

Clinical Imperatives for Mainstreaming HARP



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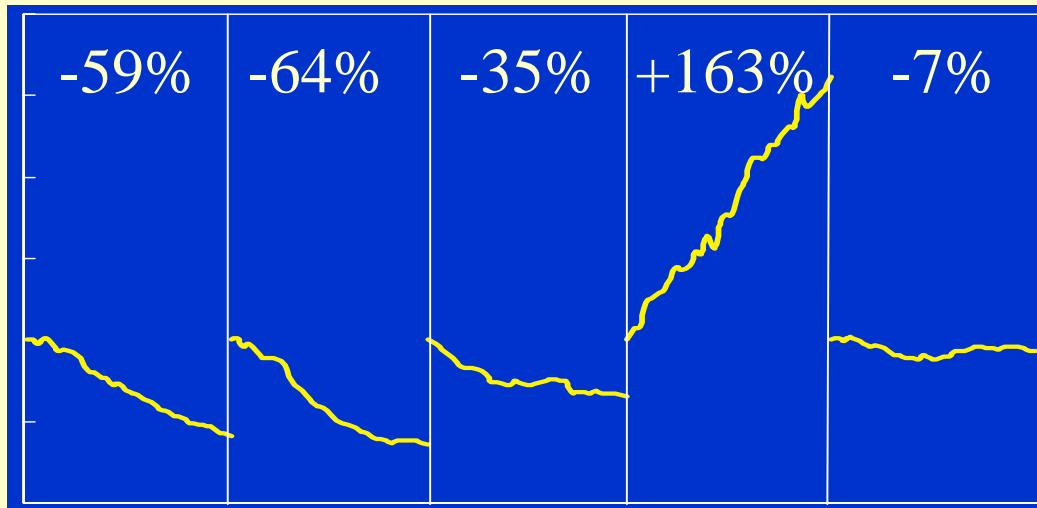
Clinical Imperatives for Mainstreaming HARP... are PARAMOUNT



- 1. Size of need**
- 2. Success of HARP**
- 3. Potential for further service improvement and innovation**

Importance of COPD

Percent change in age-adjusted death rates
USA 1965-1998



Coronary
artery
disease

Stroke

Other
vascular
disease

COPD

All other
causes

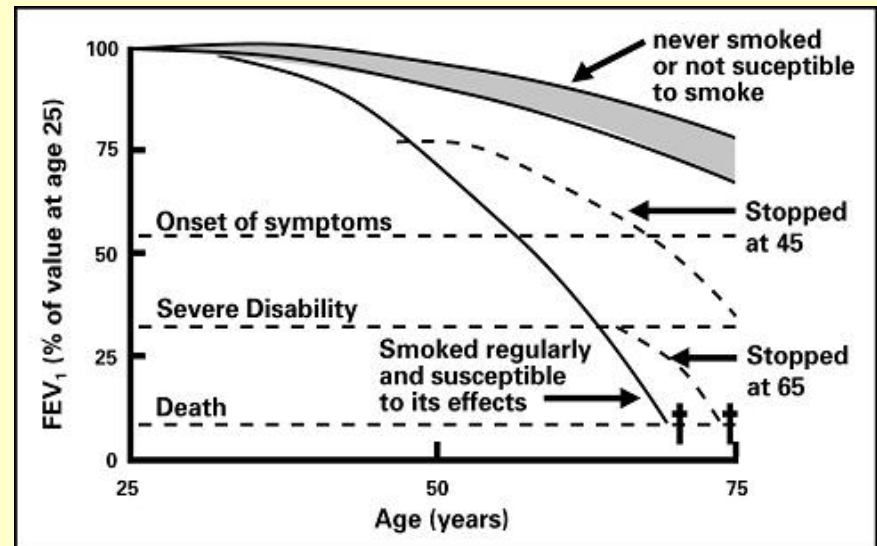
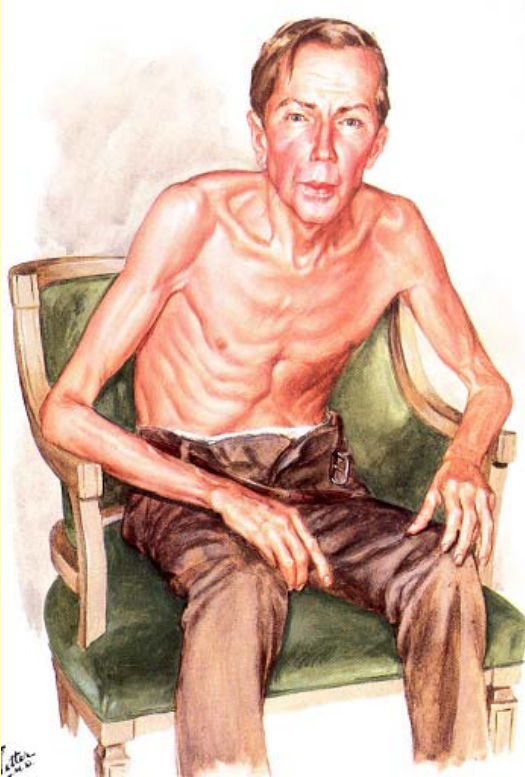
- Affects 10% of Australians over 45 years and the 4th leading cause of death

(Australian Bureau of Statistics, 1995)

- Incidence is increasing c.f. other chronic diseases

COPD is Characterized by: 1

Chronic, progressive disability due to reduced lung function



Adapted from Fletcher C, Peto R. *Br Med J* 1997; 1: 1645-8.

