

**Forty-a-day smokers
between ages 30-35
shorten their life expectancy
by 8-9 years**

WHAT IS SMOKING?

- **PSYCHO SOCIAL HABIT**
20 cigarettes a day mean 200 hand-to-mouth movements and puffs a day; 6,000 a month; 72,000 a year; or more than 2,000,000 for a 45-year-old smoker who started at 15.
- **PHARMACOLOGICAL DEPENDENCE**
Nicotine reaches the brain within 7 seconds of inhaling tobacco smoke, twice as fast as if it were injected intravenously. Due to the short half-life nicotine has in the body, craving occurs within minutes of finishing a cigarette.

Habitual cigarette smoking fits the WHO criteria for addiction:

- The compulsion to take a drug (nicotine)
- on a continuous basis (200 shots a day)
- in order to experience its effects (small doses stimulate, large doses sedate),
- or to avoid the discomfort of its absence (anxiety, irritability, tremor, loss of concentration, memory impairment, insomnia, constipation, weight gain, craving).

(WHO definition of addiction as adapted by Dr Chris Steele)

THE PATHOPHYSIOLOGY OF SMOKING

Smokers smoke for the effects of nicotine, but suffer the morbid and mortal effects of carbon monoxide and smoke condensate (tar), the latter containing 4,000 different chemicals, including 300 known carcinogens.

1. NICOTINE

- Acts on the central and autonomic nervous systems by stimulating the brain's nicotinic receptors, causing changes in mood, learning, concentration, alertness and performance.
- Triggers the release of chemicals that increase heart rate, vasoconstriction (analogy of 'one foot on the accelerator, the other on the brake'), blood pressure, blood clotting, and oxygen consumption.

2. CARBON MONOXIDE.

- Attaches readily to the haemoglobin in the blood, preventing it from carrying the maximum amount of oxygen to the body's tissues, this being especially compromising in cardiac disorders, asthma and pregnancy.
- In the cardiovascular system, may produce intimal hypoxia and increase endothelial permeability, repeated insults encouraging lipid deposition.

3. SMOKE CONDENSATE (TAR)

- Carcinogens contribute to the development of cancer in the lung through inflammation with associated ulceration and squamous metaplasia.
- Other irritants narrow the bronchioles and promote ciliostasis. Increased numbers of macrophages and neutrophils release elastase into the lungs, leading to emphysema.

ATHEROGENESIS is also promoted by smoking which:

- decreases high density lipoprotein cholesterol, and
- increases low density lipoprotein cholesterol, total serum cholesterol and free fatty acids in the plasma.

TOBACCO-RELATED DISEASES (WHO - WORLD NO-TOBACCO DAY 1993)

- **CANCER**
Lung
Larynx
Pharynx
Oral Cavity
Oesophagus
Pancreas
Kidney
Bladder
Cervix
Leukaemia (*some forms*)
- **CARDIOVASCULAR DISEASE** (*Cumulative effects with oral contraception*)
Coronary Heart Disease
Stroke
Peripheral Vascular Disease
Aneurysm
- **CHRONIC OBSTRUCTIVE LUNG DISEASE**
Chronic Bronchitis
Emphysema
Asthma
- **COMPLICATIONS OF PREGNANCY**
Spontaneous Abortion
Low Birth Weight
Perinatal Death
Congenital Malformation
- **OTHERS**
Peptic Ulcers
Oral Ulcers
Gum Disease & Tooth Loss
Reduced Fertility
Osteoporosis
Lower Respiratory Infections

THE LOCAL SITUATION

In Malta, over half of adult males and about one-third of adolescents smoke (*see Table 1*).

In 1990, 79% of local deaths were caused by cancer and circulatory/respiratory disorders (*see Table 2*).

According to a WHO Fact Sheet published for World No-Tobacco Day 1992, in populations where cigarette smoking has been common for several decades (which is certainly the case with Malta), about:

- 80-90% of lung cancer,
- 80-85% of chronic bronchitis & emphysema, and
- 20% of deaths from heart disease and stroke are attributable to tobacco!

