

**National
CANCER CONTROL
Strategy**

Cyprus

MINISTRY OF HEALTH

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**NICOSIA-CYPRUS
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Drafted by:

A. Polinikis, St. Kanna Michaelidou, M. Azina-Chronides and
D. Siekkeri-Makkoula

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Content

Introductory note by the Minister of Health

Acknowledgments

Vision Statement

Introduction

Summary

Chapter 1: Introduction

Chapter 2: Prevention
2.1 Primary Prevention

A. Main risk Factors

- 2.1.1 Smoking
- 2.1.2 Alcohol
- 2.1.3 Diet and Nutrition
- 2.1.4 Physical Exercise and Obesity
- 2.1.5 Occupational Factors
- 2.1.6 Pollution of the atmosphere
- 2.1.7 Solar Radiation
- 2.1.8 Electromagnetic fields
- 2.1.9 Other cancerous Factors
- 2.1.10 Immunisation / Genetic Factors

B. Primary Prevention Targets

2.2 Secondary Prevention

Secondary Prevention Targets

- 2.2.1 Introduction of population based screening programmes for common forms of Cancer
- 2.2.2 Secondary Prevention Goals

Chapter 3: Diagnosis / Therapy

3.1. Diagnosis

Effective and accelerated diagnosis

- A. Confirming the symptoms – Informing the public
- B. Investigation in secondary care
 - 3.2 Medication
 - 3.3 Surgical Treatment
 - 3.3.1 Holistic Approach
 - 3.3.2 Specialised Breast and Gastro-Intestinal Centres
 - 3.4 Radiotherapy
 - 3.5 Alternative – supportive Therapy
- CHAPTER 4:** Palliative Care
 - 4.1 Substructure and Procedures
 - 4.2 The support provided by voluntary organisation services and the state's contribution
 - 4.3 Rehabilitation
- CHAPTER 5:** Research
- CHAPTER 6:** Cancer Registry
- CHAPTER 7:** Quality Control / Monitoring
- CHAPTER 8:** Applying the Strategy and necessary structure
 - 8.1 Applying a National Health System and the possible impact.
 - 8.2 The Structure
 - 8.3 Establishing a National Committee, Permanent Secretariat and an Advisory Body
 - 8.4 Time Schedule for implementation: Actionplan
 - 8.5 Evaluation- Quality Control System and Report
- CHAPTER 9:** Conclusions and Suggestions
 - 9.1 Conclusions
 - 9.2 Suggestions
 - 9.3 Time Schedule for implementation

APPENDICES

Introductory note by the Minister of Health

The fight against cancer is a matter that concerns everybody.

It is a fight that needs the activation and participation of Civil Society. This is the only way we shall succeed in fighting cancer. We have to fight prejudice and stress the significance of prevention and early diagnosis to all citizens.

We have to create the best possible conditions so that our fellow citizens who are suffering from cancer can fight the disease with hope and dignity.

The National Strategy for Cancer Control is the first organised response of the state to this disease. We fully agree with the statement of the World Health Organisation that Cancer is becoming an epidemic disease.

All the bodies that are involved in Cancer control will cooperate in the development of this Cancer Plan. Doctors in the private and public sector, organised bodies and other stakeholders will get together for the first time as one body, setting common aims and visions.

Within the strategy we are investing in the four pillars: prevention, early diagnosis and therapy, research and rehabilitation.

In this way we set the foundations for a holistic approach to Cancer, a necessary precondition for succeeding in our goal.

I take this opportunity to thank everyone who contributed to the preparation of the National Strategy for Cancer Control in Cyprus.

Dr. Christos G. Patsalides

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that compromised the first Scientific Advisory Group on Cancer.

We would also like to warmly thank the Parliamentary Committee on Health and the following non-governmental organisations: the Anti-Cancer Association, ELA-ZO, EUROPA DONNA, the Cyprus Association for Cancer Patients and Friends (PA.SY.KA.F.), and others including the doctors and all those who offer their services to cancer patients (government staff and individuals) for their comments and valuable contribution.

Finally, a warm thank to you all that have expressed your points and views, with your written contribution.

OUR VISION:

The Ministry of Health's vision is prevention, reducing morbidity and mortality from cancer, to add value and quality of life of cancer patients at all stages of their illness, to develop services of excellence for patients by creating the necessary centres for the provision of services and to raise awareness among the public on matters relating to cancer.

