 years studying the effects of different kinds of breakfasts versus no breakfast at all on people of different ages. A good breakfast, they concluded, can help both children and adults be:

- less irritable
- more efficient, and
- more energetic.

Recent studies have even linked healthy breakfasts with less chronic disease, increased longevity, and better health.

A "good breakfast," by the way, is one that provides at least one-third of the day's calories. Start your day with a whole-grain cereal, whole-grain bread, and a couple of whole, fresh fruits, and you'll find that your energy level stays high throughout the morning.

★ *What's wrong with just juice and a doughnut?*

You need something with a little more fiber to it. Although fiber isn't digested by the body, you see, it does absorb water as it moves through the stomach and intestines. The resulting spongy mass acts as a gentle barrier to the food particles suspended in it, so

that they are not absorbed too quickly.

On the other hand, fiberless foods — especially sugared foods and drinks — quickly pass into the bloodstream. This causes blood sugar levels to rapidly rise and fall — and that helps explain why your energy and efficiency drop off in the later morning hours when little or no fiber-containing foods are eaten at breakfast.

★ *But I'm not hungry until midmorning!*

Probably the biggest reason people feel that way is that they eat a large meal in the evening. (TV snacks don't help either!) When they go to bed, their stomachs are still busy digesting all that food. But the stomach needs rest too. An exhausted stomach does not feel like taking on a big breakfast.

The solution?

1. Eat a light supper four hours before bedtime, or even skip supper a few times.
2. Eat or drink nothing but water or fruit between supper and bedtime.

If you do these two things, you'll be ready to break the fast of the long night.

★ *Won't skipping breakfast help me lose weight?*

Surprisingly, no. The Iowa Breakfast Studies demonstrated that the omission of breakfast is no advantage in weight reduction. It's actually a disadvantage, because those

who omit breakfast accentuate the hunger and eat more snacks and food the rest of the day to make up for the lack. They also suffer a significant loss of efficiency in the late morning hours.

★ *I don't have time to eat breakfast.*

Many people are in the habit of staying up late, then sleeping in as late as they can in the morning. Although a few people work most efficiently at night, most don't fit that timetable.

Try going to bed early enough that you can wake up in the morning feeling refreshed and with time to spare. Begin the day by drinking a glass or two of water to rinse and freshen your stomach. Pull on your gym clothes and get some active exercise like a brisk walk. Shower and dress for the day.

Then go fix and eat a hot breakfast.

This works with children too. If you can, put them to bed early enough so that they wake up at an earlier hour.

The efforts is worth it because breakfast can be "family time," sitting around the table together. What's more, a good breakfast can help give your family members more energy and a heightened sense of well-being. You'll be in better control of your emotions; you'll be less apt to cheat on your diet by snacking.

What a great way to start your day!

From: The Signs

'Independence! Self rule! Let us run our own affairs!' have been clarion calls in many countries since World War II, and at a time of disintegration of empires. The cry is still being heard today, in somewhat unexpected tones.

New Age Strategy

An area where the message was very necessary was in charitable work overseas where former paternalistic attitudes often left very little discretion or initiative to the beneficiary. Those recipients were sometimes regarded as less educated, less reliable and less able to participate in decisions on their own destinies. Like children they needed to be told what to do, and to be controlled carefully in the doing. And, nearer home, this is a tendency sometimes displayed by those who have to care for elderly people.

A new age strategy came about almost by accident in the 1970s. HelpAge founder, C. Jackson Cole had been approached by Indian philanthropists seeking more cash to support elderly people in India. Jackson Cole suggested to his visitors that they themselves should try to set up their own 'Help the Aged' in India. Further he offered to support them in such an initiative.

HelpAge India

The result was HelpAge India now a large and respected national organisation widely recognised as the doyen of such groups in Third World countries. In 1989 the United Nations gave an unique first award for Services on Aging to HelpAge International, and a significant part of the credit for gaining the award belonged to Third World affiliates, oldest among them HelpAge India.

With headquarters in Delhi, HelpAge India is a truly national organisation seeking on behalf of India's 25 million elderly and promoting programmes of many kinds for the welfare of the less fortunate. It has its own efficient fund raising programme so that for its own running costs it is not dependent on foreign aid.



Any financial good-will coming from overseas can be directed into priority voluntary programmes where HelpAge India's highly skilled team of project advisors helps plan and monitor.

The Indian staff can set up appropriate training and information services related to local needs and culture. HelpAge India is able to speak with vast experience and authority as the world contemplates the new phenomenon of a greying population in the Third World.

The oldest member organisation of HelpAge International is, of course, Help the Aged (U.K.). Many people in Britain greet Help the Aged workers with the words "I didn't realise that you worked overseas too". In fact Help the Aged was founded, in 1961,

specifically to deal with the problems of elderly REFUGEES OVERSEAS, as nobody else was doing that work.

Having seen some of the tragedies affecting older persons in poorer countries, especially those who were forced to become refugees. Help the Aged at first concentrated on sending urgent basic relief to feed, clothe and heal those who could not look elsewhere for aid. In the course of nearly 30 years Help the Aged has contacted many local groups, in those countries, with whom it has been privileged to work. Help the Aged supplying the funds and materials and the local groups providing many volunteers.

Eventually some of the local groups developed and became national organisations, very similar in structure



economy sake Help the Aged provides office and administrative facilities in London.

HelpAge International does not see direct welfare projects as being a major part of its activities. Its main impetus is three fold. First to reinforce the structures of its members through training and advice in organisational matters so that they can more efficiently carry on their own direct projects. Secondly to assist in developing other similar national groups throughout the world and with special emphasis in developing countries. Thirdly to raise world awareness of ageing issues and collaborate with international organisations in effective programmes.

The award by the United Nations, referred to above, reflects the importance of HelpAge International's work. This work carries into effect many of the recommendations of the World Assembly on Ageing in 1982, when the nations of the world recognised that this great human achievement of longer life could develop into a socio-economic catastrophe for under-developed countries.

From: Age Action: HelpAge International, Lonton

and objectives to Help the Aged, but each group being truly independent, run by its own nationals with its own fund raising and governing boards. During the 1980s it was possible to mobilise a number of these national organisations in the form of HelpAge International. This was a particularly important step because, in the course of international conferences and United Nations discussions, Help the Aged had discovered that there was no truly international agency directly concerned in the development of basic

welfare and economic opportunities programmes for older people, especially in developing countries.

HelpAge International is a free association of affiliate groups (which are specifically dedicated to welfare and development programmes with and for the elderly) and associate organisations (which have a more general interest in affairs of older people). The affiliates form its governing council. The President is an Indian. Vice-Presidents include a Kenyan, Colombian and Briton. For

2 AIDS cases detected in Vizag

Two AIDS positive cases and two Elisa positive cases have been detected recently in the port city of Visakhapatnam.

The AIDS surveillance centre at the Andhra Medical College, here which was one of the first few such centres sanctioned by the Indian Council of Medical Research (ICMR), has recently got confirmation of the two AIDS positive cases.

The surveillance centre, set up a few years ago to screen high risk groups for the AIDS causing HIV virus, has been sending blood samples to the Christian Medical College, Vellore after testing

Elisa positive. The centre has so far sent over 6,400 cases for confirmation of AIDS positive virus to CMC, Vellore.

It is learnt that about a couple of months ago, the centre has received confirmation that two of the cases in Visakhapatnam were found to be AIDS positive.

While one case has been traced to a patient who had come for treatment in the STD department of KGH, another case was traced to the KGH blood bank. Enquiries have also revealed that the patient with HIV virus who had donated blood at the KGH blood bank, has passed on the virus to a particular patient through blood transfusion.

The patient, however, died due to diabetes subsequently.

Although Visakhapatnam was initially considered to be vulnerable for contacting AIDS due to mixing of foreigners who touch the port, it has been baffling the medical circles that not a single HIV positive case was detected.

Experts were wondering whether there were really no AIDS cases in the port city or the surveillance centre was not able to screen adequate number of people from the high risk groups.

Handicapped by lack of proper facilities, the AIDS surveillance centre at Andhra Medical College has not been able to maintain the momentum of surveillance of high risk groups.

This article gives a basic guide to the changes that take place with ageing. This is important, as anybody involved in caring for or working with elderly people needs to understand this process, and elderly people themselves need to be assured that changes taking place are perfectly natural.

The Aging Process

Ms Barbara Burkey

Ageing is a dynamic process, which brings about physical and mental changes, as well as a change in social status. It is important to remember that people age at different rates, and so do the systems in their bodies. For example, the kidneys can fail, but the heart can still be strong. This article will look at the main changes in turn.

Effects of Ageing:

Skin, Nails and Hair

- ★ There is a marked increase in wrinkles due to the loss of elastic tissue in the skin.
- ★ The skin becomes fragile and is easily damaged and bruised
- ★ The skin becomes dry
- ★ Finger nails become brittle and can break easily causing jagged edges.
- ★ Toe nails become thick and difficult to cut
- ★ Hair becomes thinner and loses its colour
- ★ Women may have an increase in facial hair

The skin should be treated gently and kept clean. Finger nails should be kept short and filed. Toe nails need to be cut with clippers, and extra care should be taken if the person is diabetic. Facial hair can be removed with special creams (known as depilatory creams) to prevent embarrassment for elderly women.

Skeleton and Muscles

There is an overall loss of height due to shrinkage of the spine, not the limbs. The density of the bone is reduced — this can lead to an increase in fractures following falls.

The joints become enlarged, and inactive muscles stop functioning and begin to waste away.



Elderly people should be encouraged to keep active in any way that they can — no matter how small. Carers should not think that they are being kind by doing everything for them. Elderly people should be allowed to wash, dress, shop, clean and walk as much as possible.

The brain and nervous System

- ★ Reaction time slows — therefore the elderly person should be encouraged to allow more time to cross the road, as they will not be able to move away from danger very quickly.
- ★ Taste buds and sense of smell are reduced. Both affect the appetite, so that the flavour of food will need to be accentuated. Elderly people may frequently say that food is not sweet enough, or does not have the flavour it used to have.
- ★ Hearing — small bones in the ear

become rigid, and the nerve for hearing is sometimes damaged, causing loss of hearing. Sometimes this loss of hearing can be caused by a build up of wax in the ear, which if removed would give some hearing improvement. Carers should encourage elderly people to get their ears checked and see if it is possible to obtain a hearing aid if one is needed.

- ★ Sight impairment — elderly people often require glasses for reading — these need to be kept clean. Elderly people often find that their perception of colour is lost, so that people tend to like stronger colours as they get older.
- ★ Temperature regulation — elderly people are often no longer able to feel extremes of temperature as well as they used to, therefore there is a danger of them becoming too hot or

too cold. This is something a carer needs to be aware of and should try to heat up or cool down the elderly person's room accordingly.

Lungs and Respiration

- ★ Lungs become more rigid
- ★ Respiratory muscles become weaker
- ★ Cough action is less effective.

This can lead to an increased risk of chest infection. Elderly people should be encouraged to give up smoking, and to increase the ventilation in their homes. Some elderly people may find deep breathing exercises useful.

Digestion

- ★ Teeth loss and gum recession
- ★ Reduced flow of saliva
- ★ Reduced number of taste buds

Elderly people often have difficulty in chewing, they may also have a loss of appetite, and a loss of the taste of sweet and salty flavours. The movement of food in the gastro-intestinal tract is also slowed down — this may lead to constipation. The impaired absorption of food stuffs may lead to deficiency diseases — eg: anemia.

Carers can ensure that elderly people keep their teeth or dentures clean, and that dentures fit properly. Food should be well cooked, but not sloppy. Elderly people should increase their fluid consumption particularly in hot weather.

Heart and Circulation

- ★ Blood vessels lose their elasticity
- ★ Blood pressure tends to rise
- ★ Elderly people expend more energy for less results
- ★ Blood vessels may become blocked
- ★ The heart muscles will not be as strong

Elderly people should rest between activities, and should move from lying down to standing up slowly. Elderly people also need to take care with their drugs, taking them only as directed by a doctor or health worker — as strokes or heart failure may result if drugs are not taken as the doctor or health worker recommends.

Kidney and Bladder

- ★ Kidneys become less efficient
- ★ Bladder capacity reduces
- ★ Men may suffer from the enlargement of the prostate gland

This can lead to incontinence, and elderly people may pass small amounts of urine involuntarily when they cough or laugh. Despite this, it is important for elderly people to drink plenty of water (roughly 2 litres in cold months and 3 litres in warmer weather). A carer should contact a health worker if an elderly person smells constantly of urine, as they may be able to provide some relief or treatment from the incontinence.

Psychological Effects of Ageing

Ageing may affect

- ★ Personality
- ★ Memory
- ★ Learning Creativity/play
- ★ Intelligence

Psychological ageing is influenced by:

- ★ Physical health
- ★ Social taste

Personality — remains constant with old age. In fact an elderly person can become their 'real selves' as they are not frightened of showing their true selves as they get older. An elderly person has the ability to experience all of the following just as deeply as a younger person, but may not show these feelings in the same way:

- ★ Joy
- ★ Sorrow
- ★ Pleasure
- ★ Pain
- ★ Love
- ★ Rejection
- ★ Contentment
- ★ Anxiety

Old age may only exaggerate what the person was like at a younger age, for example if someone is mean and miserable at 30, he or she is likely to be mean and miserable at 70.

Elderly people should be accepted for who they really are, and carers and friends should allow them to express their feelings.

Memory — there is some loss of cells in this area of the brain. Some individuals suffer memory loss more than others. Memory loss is usually concerned with short term memory — an elderly person may forget what he or she did yesterday but can clearly recall an event in their lives from many years ago. However, memory loss is not inevitable, it is important to encourage the elderly persons to keep their minds active and useful, and for carers to treat elderly people as intelligent human beings.

Intelligence — providing elderly people do not suffer from mental illness, and their general health is good, elderly people will not suffer from any loss of intelligence. A clever 20 year old is likely to become a clever 70 year old! Many of our politicians and world leaders are people in their later years.

Learning/Creativity — many elderly people return to study, or learn a new skill as they are well motivated to study. Elderly people can still be creative — artists, poets and musicians have often achieved their greatest works in old age. Everyone has the need for self expression — no matter how small, and this creative urge should be encouraged.

Social Aspects of ageing

Many people give up the roles they have had in society as they get older. They may have to retire from work, lose their leadership of groups and their position in their family. All of these contribute to a loss of opportunities to engage in social interaction. This can be heightened by the loss of family friends and partner due to bereavement or emigration. Lack of mobility will also prevent some elderly people from getting out on their own and meeting other people. Therefore, elderly people should be encouraged to go to local clubs, or day centres and mix with other people; visitors too should be encouraged.

From Ageways: HelpAge International, London

This article has been adapted by Cathy Squire — Help the Aged (UK)'s Disaster Response Officer, who is also a nutritionist, from an essay written by Cristina Lindau. Ms Lindau, a Brazilian nutritionist has carried out several surveys on nutrition and elderly people.

Infections in Old Age

**How are they different? Why are they serious?
What can be done?**

Infection and illness are common problems for elderly people. It is well known that with advancing age people are more likely to get infectious diseases such as pneumonia or tuberculosis. Pneumonia is still listed as the most common cause of death in extreme old age. Infections are very likely to cause the death of the elderly person. Why is this so?

There are three main reasons why elderly people are more likely to suffer from infections, get them more severely than younger people, and are more likely to die from an infection. The three main reasons are:

- 1 impaired defence systems of the body in old age
- 2 late diagnosis
- 3 malnutrition.

1. Impaired Defence Systems of the Body in Old Age

Broadly speaking there are three main defence systems (ways of fighting germs) that the body uses to prevent and to fight infections. These are:

- i) the outer defence systems
- ii) cell mediated immunity
- iii) humoral immunity

The outer defence systems consist for example of the oils made by the skin, the saliva in the mouth and the fluids in the stomach which all fight against germs, and act as a first barrier against infections entering into our bodies. In older people there are not so many of these fighting forces, and are not as effective in preventing infections at this early stage as they are in younger people. Inactivity in elderly people, which means less muscle activity in the stomach, seems to lead to more frequent cases of stomach and

intestinal infections (upset stomachs, diarrhoea, cramps etc).

Once you have had a particular infection you are unlikely to get it a second time since the body has "built up" its defences to it. This is called cell-mediated immunity. In old age this type of build up decreases as the cells are renewed more slowly and this accounts for the fact that infections that old people have had in the past and got over, now flare up again. This could account, for example, for the recurrence of tuberculosis.

The third kind of immunity (humoral immunity) is an "inbuilt" system to combat infection through, for example, the "killer" cells, which detect germs in the blood-stream and cells and then attack and destroy them. This protects the body from infections started by cuts.

Recommended Action:

Ensure that a good and varied diet is available to all elderly persons in your care as this is the most important contributor to an effective immune system. Keep in mind also that physical activity contributes to good "outer defence systems" to prevent infection.

2. Late Diagnosis

The signs and symptoms of infection in old age are the same as in younger people, but they tend to be much less visible at the early stages of infection. In younger persons suffering from infection, the symptoms of fever, swelling, inflammation and redness are very obvious. In an older person these symptoms will not be so pronounced because the body's tissues

and cells do not react so quickly or so strongly as in a younger person. This means that it is not until the infection is much more serious that the symptoms become apparent: at this stage the infection is already well advanced and the sick person is at a higher risk.

In addition to the fact of the disease not being very apparent in elderly people, it should be remembered that they may wait longer than younger people before they go to see a doctor/health worker or report an illness to care staff. They may be confused, not very mobile and frail and will be unwilling to undertake a journey to a doctor until it seems absolutely necessary. All these factors will delay the diagnosis of the illness further, and mean that the person will be even more vulnerable by the time they get to see a doctor.

Recommended Action:

Keep in mind that early symptoms such as fever, loss of appetite and tiredness could indicate the onset of an infection. Do not dismiss reports of such symptoms without making sure that they are not caused by an infection. Take prompt action in examining or treating an elderly person — there is less time to spare than with a younger person.

3. Malnutrition

Malnutrition means both the lack of enough food (protein from beans and meat products and calories from rice, potatoes, maize and oily foods), and also a lack of imbalance in vitamins and minerals.

Nutrition affects both the risk of getting an infection and also the risk of



dying from it. As mentioned in the first section, how well or badly a person is fed makes all the difference as to how well their immune system will work. Deficiencies of nutrients (nutrients are important substances which keep the body healthy, and are found in many foods), such as zinc, riboflavin, thiamine and vitamin D as well as others, are particularly likely to lead to a poor immune response.

Dietary surveys of elderly people in different countries show that intakes of these nutrients well below those recommended by the World Health Organisation are widespread.

These deficiencies are reinforced by as well as contribute to, the numerous illnesses suffered in old age. When a person falls ill, they will have less appetite and eat less of the nutrients

they need at precisely the time that they need them most!

Even if a person is eating the required amount, his or her body will probably be unable to use the nutrients fully because of poor absorption by the stomach cells, and inefficient use by the tissues.

In addition to vitamin and mineral deficiencies, it is well recognised that not eating enough of the basic cereal and meat or bean diet results in protein-energy malnutrition (PEM). This is also strongly associated with a higher risk of developing infections. Unfortunately there is no established standard of measurement of PEM in the elderly as there is for children.