Therefore tobacco smoking, which is highly prevalent locally, is strongly associated with the three main killer diseases in Malta.

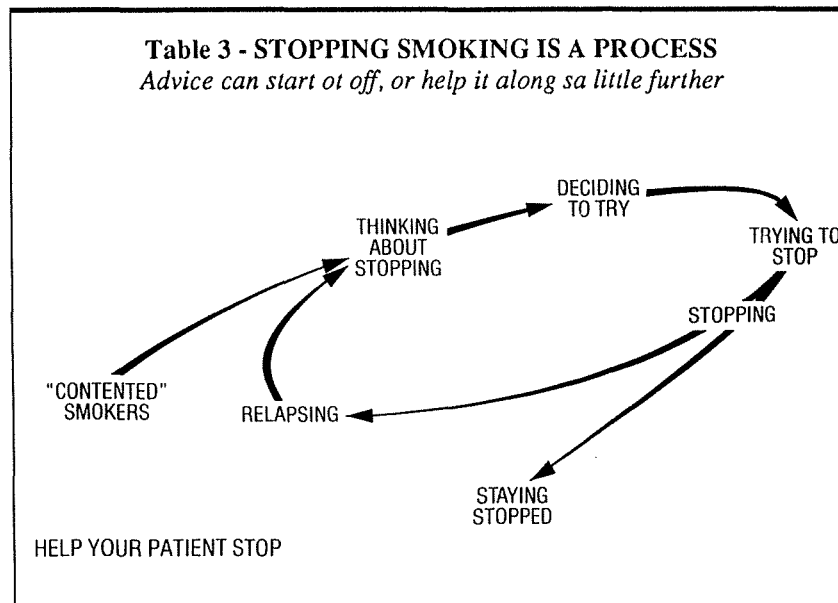
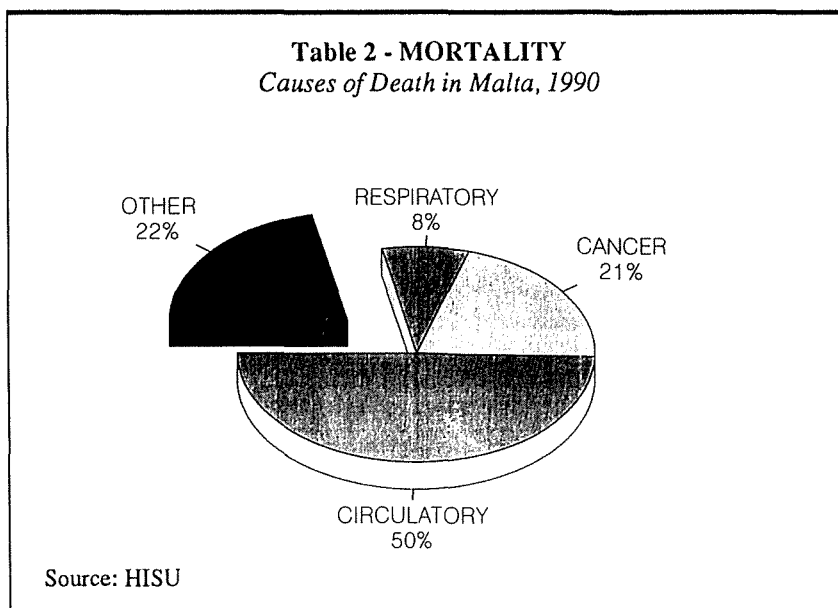
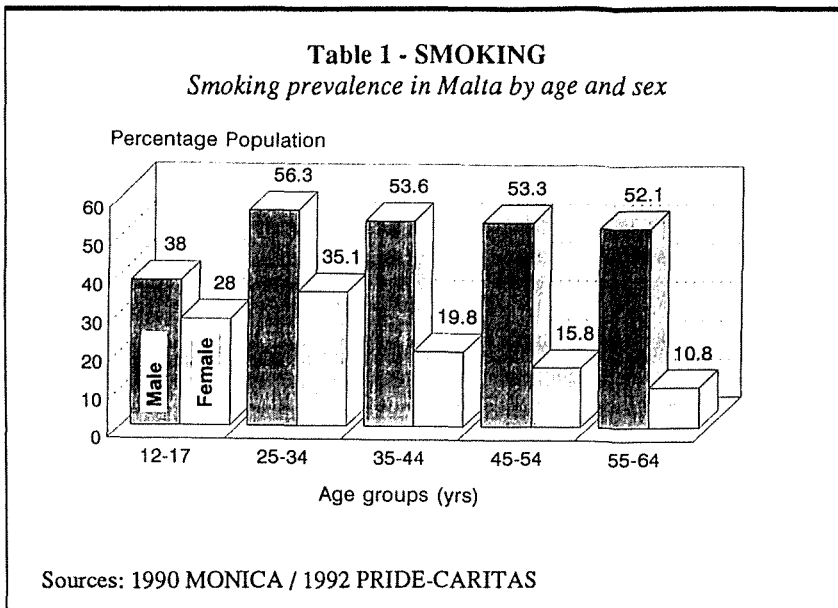
THE CHARTER AGAINST TOBACCO