In order to implement its vision, the Ministry of Health recommends the development of an integrated strategy for Cancer Control which will include all the pillars that influence the problem ie. Prevention, Early Diagnosis, Therapy, Palliative Care and Research.

Introduction

The Ministry of Health, recognising the huge problem posed by cancer and wanting to contribute catalytically towards treating it in Cyprus, held conferences, at various times, at the Ministry under the chairmanship of the former Ministers of Health, which they attended and at which all interested parties expressed their views.

Initially, the Scientific Advisory Group on Cancer (SEOK) was set up, which prepared a relevant Report that included suggestions to develop and apply a strategic plan against cancer.

This report was considered a “document for discussion” and was distributed to all the interested parties. Following various comments and suggestions of the interested parties, the Minister of Health, Dr. Christos Patsalides, assigned a Steering Committee, consisting of:

- Dr. A. Polynikis, First Medical Officer (Coordinator)
- Dr. St. K. Michaelides, Director of the State's General Laboratory
- Dr. M Azina-Chronides, 1st Class Medical Officer
- Mrs. D. Siekkeri-Makkoula, Ministry of Health Officer

With the task of reviewing the documents and preparing a strategy for cancer, evaluating all the modern and international data, in co-operation with all the Ministry's involved services.

SUMMARY

The Ministry of Health's vision is to treat cancer through a holistic approach, always having in mind the need to offer the patient the best possible assistance from early prevention to therapy and Palliative Care. This is why the development of an integrated strategy on Cancer treatment is suggested, that will include all the hubs that constitute the problem, namely Prevention, Timely Diagnosis, Therapy, Palliative Care and Research.

Having taken into account the views of all the bodies involved and the suggestions of all those who have been involved over the past few years, it proceeded with the preparation of the strategy.

The strategy's aim is to organise and evaluate all the resources and infrastructure available in the oncology sector, to develop and improve an integrated network of information with the aim of collecting analysing and disseminating all the necessary information and data to all those who have the knowledge and the desire to promote and improve the oncology services to patients and at the same time to promote prevention and research.

Initially, there is an analysis of all the prime causes of cancer. Thereafter, the four hubs on which the design for the development and implementation of the strategy shall rely are dealt with.

- Prevention
- Diagnosis and Therapy
- Palliative Care
- Research

Special emphasis is given to prevention, which is the most effective and efficient method of treating cancer. Strengthening

the legislative framework is recommended, on the basis of the Precautionary Principle so as to drastically reduce the population's exposure to cancerous factors with emphasis being placed on vulnerable groups of the population. Extending screening programmes is also recommended.

In the chapter on Diagnosis and Therapy, what has been taken into account is what is currently available in Cyprus, and in particular the existence of the Bank of Cyprus Oncology Centre and its service to cancer patients. It is recommended that it is upgraded and converted into a Centre of Excellence.

At the same time, however, the report also notes the lack of a completely organised, equipped and staffed Oncology Department at the Nicosia General Hospital. It notes the importance the development of such a Department has at the Nicosia General Hospital and the expected transformation of the Hospital into a University clinic. It is also noted that Oncology is one of the most expensive medical procedures and as such it is at the same time a source of financial resources to a hospital.

Palliative Care, as the strategy's third hub, must be investigated and developed in such a way that it covers all the patient's needs.

Research, the strategy's fourth hub, shall be placed on new foundations and will be encouraged by providing suitable incentives and making the necessary information available to the researcher.

The strategy takes into account the new conditions vis a vis the introduction of the GenHS, where a citizen is entitled to choose the doctor / clinic / hospital he wishes to visit, in the government or private sector, taking into account at the same time that the supplier of health services shall be indemnified by the H.I.O. This way, there will be competition between the suppliers.

An essential precondition for achieving these high targets is excellent organisation and the co-operation of all the involved stakeholders. Of essential importance is organising the

management of the resources for the treatment of cancer and ensuring the necessary co-ordination of all policy and action levels.

The adaptation of policies, prioritisation, co-ordination and supervising the implementation of the National Strategy shall be vested in the National Committee on Cancer. The Committee will be supported by a scientific/executive secretariat that will be established by the Ministry of Health, and which will gradually transform into a body with its own staffing and structure, a neoplasia network (NN). An Advisory Body to the Committee shall also be established, with the participation of all the stakeholders, services and voluntary groups involved.