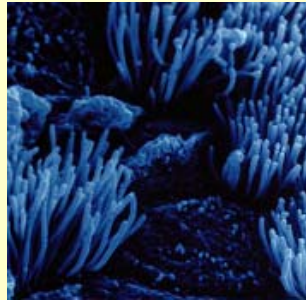
Causes reduced health status and QOL

Results in premature death - due to respiratory failure, right heart failure and wasting

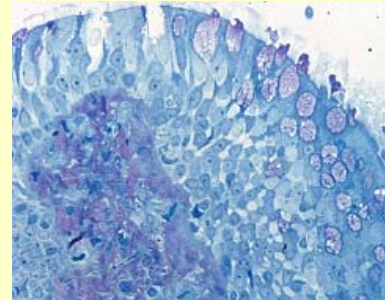
COPD is Characterized by: 2



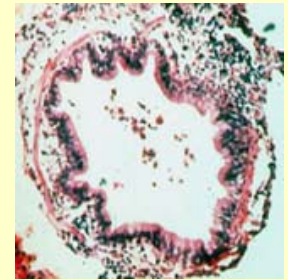
Recurrent acute exacerbations due to abnormal anatomy and reduced tissue defenses



Destruction of cilia



Mucous gland hyperplasia

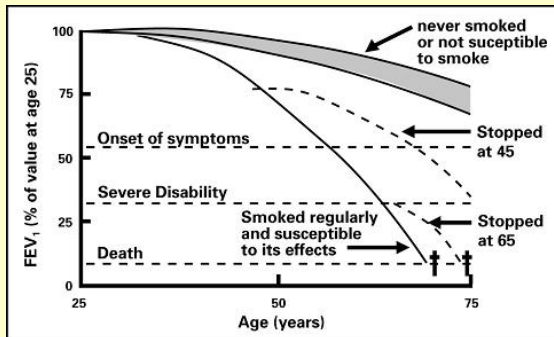
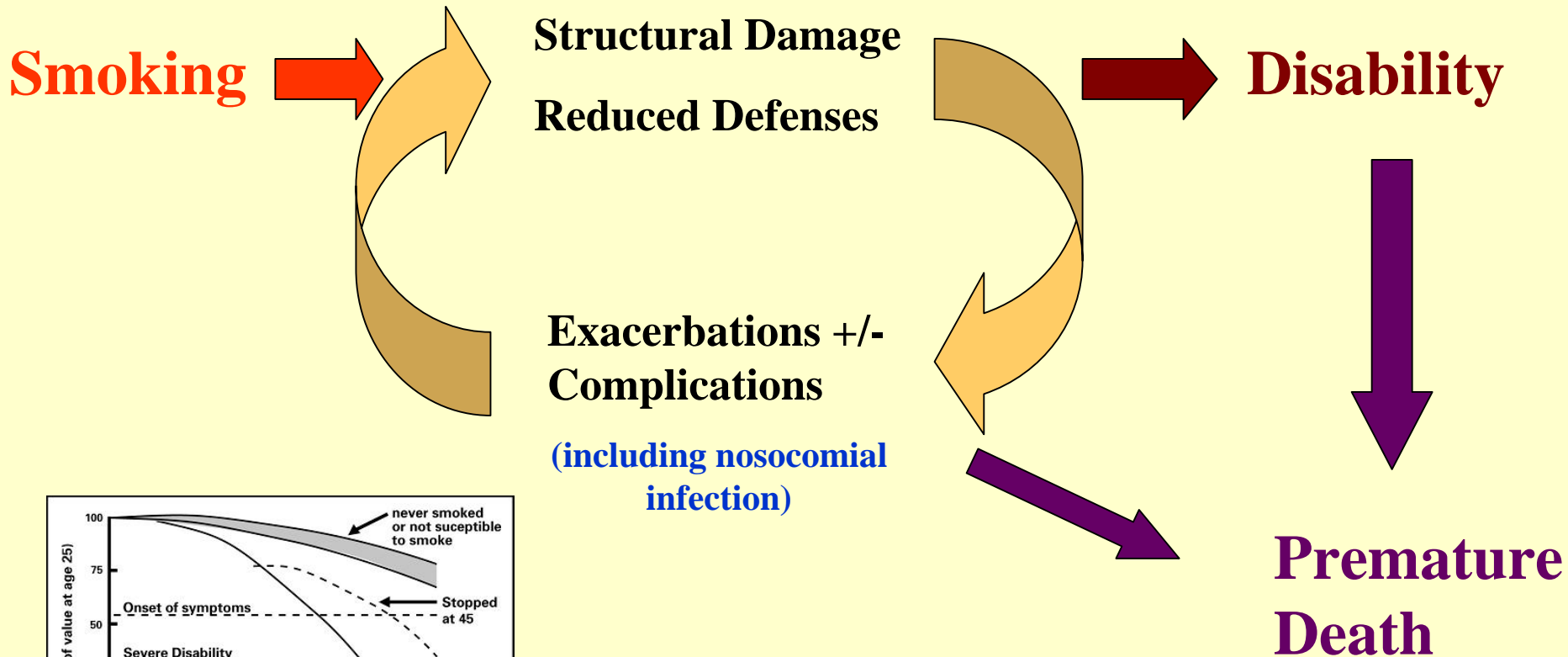