However, there are guidelines on the recommended daily calorie and protein intake of men and women

according to their body weight and their level of activity. Elderly people who eat less than this recommended amount over a sustained period of time are in danger of becoming seriously malnourished and therefore at greater risk of infection.

There are many reasons why elderly people may be malnourished. Some of these are listed below.

- ★ low income: unable to buy sufficient food
- ★ confused: may not be able to purchase and prepare food
- ★ season: not much food available at some period
- ★ frail disabled, alone: unable to prepare food properly
- ★ not eating good variety of food
- ★ no teeth: unable to eat some foods
- ★ infection: loss of appetite
- ★ infection: poor absorption of nutrients
- ★ infection: increased energy expenditure by the body
- ★ institutionalised: doesn't like the food prepared.

Recommended Action:

Carers should pay special attention to preparing interesting and varied nutritious food for elderly people. If you know of an elderly person living alone, why not go to see them and talk in a friendly manner about the issues this article raises.

From: Ageways: HelpAge International, London.

PIL: A Sad story

In the Supreme Court of India, once known the world over for progressive judgments, important public interest judgments are today few and far between. Even where public interest matters are considered and decided, the judgments are of dubious value. A classic example is that of the Sivakasi child workers (MC Mehta V/s. State of Tamil Nadu & Ors., (4) JT SC 263).

The Petitioner, Shri MC Mehta, had

brought the plight of thousands of child workers slogging for 10-12 hours daily in the match and firework factories in the Sivakasi District of Tamil Nadu to the notice of the Supreme Court. He pointed out that this violated Article 24 and also Article 45 of the Constitution of India. The court, while accepting the validity of the claims, however held that "economic necessity" compelled these children to work. Hence, the court ruled that children should be prohibited from working in the

process of manufacture, but that they could be employed in the process of packing. Incidentally, Article 24 of the Constitution as well as the Child Labour Act of 1986 already prohibited this. Further, the court ruled that the State of Tamil Nadu may fix a minimum wage for children at not less than 60 % of the minimum wage for adults. Thus, the court legalised the very reason for employing children rather than adults, viz. dirt cheap wages and more work.

The Lawyers

There are many myths about ageing. And many frightening facts. If the myths are to be believed. Dementia, Alzheimer's Disease, Parkinson's Disease, institutionalization, abandonment, total degradation and deterioration?

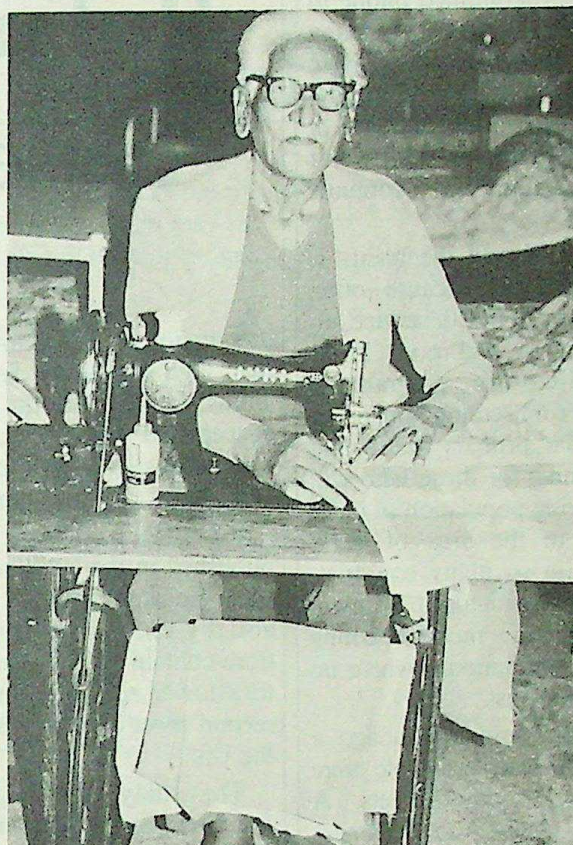
In fact, for the majority of people, ageing is a very slow and gradual process, which starts the moment a person is born. And which has no conspicuous downward jolts at ages like 40, 60, 65 or 80. In spite of the tendency of some commercial and industrial concerns to encourage older workers to "retire gracefully" at an early age, there is much scientific evidence to suggest that this is a false policy.

One large-scale scientific test, using reaction in pressing a button when a red light came on, had persons aged 55 reacting in 0.212 seconds, whilst those of 75 reacted in 0.245. And that 20 year difference of 0.033 seconds would only mean about 11 inches advantage to the fastest sprinter in the world. A similar testing in India showed a variation from 0.198 seconds for people in their twenties to 0.279 for the age of 65.

As regards dementia there is some difference of opinion but, depending on criteria used by various researchers, between 80% and 90% of very old people can expect to retain their mental powers "right to the end". In fact there are very many examples, ranging from politicians like DeGaulle and Adenauer, to artistic creators like Verdi and Bernard Shaw (who died climbing an apple tree in his mid-nineties) who continue to function far better than the average at a "ripe old age".

To some extent people living in tropical climates are at risk. A Nigerian expert, Dr. T.A. Lambo found that diseases such as malaria, typhoid, infestation by intestinal parasites and anaemia due to malnutrition (all more frequent in the

What Age is Old?



Third World) were triggers of psychiatric problems in later years

What Does Old Mean?

In its projects HelpAge recognises that 'old' can have various meanings in different countries. In Britain the statutory pension ages of 60 for women and 65 for a man are sometimes used as a measure, but it is now widely recognised that ageing is a personal phenomenon. One person of 40 may be much less active and healthy than a neighbour of 75. In a project in Ecuador HelpAge discovered very active workers going to their tasks at over 100 years of age. Yet in an area of Bolivia some retired miners of 35 were exhibiting all the signs of ageing. This related to the differing

life-styles, climates, physical environments, working conditions, diets and so on.

"Ageing programmes" therefore need to consider two most important elements. The first is support programmes for those who do fall prey to excessive frailty, chronic illness or some form of real dementia. The second is to restore opportunities, and sometimes basic rights and dignity, to those in the upper age brackets who have been cut off from full participation in life by some artificial age limit.

In Britain one way Help the Aged has been able to give a lead in the battle against elderly frailty is through the promotion and funding of Alarm

schemes. Thus an old person can be provided with the most sophisticated apparatus to use in emergency. It sounds like a James Bond spy tool, but the tiny button which can send radio messages through closed doors and activate a self-programmed phone to send out a warning is a reality to many frail elderly. Early in its history Help the Aged worked with the Employment Fellowship to foster the idea of continuing work opportunities for those who wanted to continue working.

In the Third World the reality is somewhat different. Because often there is no national health service, no geriatric speciality and poor living conditions, HelpAge programmes have to 'start from scratch', financing the very basics of primary health, and providing training for those who will serve the growing population of older people. And in the area of work opportunities, in so many countries, not to work means not to eat. So again the provision of income-earning opportunities is paramount where no pension schemes exist.

In Guatemala some years ago a number of blind elderly people were found begging in the streets. A rehabilitation scheme was commenced. The old people were taught to care for themselves, and then to undertake domestic chores like lighting fires, looking after children, and indeed work at some modest income producing task. Suddenly the families who had abandoned the old blind people were asking to have them at home again. The change from an unproductive, expensive charge on the household to a useful, earning partner in the home's economy had been crucial. Blame the relatives, we might! But this example does highlight the extent of poverty and the importance of personal productivity in many Third World lands.

From: AgeAction: HelpAge International, London.

From our files.....

Red meat, animal fat cause colon cancer

A major study has found evidence that high intake of red meat and animal fat increases the risk of colon cancer, and supports existing recommendations to substitute fish and chicken for red meat reports UNI.

Results of the six-year study, published in the latest edition of *The New England Journal of Medicine*, also suggests that a generous intake of fibre-containing fruits may contribute to a lower risk of colon cancer, the second most common fatal cancer in the US.

The study, the largest ever to examine the relationship of dietary factors with the risk of colon cancer, is part of the on-going nurses health study, a Boston-based project assessing the relationship between lifestyle factors and various diseases.

Questionnaires: In the cancer study, researchers asked 88,751 women from 34 to 59 years old to fill out questionnaires describing their diet and medical history. The women, all nurses, were studied for six years, and 150 of them developed colon cancer.

Dr Walter Willett, director of the study, said he and his colleagues found that women who consumed the highest amounts of animal fat and red meat also had the highest rates of colon cancer. For example women who daily consumed beef, pork or lamb as a main dish had a risk of colon cancer

two and a half times higher than those who ate only small amounts or none at all.

The amount of chicken or fish the women ate did not contribute to their risk of developing colon cancer. And, women who consumed higher amounts of fibre in the form of fruits and vegetables had reduced rates of colon cancer, although this relation by itself was not statistically significant.

No Association: The researchers said that they had found no association between colon cancer and vegetable fat or fat from dairy products like butter milk.

Based on the latest findings, Willett offered the following recommendation: "red meat should be eaten only occasionally and fish and chicken, particularly with the skin removed, can be substituted for red meat. We would also try to eat at least five servings of fruits and vegetables every day".

It is not yet known how fat leads to colon cancer, but researchers speculate that it could induce the cancer by increasing the secretion of bile acids into the colon. It is thought that bile acids, which are produced by the liver to aid in digestion of fats, may promote the development of colon tumours. Increased concentrations of bile acids have been found in populations with higher rates of colon cancer.

This article has been adapted from a booklet produced by the Green Cross Society (India), which was written by Dr S C Manchanda.

Heart Attacks — the Facts

- Heart attack is the leading killer of people all over the world.
- Heart attacks are more common in industrialised and developed countries like the USA, Finland, UK etc. and are less common in developing countries. However the number of heart attacks are increasing in developing countries like India.
- It has been estimated that at least 700,000 people die of heart attacks every year in India alone.
- About 4 out of every 10 patients die after getting heart attacks, mostly within 1 hour before medical aid can reach them. Many lives could be saved if people knew about CPR (Cardio Pulmonary Resuscitation).

What is Heart Attack?

For proper functioning, the heart muscle needs oxygen and essential nutrients. These are supplied to it by coronary arteries situated on the outer surface of the heart.

- There are 3 major coronary arteries each with many smaller branches. These arteries can get narrowed due to deposition of cholesterol — a waxy looking fat-like substance found in animal fats and oils, in egg yolk and many other foods. If one of the coronary arteries gets completely blocked due to cholesterol, a part of the heart muscle does not receive any oxygen and dies. The death of the heart muscle due to complete blockage of one of the coronary arteries is called a heart attack.

Warning Symptoms of a Heart Attack

- Chest pain. The pain of a heart attack is usually very severe and occurs in the centre of the chest, spreading out to the left arm. The pain may last for 15-30 minutes and sometimes spread to the left jaw or

Heart Attack — Causes and Prevention

right arm. At other times the pain may be absent and there may be a feeling of uncomfortable pressure in the chest.

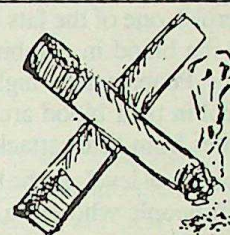
- Shortness of breath.
- Sweating
- Weakness
- Dizziness
- Nausea or vomiting
- Unusual heaviness in the upper abdomen or unusual wind or gas problems
- Fainting and unconsciousness

In the Event of a Heart Attack

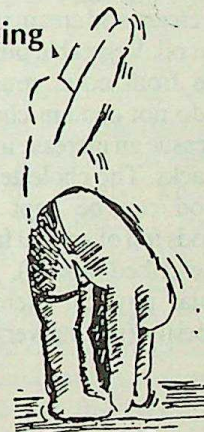
- Make the person lie down comfortably. He or she should not exert themselves as this would risk further damage to the heart.
- If the person is breathless, give him or her a few pillows to raise their head.
- Loosen his or her clothes and reassure the person.
- Determine whether the person is conscious or unconscious.
- If conscious take the person to the hospital as soon as possible.
- If unconscious, and the pulse in the neck is absent, start CPR immediately and alert a health professional if possible.

What Causes Heart Attacks ?

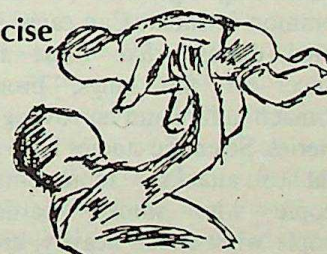
All of the following can affect the body and heighten the risk of a heart attack. Some of these factors, can be acted upon — such as stop smoking, cutting down on fatty foods etc. but with others such as age etc. this is obviously not possible.



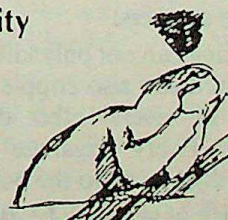
Smoking



Exercise



Heredity



Stress

High Blood Pressure

High blood pressure is a very common disease, and about 10–20% of adults suffer from it all over the world. However, most people are not aware of this disease as it does not usually produce any symptoms.

High blood pressure put on extra strain on the heart and the arteries supplying the other organs of the body, because more blood is trying to rush around the body.

High Cholesterol

Cholesterol is one of the fats which is found in the blood in combination with proteins. People with a high level of cholesterol in their blood are more likely to suffer from heart attacks.

High cholesterol levels in the blood, are found in people who eat a lot of fatty foods — eg. eggs, meat, butter (and ghee), cream and cream products, and coconut oil. Vegetable oils such as those made from corn, mustard or soyabeans do not contain cholesterol and do not cause an increase in the risk of heart attacks. The cholesterol level in the blood can be kept low by avoiding foods full of animal fats (such as those described above), and by taking regular physical exercise and avoiding obesity (getting very fat) or smoking.

Smoking

Smoking cigarettes (or bidis — common in India) can cause several lethal diseases like heart attacks, cancer of the lungs, bronchitis, stomach failure and narrowing of the arteries. Scientific studies have shown that heart attacks are more common in people who smoke, particularly people who smoke heavily, and that death rates due to heart attacks are higher in smokers.

Smoking can not only kill a person early, but it can also cripple a person because of several other dangerous diseases. Every cigarette that is smoked does harm to the body.

The risk of getting a heart attack is increased by at least 6 times in people

who smoke more than 15 cigarettes a day.

Diabetes

Diabetes is a higher than average level of sugar in the blood. People who have diabetes also have sugar in their urine.

People with diabetes have a higher risk of heart attacks. They may also get several other diseases such as damage to the kidneys, nerves and eyes. Heart attacks occur at a younger age in severe diabetics, particularly women. The symptoms of diabetes are increased urination and weight loss, but for some people there may be no symptoms at all.

Exercise

Several studies have shown that people who do jobs sitting down for most of the day, such as clerks, officers, drivers etc. get more heart attacks than those whose professions need physical exercise — eg: farmers, labourers, conductors etc.

If people do not exercise they may become fat, and their lungs and blood circulation become weak. Regular physical exercise not only prevents diseases like heart attacks but also keeps a person fit. Their lungs will be stronger, and their body will remain stronger.

Obesity

Obesity is another word for being fat. Fat people have a higher chance of getting heart attack and a higher chance of getting high blood pressure and diabetes. Obesity can be avoided by not eating fatty foods, too much sugar or alcohol, and by taking regular physical exercise.

Stress and Mental Tension

There is a strong relationship between stress and mental tension and heart attacks. People who worry too much and who are always in a hurry can get high blood pressure and more heart attacks.

Heredity

It has been known for some time that members in a family pass down

health problems to their sons and daughters, this is known as heredity. If one parent suffers a heart attack, then the chances of the child having a heart attack when they are older is doubled. High blood pressure and diabetes which cause heart attacks are also known to be genetically determined.

Age

Heart Attacks are most frequent between the age of 50–55 years, but it is not unusual for heart attacks to occur between 30–50 years of age. Heavy smokers also tend to get heart attacks at a younger age.

Sex

90% of heart attacks occur in men. However women are more likely to have a heart attack the older they become. The reasons why women suffer from less heart attacks than men are not clear.

Prevention of Heart Attacks

Heart attacks can be prevented by following the five golden rules:

- 1 Take a proper diet
- 2 No smoking
- 3 Regular medical check up
- 4 Regular exercise
- 5 Avoid stress and tension

Start Prevention in Early Childhood

— *Ageways: HelpAge International, London.*

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Although nursing in its organised form is a specific health discipline, it is first and foremost a fundamental human activity and one which has been practised since time immemorial. Basic nursing has its origin in fundamental and universal human needs. The primary responsibility of nursing is to assist people to make the most of their own abilities and functions within varying states of health and at all stages of their lives. This means that the discipline is concerned with each period of our life-cycle, from conception to death.

Nursing science is an organised body of knowledge, and nursing art is the use of that knowledge for the wellbeing of all people, including those adults who happen to have lived longer than the rest of us; people in old age.

Nursing can use its body of knowledge creatively for the wellbeing of these old people to enhance their lives at every stage — in health, frailty, sickness, disability and death.

One of the most common needs of people in old age is for care. Not just being "taken care of" but being "cared for" and being "cared about"; care which provides comfort and support in times of anxiety, loneliness and helplessness. This includes listening, and then intervening appropriately and effectively. This care is the primary component of nursing in every country of the world.

Elderly people are vulnerable people. They are susceptible to physical and mental deterioration and to social crises; frequently, these are inter-related. In all settings and in all cultures, nursing intervention at crucial moments in the lives of old people and their families can lead to positive outcomes.

Innumerable stresses in today's world play upon every individual at any age: how the individual and his family respond to these, the adaptations they are able to make, strongly influence their level of health

Enhancing Old Age: The Role of Nursing

Muriel Skeet

and their quality of life. Identified at an early stage, many potential health and social problems of old age can be controlled or avoided. This implies continuous surveillance of the elderly at the primary health care level — but with sensitive awareness of every person's right to privacy.

Nursing care includes teaching the elderly person and his family how to maintain independence. Elderly people, like everyone else, have the right to take risks, but they also have the right, like everyone else, to a health service which supports their efforts to maintain health. Help may take many forms from advising on food and medicines to dental care, or supplying a piece of equipment or devising strategies that can reduce feelings of worthlessness at crises such as retirement or bereavement.

Self-care should not be elevated to the level of an ideology, nor should it be seen as an alternative to, or a substitute for, informed care provided by another. Often, in the lives of aged people, there is a thin borderline between self-care and self-neglect. This line must be watched for and recognized promptly if the quality of an old person's life is to be maintained.

It is necessary to be realistic about the amount of time and support families can give to their elderly members; even in developing coun-

tries, where extended families still exist, not all are able to provide the necessary care and company. And family patterns are changing. In many part of the world, there is a decided shift of younger generations away from villages to urban areas.

Women, the traditional providers of care, are assuming new responsibilities outside the family, while aging of whole populations means that inevitably, children of the very old are themselves likely to be elderly. Nevertheless, evidence from all over the world demonstrates that the most prompt and continuous support of old people comes from their relatives.

A major objective of the formal nursing services should be to support and not supplant, this continuing care. Family members should know that they may expect to receive immediate help relief and advice when, and wherever, they need it. Nursing personnel can help the public to understand the physiological, social and psychological processes of ageing so that they are accepted as a normal part of the life-cycle.