By integrating all the stakeholders and services in the proposed NN₂ that will operate under the umbrella of the National Committee on Cancer, the co-ordination and effectiveness of the currently diffuse actions shall be strengthened. The Committee's funding and of its bodies must be from the state, donations, E.U. Funding and from other stakeholders.

The National Committee shall consist of 5-7 members and shall refer to the Minister of Health. The Committee's term shall be a five-year term with the possibility of renewing it for a further term.

The Committee's terms of reference are mentioned in part 8.3

The Strategy's suggestions are extensively referred to in Chapters 8 and 9 and are set out briefly herein below:

- Three distinctive levels of service must be established:
Tertiary, Secondary and Primary
- Establishing a "Tertiary" sector of high quality.
- The specialised services are to be provided at two reference centres, at the New Nicosia GH and the Bank of Cyprus Oncology Centre.
- Gradually Establishing District Oncology Units at Public Hospitals.
- Establishing specialised Centres e.g. Breast and Gastro-Intestinal Centres.

- Establishing a “Primary” patient-care system (supervision after-therapy, palliative care etc)
- Private oncologists are to be supported and be provided with facilities at the state hospitals. Furthermore, incentives should be given to other private oncologists to operate surgeries in other districts.
- Incentives and scholarships to be granted to surgeons to specialise in surgical oncology.
- Quality control systems are to be developed for all services or stakeholders dealing with cancer patients, in order to provide high specification services.
- Strengthening the legislative framework on the basis of the Precautionary Principle so as to drastically reduce the population's exposure to cancerous factors with emphasis being placed on vulnerable groups of the population.
- Strengthening co-ordination to the level of designing implementing and evaluating the relevant programmes and to extend population screening programmes.
- Legislation and Special Regulation for the Cancer Registry is to be enacted directly.
- Hospital care in the oncology sector, in the clinical and community area, is to be strengthened.

Chapter 1: Introduction

Cancer is a major subject of Public Health. In Europe, it is the second cause of death; recently, Holland announced that cancer constitutes the first cause of death in its territory. It is a complex of illnesses with very serious consequences, not only for cancer sufferers and their families but also for society, health systems and the economy of every country.

Worldwide, insurance funds are sounding alarm bells, because in addition to the fact that treatment is costly, cancer patients have a greater life expectancy now, which simultaneously means larger amounts for medical treatment, examinations and larger re-integration expenses.

Combating cancer must involve various forms of action such as: Detecting the causes of cancer, eradicating or reducing exposure to known risk factors, timely diagnosis, through screening, and finally the best possible therapy.

One in three Europeans develops cancer in his lifetime, a fact which has a huge social and financial impact. According to the International Agency for Research on Cancer (IARC), which is part of the World Health Organisation, in 2006 3,2 million cancer occurrences were diagnosed and 1,7 million deaths from cancer were recorded in Europe. Without taking drastic measures, cancer will increase significantly.

The Council of Europe, in a series of decisions, in 2008, called on all the member states to take preventative measures and to set up strategies in order to reduce the burden of cancer.

It is now clear and necessary that prevention measures reducing the population's exposure to risk factors must be increased. This may be achieved by strengthening enlightenment, sensitivity and developing culture in the wider population, with regard to practices that hinder appearance and or delay the development of cancer, in order to improve their qualitative, quantitative and financial efficacy and to significantly reduce the percentages from this illness.

In promoting suitable legislation in this direction, and to support its application, including screening, are necessary elements for an integrated prevention policy. The state must have a primary role, as is appropriate for every European state, but at the same time it must also co-operate with the private sector and patients organisations, so as to achieve the best possible result in treating this disease.

Cancer is a multi-dimensional problem and its treatment requires the co-operation of many specialties, medical and paramedical services, in order to attribute a collective and spherical therapy. That is why the correct utilisation of existing resources, not only of the state but also private, and the rational organisation and development of cancer services at a level that will satisfy the needs and the requirements of our era, is an exceptionally difficult operation even for the developed European countries. The lack of a substantial research infrastructure and the almost non-existent funding for research into cancer is an important point of reference.