Bronchial inflammation and obstruction

1. Reduce quality of life (QOL)
3. Contribute to mortality

2. Accelerate decline in lung function
4. Account for 50% of total cost

Vicious Cycle of Damage in COPD Leading to Early Death



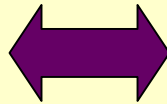
Hospital Admission Reduction Program (for COPD)

- **Evidence based interventions (level A evidence)***
 - Quit programs
 - Health education
 - Rehabilitation
 - Bronchodilators, inhaled steroids and supplemental oxygen
 - etc

HOLISTIC APPROACH to RESPIRATORY PATIENTS

* Global Initiative for Chronic Obstructive Lung Disease (GOLD) Guidelines, 2004

Hospital Admission Reduction Program (for COPD)



Diagnosis

Acute treatment

Discharge planning

Diagnosis

Maintenance (including Quit)

Rehabilitation and Education

Multi-disciplinary

Adequately supported and funded

Program evaluated

Success of HARP

- **Reduced admissions**
- **Reduced length of stay**
- **Improved physical function**
- **Improved quality of life**
- **Improved patient (and carer) education**
- **High patient satisfaction with program**
- **High use and integration of the program**
- **High staff satisfaction**

Further Service Improvement and Future Innovations

- **Service improvement** - home management of exacerbations
 - - improved links with family physicians
- **Innovations** - advanced directives
 - - improved prevention
- **More movement of multi-disciplinary teams between hospitals and the community**
- **Flexible staff management systems**

Home Management of Exacerbations (Melbourne COPD Cohort)*

- **87 patients with severe COPD**
(mean age 73 years, FEV₁ 45+/- 13% predicted)
- **All admitted at least once in previous 24 months**
- **Educated about symptoms of exacerbation and phoned fortnightly**
- **Visited at home by research nurse at time of exacerbation** (to collect samples) **but also given treatment**
- **Main aim was to identify microbial causes of COPD exacerbations** (and correlate with inflammatory gene expression)

* Funded by Victorian TB and Lung Association and CRC for Chronic Inflammatory Diseases

Home Management of Exacerbations (Melbourne COPD Cohort)*

- **83 exacerbations in 2 successive winters**
(68 weeks of monitoring)
- **78% of exacerbations notified by patients** (mean 2.7 days)
- **12 hospital admissions (14%)** (3 to ICU)
- **Uncontrolled data but:**
 - **Patients can be taught to identify exacerbations**
 - **In-home treatment by out-reach nurses is feasible**
 - **Possible dramatic reduction in admission rates**

Future Decisions About Management Advanced Directives by the Patient

- **Not or only partially addressed at present**
- **A common cause of inappropriate management of patients causing significant cost and angst**
- **HARP is an opportunity to address these issues:**
 - **Early and multiple contact with patient and family**
 - **Hospital and community based**
 - **Culturally appropriate**
 - **Trained staff**
 - **Liaison with family practitioners**