A network of nursing personnel working at the primary health level can perceive, recognise and act when an elderly person shows the first sign of impairment or difficulty. Appropriate nursing intervention may be all that is required, but if assessment reveals the

need for referral, immediate "sign-posting" to the appropriate health service, or organisation may prevent disability or dysfunction.

Where nurses have knowledge and experience of both hospital and community settings, and enjoy good working relationships with members of related disciplines and professions, they are able to synthesize the needs of old people and synchronize health and social services to ensure a continuum of care.

If the old person does develop a chronic physical or mental condition, nursing can help the patient and his or her family to help themselves for the rest of that elderly individual's life. The basic life pattern will remain, but the nurse will guide and support to a way of life which accommodates illness. She will place emphasis on adequacies and abilities rather than upon deficiencies and limitations to help the patient remain in command of life in a new situation. The nurse discovers the patient's interpretation of "a good quality of life" and sets nursing goals to help attain it.

Reliance upon the family must be selective and, if the aged person is

alone or removed from any living relative or friends, the nurse should make arrangements for more intensive services from professional or voluntary agencies.

Notwithstanding, for a minority of aged people with impairments, transfer to a hospital or other care institution will be unavoidable. The nurse can make sure that the elderly person and his/her family or friends are familiar with all the options.

Total nursing services are likely to be needed by the aged person's family and friends during and after dying. For the dying person, nursing should provide constant human care which can make the last weeks of life a valuable experience instead of a period of humiliation, deprivation and suffering.

While physical symptoms of distress may be effectively alleviated by nursing, the response to the emotional state of a dying person is more difficult. The nurse needs to be aware of local customs and of the social and religious aspects of dying. Nursing includes care of the dying person's family and friends, in the form of practical services and psychological support. Especially

for an aged bereaved spouse, the nurse can provide appropriate facilities, care and comfort during the period of stress and grief.

Future Aged People:

The efficient and effective use now, by all countries, of the nursing networks of their aged people, could bring far-reaching benefits.

Nursing personnel are in a strategic position to help people, from an early stage to avoid lifestyle practices that are likely to lead to disease or disability in later life, and to develop practices which can contribute to a healthy old age. In industrialised areas, nurses should be aware of the employer's and employee's responsibilities in achieving optimal performance at any age and also to prepare for retirement, thereby reducing the effects of transition from being "employed" to being "retired".

Foresight in planning for future old people, and development of a fine sense of timing in relation to today's old people should be two priorities in nursing services everywhere, if the world is to achieve life-with-quality in old age.

AgeAction: HelpAge International London

Family support for the elderly

The informal support system, most often the family, remains central to the care of the elderly. The primary function of formal care is to help the informal system maintain older individuals in the community whenever feasible.

- ★ Special emphasis should be given to programmes that assist the family in its traditional role of supporting the elderly.
- ★ Frail elderly persons without family support will often require more formal support systems to permit them to remain in the community.
- ★ Where traditions of respect for elders are under threat owing to

cultural change, effort should be made to reinforce and foster them, especially among the young.

Health of the elderly, Report of a WHO Expert Committee, Geneva, World Health Organization, 1989 (Technical Report Series, No. 779), p. 83

10m kids likely to be orphaned by AIDS in 90s

United Nations

Ten million children under the age of 10 will probably be orphaned during the 1990s because of AIDS and by the end of the decade more than 10 million youngsters will themselves be infected. U.N. Secretary General Javier Perez de Cuellar said.

In a statement at a meeting marking the annual world AIDS day he expressed deep concern over the "Immense toll that is being paid by the entire human family" as a result of acquired immune deficiency syndrome, for which there is no known cure.

Women were being affected in nearly the same ratio as men and AIDS had become a major cause of death for women aged 20 to 40 in the largest cities of the Americas, Western Europe and Sub-Saharan Africa.

"Over three million, women of child-bearing age have already been infected with the HIV (Human Immuno-deficiency Virus)"
Perez de Cuellar said

Work with elderly people should aim to enable them to remain as accepted members of their family and the community to which they belong. That is the ideal; but in India, to take just one country, it is not easy to achieve that ideal.

There are so many obstacles to be overcome. Poverty and poor health are often the overriding ones. A man or a woman retains the respect of their family and community as long as they are adding to the life of the family or community — whether by earning money or working in the fields or looking after the children and the household... but when blindness, or a stroke, or even with the increasing frailty of old age, the elderly person often feels that they are becoming more and more of a liability to the family and less and less able to contribute to its welfare.

The Blind Men's Association

An organisation called the Blind Men's Association in India tries to tackle these problems at the roots. Let it be said at once that the title implies no sex discrimination — women are both involved in running the project and are included amongst its beneficiaries. The organisation was founded many years ago by Shri Jagdish Patel. He is sixty now, and well-known throughout his State, and indeed throughout the whole of India. In 1955 he was one of a few people struggling to prove to the nation that blind people need not be helpless objects of charity, but, given opportunities to acquire skills, they would become productive members of society. So he started a school for blind girls and they all passed their senior school certificate examination...

In 1983 he applied the methods that he had used so successfully over the years to rehabilitate blind and other disabled people, to elderly people. Below we will describe how the Blind Men's Association operates:

The Blind Men's Association — Steps in Development for Elderly People

Graeme Jackson



Step One

A geographical area is chosen — a cluster of villages or a limited slum area of a city.

Step Two

The elderly people living in the area are identified and their circumstances recorded. Each person is given a card with their personal circumstances recorded into it so that the organisation can measure the success or otherwise of enabling that person to regain a valued place with society.

The organisation usually borrows a public building — perhaps the offices of the village council, and, with the services of doctors who give their free time, sets up a health camp. Every elderly person is then invited to visit

the health camp. As well as doctors there are trained counsellors in attendance who spend time talking with those who come about their problems.

Step Three

All the needs discovered are then followed up and the team undertakes door-to-door visiting around the village to meet those who, for whatever reason, did not wish or could not come to the health camp.

Follow up may involve a supervised course of medicines; it may mean providing the regular treatment needed for Tuberculosis (TB) patients; it may mean arranging for cataract operations for those who have lost their sight; it may mean arranging

hospitalisation for those with serious complaints — and free treatment and transport will be arranged at the nearest hospital.

Other needs are also dealt with. The Blind Men's Association has the right to issue free bus passes to all elderly people over a certain age which are valid throughout the state of Gujarat. It is also the case that for elderly people who are genuinely without support of any kind there are state pensions available. However, the process of obtaining them is an extremely difficult one for a poor person from a village; so the staff of the Blind Men's Association help these elderly people in this task.

Step Four

There are many other objectives which the team sets itself to achieve during its two years of concentrated work with this group of elderly people:

- At least one visit to a place of pilgrimage is arranged if the resources are available. For many of the elderly people this is a dream

come true.

- Resources are sought and assistance given to elderly people who want to set themselves up in an income-generating activity — perhaps in cooperation with others in the village.
- If there is a local voluntary agency in the area, it will be encouraged to make the elderly people one of the focuses of its concerns — perhaps setting up a simple day centre where various activities can take place.
- An attempt is made to make the whole community aware of and responsive to the needs of elderly people living amongst them as even in a small Indian village elderly people can often go unnoticed.

Step Five

At the end of two years, the team withdraws. This is regarded as a positive action and not an abandonment of these people. It is the whole purpose of the team's work to enable the elderly people to be able to look after themselves as far as possible —

getting what support they need from the community of which they are part. If the result of their work was to make the elderly people dependent on their team, which had come in from the outside, then their work would not have been successful.

When the team withdraws, it does not desert the village; it is available in the area and can be contacted. One of the ways in which they lay the basis for future work is by building up a small fund which can provide the resources that may be needed in an emergency.

One of the most impressive aspects of the Blind Men's Association's programme is its staff. Highly motivated, and professionally trained, they know what they are trying to achieve; they know how they hope to achieve it and they are constantly monitoring what they do and learning from the past in order to be able to achieve more in the future.

From: Ageways: HelpAge International, London



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We all have feelings about old age, about our own ageing and the effects of the ageing process on those we know and care for. Those of us who work in organisations which provide services for older people are particularly likely to have to face our own attitudes to old age and consider how they affect our work.

Ageism

Very few of us are free of ageism (treating people differently because of their age). There is a conflict in our attitudes to elderly people — we want to be able to honour and protect them and to value their contribution to society, but we also feel impatient, guilty, and fearful of the mortality elderly people remind us of, and resentful of the demands they make of the young and fit.

But ageism is more than just an unthinking prejudice. There is often a very real competition for resources between the old and the young — competition for jobs, welfare benefits, housing, medical and nursing care and a whole range of other limited resources.

Of course, age alone should not affect the way in which resources are allocated. If we act justly, then we will take care of those most in need first, and elderly people will have equality with others in the availability of care. But the problem of allocation of a scarce resource may be in conflict with justice.

Rationing of Services

If the provider of a service, cannot afford to care for everyone who needs help, then the service will have to be rationed. The way this rationing is done may be biased against elderly people — for instance, if a hospital has insufficient beds, it may decide to allocate those beds to those people who it believes are most value to the community, therefore, a younger patient may seem more deserving of treatment.

Some form of rationing of services may be inevitable, but the best

How Do Attitudes Towards Elderly People Affect the Services they Receive?

Ms Fiona van Zwanenberg
Help the Aged (U.K.)



protection against ageism is to make the system of service planning and allocation as open and as honest as possible. Rather than a situation where the needs of elderly people are made a low priority by accident and through ageist beliefs ("They've had their lives"), there needs to be open discussion about policies and priorities. If providers develop and publish their criteria for the way in which services are provided, their objectives, methods to be used to achieve them and resources available, then there is a real chance of genuine equality.

Such a system would need to involve asking the people who use the service, both older people and their carers, along with representatives of other social groups who also need care. The injustice doesn't lie in having a system of priorities, but in having a system that no-one understands and no-one has been consulted on.

Equal Access to Care

If the goal of your organisation is to provide 'equal access to care', you will need to consider how it meets the needs of elderly people. For a start

access must mean more than a service just being available. Lack of transport disability or unsuitable premises, can mean that older people have problems in taking advantage of services that are available.

If older people are to have genuinely equal access, service providers will need to consider making their service physically accessible — premises on a ground floor, close to public transport, etc.

Making Judgements

We must also avoid making judgements for elderly people, when they are perfectly capable of making them themselves. There is almost always something wrong if you find yourself describing a person as "too old to benefit from..."

Too many professionals still dismiss health problems as "just old age" and older people may be denied a proper assessment of their condition and access to appropriate treatment. Older people may be admitted to residential care or to non-acute hospital wards when active treatment would lead to rehabilitation and a return to the

community. Admission to care may be the appropriate solution for a particular older individual, but we need to be aware of how this judgement has been reached. Relatives and friends may be feeling guilty, saying "She'll be better off in a home", adding "You'll be looked after", offered instead of exploring supports that would enable her to continue looking after herself.

We should remember perhaps when we talk of attitudes to ageing and to older people, that most of us have personal stake in the matter. Almost all of us will live to be old, some of us will join the ranks of the very old and will live to find ourselves on the receiving end of such attitudes and treatment, as society considers appropriate.

Let us hope that we meet caring services which respect our individuality and dignity and allow us the greatest possible choice in determining how we spend our final years. *From: Ageways: HelpAge International, London*

Age

Age is a quality of mind.
If you have left your dreams behind,
If hope is cold, If you no longer
plan ahead,
If your ambition's fires are dead,
Then you are old.

But if you make of the life the best,
And in your life you still have zest,
If love you hold —
No matter how the years go by,
No matter how the birthdays fly,
You are not old.

*From: 'Celebrating Age':
The Ageways — HelpAge
International, London*

Alcohol and Young People

According to C. Everett Koop, former Surgeon General of the United States, two or three individuals are killed on U.S. streets and highways every hour, around the clock, because they or others had their judgement and reflexes impaired by alcohol or other drugs.

More than one million alcohol — and drug-related crashes occur every year, most do not end in death. But they do result in injuries — a half million injuries at a minimum.

A disproportionate number of highway victims are young people between the ages of 14 and 24. By itself, this age group accounts for more

than 8,000 alcohol-related fatalities, or about a third of the annual total. No other comparable age group has such a record of death and injury on the highway.

Young people are becoming more sensitive to this issue. At public hearings held by the National Commission Against Drunk Driving, young people supported the minimum drinking-age law, seatbelt laws, and more public education. They also agreed nearly unanimously that advertising encourages adolescents to drink.

From: The Signs

Many people believe that tooth loss is a normal consequence of ageing — this is not true. Healthy teeth and gums are important to all age groups, but particularly for elderly people because:

- Strong, healthy teeth are needed for digestion and good nutrition so that elderly people may eat a wide range of foods. Difficulty in chewing, due to painful, or missing teeth, can mean elderly people avoid certain foods and miss out on particular vitamins and minerals which can lead to health problems.
- Painful cavities (holes in the teeth caused by decay), and sore gums can be extremely painful for elderly people, and with care, this can be avoided.
- Decayed or rotten teeth caused by lack of cleanliness can lead to serious infections, which may affect other parts of the body.

Gum Disease

Gum disease can be a problem for elderly people. It is caused by a build up of substance called "plaque" on the teeth and gums. Plaque contains an acid which attacks the gums. If teeth are not cleaned regularly, the disease may lead to a loosening of the teeth and eventual loss.

The following may indicate gum disease:

- Bleeding gums when teeth are brushed
- Change in shape or colour of gums
- Persistent bad breath or an unpleasant taste in the mouth
- Looseness or change in position of the teeth

Gum disease can also be caused by not eating enough nutritious foods (malnutrition).

Inflamed (red and swollen) painful gums are a sign of gum disease.

Prevention and Treatment

- Brush teeth well after each meal, removing food that sticks between the teeth. Also, if possible, scrape off the dark yellow crust (tartar)

Healthy Teeth and Gums

that forms where the teeth meet the gums. It helps to clean between the teeth with a strong thin thread (or dental floss). At first, this could cause a lot of bleeding, but soon the gums will be healthier and bleed less.

- Eat foods rich in vitamins, especially eggs, meats, beans, dark green vegetables and fruits like oranges, lemons and tomatoes.

Avoid

- Smoking, chewing tobacco, sweets and sugary drinks.

Try replacing these habits with snacks of fresh fruit or vegetables.

Cleaning the Teeth

Teeth should be brushed every day, morning and evening to prevent tooth decay and gum disease. If a toothbrush is used, try to avoid one with hard bristles, as this can damage gums and wear away the enamel of the tooth. Teeth should be brushed from top to bottom, not from side to side. Brush the front, back top and bottom of all teeth.

For elderly people with trouble gripping a toothbrush, try putting the handle through a child's sponge rubber ball. For those with limited arm movement, the length of a toothbrush handle can be extended by taping it to a ruler, or similar piece of wood.

Dentures

Some elderly people have "dentures". These are false teeth made from plastic which can be used when all or some of the natural teeth have gone bad and been removed, and are fitted by a dental worker.

Dentures, just like natural teeth, have to be cleaned regularly so that they are clean against the gums, to prevent them being stained and to prevent bad breath.

When an elderly person first starts using dentures they may have some trouble chewing. If this happens, only small portions of food at a time should be taken into the mouth and chewed slowly. It may help to chew on both sides of the mouth at once, and avoid very hard foods until the elderly person has got used to chewing with the dentures.

It is essential to take dentures out of the mouth for several hours every day. The dentures should be put in clean cold water at night and at rest times. This allows the gums to breathe and remain healthy.

An elderly person should find his or her dentures comfortable. Loose or poorly fitting dentures can irritate the gums. If dentures are painful, a dental worker should be seen.

From: Ageways: HelpAge International, London.

Dr Christiaan Bernard the famous cardiac surgeon suffering from Rheumatoid Arthritis writes ...

"When Louis Washkansky became the world's first heart transplant patient in 1967, I and my dedicated team gave that large, amiable man not only a new pump for circulating blood through his body; we gave him something perhaps more precious — hope.

"Throughout my career, even before I began to perform heart-transplant operations, this need to open the door of hope to people hemmed in by fear or worry or despair had been with me. It may even have been what motivated me to become a doctor in the first place. But it was not until 1956, when I was a junior member of the surgical staff of the University of Minnesota, that I fully appreciated how important it is to have some light at the end of the tunnel. For it was in that year that I was diagnosed as having arthritis.

"Imagine what this meant. I was an aspiring young surgeon with a fast developing expertise in the intricacies of open heart surgery, and especially in the possibilities of transplanting a healthy organ from one body to another. All surgery is physically as well as mentally demanding: one has to stand for long periods carrying out delicate manipulations. With heart transplants there are added complications.

"In this complex medical setting, populated by large teams of surgeons, physicians, anaesthetists, nurses and auxiliaries, the need to perform with maximum efficiency is to say the least, difficult, when your feet and legs are beginning to seize up in crippling pain and your hands are swollen and sore in practically every joint. All this I could imagine so easily on the fateful day when my arthritis was diagnosed. And yet I was not without hope.

"Faced with the possible curtailment of my career before it had really

Rheumatism, Arthritis, Rheumatoid Arthritis — An Overview

Dr U. Ramakrishna Rao MD (Med) (AIIMS)

Associate Professor, Dept. of Medicine, NIMS, Hyderabad

lifted off, I still had something to cling to — a shred of optimism in the gloom.

"I went to the famous Mayo Clinic at the University of Minnesota, where the consultant examined me, did some blood tests and then called me in and said, 'Dr Bernard, you are suffering from rheumatoid arthritis. But there's one thing in your favour; you are what we call sero-negative, and therefore it's very unlikely that you will ever be crippled by your arthritis'. Those words probably saved me, because when he told me that I had rheumatoid arthritis I had immediately been reminded of an experience during my fourth year as a medical student in South Africa.

"When I studied medicine, we were only introduced to the patients in the fourth year of our six-year course, during which year we concentrated mainly on internal medicine. A patient was allotted to each student: we had to work out and write up that patient's whole case history. My first patient was a lady in her sixties who was bedridden by rheumatoid arthritis; sadly, she was grossly deformed and could hardly use her hands or feet.

"When the doctor at the Mayo clinic told me I had rheumatoid arthritis, a picture of this poor woman flashed through my mind and I thought, Oh my God, here I am, a

young man who wants to become a surgeon, and with hands like that it would be totally impossible.

"But when I was told that blood tests had shown that I would probably never become actually crippled with arthritis, this acted as a tremendous encouragement to me and impressed on me how important it is, when a doctor tells a patient of a disease which could permanently disable him or could be terminal, to leave a little bit of hope for the sufferer — even though the doctor may feel deep down that the hope is very slight or even that there is none at all...."

And thankfully for all of us, especially those in pain, hope is eternal — and has found some answers to relief and cure.

What really is Rheumatism and Arthritis?

Rheumatism is a generic term for a number of disorders of the locomotor system. The common denominator of this is the occurrence of pain and stiffness of movement with or without inflammation in joints, muscles, tendons and connective tissues.

In Greek medicine, "Rheuma" was used in humoral theory of disease causation. It was used interchangeably with "catarrhos" a term that meant "flowing down", that, from the brain.