The first European Conference on Tobacco Policy in Madrid in 1988 endorsed a charter recognising people's moral right to be protected not only from the diseases tobacco causes but also from the pollution created by tobacco smoke. The last two points of this charter are very relevant here:

- Each citizen has the right to be informed of the unparalleled health risks of tobacco use.
- Every smoker has the right to receive encouragement and help to overcome the habit.

The effectiveness of advice against smoking

Stopping smoking is a process. Advice can start it off, or help it along a little further (*see Table 3*).



In the UK, Russell et al showed in 1979 that following simple advice to stop, reinforced by a leaflet and warning of follow-up, 5% of GP's patients were not smoking a year later.

Moreover, a study done on the outcome of six smoking cessation clinics held locally by the author for the Health Education Unit between July 1991 and June 1993, showed that 30% of the smokers were not smoking eight weeks later (see Table 4).

**FOUR A's to
"HOW TO HELP YOUR PATIENTS
STOP SMOKING"**
(US National Cancer Institute, 1990)

1. ASK about smoking at every opportunity
2. ADVISE all smokers to stop
3. ASSIST the patient in stopping
4. ARRANGE follow-up visits

**1. ASK ABOUT SMOKING
AT EVERY OPPORTUNITY**

(A) "DO YOU SMOKE?"

- especially to those with symptoms of:
 - cough, sputum production
 - chest pain, shortness of breath
- and to those at special risk through:
 - coronary / central / peripheral vascular disease
 - hypertension
 - bronchitis / emphysema / asthma
 - recurrent respiratory infections
 - diabetes mellitus
 - hypercholesterolaemia
 - peptic ulcer
 - allergy
 - before and after surgery
 - women on the pill
 - pregnancy and post-delivery
 - parents of young children

**2. ADVISE ALL
SMOKERS TO STOP**

**Table 4 - Health Education Unit
Smoking Cessation Clinic Programme**

Session 1		Introduction
Session 2	After one week	Quit Day
Session 3	After one week	Follow-Up
Session 4	After one week	Follow-Up
Session 5	After two weeks	Follow-Up
Session 6	After two weeks	Follow-Up
Session 7	After two weeks	Final session

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SMOKING CESSATION CLINICS: RESULTS	ATTENDED QUIT SESSION (2)	QUIT SMOKING BY FINAL SESSION (7)	SUCCESS RATE (% OF QUIT SESSION)
Clinic 1 Floriana Jul-Sep 1991	12	1	8 %
Clinic 2 Floriana Feb-Apr 1992	4	1	25 %
Clinic 3 Qormi Jun-Aug 1992	12	3	25 %
Clinic 4 Qormi Oct-Dec 1992	8	5	62 %
Clinic 5 Floriana Jan-Mar 1993	10	5	50 %
Clinic 6 Qormi Apr-Jun 1993	17	4	24 %
TOTALS	63	19	30 %

- Record smoking status in notes:
 - black sticker for smokers
 - yellow sticker for those trying to quit
 - blue sticker for non- or ex-smokers (congratulate the latter)

(A) GIVE A FIRM, SIMPLE NO-SMOKING MESSAGE SUCH AS:

- "I am concerned about your smoking. I must strongly recommend that you quit."