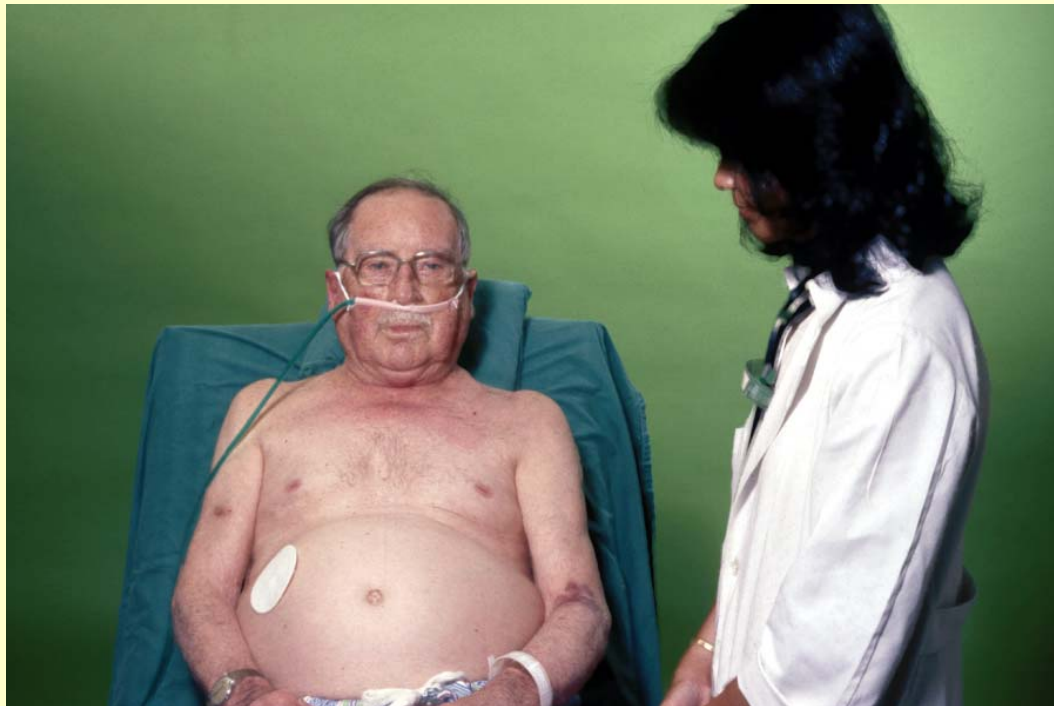
Threats and Challenges to HARP

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- **Loose focus on the patient and the disease**
- **Become unresponsive to changing needs of patients**
- **Inadequate funding** (across all elements of the program)
- **Undervalue or mismanage staff**
 - **Specific personality (work independently and as a team)**
 - **Multi-skilled**
 - **Working “horizontally” in several pyramidal systems**
 - **Daily contact with a variety of stakeholders**

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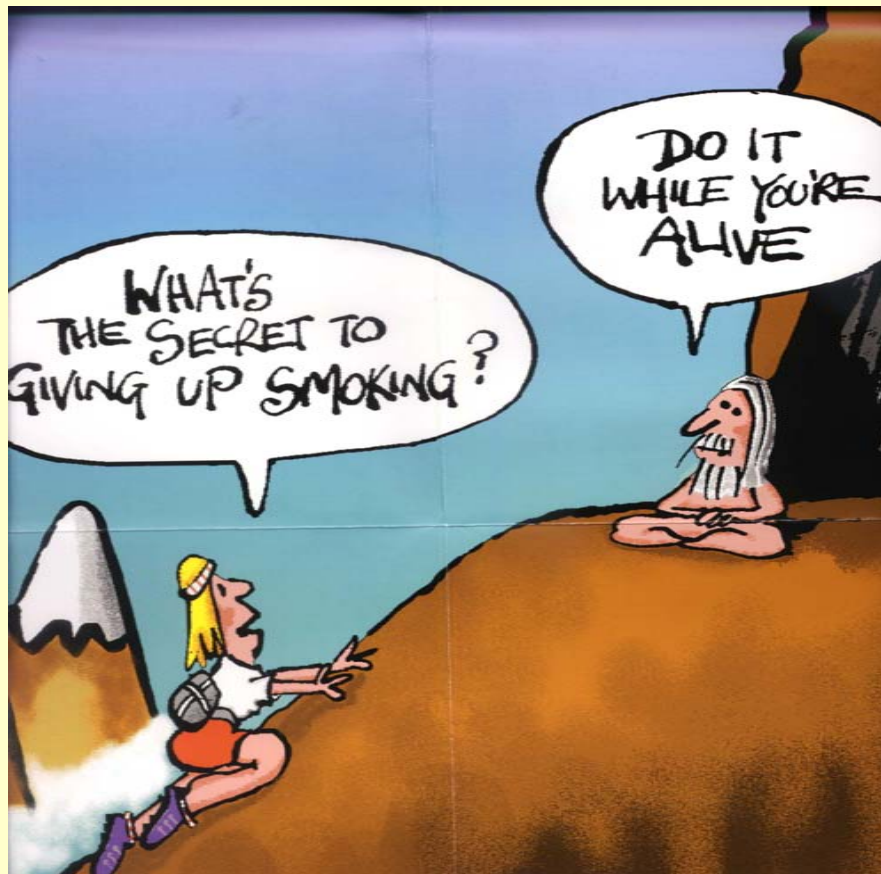
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- **Teamwork and innovation from clinical staff**

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