Presently, research into cancer in Cyprus is insufficient and fragmentary and as a result many opportunities are lost. Research into cancer must cover all sectors such as: epidemiology, basic and clinical research, bio monitoring, and to aim at reducing morbidity and mortality from cancer in Cyprus. A well organised research programme substantially improves Cyprus's standing in the international environment and shall render the use of significant funding for the European Union funds more achievable.

The Strategy Plan must be based on European specifications and interwoven with the resolutions of the European Parliament and the European Acquis, the Legislation for the Patients Rights, the Constitution of the Republic of Cyprus, the proclamations for Human Rights and the World Health Organisation, the Treaties and the European Court Legislation and finally, the recommendations of the Committee of Ministers of the E.U. to the Member States to establish Palliative Care.

In Cyprus, in 2004, 1,697 new cancer occurrences in adults were recorded. According to the Cancer Registry data, during 2001-

2003 cancer was diagnosed in 123 children. Cancer occurrences in children represent 2, 4% of the total number of occurrences. Regarding the types of cancer, Cyprus reflects European reality.

The four main hubs for an effective strategy are:

Promoting a healthier way of life and reducing exposure to chemical and other factors causing or activating the development of cancer – Promoting cancer detection programmes at a pre-clinical stage (population screening)

- Applying the best diagnostic and therapeutic practices.
- Developing re-integration and Palliative Care services.
- Promoting research, with an aim at discovering cancer causes and developing the best strategies for prevention, diagnosis and therapy.

On the basis of the above, the strategy for cancer treatment shall be based on the following four hubs: Prevention, Diagnosis and Therapy, Palliative Care and Research.

1. Source: Cancer Registry, Ministry of Health
2. The Council's Conclusions on Reducing the Burden of Cancer, 10 April 2008.

CHAPTER 2:
Prevention

2.1 **Primary Prevention**

The mechanism in creating cancer consists of a number of procedures and interrelated stages. The exact cause and therapy for more than 100 types of cancer continues to be a difficult task for medicine, biology, biochemistry and pharmacology. Generally, it is accepted that the complicated interaction of genetic, dietary, environmental and other parameters that are linked with the way of life is particularly important for the creation and development of cancer. Genetic factors that are related to the presence of chromosome mutations or the existence of genes, which can predispose to carcinogenesis, are important. In the past few years genes have been discovered that predispose the development of certain types of hereditary cancer. The practical importance in discovering these genes lies in that they may be discovered in people with a positive family history and in which the possibilities of developing some types of neoplasia is increased, in relation to the remaining healthy population.

The results from epidemiological studies show that 60-80% of cancer occurrences are caused or at least are activated due to environmental causes and mainly due to exposure to cancerous substances. According to the World Health Organisation at least 30% of cancers may be prevented. What is important from a Public Health view is the fact that cancers caused by environmental factors are largely reversible by reducing the population's exposure to possible cancerous substances or other factors, such as radiation.

Particular attention must be given to the prevention of children and pregnant women to exposure, because the development of the embryo and of a child is characterised by a uniqueness that one does not come across in the development of an adult, passing through phases of particular sensitivity where the risk of developing and activating cancer is greater. At the same time, children are exposed to a greater degree per unit of weight through the air, food and water, and defence mechanisms, such as aborting substances and rectifying the damage caused, are incompletely developed to non-existent.

Furthermore, childhood means the organism grows at a faster rate and consequently the cells multiply at a greater rate, including cancerous ones. The rapid multiplication of cells in connection with the incomplete defence and the relatively weak rectifying mechanisms of the affected cells, accelerate the rhythm of cancer development. That is why, in the case of children in relation to carcinogenic substances, it is particularly important to invoke and apply the Precautionary Principle enacted by the European Committee as an additional management tool of well documented and serious risks, of which, however, there are uncertainties in quantifying (COM 2000(1)).

In an attempt to reduce the exposure to cancerous factors particular importance is placed on the quality control of indoor air in schools, nurseries and homes, with particular emphasis on the reduction of the exposure to passive smoking. That is why indoor air constitutes one of the actions of the European Union's Environment and Health Action Plan. This control is exercised by the Ministry of Health Services with emphasis on passive smoking control.

There is a direct link between Environment and Health and recognising and understanding the link may lead to a more effective policy on public health and to preventing many illnesses, especially cancer.