The association of rheumatism with joint ailments was propounded by the Parisian physician Guillaume Baillou (Ballonius, 1558–1616). The term “Rheumatologist” was coined by Bernard Comroe in 1940.

Arthritis is a term used to describe inflammation in the joint(s). It is, rather a manifestation of underlying disease and is not in itself a diagnosis. For centuries, gout was used as non-specifically as arthritis is used today. Thomas Sydenham (1624–1689, London), himself a victim of gout, sought to isolate specific diseases from the mix of rheumatisms by differentiating it from acute rheumatic and chronic rheumatoid arthritis. However, it was A. B. Garrod who vividly described one of the commonest inflammatory arthritis’ after coining the term “Rheumatoid Arthritis” in 1858.

Rheumatologists have to cover a very wide, sometimes ill-defined and still burgeoning field, despite their recently acquired specialism. The patients that are referred to them from general practice or from their hospital colleagues suffer from diseases treated by orthopedic surgeons, dermatologists, cardiologists, chest physicians, endocrinologists, ophthalmologists, neurologists, paediatricians and many other physicians, belonging to alternative systems of medicine.

Till recently the disorders pertaining to rheumatism were considered “orphan diseases”. As the understanding of these diseases improved, a purely negative approach has been changed to one that emphasises helping people with arthritis and allied disorders.

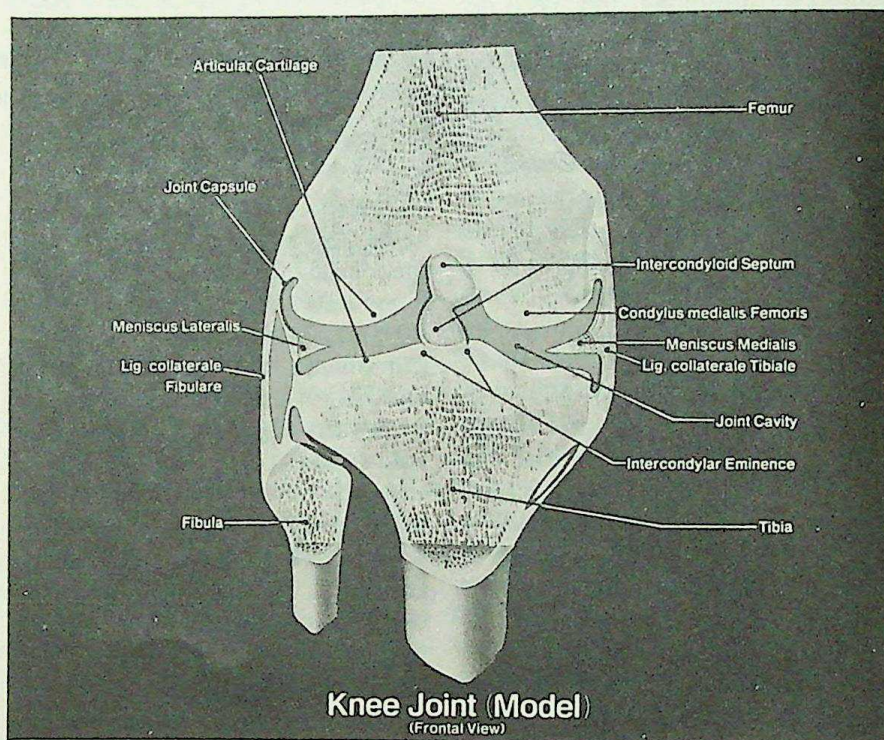
Most of these diseases are named as connective tissue or collagen vascular disorders. The relevance of symptoms, recognition of its causes and the proper diagnosis of the rheumatic disorders in most instances can be obtained by careful history and physical examination with appropriate laboratory and radiological investigations.

Arthritis

A joint, the level of articulation in the body has both articular surfaces of bones lined by cartilage, a sort of shock absorber. In a synovial joint, the space around the joint is enclosed within a thin membrane called “synovium” and a tough joint capsule filled with a lubricating fluid called “synovial fluid”. The muscles, tendons and ligaments which keep the joints stable have little pockets of fluid called “bursae” to lubricate the tissue that move across each other.

the joint, it can broadly be classified into “arthritis”, or “periartthritis” including “soft tissue rheumatism” or “non articular rheumatism” where there may be muscle inflammation and injuries to ligaments, tendons, capsules or bursae to produce frozen shoulders, fibrositis, tennis elbow, housemaid’s knee, and so on.

In true arthritis, it is important to note the mode of onset of the inflammation, the duration, the progress of the disease, the type of joint(s) involved, whether it belongs to



When a joint gets inflamed, the synovial membrane becomes swollen, giving rise to classical symptoms of inflammation viz, calor (heat), dolor (pain), tumor (swelling) and rubor (redness). There would, additionally be function loss of the joint. With or without treatment, the symptoms may slowly abate to remit completely or to slowly progress to form chronic arthritis leading to deformities (or ankylosis) or to undergo remissions and relapses.

Though the term arthritis is loosely used for every manifestation around

axial skeleton or peripheral joints and the number of joints involved.

If a single joint is involved in the beginning, it is called monoarticular arthritis; four or less than four oligo or pauci articular and more than four poly arthritis.

The inflammation within a joint may be due to 1) autoimmune diseases such as rheumatoid arthritis (RA), systemic lupus erythematosus (SLE) and certain seronegative spondylarthropathies (SSA); 2) infections such as tuberculosis, gonococcal and staphylococcal; 3) trauma post injury

4) crystal induced arthritis such as gout. In certain joint disorders like hemophilic arthropathy, all the inflammatory signs may not be evident.

The other important types of arthritis due to degeneration are called 'Osetoarthritis' or more appropriately termed 'osetarthroses'. In this disorder cartilage over bone-ends gradually deteriorates, with time becoming worn and soft and flaking away from the bone. In extreme cases the bone surface is eroded, with 'osteophytes' formation. This 'wear and tear' phenomenon is seen in certain elderly, obese individuals. Some of the chronic inflammatory arthritis may also ultimately lead to secondary degenerative arthroses.

Thus, there are about one hundred varieties of 'arthritis' present. It is extremely important to arrive at a near diagnosis to treat and predict the course of the disease. The following figures and tables give additional information.

CAUSES OF ARTHRITIS

1. Immuno Inflammatory Arthritis:

- 1 Rheumatoid Arthritis (RA): (i) Seropositive (ii) Seronegative (depending upon the presence of rheumatoid factor in serum)
- 2 Seronegative spondylarthropathies (SSA):
 - a) Ankylosing Spondylitis (AS)
 - b) Reiter's (or) reactive arthritis
 - c) Psoriatic arthritis
 - d) Enteropathic arthritis
- 3 Rheumatic fever with arthritis
- 4 Arthritis as one of the manifestations of various collagen vascular diseases:
 - a) Systemic lupus erythematosus (SLE)
 - b) Progressive systemic sclerosis (PSS)
 - c) Poly/Dermatomyositis (PM/DM)
 - d) Mixed connective tissue diseases (MCTD).
- 5 Arthritis as one of the manifestations of vasculitides.

- a) Systemic necrotising vasculitis (SNV) eg: Polyarteritis nodosa (PAN)
- b) Small vessel vasculitis eg: Henoch-Schonlein purpura
- c) Allergic granulomatosis eg: Churg Strauss disease.
- d) Temporal arteritis/Giant cell arteritis.

2. Infections:

Viral
Bacterial
Spirochetal
Eg: Tuberculosis
Gonococcal
Staphylococcal Lyme arthritis.

3. Crystal Associated Synovitis:

- a) Gout
- b) Calcium pyrophosphate (pseudogout)

4. Osteoarthroses:

Degenerative joint diseases

5. Arthritis as one of the manifestations of other systemic disorders:

- a) Hemophilic arthropathy
- b) Hemoglobinopathies eg: sickle cell disease
- c) Arthropathy associated with malignancy
- d) Arthropathy in certain infiltrative disorders
 - i) Amyloidosis
 - ii) Sarcoidosis
 - iii) Hemochromatosis
- e) Metabolic disorders: eg: Ochronosis

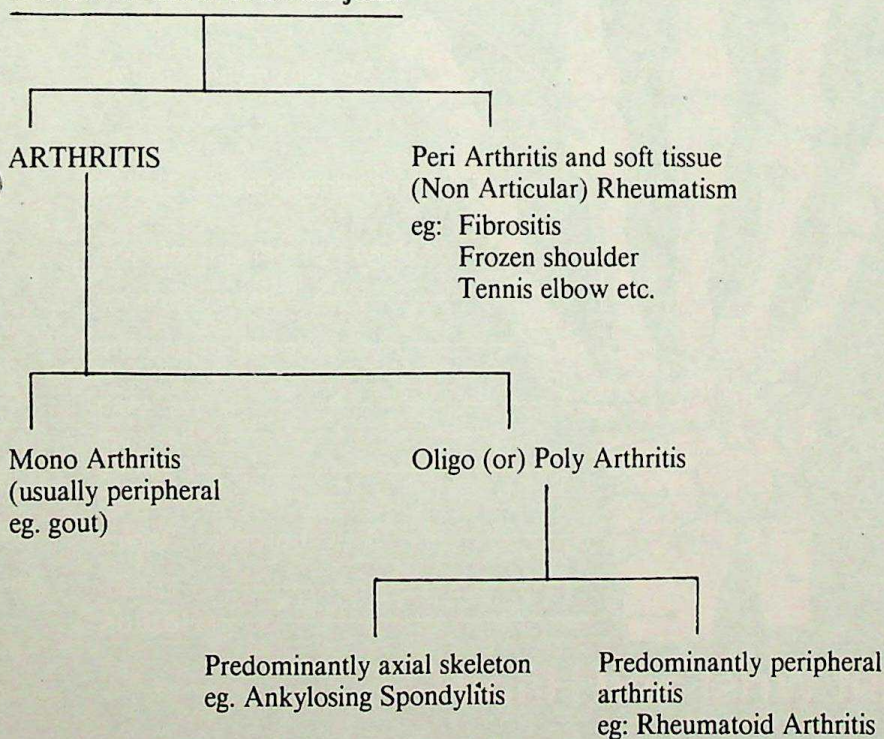
6. Others

Polychondritis
Behcet's disease

RHEUMATOID ARTHRITIS

Rheumatoid arthritis (RA) is commonest among the immune mediated inflammatory arthritis. It affects about 1 percent of the population worldwide. Hence, RA is taken as a prototype for the following discussion of arthritis. Although rheumatologists in the west are convinced that the disease is being treated more effectively there is no

Disease in and around the joint



convincing evidence that current treatment totally alters the outcome. In our country, RA is treated by different doctors of different specialties in different ways. There is a good deal of evidence that we have underestimated the mortality and morbidity of RA.

There are many criteria to diagnose various rheumatological diseases. The first criteria for the classification of RA was published in 1958 and revised in 1988. It is important to note that the criteria were designed principally for disease classification for epidemiologic purpose, not for diagnosis in individual patients, supporting the conviction that the diagnosis of RA must be made

on clinical grounds. Nonetheless, the criteria given for various disorders are useful as guidelines for arriving at a diagnostic possibility in a given case.

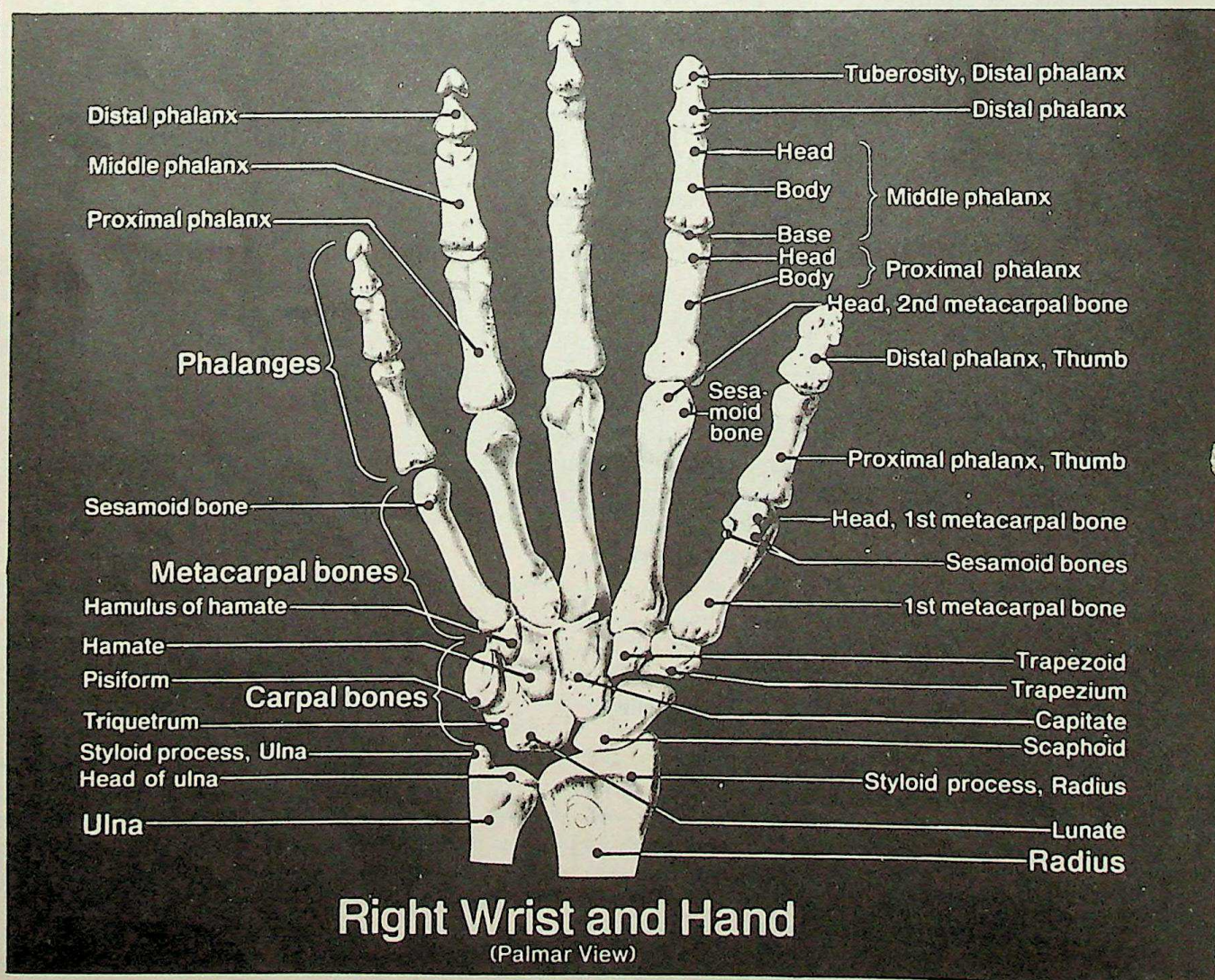
Clinical Features of RA

The prevalence of RA is approximately 1 out of 100 individuals (1% of the population). Female to male ratio is 3:1. It occurs commonly in the fourth decade of life. The onset is usually subacute and insidious. Characteristically, RA is a bilateral symmetrical polyarthritis, mostly affecting small and intermediate joints.

The joints commonly involved are

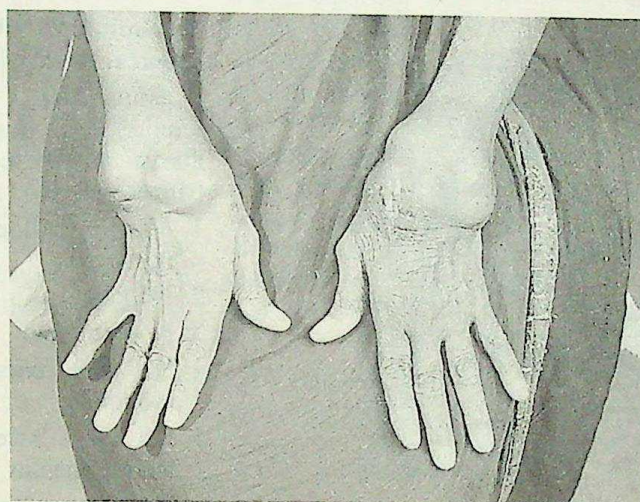
metacarpophalangeal (MCP), proximal interphalangeal (PIP), wrist, knee and small joints of feet. Distal interphalangeal (DIP) and sacroiliac (SI) joints are not involved.

Temporo-mandibular and atlanto-axial joint involvement also occur in some patients. The majority of patients experience mild constitutional symptoms. Morning stiffness is very characteristic of RA. The functional classification and anatomical staging of the disease (depending upon radiological findings) are very helpful in evaluating patients on various drug regime and to know the severity and course of the disease.



1987 Criteria for Rheumatoid Arthritis

Criteria	Definition
1. Morning stiffness	: Morning stiffness in and around the joints lasting at least one hour before maximal improvement.
2. Arthritis of 3 or more joint areas	: At least 3 joints areas simultaneously have soft tissue swelling of fluid (not overgrowth alone) observed by a physician. The 14 possible areas are right or left PIP, MCP, wrist, elbow, knee, ankle and MTP joints.
3. Arthritis of hand joints	: At least 1 area swollen (as defined above) in a wrist, MCP or PIP joint.
4. Symmetrical arthritis	: Simultaneous involvement of same joint areas (as defined in 2) in both sides of the body (bilateral involvement of



Bilateral synovitis of wrist joints

	PIPs, MCPs, MTPs is acceptable without absolute symmetry).
5. Rheumatoid nodules	: Subcutaneous nodules over bony prominences or extensor surfaces or in juxta articular regions observed by a physician.
6. Serum rheumatoid factor	: Demonstration of abnormal amounts of serum rheumatoid factor by any method for which the result has been positive in less than 5% of normal control subjects.
7. Radiographic changes	: Radiographic changes typical of rheumatoid arthritis on postero-anterior hand and wrist radiographs which must include erosions or unequivocal bony decalcification localised in or more marked adjacent to the involved joints (osteo arthritic changes alone do not qualify)

A patient shall be said to have rheumatoid arthritis if he has atleast 4 of the above. Criteria 1 through 4 must have been present for atleast 6 weeks. Patient with 2 clinical diagnoses are not excluded. Designation as classic, definite or probable rheumatoid arthritis is not to be made.

Functional Classification: (depends upon the activities of the patients:

CLASS

- I : Capable of all activities despite arthritis
- II : Moderate restriction of daily activities

III: Marked restriction, only self care is possible

IV: Bed and/or chair dependant.

Anatomic Staging: Depends upon clinical and radiological features.

GRADE

I : No destructive changes, soft tissue swelling over joints

II : Osteoporosis — mainly juxta articular, joint space narrowing

III: Bony erosions and cystic spaces near articular margins of bones.

IV: Fibrous or bony ankylosis.

Characteristics of Synovial Fluid in RA:

Translucent or yellow fluid with low viscosity, cells often more than 10,000 (90% polymorphs in early disease). Depressed glucose content and increased protein content are usual features. Normal or low complement levels are seen. Rheumatoid Factor (RF) may be present. Culture is usually sterile.