(B) PERSONALISE THE MESSAGE TO QUIT

- by linking it as closely as possible to the smoker's physical condition.

(C) REINFORCE ANY INTEREST IN STOPPING

- by stating the risk in terms which are easy to understand:

"Smoking IS dangerous"

- "9 in 10 of deaths from lung cancer, chronic bronchitis and emphysema, and 1 in 4 of heart disease deaths, are CAUSED BY SMOKING!"
- From an average 1,000 young men who smoke cigarettes regularly: about 1 will be murdered, about 6 will be killed on the roads, and about 250 WILL BE KILLED BY TOBACCO!"

(B) "HOW MUCH? HOW EARLY DO YOU SMOKE YOUR FIRST CIGARETTE?"

- Typically, the addicted smoker:
 - smokes more than 25 cigarettes a day
 - smokes within 30 minutes of waking

(C) "HAVE YOU EVER TRIED TO STOP? IF SO, WHAT HAPPENED?"

- Difficulties experienced then, will help in preparation for quitting now.

(D) "ARE YOU INTERESTED IN QUITTING NOW?"

"It IS worth stopping"

- "Quitting smoking once and for all cuts the added risks of death and disease WITHIN 10 TO 15 YEARS."
- "If you stop smoking today, by tomorrow you will have HALVED YOUR CHANCES of dying of a heart attack!"

(D) CLOSE CONSULTATION OR CONTINUE

- *If not interested*
- offer a booklet (Taf x'jaghmillek it-tipjip ... Aqra flit)
- advise further consideration
- give an open invitation for further discussion
- ask again at next visit

3. ASSIST THE PATIENT IN STOPPING

- Reassure patient that many smokers find that quitting is much easier than they imagined – if they have the WILLPOWER and the WANT POWER.

(A) "PREPARE CAREFULLY"

- Write down your own reasons for quitting
- Keep a smoking diary of when, where and with whom you smoke so that coping strategies can be planned beforehand.
- Be aware of nicotine withdrawal symptoms – most will pass within a few weeks
- Set a quit date – within 1 to 4 weeks, avoiding periods of stress
- Enlist the support of family or friends – quit with a friend
- Read self-help literature (Trid tieqaf tpejjep? Ara kif ...)

(B) WAKE UP AS A NON-SMOKER

- Remove any temptation – "just one" cigarette leads to another

- Using the Stop/Think/Act technique, implement coping strategies (hands, mouth, mind) in the leaflet 'X'nistgħu naghmlu flok li npejpu'
- Change your routine – keep yourself busy
- Avoid worrying about the future – take one day at a time
- Eat healthy food, take more exercise, get plenty of rest
- Be nice to yourself – cash not ash

(C) CONSIDER PRESCRIBING NICOTINE REPLACEMENT THERAPY

4. ARRANGE FOLLOW-UP VISITS

- Three visits at weekly intervals, followed by three visits at fortnightly intervals, i.e. six appointments in all, lasting about five minutes each, and totalling 30 minutes over 2 months.
- Using a carbon monoxide monitor, reinforce advice to quit by showing that the level of exhaled CO drops to normal within 24 hours of stopping

smoking – a powerful positive-feedback effect!

- Discuss progress and problems, maintain a positive attitude and encourage when despondent.
- Differentiate between a slip (one or two cigarettes) and a relapse (going back to smoking on a regular basis).
- If at first you don't succeed – quit, quit again
- Further help: refer to smoking-cessation clinic

IN CONCLUSION

- Giving up smoking is probably the biggest single thing smokers can do in their life to improve their health.
- Your intervention will probably be the most important single influence you can have on their health.

Are YOU setting an example?

- No-smoking policy in clinic
- No-smoking signs & literature

Remember your "FOUR A's"

1. ASK about smoking
2. ADVISE stopping
3. ASSIST in quitting
4. ARRANGE follow-up

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