An effective strategy for primary prevention must treat the main risk factors that are related to the environment and the way of life and finally the genetic factors:

(a) The main environmental factors are:

- (i) Outdoor air
- (ii) Indoor air
- (iii) Water
- (iv) Chemical substances, for example, at home, pesticides, especially in rural areas
- (v) Electromagnetic and solar radiation
- (vi) Food safety

(b) The main risk factors linked with the way of life are:

- (i) Smoking
- (ii) Diet and Exercise
- (iii) Use of alcohol
- (iv) Infectious factors
- (v) Occupational exposure

(c) Genetic Factors (see 2.1.10)

A. Main risk Factors
2.1.1 Smoking

Smoking is an important cause of cancer and its avoidance indicates a significant reduction in the appearance of cancer. More than 40 substances that have been isolated from tobacco and its products are cancerous.

25-30% of cancers in developed countries are referred to smoking. Research carried out in Europe, Japan and the USA; show that 87-91% of lung cancer in men and 57-86% in women is related to smoking.

In both sexes, 43-60% of cancers of the oesophagus, the larynx and the cavity of the mouth are connected to smoking in combination with the regular use of alcohol.

Furthermore, recent data reveals that cancer of the bladder, pancreas, kidneys, stomach, and breast, cervix of the uterus and myelogenous leukaemia are directly linked to smoking. Recent European statistics indicate that smokers gradually increase to 40% and female smokers by 18% with a 5, 6% years loss of active life, either from disability or from premature death, due to smoking (Chronic Obstructive Pulmonary Disease, Cancer, and Cardiovascular). Smoking remains the second risk factor for creating cardiovascular disease; it is important that the necessary and suitable measures are taken to avoid / prevent smoking.

A particular aspect of smoking is that of passive smoking, a global phenomenon. Its impact on the population's health, and in particular of the embryos and children, has concerned the World Health Organisation and the European Union and each and every country, separately. It is the European Union's priority to reduce children's exposure to passive smoking.

In order to reduce the impact of active and passive smoking, the following actions are to be taken, in co-operation with all the stakeholders:

- Within the framework of School Health, Educational Health programmes are to be carried out for children in elementary and secondary education.

- Information campaigns are to be strengthened, in cooperation with other stakeholders.
- Suitable legislation regulation is to be promoted, so that Cyprus is a “Smoking-Free Zone”, especially in the workplace, common areas, where there are children and generally in closed areas.
- “Stop smoking” programmes are to be made available throughout Cyprus through clinics and the possibility of creating “stop smoking” clinics to special groups such as youngsters, people with heart conditions, people with diabetes, in cooperation with patients’ Associations.
- To promote modern legislation for the packaging of tobacco products.

2.1.2 Alcohol

Alcohol consumption plays an important role in causing cancer. Two alcoholic drinks a day for a man and one for a woman is the limit, over and above there is an increased danger for cancer of the pharynx, larynx, oesophagus and the cavity of the mouth.

Breast cancer, intestinal/rectal and cancer of the liver have all been linked with alcohol consumption. Unfortunately, there is an increased record of alcohol consumption among the younger generation, throughout Europe. Furthermore, it affects driving (accidents, first cause of death in young persons) and furthermore contributes to creating cardiovascular problems.

- There should be stricter control in selling alcohol to minors (recreational areas, pubs/bars, night spots etc).
- There should be a methodical and intensive campaign stressing the disadvantages of systematic alcohol consumption, not only addressed to the population in general but also to specific groups for example immigrants, where the problem has been detected to a greater extent.
- More information should be provided on a wider basis as to re-integration clinics and a study must be prepared to develop programmes that are connected with prevention and reduction of senseless alcohol consumption, in cooperation with the Psychiatric Health Services.

- Programmes should be developed, with the cooperation of the School Health programme, so that pupils are made aware of the harmful impact of alcohol.

2.1.3 Diet and Nutrition

It is estimated that 30-40% of cancers are connected with dietary habits. The connection between diet and carcinogenesis has not been scientifically proved, but all recent research points to the same results.

In a number of European researches the systematic consumption of fibre from rye indicated its deterrent action in gastro-intestinal cancers. Epidemiological experience shows that the impacts of many types of cancer that are connected to diet are less prevalent in southern Europe (Spain, Greece, and Italy). This is attributed to the Mediterranean diet which is rich in olive oil, fish, vegetables and fruit.