Joint Deformities In RA:

There are characteristic joint deformities seen in advanced RA

- 1 Swan neck deformity-hyperextension of PIP, with flexion of DIP Joint.
- 2 Boutonniere deformity-flexion of PIP.
- 3 'Z' deformity-Radial deviation of wrist with ulnar deviation of digits.
- 4 Loss of thumb mobility and pinch.
- 5 Plantar or palmar subluxation of proximal phalanges.

Extra-articular Manifestations of RA:

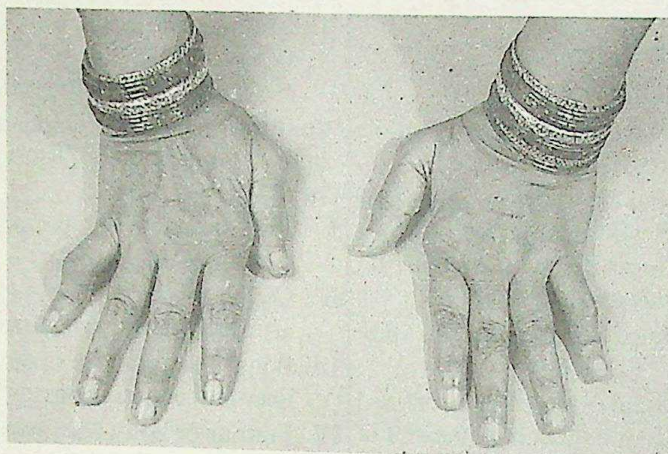
RA is infact, a systemic disorder with predominant joint involvement. The extra articular features are:

Skin: Cutaneous vasculitis, Rheumatoid nodules.

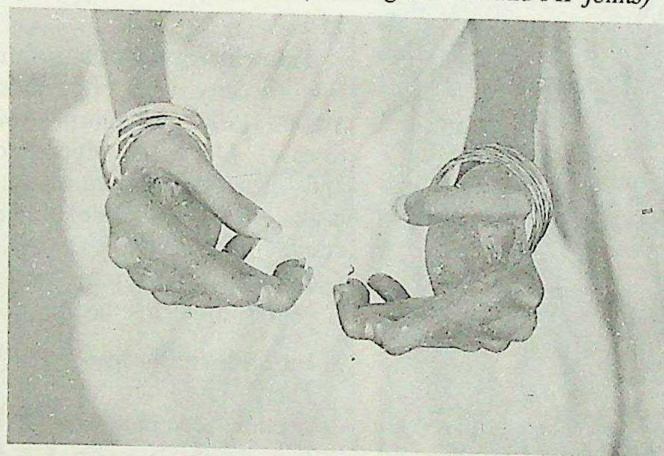
Eye: Scleritis, uveitis, retinitis, scleromalacia perforans.

Lungs: Pleuritis, diffuse interstitial fibrosis, rheumatoid nodules.

Heart: pericarditis, myocarditis, coronary arteritis, valvular insufficiency



Early arthritis of hand joints (Swelling of MCP and PIP joints)



Severe deformities of hand joints in a patient suffering from arthritis

Nervous System: Mononeuritis multiplex, distal sensory neuropathy.

Extra articular manifestations are uncommonly seen in RA in India. Subcutaneous nodules denote severe form of RA, seen in less than 5% RA. There is a general feeling that RA is less severe in our population compared to that in the Western population.

Various Syndromes Associated With RA:

- 1 Still's disease-RA associated with fever, rash, hepato splenomegaly and lymphadenopathy, comprises 20% of Juvenile RA. It may also present as Pyrexia of unknown origin (P.U.O.) in adults.
- 2 Felty's syndrome: RA with splenomegaly and hypersplenism giving rise to neutropenia and anemia

3 Caplan's syndrome: Nodules or diffuse nodular fibrotic process of lungs in a setting of pneumoconiosis.

4 Sjogren's syndrome: Dry mouth with kerato conjunctivitis sicca (KCS).

5 Carpal tunnel syndrome: Entrapment neuropathy of median nerve at wrist joint.

Complications of RA:

Untreated or even treated RA may end up with one of the following complications.

- 1 Vasculitis affecting various organs leading to that particular organ dysfunction.
- 2 Atlantoaxial dislocation when first two cervical vertebrae are involved.
- 3 Superadded infections.

4 Complications due to drug treatment.

Clinical Course and Prognosis:

The course of RA is highly variable. Most patients (70%) experience fluctuating disease activity. Approximately 15% remit without treatment and 15% may relentlessly progress even with treatment. But treatment in RA is well established and helps more than three-fourths of RA patients. Nihilistic attitude towards the treatment of arthritis should be discouraged.

Preliminary Criteria for Complete Clinical Remission in RA:

A minimum of five of the following requirements must be fulfilled for at least two consecutive months in a patient with RA.

- 1 Morning stiffness not to exceed 15 minutes.
- 2 No fatigue
- 3 No joint pain
- 4 No joint tenderness or pain on motion
- 5 No tissue swelling in joints or tendon sheaths.
- 6 Erythrocyte sedimentation rate (westergren) less than 30mm/h (females) or 20mm/h (males).

Exclusions: Clinical manifestation of active vasculitis, pericarditis, pleuritis, or myositis and/or unexplained recent weight loss or fever secondary to RA prohibit a designation of complete clinical remission.

Laboratory Findings:

Normocytic, normochromic anemia is a common feature of a chronic disease like RA. Thrombocytosis and eosinophilia correlate with the disease. Acute phase reactants like erythrocyte sedimentation rate (ESR), C-reactive protein (CRP) and ceruloplasmin have positive correlation with the disease activity.

Rheumatoid factors, the auto antibodies reactive with native IgG, belong to IgM, IgG, and IgA

immunoglobulins. IgM, RF is detected by agglutination tests (Rose Waaler test, Latex fixation test). Seropositivity seen in about 60-70% of RA patients correlates with the disease activity.

Treatment of Rheumatoid Arthritis (RA)

A patient suffering from chronic disease with acute exacerbations like RA need not be a passive sufferer and totally pessimistic, believing and expecting that there is nothing that could be done. In our country, the patient would have seen a number of doctors belonging to various systems of medicine before he approached a rheumatologist or a physician who was well versed with the treatment of arthritis.

This 'doctor shopping' is due to the fond hope of getting 'cure from arthritis'. RA, like many other forms of arthritis and many other diseases like

diabetes mellitus and hypertension is not curable, in the sense that there is no course of treatment or magic which will eliminate the disease completely.

However, the fact that there is no cure does not mean that RA patients have to suffer from the pain and dysfunction all through their lives. They require, the expert help of doctors, because of their regular need to take drugs and in order to choose the right medication in the first place.

Management of patients involves an interdisciplinary approach of physicians, orthopedic surgeons, physiotherapists, clinical psychologists and occupational therapists. Rest during acute phase of arthritis, and physiotherapy in the latter part of the disease constitute basic management. Drug therapy however, is the mainstay of RA management which can be classified as group I... Analgesics II NSAIDS III DMARDS.

Non Steroidal Anti Inflammatory Drugs (NSAIDS)

NSAIDS act by inhibiting cyclooxygenase pathway in the metabolism of arachidonic acid. By inhibiting prostaglandin synthesis, they reduce inflammatory signs. Same mechanism may explain their side effects on gastric mucosa. By local irritating action and by suppressing the protective action of prostaglandins on the mucus barrier they cause intolerance. Prolonged therapy may lead to analgesic nephropathy.

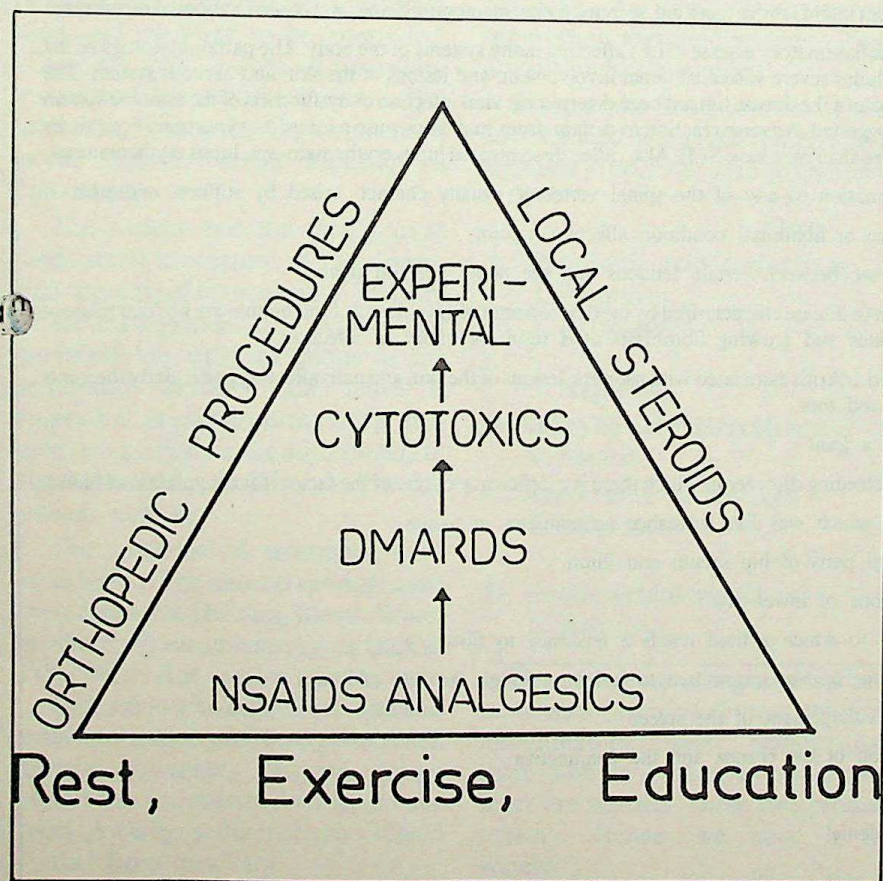
Disease Modifying Drugs (DMDS)

DMARDS are definitive drug therapy for RA. Indications for them are:

- Correct diagnosis
- Persistently active RA of greater than six months duration
- Sufficient disease to justify therapeutic risks
- Responsive disease
- Incomplete control on salicylates or NSAIDS
- Steroid dependency: more than 7.5 mgms Prednisone per day or equivalent.
- Absence of contraindications.
- Objective evaluation and goal setting.
- Informed cooperative patient
- Physician competence in treatment modality
- Careful monitoring for toxicity
- Ability to tolerate and accept slow response.

Some Indications of corticosteroids in Collagen Vascular Diseases.

- Rheumatic carditis:
 - Failing to respond to salicylates and initial acute manifestations.
- Rheumatoid Arthritis:
 - Vasculitis, Organ damage
- Systemic lupus erythematosus:
 - Organ damage eg; kidney, brain
 - Aggressive disease.
- Poly/Dermatomyositis
- Polymyalgia rheumatica/Temporal arteritis



Systemic Necrotising Vasculitis

★ Polyarteritis Nodosa

★ Wegner's Granulomatosis

Important point to be considered in the drug therapy of RA.

Response to NSAIDs and DMDs is variable from patient to patient. Any NSAID has to be used at least for 3-4 weeks to evaluate the efficacy of the drug. Two or three NSAIDs are not usually combined since side effects are addictive. Concomittant use of antidepressants is very helpful in the management of chronic diseases like RA.

The disease modifying drugs may be started early in the course of therapy and show benefit only three to five months after starting the therapy. Patient education and assurance are

beneficial in this regard. Two drugs eg; gold and chloroquine can be combined. Frequent monitoring for side effects of various drugs is necessary.

It is always better to be well versed with only a few drugs. Along with the drugs physiotherapy should be given. Local steroid injections may be considered when the inflammation is persisting in one or two joints. Systemic steroids have little role in the management of RA. Steroids should never be prescribed on a long term basis for a chronic disease like RA and they do not alter the disease process.

There is always a danger that patient may continue to take steroids without the doctor's knowledge. The side effects of steroids are well known- gastric and intestinal ulceration,

osteoporosis, salt and water retention, hypertension, hyperglycemia, cushingoid features and psychiatric disturbances.

The other cytotoxic immunosuppressive agents are cyclophosphamide and azathioprine. The experimental therapy for RA include methylprednisolone pulse therapy, total lymphoid irradiation or plasmapheresis. These agents should only be used by experienced rheumatologists.

Surgery

Goals of surgical procedures are relief of pain, correction of deformity and modest functional improvement. Synovectomy, release operations, arthroplasty and joint replacement are some of the surgical procedures described.

GLOSSARY

Synovial Fluid	: A transparent viscid lubricating fluid, secreted by the membrane lining joints called Synovial membrane.
Systemic Lupus Erythematosus	: A chronic inflammatory disease (SLE) affecting many systems of the body. The pathophysiology of the disease includes severe vasculitis, renal involvement, and lesions of the skin and nervous system. The primary cause of the disease has not been determined; viral infection or dysfunction of the immune system has been suggested. Adverse reaction to certain drugs may also cause a lupuslike syndrome. Four times more women than men have SLE. Also called disseminated lupus erythematosus, lupus erythematosus.
Spondylitis	: An inflammation of any of the spinal vertebrae usually characterised by stiffness and pain
Arthropathies	: Any disease or abnormal condition affecting a joint
Bursae	: A fibrous sac between certain tendons and the bones beneath them.
Granulomatosis	: A condition or disease characterized by the development of granulomas. Granulomas are nodular tissue of capillary buds and growing fibroblasts as a result of injury or infection.
Psoriatic Arthritis	: Rheumatoid arthritis associated with psoriatic lesions of the skin and nails affecting particularly the joints of fingers and toes.
Ankylosis	: fixation of a joint
Hemophilia	: hereditary bleeding disorder in which there is a deficiency of one of the factors for coagulation of blood.
Amyloidosis	: Disease in which amyloid substance accumulates in tissues.
Sacroiliac	: The skeletal parts of hip sacrum and ilium
Mandibular	: The flat bone of lower jaw
Viscosity	: The extent to which a fluid resists a tendency to flow
Boutonneire	: An infectious disease transmitted to human through the bite of a tick
Splenomegaly	: Abnormal enlargement of the spleen
Kerato Conjunctivitis	: Inflammation of the cornea and the conjunctiva
Sicca	: dry
Nihilistic	: Complete denial

Rheumatoid arthritis is a painful condition involving many joints, particularly those of the hands and feet. The joints are swollen, stiff and painful, with limitation of movement. The slightest movement of the limbs causes the patient to cry out with pain. Sleep is disturbed. Patients continue to lie in the same position as that in which they went to bed. Many other parts and organs of the body are involved. Hence, some people call it Rheumatoid Disease. There may be nodules in the skin. The blood vessels may be affected. The eyes, heart and lungs and their coverings and other tissues and organs may be affected.

We do not yet know fully how rheumatoid disease is caused though some advances have been made in recent times. We know that there is involvement of the immune system causing inflammation.

What are the aims of modern management of the disease? Inflammation and pain are to be controlled. There are many individual variations: extent and degree of the disease as also domestic, economic, employment and social factors. Patient education is important.

The patient and the family must understand the nature of the disease and the aims of management. The aim of the management is to achieve and maintain the daily functions to the maximum extent. Pain relief is important as also ensuring sleep. It is also necessary to make adjustments in life-style and for the family to provide patient support.

The methods of treatment have been legion. The mineral springs (saps) were frequented by the patients. Water treatment (hydrotherapy) goes back to 200 BC. Hot spring water was considered to give relief. Hot sand and mud application produced some relief. Careful massage, purging (inner cleanliness) and special diets have been tried. Arthritis sufferers have suffered further from quackery.

Rheumatoid Arthritis and Rational Drug Therapy

Dr C.M. Francis

The non-steroidal anti-inflammatory drugs are very useful. They also give pain relief. We have to choose wisely. All of them have side-effects; most common are gastro-intestinal disturbances, such as dyspepsia and peptic ulceration. Certain drugs produce complications. Phenylbutazone can cause bone marrow suppression and fluid retention. Such drugs should be avoided.

Some of the drugs commonly used and included in the CMAI-CHAI joint formulary (pp.75-81) are given below.

The aim of management of Rheumatoid arthritis

1. Control inflammation; relieve pain
2. Maintain daily functions maximally
3. Specific treatment to control the disease.

There are different regimes possible, based on the responses and side-effects. The following guidelines may be useful:

1. Select an appropriate drug. It may be good to start with a propionic acid derivative, say, ibuprofen.

Drug	Dose	Time per day
A. Propionic acid derivatives		
1. Ibuprofen	400mg	4
2. Ketoprofen	100mg (slow release)	1-2
3. Naproxen	250mg	2
B. Salicylic acid derivatives		
4. Aspirin	600mg	6
C. Acetic acid derivatives		
5. Indomethacin	50mg (slow release)	3
D. Enolic acid derivatives		
6. Piroxicam	20mg	1

The commonest drug used has been salicylates (aspirin). To get the anti-inflammatory effects, higher doses than those used for relief of pain and fever are needed. These can produce toxicity. Hence, we have to be watchful.

2. Prescribe only one drug at a time. There is no evidence of synergism or reduced toxicity with a combination of drugs. However, we may give one drug at one time (say, daytime) and another at another time (night)

3. If relief is not sufficient, add another drug, say, indomethacin at night.
4. If the expected relief is still not obtained, change to another drug, say aspirin, with or without indomethacin at night.
5. Always prescribe an adequate dose. Many of the combinations, formulations do not have adequate dose of each and there is no synergism.
6. Avoid overprescribing. Unnecessarily large doses do not give greater relief. At the same time, it may lead to toxicity. The beneficial range is often limited.
7. Prescribe for a limited time. Observe the effects. If intolerance is seen, discontinue the drug and try another.
8. Use newer non-steroidal anti-inflammatory drugs cautiously. Side-effects are not less. They are more expensive.

To reduce gastro-intestinal disturbances, advice must be given to the patient:

1. Avoid smoking
2. Avoid alcohol
3. Have proper meals at proper times.
4. Take the drug along with the food or following it.

Corticosteroids are sometimes used. They may provide immediate dramatic effects. However, they produce numerous complications from prolonged use. They may be given systemically or injected locally into the affected joint. The latter is relatively safer and more effective.

Non-steroidal anti-inflammatory drugs do not provide specific therapy. Certain slow acting antirheumatic drugs are used to control the disease and to induce remission. Among them, the best known are gold salts given intramuscularly. Oral preparations are also available. D-Penicillamine can give improvement in about 70% of the patients. Other useful drugs are chloroquine (the antimalarial drug), methotrexate and azathioprine. Many

other drugs have also been tried; their beneficial effects have not been fully established. All these drugs have considerable toxic reactions and major side-effects.

An important problem in drug therapy in the elderly rheumatoid arthritis patients is lack of compliance. The patients are often confused and lack concentration. They have other illnesses for which they may be taking medicines. It is necessary to reduce the number of drugs, so that the patients will take the essential drugs.

Repetition of instructions and written directions are useful.

In addition to drug therapy, rest and exercise should be given judiciously. Periodical rest is very useful. Physical and occupational therapy, recreation and vocational rehabilitation have some role to play but can have special problems in the elderly. Swimming and whirlpool baths are beneficial. Consideration of the occupation is important. Surgical treatment including replacement of the joint may be useful in selected patients.

Target Women

More and more women are now being afflicted by heart diseases — hitherto exclusively a male domain.