Of course, it is important that food stuff and water should come into contact with cancerous substances as little as possible.

2.1.4 Physical Exercise and Obesity

Regular physical activity deters cancer of the intestine, breast and endometrial/prostate, as many epidemiological studies have shown. Obesity, which is continuously increasing in Europe (obese children 10 times more than in 1970), appears to be connected with 11% of intestinal cancer, 9% of breast cancer, 39% of cancer of the endometrial, 37% of cancer of the kidneys and 24% of cancer of the gall-bladder.

Because diet and physical exercise affect many other diseases, such as cardiovascular disease and diabetes, the strategy must invest in educational programmes within the framework of the School Health programme and other forms of enlightenment and promotion of health.

With regard to points 2.1.3 and 2.1.4, the following actions must be promoted, with the co-operation of the ministries involved:

- Promoting a policy and measures for exercise within the workplace, especially where people are involved in sedentary work.
- Promoting healthy diet at all cafeterias.
- Having fruit and vegetables available at the work place and educational or other institutions.
- Restricting the advertisements for sweets and cakes, soft drinks and other greasy foods during the children's zone in the mass media.

2.1.5 Occupational Factors

5% of cancers are due to occupational factors. Thirty five substances that are used in professional areas have been classified as cancerous. Some of these, such as crystalline silicon, petrol vapours, dust from wood shavings, asbestos, formaldehyde, polycyclic hydrocarbons, chrome, cadmium and nickel, are widely used.

2.1.6 Pollution of the atmosphere

The main pollution factors in the atmosphere are gas/pollutant emissions from industrial units and vehicle traffic. The preventative measures at the moment are to remove the units from inhabited areas, improve the anti-pollution systems and develop the public communication system (particularly in Cyprus), are essential conditions to improve the quality of the air. The areas of priority are the following:

- Exposure to passive smoking
- Emission from various substances indoors (paint, sprays, carpets, furniture, floors)
- Emission from daily use of chemical substances for example cleaning materials, pesticides etc.

2.1.7 Solar Radiation

Skin cancer has shown an increasing trend, especially after the destruction of the ozone layer (such as malignant melanoma, among the 10 most common types of cancer). The Ministry of Health, knowing the impact of melanoma has doubled since 1960, must strengthen its campaign for protection against solar radiation.

In particular, due to the strong sunlight in Cyprus, all means of protection are to be afforded to workers in the countryside. Children, at all levels of education, must, with the co-operation of the Ministry of Education and Culture, be provided with information and material to deter sunburn. Systematic examination of spots will assist in preventing mutation to melanoma.

2.1.8 Electromagnetic fields

There has been a lot of discussion lately with regard to electronic fields from electrical appliances and high voltage pylons. Studies show a small link with carcinogenesis and electrical appliances, so that the International Electromagnetic Energy Protection Organisation has set some guidelines. Electromagnetic fields are characterised by their frequency and intensity. It is for this reason that there should a safety distance of at least 50 metres from inhabited areas.

2.1.9 Other cancerous Factors

Some infectious factors cause cancer. 10% of malignancies in Europe have bacteria, viruses and parasites as causes. Cancer of

- (a) cervix of the uterus
- (b) liver
- (c) stomach and
- (d) some lymphoma

Have infectious factors as causes.

Research in this decade have shown HPV's role in developing cancer of the cervix of the uterus. This is how inoculations and much specialised controls detecting DNA of the virus in the cells of the cervix of the uterus were detected. An inoculation that covers the most common tumorous types of HPV (16, 18) have shown to be safe.

Chronic infections with the hepatitis B virus cause an increased risk of cancer of the liver. Cyprus, as a tourist destination, is particularly sensitive. Helicobacter Pylori is directly linked with stomach

cancer. Its presence increases the risk of developing the cancer by six times. Therapy with antibiotics and proton pump inhibitor helps eradicate the bacteria.

The following actions may substantially contribute to prevention:

- Applying the inoculation to girls in puberty (13 years old), provided, however, that first and foremost, a population control is carried out for cervical cancer.
- Intensification of inoculations for Hepatitis B taking into account the number of illegal foreigners/immigrants
- Education Day, including leaflets to the Health Officials

2.1.10 Immunisation/Genetic Factors

In past years, genes have been discovered that predispose the development of certain forms of hereditary cancer. The practical significance of these genes is attributed to the possibility of detecting them in persons with a positive family history and in which the possibility of developing some types of neoplasia is increased, in relation to the rest of the healthy population.