If you are a woman over 40, and if you smoke and or work under stress and/or have been on the Pill, there is every chance that you will fall prey to a heart attack or a related ailment. Recent findings in India and the West reveals that heart diseases in women have taken a front seat.

During the last 10 years Dr R K Goyal, an eminent cardiologist and Dean of Bombay Hospital has studied 5000 cases at the J.J. Hospital. These patients are from the economically weaker sections of society but findings show that under 40 years of age, the out of five patients being treated for cardiovascular problems was a woman.

At this age, the male-afflicted are predominant. But the incidence of coronary disease increased once the women crossed menopause and the ratio now registered is 1:2 "We have not been able to pinpoint the causes in this section," says Dr Goyal.

Furthermore, the mortality rate in the under-40 age group for women in India is a staggering high of 30 per cent

as against the 15 per cent males. Yet the incidence of heart ailment in India is lower than in the West.

However, in the upper middle class and affluent sections, "the incidence of heart ailments can be attributed to the fact that women today are more and more involved with their jobs/careers. This involvement brings on stress conditions," adds Dr Goyal.

"Other than stress, the factors largely responsible for bringing on heart ailments in women are the use of contraceptive pills and smoking," Dr Goyal continues. "The liberation of the Indian woman in the last decade or two has seen more women taking to lady nicotine. Also, the need for family planning to not start a family immediately after marriage — out of economic necessity — has resulted in women resorting to contraceptives and the most widely used is the Pill.

However, for those women under 40, the risk of a heart attack or related ailment is greatly diminished. This is because the estrogen produced in the woman's body acts as a preventive against the arteries hardening. But when the estrogen production ceases, there is nothing to stop the arteries from hardening.

Rheumatism is not a single entity. Anyone may have aches and pains. Some of them are more persistent than others. A strained muscle or a strained ankle hurts for a few weeks. Some joints, muscles and other parts hurt from time to time over the years without being subjected to injuries. These aches and pains that develop spontaneously and last, even if not continuously, for a long time on and off, are grouped together as Rheumatism.

The word itself comes from the Greek word for "flowing". It refers to the thick fluid that occasionally forms in the affected joints in Rheumatism. The history of rheumatism is littered with theories about its cause, theories that are believed, argued and doubted. Thus the word Rheumatism, was at first used to mean aches and pains in general. Over the years, it has been found useful to divide rheumatism into two main groups:

- 1) those affecting joints (articular) commonly known as arthritis and
- 2) those affecting soft tissues (non-articular) called soft tissue or muscular rheumatism

The term "soft tissue (non-articular) rheumatism" describes a multitude of painful conditions affecting the muscles and soft tissues outside the joints. All are characterised by a self limiting inflammation in the soft tissues, be they muscles, ligaments or tendons. Many of them are well recognised and have definite anatomical basis. Their incidence and chronicity increase with age.

Fibrositis

Some less specific aches and pains defy accurate anatomical diagnosis. There is pain, sometimes sharp, sometimes dull, chiefly in the neck, shoulders and back. These are sometimes accompanied by tender, palpable lumps or nodules. These may act as "trigger points" which bring on the pain whenever touched. The term "Fibrositis" is usually reserved for

Rheumatism

Dr B. M. Parthasarathy MNAMS
Orthopaedic Surgeon

these lesions despite the fact that there is no evidence of fibrous tissue inflammation. They usually respond to heat, soft tissue massage and local anaesthetic injection. Mild non-steroidal inflammatory drugs may be used to good effect.

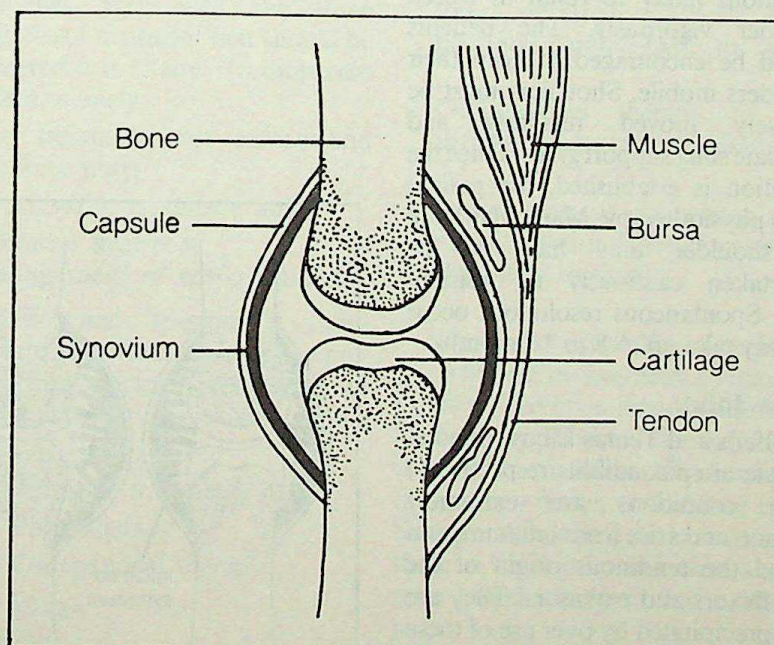
The separation of these conditions from "psychogenic rheumatism" is often extremely difficult. Failure to respond to *adequate treatment* in a clinical context of anxiety or depression should raise the suspicion that the patient is suffering from *psychogenic rheumatism*.

The more easily identified conditions tend to occur around joints. Some common ones in relation to the

joints *around which* they occur, are mentioned below.

Shoulder: The shoulder joint is particularly vulnerable to soft tissue lesions, probably because the joint has many planes of movement and relies for its stability solely on the surrounding cuff of muscles and tendons, any one of which can be easily damaged.

a) Supraspinatus tendinitis is a very common problem. Patient complains of pain over the point of the shoulder. Pain is made worse on abduction (outward movement). Often the patient develops an arc of pain when the shoulder is abducted and adducted. Occasionally it may develop into a



normal joint

chronic recurrent problem with deposits of calcium rhydroxyapatite within the tendon — *Calcific tendinitis*.

b) Frozen Shoulder:

An injury in and around the shoulder joint can result in a secondary loss of movement at the joint — the so called “frozen shoulder”. The exact pathology is not known, but probably the capsule of the joint becomes inflamed resulting in the formation of fibrous adhesions within it. *Adhesive capsulitis* is another more explicit term for this condition. Any of the muscular lesions around the shoulder can cause a secondary frozen shoulder. It may also have an association with conditions which are away from the joint itself, such as myocardial infarction, pleurisy. Referred pain pathways are the causes of the frozen shoulder in these conditions.

The patient complains of an inability to move the shoulder and often of a nagging pain. Examination reveals loss of movement and rotations and very painful.

Prevention is the best form of treatment. This means treating all conditions likely to result in frozen shoulder vigorously. The patients should be encouraged to keep their shoulders mobile. Shoulders must be passively moved regularly and adequate sling support given. Once the condition is established, the patient needs physiotherapy. Manipulation of the shoulder may have to be undertaken cautiously in resistant cases. Spontaneous resolutions occur but may take up to 8 to 10 months.

Elbow Joint:

Golfer's and Tennis Elbow (medial and lateral epicondylitis respectively) These conditions are extremely common and arise from inflammation around the tendinous origin of the wrist flexors and extensors. They are often precipitated by over use of these muscles and severe pain as experienced over the bony prominences

on the inner and outer aspects of the elbows.

Pain can be made worse on resisted extension (in tennis elbow) and flexors (in golfer's elbow) of the wrist. Treatment is by injection of local anaesthetic and steroid which, in many cases is curative. Recurrences are common. Other forms of treatment such as ultrasound massage and heat can give relief.

Wrist joint:

Ganglia: These are usually small, cystic swellings found in association with joint capsules and tendons. They are common around the wrist usually found over the back of the wrist and hand. They are filled with hyaluronic acid. They are contiguous with joint capsule or tender sheath. They may disappear spontaneously. Surgical removal is recommended if they are painful.

Ankle joint and foot

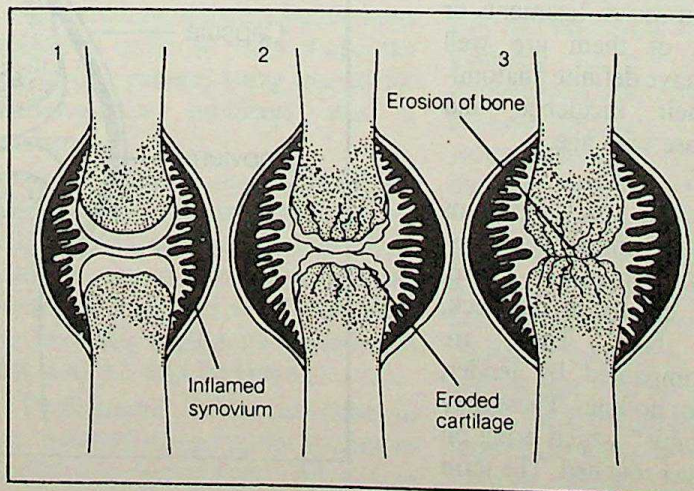
Achilles Tendinitis: Inflammation around the Achilles tendon and at its

attachment to the back of the heel, is quite common. Pain may be severe disabling and causing the patient to limp. Pain extends from the heel up to the calf. Rest, heat, anti-inflammatory drugs may be used as a first line of treatment, but rapid resolution is achieved by infiltration of steroid and local anaesthetic around the tendon. Advice about modifying shoes and wearing of protective pad is helpful.

Plantar fasciitis: The plantar fascia stretches from the heel across the sole of the foot. It becomes inflamed as a result of mechanical stresses. Pain is maximal over the inferior border of heel and is increased as the heel strikes the ground during walking. Hence the patient tends to walk on his toes. Treatment is similar to that described for Achilles tendinitis. Shock absorbing heel pads and insoles and modification of footwear help reduce symptoms and prevent recurrences.

II Rheumatism in joints (Arthritis)

This is dealt with in the other pages of this issue of Health Action.



Changes in a joint caused by

arthritis. (1) Swollen joint and inflamed synovium. (2) Erosion of cartilage. (3) Loss of cartilage and erosion of bone

Arthritis means inflammation of joint. The joints become red, warm, and swollen. There is pain on movement of the affected joints. It is a very common affliction all over the world. There are many different types of arthritis.

Osteo-arthritis is the commonest joint disease. It is progressive. It is usually primary but many develop secondary to any joint disease. Over 50 names exist for this disease of which osteo-arthritis, osteo-arthritis and degenerative joint disease are the most common. There is destruction of joint cartilage with formation of osteophytes. Weight bearing joints are particularly involved.

Primary osteo-arthritis probably results from an imbalance between cartilage synthesis and degradation. The forces exerted on a joint by motion and weight bearing are dissipated by joint cartilage, sub-chondral bone and surrounding structures, namely joint capsule and muscles. Some of the known disorders causing secondary osteo-arthritis include injury (acute and chronic), bleeding dyscrasias, neuropathic joint diseases, alkaptonuria and chondrocalcinosis.

Symptomatic patients are usually over the age of 40. The disease is three times more common in women than in men. Symptoms include pain on movement, worse at the end of the day, back-ground pain at rest, morning stiffness and stiffness after inactivity and joint instability.

Common joints involved include distal inter-phalangeal joints, first metatarso-phalangeal joint in the foot, cervical and lumbar spine, next the hip and then the knee joints. Older women tend to have smaller joints involvements and men tend to have more of hip involvement (perhaps related to occupational factors)

Examination of the joints reveals joint tenderness, derangement, poor range of movement, fluid accumula-

Osteo-Arthritis

Dr Geetha K. Subramanyam MD

tion (effusions), crepitus and "knobby" swelling at the most distal joints of fingers. Radiological findings include loss of joint space, Sub-chondral sclerosis and cysts, marginal osteophytes, sub-luxation and deformity in advanced disease and absence of ankylosis.

Other laboratory findings are essentially normal. Arthroscopy may be of diagnostic value in patients with mechanical derangement associated with osteo-arthritis. It is also of therapeutic value in removing loose bodies within the joint.

The management of osteo-arthritis exemplifies very well the three categories of treatment that should be considered in any orthopaedic problem, namely,

- a) no treatment, but advice and reassurance only;
- b) conservative treatment; and
- c) operative treatment

Management of osteo-arthritis

- 1 Advise and reassurance, with weight reduction, correction of predisposing factors, restriction of wear and tear of the joint
If it does not succeed,
- 2 Conservative treatment
 - i) Physiotherapy
 - ii) Occupational therapy
 - iii) Drugs
 If it fails,
- 3 Surgery.

In many patients, active treatment is not required. Reassurance combined with weight reduction, correction of predisposing factors and restricting the wear and tear of the affected joint is all that is required. When more active treatment is called for, conservative measures should be tried first.

- 1 Physiotherapy helps to relieve pain and stiffness, maintain and recover joint mobility and strengthen the supporting muscles. The various measures are therapeutic exercises and local heat therapy with the help of short-wave diathermy, ultrasonics, infra-red, hot-packs, whirlpool and paraffin-bath (for hands).
- 2 Occupational therapy to help patients to adapt to their disabilities.
- 3 Drugs such as salicylates, non-steroidal anti-inflammatory drugs if absolutely essential.

When severe disability is unrelieved by conservative treatment, operation is justified. The operations available are arthroplasty (construction of a new joint) and arthrodesis (elimination of the joint by fusion of the bone ends). Surgery should not be considered if there is local joint infection and/or poor blood supply to that particular joint.

(Christiaan Barnard, the doctor who created history with the world's first heart transplant is an arthritic. 'HINTS, TIPS AND A LITTLE HELP FROM MY FRIENDS...' is from his book *The Arthritis Handbook* — Ed.)

Hints and tips for sufferers of Arthritis

To have arthritis (I am not the first to make this comparison) is like being in a perpetual state of war, sometimes under direct attack, sometimes enjoying a brief truce, most often engaged in various skirmishes with the enemy. In war it pays to subscribe to the Boy Scout motto 'Be prepared'. As an arthritic, I have sat down calmly, in the operations room of my mind if you like, and analysed my strengths, weaknesses, ambitions and limitations. This has meant carrying out a mental stocktaking of my total lifestyle: at work, at home and at leisure. It has meant assessing the enemy and when he is likely to strike. At what time of day and in what kind of circumstance do I seem least protected?

I have always been motivated by a desire to improve the quality of life. It has always seemed to me preferable to try an experimental procedure such as heart transplant surgery than to watch another human being's existence rapidly ebb away in misery and despair.

The operation can fail, or the post-op procedures of suppressing rejection can be unsuccessful. But at least one is doing something positive, not just waiting for the inevitable. Fatalism has no place in medicine.

I have carried this professional philosophy over into my life as a patient. In fact 'patient' is not really a good term to describe me. I tend to be highly impatient with the restrictions that my RA has increasingly imposed on me, and reacted to them by counter-offensive measures.

In the home, where one can, to a great extent, control the environment, I see no reason why everything should not be geared to my needs. An obvious

but often overlooked example to this is the electrical supply to lights and power sockets. Why make it a fumbling nuisance to flick tiny switches or stoop to plug in a television when bathroom style pull-cords and waist-level points can easily be installed? Why not replace ungraspable slimy doorknobs with lever-type handles, or have a simple handrail fitted on stairs or in the bathroom where you know your hips or knees always give you trouble?

The help available in the form of aids and gadgets is almost too extensive to catalogue, ranging as it does from major items such as automatic stair climbers — necessitating structural modification to the home — to simple adaptations of existing objects such as tooth brushes or keys using materials readily available at minimum cost (or even free). The use made of the full range of devices will depend on: the amount of help needed (never use a gadget that gives too much help); the money available; the extent of free or subsidized equipment available in your locality; how good you or someone close to you is at making things; inventiveness.

One rule, however, needs to be observed, especially with aids for the arthritic: consult the doctor about using particular aids. He may feel it would be better to exercise a limb than to adjust to infirmity by leaning on the benefits offered by a gadget, however ingenious.

I am not suggesting that you get yourself into debt by having an electric lift installed, or that you should turn your house or apartment into a set from *The Mad Inventor's Paradise*. But think sensibly about your everyday habits and design your domestic milieu to suit you. Do not make a virtue out of labouring on in an alien, ill-fitting environment just because you do not want to admit to yourself that you have special needs. Everyone has special needs of one sort or another. Yours just happen to be those of the arthritic.

Here are some useful hints about how to cope with everyday activities inside and outside the home.

TRICK MOVEMENTS

One of the most difficult areas in the house can be the bathroom or lavatory. Apart from having special items of equipment installed, such as steps to help you in and out of the bath, you may be able to follow my example and develop your own coping techniques. One in particular came to me from an unexpected quarter.

Some years ago, my daughter Deirdre showed great promise in water-skiing; she ended up representing her country overseas when she was twelve years old. Later, she came third in the world in Australia and won the Australian water-skiing championship for women three times. I was training her and I remember that, often when pushing the boat out in the water, I was totally hampered by the pains in my

hands. After a while they got so bad that either I had to find a way to push the boat with less pain or my boat pushing days were numbered. So I began to move my arms and shoulders in slightly different ways, experimenting with movement, you might say.

Because of my tremendous ambition and drive, the pains never really prevented me from doing what I wanted: I learned to compensate by making different movements and using different muscles. For example, having very bad arthritis in both wrist joints, I find it very difficult to bath because I cannot push on my hands to push myself up or let myself down. Therefore, I use my elbows to get in and out of the bath.

There are other limitations imposed by severe arthritis in both wrist joints. I have to avoid any movement which requires me to push myself up with my hands, using my wrists; because my elbows and my shoulder joints are not affected, I use them to get from a sitting or lying position into a standing position.

Anybody with a physical disability of some kind uses what we call 'trick movements'. A very good example of this was my wife Barbara, who as a result of the severe accident we sustained together developed an injury to the brachial nerve plexus. This caused partial paralysis of the right shoulder which meant she couldn't put her left hand behind her head when she did her hair. She now uses the other hand to bring the paralysed hand into position, but the movement is done so unobtrusively that it is scarcely noticeable.

There are several examples of trick movements which involve the use of a part of the body that has not been damaged or is not in pain. I have one such trick in the morning when I shave. When I developed a pain in my shoulder joints, especially in my right shoulder joint, it was very painful to bring the razor up to my chin, so I

simply transferred the razor to my left hand.

SITTING, AT TABLE OR IN AN EASY CHAIR

Look for a chair which is comfortable while giving full support to the back, perhaps with arm rests. If your knees are stiff, do not have it too low or you may have trouble unbending to get up. There are specially made chairs available which will help to raise you from a sitting to an upright position by means of a mechanical device. If you regularly sit at a table to write or type, fit it with good quality castors so that you can swing it away from you easily when getting up.

THE KITCHEN

The kitchen can be a source of considerable trouble. Ovens never seem to be at the right height, and there is a lot of stooping and stretching to do. Why not have one continuous work surface alongside the oven so that heavy pots and casseroles can be slid, instead of lifted? As a surgeon, accustomed to using long-handled hospital tongs, I should reckon that these could be a blessing for the person with the typical arthritic hand and fingers. Why not have a tap-turner fitted to your existing plumbing ware? As for height, many appliances such as fridges can be fitted at eye level, often releasing valuable floor space in an otherwise crowded room.

Knobs on ovens and cookers can be cheaply modified to suit the arthritic hand. I have also seen some ingenious inventions such as a tea or coffee pourer — a false-top hinged platform on which the pot rests — that obviates the need for lifting.

MOBILITY AIDS

The most commonly used aid to getting about is of course the walking stick. But how about going upstairs? One idea is to attach a wrist strap to the stick so that it hangs down while the climber pulls him/herself up by the bannister. Another is a home-made

walking stick and half-step arrangement for steps that are very deep. The half-step is a wooden box, to which the walking stick is attached. The climber lifts up the box at each step.

RECREATION AIDS

A book rest is an obvious requirement for the reader, as is a page turner consisting of a rubber finger stall slipped on the end of a suitably cut stick. Large-print books and magnifying glasses (on stands) are also available. But the list of leisure aids goes considerably beyond these. Here is a selection, all home-made:

pen or pencil holder — a plastic lightweight golfball (which, of course, is full of holes; push the pen or pencil through them so you can grip properly)

typing aid — fit rubber-ends pencils into two short lengths of broomstick; ideal for fingers that aren't as flexible as they were

telephone dialer — a small walking-stick-shaped piece of Perspex tubing (bend by dipping in boiling water) fits into the number holes very easily

page turner — try small plastic clothes pegs or paperclips to separate the pages

playing-card holder — a nylon scrubbing brush does it very well, or you can saw diagonal slots in a block of wood

needle stand — for threading, stick the needle into a broad cork bung

darning stand — a wooden darning mushroom can easily be fitted on to a G-shaped clamp to hold it firm on a table

pipe-holder — for the person who cannot raise his arms, the pipe can be held at mouth level in a spring clip such as a Terry clip fixed to the end of a broomstick on a suitable base.

THE BEDROOM

An important room in the house which I have not yet mentioned is the bedroom, ostensibly a place of rest and

tranquility, but in reality for many arthritis sufferers an area of discomfort and dismay. Good sleep is essential to us all, with or without joint problems, whether we need a modest five hours per night or a regular eight or nine.

Bed manufacturers often make great capital out of the fact that we spend so much of our lives in bed, and with justification. But whereas the non-arthritic can afford to some extent to turn a deaf ear to their attentions, I have found it important to choose my bed carefully. I need good support for the body from the mattress, and I like a low-slung bed so that I can swing out easily in the morning.

CLOTHES

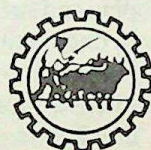
You can make life less stressful for yourself by wearing clothes that are

loose-fitting, comfortable and easy to slip on and off, fasten and unfasten. Zips beat buttons, and Velcro-type fasteners can be much more convenient than press-studs. Avoid any clothing, including footwear, that directly aggravates your arthritis. It is not necessary to endure pain in a masochistic route to high fashion. For a woman with arthritic feet, to squeeze them into high heels is understandable but wrongheaded. If you can put a good-looking outfit together that involves stiletto heels, you can surely do the same with something less detrimental to the health of your joints!

DRIVING

One everyday activity which every arthritis sufferer soon learns to

consider carefully is driving. Here you have to make sure that you can get in and out of the door reasonably easily — from the passenger as well as driver's side, if there is heavy traffic on the street. You also need well-positioned controls such as gear lever and steering wheel, and a driving-seat position which enables you to keep your knee joint in a fairly shallow angle. Good hip and back support is vital, especially for longer journeys. An automatic gearbox and power steering, if you can afford them, will ease the driving burden.



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General Advice

Try not to get over tired — when you sit down put your legs up with legs fully supported. If you do get very tired, an hour's rest after lunch may be helpful — use this time to rest your joints in a good position, eg. lie down flat with your arms and legs stretched out and one pillow under your head (not the shoulders), or lie on your front if you can.

Never place pillows under the knees as this could cause the knees to become permanently bent.

A firm mattress is desirable if possible. Some people find it easier to lie from a higher bed — blocks can be used to increase the height of the bed.

Choose a chair with a high back which supports your head, and has arm rests. The seat should be high enough to allow you to stand up easily.

If your doctor suggests splints, insoles, or a collar, you should wear them, they are to protect your joints, but check with your doctor or health worker if they are uncomfortable.

Exercises

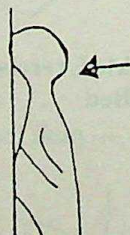
The exercise should be done once daily, preferably in the morning to overcome morning stiffness and to keep muscles strong.

Each exercise should be repeated 5–10 times.

Neck and Jaw Exercises

Position — either sit with your head against the wall, the back of a high chair or lay on the floor without a pillow.

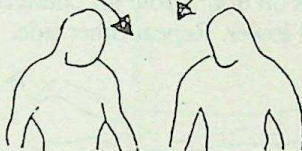
- 1 Press head against support keeping chin in.



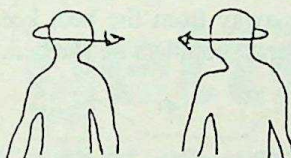
- 2 Bend head to side, keep your shoulders down, left ear towards

Daily Exercise Programme for People with Rheumatoid Arthritis

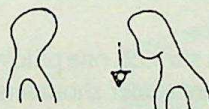
- shoulder and then right ear towards shoulder.



- 3 Turn head slowly to look over right shoulder, then left shoulder.



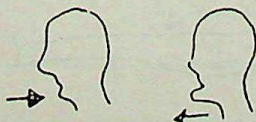
- 4 Drop head gently forwards, and then lift slowly, looking up.



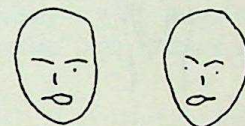
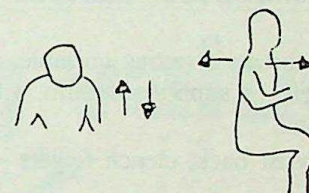
- 5 Open mouth wide then close.



- 6 Move your jaw backwards and forwards.

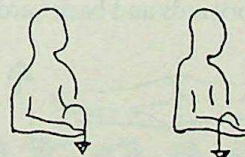


- 7 Move your jaw from side to side.

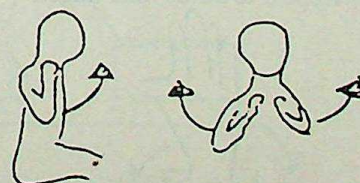
**Shoulder and Elbow Exercises — Sitting**

- 1 Shrug shoulders up to ears, lower slowly. Pull shoulders forward and backwards.

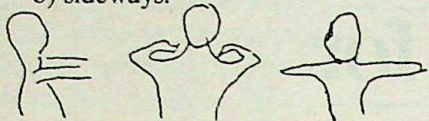
- 2 Bend elbows, straighten them out.



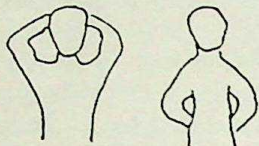
- 3 Elbows tucked into sides, trun palms upwards and then downwards.



- 4 Touch shoulders with fingertips, lift elbows up and down; a) forwards b) sideways.



- 5 Touch shoulders with fingertips stretch out; a) forwards b) sideways.



- 6 Put hands behind head and then behind back.

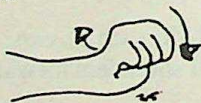


- 7 Put hands together, stretch up above head.

Wrist and Hand Exercises — Sitting

With forearms resting on table, or chair arm, or support forearm with other hand.

- 1 Lift wrist back, clench fingers — relax.



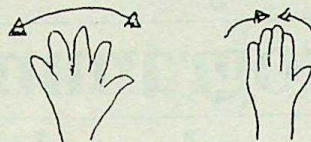
- 2 Little finger resting on table bend wrist forwards and backwards.



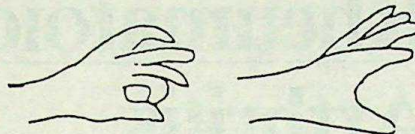
- 3 Turn hand towards thumb from wrist, return to central position. Repeat towards little finger.



- 4 Straighten fingers and thumb, spread them apart — close.



- 5 Touch each finger in turn with thumb Squeeze together-stretch.

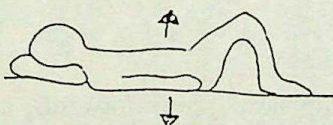


Hip and Back Exercises

- 1 Lie on front — arms by your sides. Raise leg keeping knee straight and hips on floor. Hold for count of ten and lower. Repeat other side.

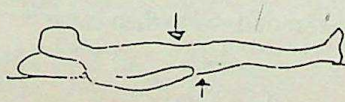


- 2 Lie on back — knees bent up arch back away from the bed, keeping hips and shoulders on the bed.

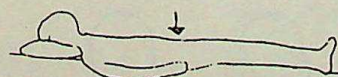


Hip and Knee Exercises — Lying Your Back

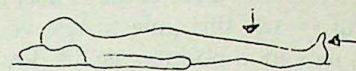
On a firm surface, one pillow under head only, not under shoulders.



- 1 Tighten lower stomach and bottom muscles, hold for the count of 15 — relax.



- 2 Tighten abdominals and press lower back against floor, hold for count of 10 — relax.

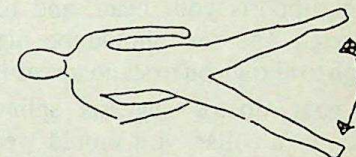


- 3 Pull up feet, tighten high muscles hard to brace knees, hold for count of 15 — relax.

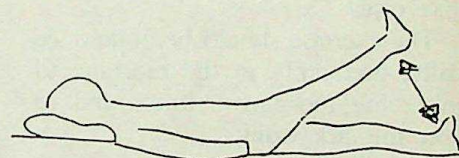
- 4 As above: this time with a rolled up towel under the knee.

- 5 Bend each hip and knee to chest in turn — straighten.

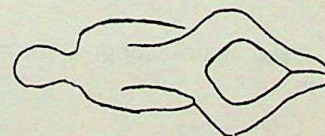
- 6 Stretch legs as far apart as possible — close.



- 7 Straight leg raising, hold knee stiff as in No. 2 Lift and lower slowly.

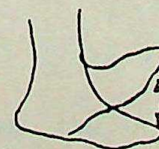


- 8 Bend knees, feet together flat on floor, let knees fall out to side as far as possible slowly bring your knees together.

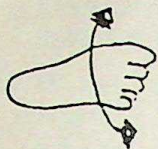


Foot and Ankle Exercise — Sitting or Lying on Bed

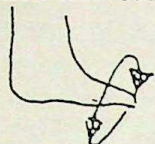
- 1 Pull feet up — push feet down.



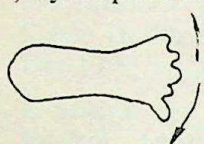
2 Turn feet in/out.



3 Circle feet round.



4 a) bend toes up/down.
b) try to spread toes.



Standing — using back of chair for support

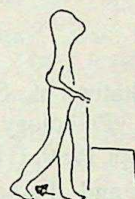
1 Press down toes and shorten foot by pulling up the arch on the inside of the foot.

2 Raise heels to stand on toes and lower slowly.



Hip Exercise — Standing

1 Lift each leg straight out backwards. Repeat with other leg.
2 Stand sideways to chair — swing leg forwards and backwards.



Points to Remember

- 1 Always try to maintain a straight posture in sitting and standing. Keep your head up and shoulders back. Do not stoop.
- 2 When resting try and lie down flat, preferably face down, in order to straighten out your joints.
- 3 If possible, choose a firm mattress to support the spine when sleeping and use only one pillow under your head, not under your shoulders, to keep the back and neck straight. Try to sit in a chair that provides good back and neck support so that the spine is not in a curved position.
- 4 If morning stiffness is a problem, bathing in warm water may help to "loosen" you up more quickly.

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- 2 How to Achieve Health For All, by Pankaj J Vasan: *Nursing Journal of India*, Dec. 1990 P 387 and 389.
- 3 Critical Reflection on the Strategy of Health For All by 2000 AD, by Anant R S Phadke, *Medico Friend Circle (Background Papers for Annual Meet)* P 1-6
- 4 Prescription without Diagnosis: report of Commission on Health Research Development, by Debarbar Bannerjee, *Eco & Pol Weekly* Dec. 29th, 1990 P 2823-2825
- 5 Immunization against Rabies, by S N Madusudana & Others, *The National Medical Journal of India*, Nov-Dec 1990, P 276-279
- 6 Breast Cancer — A Puzzling Plague, *Time*: Jan 14, 1990 P 36-43.
- 7 Challenge of Hypertension; Magnitude and Strategies For Management by H S Wasie, *Indian Journal of Clinical Practice*, Dec 1990, P 23-24
- 8 Cataract, *Herald of health*, Jan 1991 P 11-12
- 9 Review of Research on Lymphatic Filariasis in India reveals major gaps, *TDR News*, Dec 1990, P 4-5

- 10 Current Status of Studies in Leprosy vPathology, *ICMR Bulletin*, Sept 1990, P 85-88
- 11 Pathology and Pathogenesis of Vitiligo and Clinical Correlates *ICMR Bulletin*, August 1990, P 73-77
- 12 Cures For The Common Cold, *Consumer Confrontation*, Sept-Oct 1990, P 33-35
- 13 The Other Side of AIDS, by M S Bhatia and Nirmaljit Kaur, *Nursing Journal of India*, Dec 1990, P 381-384.
- 14 AIDS — An Imported Death Sentence, by Amrit Pal S Gambhir, *Indian Journal of Clinical Practice*, Dec 1990, P 61-63.
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Book-Review

Statistics in Health And Nutrition

Editors: K Visweswara Rao, G. Radhaiah and V Narayana
1990 500 pages, 60 figures and charts,
size 23 cm x 16 cm. price Rs. 250/-

The book contains the proceedings of the National Seminar on statistics in Medicine, Health and Nutrition held in October 1988 as part of the 6th Annual Convention of the Indian Society for Medical Statistics at the National Institute of Nutrition, Hyderabad. The utility of statistics with practical applications in the fields of Health and Nutrition formed the core theme in the convention. Accordingly, the 76 papers included in

this book cover the following broad areas of interest: (i) Data base and Statistical Methodology — Issues (ii) Health, Nutrition status and Mental functions (iii) Epidemiological and Genetic studies (iv) Fertility, Mortality and Health (v) Statistical Modelling and Techniques applications (vi) Statistical Modelling — case studies and (vii) Use of computers and teaching of statistics in Medicine.

In addition, the book includes the following presentations of key note sessions: (a) How poor can help the poor by Prof. P V Sukhatme, Professor, Maharashtra Association for Cultivation of Science, Pune. (b) Levels of Nutrition — appraisal of approaches by Justice M Jaganadha

Rao Judge, A.P. High Court Hyderabad. (c) Interaction between genotype and local environment as the determinant of intelligence by Prof. P.V. Sukhatme, Professor Maharashtra Association for Cultivation of Science, Pune (d) An expert system for Medical diagnosis by Prof. H.N. Mahabala Professor, Indian Institute of Technology, Madras.

Thus the volume containing valuable articles and applications of statistics in the science of nutrition and health by noted experts and academicians is a rich source of information for researchers, professionals and administrators. Coverage is quite vast and interesting. This massive compilation is a valuable addition to every library.

1. Introduction: The nature of AIDS virus; how much is the risk.

HIV (the AIDS virus) is transmitted from one person to the other in ways very similar to that of hepatitis B, i.e. infection occurring via blood and blood products and body fluids. Sexual intercourse, sharing needles or transfusion of infected blood are the three major routes of its transmission. Fortunately the infectivity of AIDS virus is hundred fold less than that of hepatitis B; however, the consequences of HIV infection are much more serious. In general the precautions required for attending patients with AIDS and HIV infection are identical with those hepatitis B.

2. Philosophy and Principles; precautions against accidental exposure to blood and body fluids.

Remember that is HIV infection the latent period is very long. During this period the person feels and looks normal. But, he is fully capable of transmitting the infection. Therefore, in practical terms there would be patients who are carriers of HIV (WITHOUT THEM OR THEIR MEDICAL ATTENDANTS KNOWING IT.) Therefore, the following policy regarding HIV infection is to be followed:

- a) All blood, blood products, body fluids and objects contaminated with it must be regarded as infected.
- b) All accidental parental inoculation with blood must be considered dangerous and reported to the authorities as per protocol laid down (see below). Accidental exposure of these to areas with broken or unhealthy skin, wounds or cuts and splashes in the eyes or other mucous membranes (mouth, nose) must similarly be reported.
- c) All contaminated objects must be disposed off safely.

The basic principles of infection control against HIV is to avoid

National AIDS Control Programme

Infection Control Guidelines For Health Care Workers

DIRECT CONTACT WITH BLOOD AND/OR BODY FLUID OF AN HIV INFECTED PATIENT. IN PRACTICE THIS WOULD INVOLVE ROUTINE USE OF BARRIER PRECAUTIONS TO PREVENT SKIN OR MUCOUS MEMBRANE EXPOSURE WHEN CONTACT WITH BLOOD OR BODY FLUIDS OF ANY PATIENT IS ANTICIPATED.

This would involve wearing gloves for touching blood and body fluids, mucous membranes, or non-intact skin of all patients, for handling items or surfaces soiled with blood or body fluids, and for performing venipuncture and other vascular access procedures.

Double gloves must be worn for all invasive procedures. Gloves should be changed after contact with each patient. Deflector mask and protective eye-wear (like clear glass goggles) or face shields (made of stiff clear plastic stapled on the face mask) should be worn during procedures likely to generate droplets of blood or other body fluids to prevent exposure of mucous membranes of mouth, nose and eyes.

Plastic gowns or aprons should be worn during procedures that are likely to generate splashes of blood or other fluids. These procedures include: Venepuncture, dressing wounds, cleaning oral cavity, helping in toilet or

cleaning any wound or exposed area, biopsies, aspirations, putting in or removing catheters, intravenous needles or cannulas, procedures like endoscopies, bronchoscopy and surgical operations.

Hands and other skin surface should be washed immediately and thoroughly if contaminated with blood or other body fluids. Hands should also be washed immediately after gloves are removed. Health care workers with exudative lesions of weeping dermatitis should refrain from all direct patient care and from patient care equipment until their condition resolves.

Although saliva has never been implicated in HIV transmission, minimize the need for emergency, mouth-to-mouth resuscitation, mouthpieces, resuscitation bags or other ventilation devices should be available for use in areas in which the need for resuscitation is predictable.

3. PRECAUTION DURING VENE PUNCTURE

All health care workers must take special and extra precautions to prevent injuries caused by contaminated needles, scalpels and other sharp instruments during disposal of used needles and when handling sharp instruments after procedures.

It must be emphasized that the disposable needles and sharps **SHOULD NEVER BE RECAPPED.**

Recapping the needles has been the single major cause of needle-stick injuries in the world. Therefore, all such sharp contaminated articles must be immediately disposed of in a puncture-proof container with a tight lid. Prominent bold-letter (preferably printed letter) labels must be put on such containers indicating "BIOHAZARD" and "TO BE INCINERATED", "NOT TO BE TAMPERED WITH OR HANDLED".

These puncture resistant containers should be located as close as practical to the use area. Needles and other used sharps should never be purposely bent or broken by hand nor removed from disposable syringes nor otherwise manipulated by hand. Large-bore reusable instruments must be placed in a puncture-resistant container for transportation to the reprocessing area (central sterilized supply department — CSSD).

However, some CSSDs may not like blood-clot studded needles etc. to be sent there without preliminary rinsing and cleaning. Under these circumstances it may be necessary for the doctor and or nurse to rinse these needles etc. in cold soap water followed by immersing it in 70% alcohol for 30 minutes. This should be done while the face-mask, eyeshield and gloves are still on. After these reusables have been processed as above, it may be despatched to CSSD in a puncture resistant container with the type of "BIOHAZARD" label mentioned earlier.

Note:

1. Health care workers who have exudative lesions or weeping dermatitis should refrain from all direct patient care and from handling patient care equipment until the condition resolves.

All cases of needle-stick injuries or exposure to HIV infected fluid must be reported as per procedure described below.

4. COLLECTION AND TRANSPORT OF SPECIMENS

For performing venepuncture double gloves are recommended. For avoiding soiling, a piece of linen with a

layer of dressing pad (a sheet of absorbent cotton between 2 layers of gauge piece) or simply a big piece of absorbent cotton may be placed below the forearm before commencing venepuncture.

After the blood has been taken, the tourniquet is removed and needle is withdrawn. The patient is given a drug sterile cotton swab to press over the site of venepuncture. Elbow may be flexed to keep the cotton swab in place till the blood stops. If patient is unable to do it then double swab method should be used. First swab is kept over the venepuncture site and pressed with a second-cotton swab till the bleeding stops. Soiled swab may be kept on the absorbent cotton pad placed below the forearm till the next step.

Any blood spill is carefully wiped off with 70% alcohol (ordinary methylated spirits). This swab, the other swabs and the absorbent cotton along with the linen are placed in a plastic sheet which is carefully folded and disposed in a plastic garbage-disposal bag (self-sealing bags are ideal, but not available in India) labelled Dangerous Infectious Waste to be incinerated.

The blood should be carefully transferred from the syringe to the sample vials without squirting. If the vials have anticoagulants in them then a second person wearing gloves would have to help in shaking the vials for mixing the blood well with the anticoagulants.

Plastic vials with screws tops are preferred. The caps must be tightly stoppered after the blood has been transferred in them. The vials must be carefully labelled preferably before the commencement of the venepuncture by the person taking the blood sample. Then the vial is placed in a plastic bag which is either heat sealed or simply a tight knot is tied. (Self-sealing plastic bags are ideal but not available in India). The accompanying investigation form can be tied around the bag using a simple rubber band. Make sure

that "BIOLOGICAL HAZARD — INFECTED MATERIAL" label is prominently PASTED ON (i) the vial, (ii) plastic bag, (iii) the investigation form.

The samples of stool, urine, sputum, body fluids and tissue specimens should also be similarly handled. Double gloves should always be used. All precautions against accidental exposures must be followed. The vials must be properly stoppered and put in plastic bags, labelling sealing etc should be carried out with all the precautions mentioned above. After collection, the specimens of blood and other body fluids should be put in a well constructed container, sealed tightly and then transported in a water proof thick plastic bag or outer container with a cover or lid.

Ideally all the HIV infected specimens must be collected in disposable screw-capped plastic vials. This helps in the safe disposal of the contaminated vials with minimum handling.

5. The basic principles of house-keeping involving patients with HIV infection take into account the survival of HIV in the environment. Studies have shown that drying HIV causes a rapid reduction in HIV concentration. When considered in the context of environmental conditions in health care facilities these results show that there is no real need to change the currently recommended sterilization disinfection or house-keeping strategies practised in most of the good hospitals. No change in existing procedures for cleaning, disinfection or sterilizing need to be made.

5.1. CLEANING ROOMS, WALLS, FLOORS ETC.

Environmental surfaces such as walls, floors, and other surfaces are not associated with transmission of infection to patients or health-care workers. Therefore, *extra-ordinary attempts to disinfect or sterilize these environmental surfaces are not necessary.* However, cleaning and the

removal of *solid wastes should be done routinely.*

Cleaning schedules and methods vary according to the area of the hospital or institution, type of surface to be cleaned, and the amount and type of soil present. Horizontal Surfaces (e.g. bedside tables and hard-surfaced flooring) in patient-care areas are usually cleaned on a regular basis, when soiling or spills occur, and when a patient is discharged. *Cleaning of walls, blinds, and curtains is recommended only if they are visibly soiled. Disinfectant fogging is an unsatisfactory method of decontaminating air and surfaces and is not recommended.*

Disinfectant-detergent formulations can be used for cleaning environmental surfaces, but the actual physical removal of micro organisms by scrubbing is probably at least as important as any antimicrobial effect of the cleaning agent used. Therefore, cost, safety, and acceptability by housekeepers can be the main criteria for selecting any such disinfectant-detergent. The manufacturers instructions for appropriate use should be followed.

5.2 CLEANING AND DECONTAMINATING SPILLS OF BLOOD AND OTHER BODY FLUIDS.

There could be 3 levels of contamination. First are the environmental surfaces that are not actually contaminated with blood or body fluid. But the items are from the cubicle or room of an HIV infected patient. For example tables, chairs, floors, lockers, cardiac tables, stoves and benches and other such items in the room. Such items, if not soiled by blood or body fluids are not associated with transmission of HIV infection to the health care workers. Ordinary soap and water cleaning and mopping is all that is required.

The second level of contamination is light contamination. These include porous surfaces, benches, floors, walls

and other inanimate objects likely to be contaminated in the cubicles and rooms where HIV infected patients are kept but **NOT VISIBLY SOILED**. These areas are cleaned by mopping them with 0.05 per cent (500 ppm available chlorine) solution of sodium hypochlorite.

The third level of contamination is when the areas have been grossly contaminated by visible gross blood spills or body fluid spills such as vomitus. For such a situation the spill-area is covered with 2 layers of paper towels or wad of cotton. Then 0.5 per cent sodium hypochlorite (5000 ppm available chlorine) solution is poured over these towels and left there for 10 minutes. Then the blood clot (or other body fluid) is carefully wiped off the floor with the paper towels or wad of cotton. The remaining stain of blood is then removed with fresh paper towels. Then the floor (or the spill area) is finally wiped with ordinary soap and water.

All through these procedures gloves must be worn by the cleaners.

All the paper towels, soiled cotton wad etc. must be carefully discarded in the plastic bag for contaminated waste disposal.

It is to be remembered that hypochlorite solutions are corrosive for metal objects. Persons using hypochlorite must wear gloves. All areas where hypochlorite is used are well ventilated.

5.3. Contaminated Articles

Articles contaminated with blood, if disposable are discarded in infectious waste disposal plastic bag. If these are short instruments then they are discarded in the puncture-resistant containers meant for this purpose (see below). If they must be re-used then they should be placed in an impervious plastic bag labelled biological hazard-blood precautions, then sent to central sterilized supply department for sterilization and reprocessing.

If there is visible blood or body fluid

clot, then, with double gloves on, the item should be cleaned in the utility room or sluice room of the ward or OPD clinic. Then it can be soaked in 2% freshly prepared glutaraldehyde (or 1% stabilized glutaraldehyde) for 10 minutes for disinfection before despatching it to CSSD. Alternatively, after gross cleaning in water, it could be autoclaved in the ward itself if an autoclave is available in the ward) before despatching it to the CSSD.

Instruments with lenses (or similar non-autoclavable items) should be sterilized with glutaraldehyde, as described.

All the soiled disposable items are to be incinerated as per policy of the hospital for items contaminated with hepatitis B.

5.4. Laundry and Linen

Although soiled linen has been identified as a source of large numbers of certain pathogenic micro-organisms, the risk of actual disease transmission is negligible. Rather than rigid procedures and specification, hygienic and commonsense storage and processing of clean and soiled linen are recommended. Soiled linen should be handled as little as possible and with minimum agitation to prevent gross microbial contamination of the air and of persons handling the linen.

All soiled linen should be bagged at the location where it was used; it should not be sorted or rinsed in patient-care areas. Linen soiled with blood or body fluids should be placed and transported in bags that prevent leakage. If hot water is used, linen should be washed with detergent in water at least 71°C (160°F) for 25 minutes. If low-temperature 70°C (158°F) laundry cycles are used, chemicals suitable for low-temperature washing at proper concentration should be used.

5.5. Infective Waste Disposal

There is no epidemiologic evidence to suggest that most hospital waste is any more infective than residential

waste. Moreover, there is no epidemiologic evidence that hospital waste has caused disease in the community as a result of improper disposal. Therefore, identifying wastes for which special precautions are indicated is largely a matter of judgement about the relative risk of disease transmission.

The most practical approach to the management of infective waste is to identify those wastes with the potential for causing infection during handling and disposal and for which some special precautions appear prudent. Hospital wastes for which special precautions appear prudent include microbiology laboratory waste, pathology waste, and blood specimens or blood products.

While any item that has had contact with blood, exudates or secretions may be potentially infective, it is not usually considered practical or necessary to treat all such waste as infective. Infective waste, in general should either be incinerated or should be autoclaved before disposal in a sanitary landfill. Bulk blood, suctioned fluids, excretions, and secretions may be carefully poured down a drain connected to a sanitary sewer. Sanitary sewers may also be used to dispose off other infectious wastes capable of being ground and flushed into the sewer.

5.6. Dietary Service

HIV is not transmitted by eating in the same utensils or drinking in the same cup or glass and using the same cutlery. Therefore, there is no need to use disposable paper plates or disposable plastic forks, spoons etc. Patients can use the same plates, cutlery and china being used by the patients in the rest of the hospital. No separate arrangement is necessary for HIV infected patients in this regard.

Similarly all epidemiological and laboratory evidence indicates that blood-borne and sexually transmitted infections are not transmitted during the preparation or serving of food or

beverages and no instances of HIV or hepatitis B virus have ever been documented in this setting. Therefore individuals involved in the preparation or serving of food or beverages (e.g. cooks, caterers, servers, waiters) known to be infected with HIV need not be restricted from work (unless they have evidence workers also be restricted. All food service should follow recommended standards and practices of good personal hygiene and food sanitation. All food service workers should exercise care to avoid injury to hands when preparing food. Should such an injury occur, both aenesthetic and sanitary considerations would dictate that food contaminated with the blood be discarded.

5.7. Toilet Care And Sluice

Extensive epidemiological and laboratory studies have shown that common use of toilets, urinals and bath-rooms does not spread HIV infection. Therefore, HIV infected patients can use the same toilet facilities as the other patients without any danger of HIV infection to anyone. Of course patients having difficulties in maintaining standards of hygiene, such as profuse diarrhoea, fecal incontinence and altered behaviour secondary to brain involvement may need a separate toilet facility. But otherwise there is no such requirement necessary. Sluice disposal can be carried out exactly as for any other infected patient. This is because again there is no epidemiological evidence to suggest that hospital waste has ever caused disease in the community as a result of improper disposal. Therefore, sluice, bulk blood, suctioned fluid, excretions and secretions may be carefully poured down a drain connected to a sanitary sewer.

Sanitary sewers may also be used to dispose off other infectious wastes capable of being ground and flushed into the sewer. Urine pot, bed-pan, suction jars etc. can be easily cleaned by washing in running water followed

by dipping them in sodium hypochlorite solution (0.5%) for 10 minutes. Alternatively they can be autoclaved in the ward if an autoclave is available in the ward. These items can be used on all the other patients of the hospital without any danger of HIV infection to others.

6. Management And Notification Of Parenteral Of Mucous Membrane Exposures:

In each and every case of accidental needle-stick or mucous-membrane exposure to HIV infected blood, blood products or body fluids, the exposed area (hands, face, eyes, skin etc) must be washed thoroughly immediately. Blood and other body fluids must be removed and cleaned under running tap water while washing with soap. Then, the accident should be notified to the officer-in-charge or infection control nurse with complete details. A form for this should be available in the ward/OPD clinic.

Such an exposed individual is evaluated clinically and serologically for evidence of HIV infection as soon as possible after the exposure. If found seronegative the evaluation is repeated at 1, 2, 3, 6 and 12 months following the exposure to determine if transmission has occurred. Most of the seroconversions in infected persons occur 6-12 weeks after the accident. In case of seroconversion it would be prudent to start them on 500 mgs 12 hourly zidovudine for 3 months.

Percentage of the elderly (over 65 years) in the population (1985) in some selected countries

Sweden	: 16.9
United Kingdom	: 15.1
W. Germany	: 14.5
France	: 12.4
U.S.A.	: 12.0
Japan	: 10.0
China	: 5.1
India	: 4.3
Bangladesh	: 3.1

In many respects, it is fitting that this tree growing project was launched on "Independence Day" in India — August 15th — as it aims to provide independence for elderly people by providing them with an income in return for their work of growing trees in the villages of Proddatur.

Why Grow Trees?

Proddatur is a region that has suffered from droughts for many years. It is widely believed in many countries that droughts can be caused if too many trees have been cut down — this is known as "deforestation". Deforestation in Proddatur was quite a problem as many of the trees had been cut down and used for firewood or timber and the land had been over-grazed by goats. Therefore, it is a good reason to replace them by planting new trees.

As well as improving the environment by growing trees, the project also provides an income for the elderly people, and it gives a feeling of contentment as tree growing is considered an important activity. In India the saying "if You protect trees, trees will protect you" is well known.

How does the project work?

The local community, including elderly people have discussed the project and 400 elderly people have agreed to grow the trees. Two year old saplings (the term used for very young trees) have been provided free of charge by the local Forestry Department, and each elderly person (both men and women) taking part in the project has been given 10 saplings which they will grow and care for, for a total of three years.

The elderly people are receiving 60 Rupees (US\$3.5) per month for their work of growing the trees. The work involves planting the trees (the work of digging the pits to plant the trees will be done mainly by the elderly people's families for which they will be paid), and the elderly people then have to water the trees regularly (sometimes daily) and care for them.

"If You Protect Trees, Trees Will protect You"

After three years the elderly people who cared for them will receive the benefit of their produce. This is done under an arrangement which is common, at least in this part of India, so that if the trees were planted on land belonging to that elderly person or his/her family, then the produce will belong to them. If the trees were planted on common land, then a certificate will be given by the government which will allow the person who cared for the trees to benefit from their produce during his or her lifetime — a right which can be claimed by the surviving partner of a marriage.

Which Type of Trees are Being Grown?

Each person received a variety of trees, selected from the following:

Neem — Which provides a valuable fruit after 3-4 years.

Peepul — used for fodder and is also valued for the medicinal qualities of its bark.

Pungum — oil is obtained from its seeds; it has medicinal qualities and is a valuable tree as it keeps nitrogen in the soil.

Mango — provides one of the most popular fruits of the area.

Sapota — important fruit tree.

Acacia — provides fuel and gum.

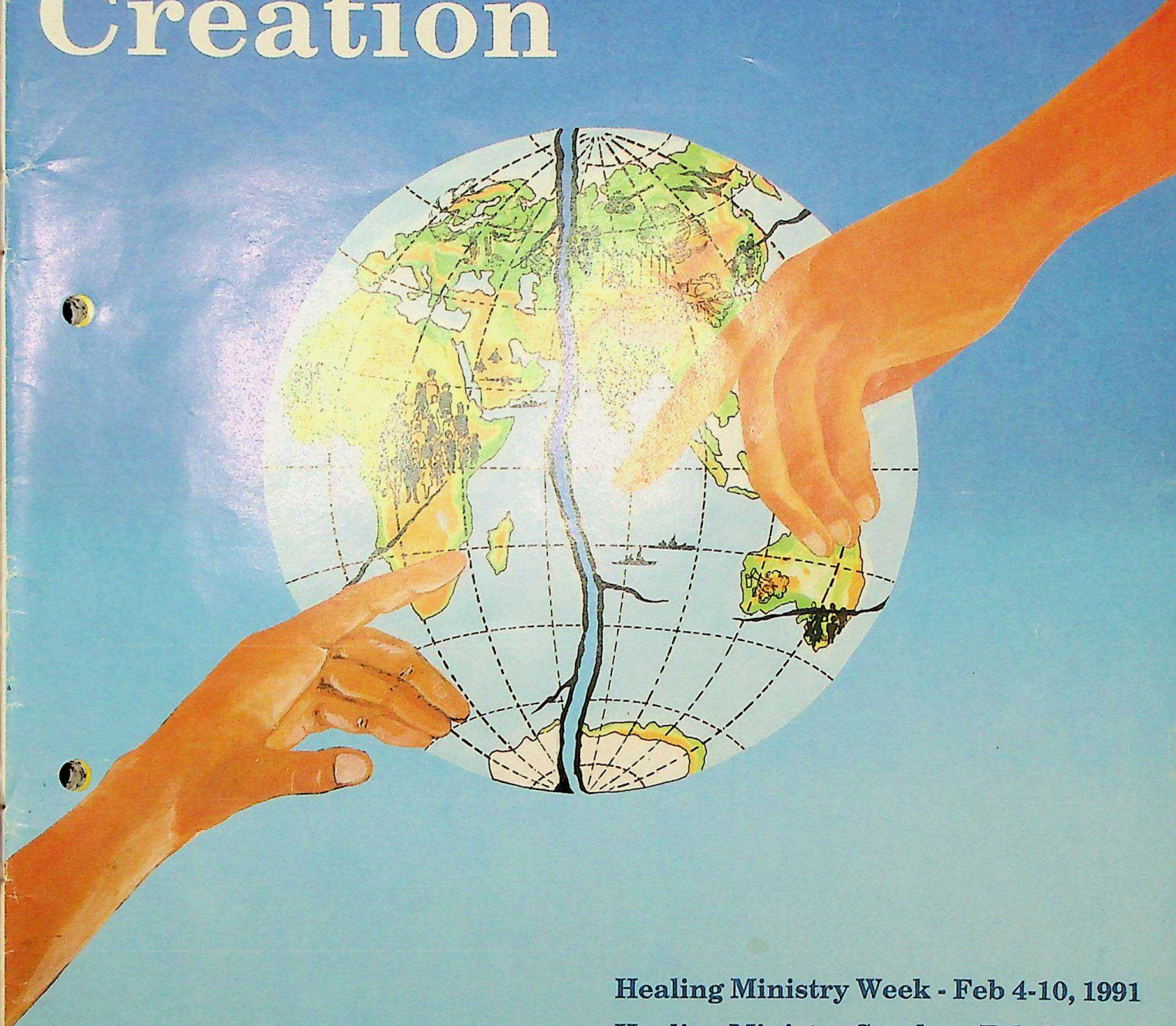
Juvvi and Ragi — provide fodder and are important shade trees.

Tamanud — its fruit is used in cooking and its branches are used for the production of charcoal.

The Results

Although the project has not been running for very long — the project can be judged to be a success. The saplings have grown well and many have started to produce fruit. The elderly villagers have enjoyed having their own trees, having their own incomes, and being useful members of the community.

The Healing of Creation



Healing Ministry Week - Feb 4-10, 1991

Healing Ministry Sunday - Feb 10, 1991

CMAI Day of Prayer - Feb 6, 1991

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