Within the scope of the Neoplasia Network (NN) operation that is proposed in paragraph 8.3 a Genetic Neoplasia Programme is to be organised, to substantially improve prevention and early diagnosis for a significant part of the population and shall contribute to the reduction of cancer occurrences.

The current programmes provided by the Makarios Hospital, the Institute of Neurology and Genetics, and the Karaiskakio, must be strengthened financially and with technological material so as to improve and upgrade their contribution.

The programme shall include:

- Genetic Advisory Services, by informing the public in time on the matter of genetics of cancer
- Algorithms regarding reference practices
- Continuous upgrading of the laboratory part for genetic analysis, and
- Organising surveillance programmes and or therapeutic interventions for people – carriers of specific genes.

B. Primary Prevention Targets

On the basis of the above-mentioned risks and factors, the main goals and priorities for primary prevention are reformed as follows:

- (i) Restricting the population's exposure to carcinogenic factors
- (ii) Promoting culture and a healthy way of life
- (iii) Educating/informing and making the public aware.
- (iv) Education and Continuous Training of Professionals
- (v) Inoculations
- (vi) Surveillance
- (vii) Research.

Particular emphasis is to be placed on vulnerable groups of the population. The Ministry of Health plays an important role promoting preventative programmes. Indicatively, the following are mentioned:

- (i) Actions to promote Health
- (ii) Policy / Legislation against Smoking
- (iii) Programmes on Food – Water Safety
- (iv) Diet and Health, a Way of Life
- (v) National Action Plan “The Environment and children's health”
- (vi) Training Health Professionals and others on matters connecting Health with the Environment and others.

2.2 Secondary Prevention

2.2.1 Applying population inspection for regular forms of Cancer

A good strategy against cancer must aim at preventing the disease out breaking to the population. A well-administered population screening has proved to be more effective than fragmented screening and consequently is a vital prevention tool, which needs to have a cost-effective scientific approach and to rely on correct practices. The European Union Council stresses that at least one third of all cancers may be prevented. Prevention remains the long term effective strategy in reducing the increased burden of cancer. The main aim is the screening programmes for

breast cancer, cervical cancer and cancer of the large intestine/rectum.

The purpose of screening is to diagnose cancer at a preclinical stage or at the early stages, before it develops. In the first instance healing may be achieved completely and in the second stage damage may be treated more effectively and therefore hopes for healing are stronger. The main indication as to the effectiveness of screening is reducing the impact of the disease or reducing the appearance of cancer at an advanced stage.

2.2.2 Secondary Prevention Targets

(a) Screening for breast cancer. Screening for breast cancer shall continue throughout Cyprus. The programme offers a free mammogram test to women aged between 50-69 and is already being implemented all over Cyprus since 2007 by the Medical Health Department and the Medical and Public Health Services of the Ministry of Health.

(b) Screening for cancer of the large intestine/rectum. The decision approved by the Council of Ministers (2007) on the development–application of population screening for cancer of the large intestine/rectum. The target–population are two age groups:

- The population, aged between 40-55 years old, estimated around 11,000 and on which a detection test shall be carried out on their faeces (3x) and
- The population, from 55 years old and upwards, to which free colonoscopy shall be provided indefinitely.

The design and application for the screening shall be based on the E.U. guidelines.

(c) Screening for cervical cancer. On the basis of a 2008 decision, a temporary committee was set up aimed at developing and applying a national population screening for cervical cancer. The aim of the programme is to reduce the impact and mortality from cervical cancer by detecting it at a pre-clinical stage. According to the European Council directive, Cyprus shall apply

this programme over the next few years. Basic aims of the Programme are the following:

1. Participation of at least 80% of the female population. This target shall be achieved with a successful campaign and dispersing information and by involving the Health Professionals.
2. Mechanisms controlling the adequate frequency of the test, quality and reliability of the laboratories and longitudinal supervision.
3. Information and awareness mechanisms

CHAPTER 3: Diagnosis and Therapy

3.1. Diagnosis

Timely diagnosis of cancer is important. A delay in diagnosis has consequences, not only in its therapy but also in the prognosis. Patient's awareness is also important as to particular symptoms, but also for Health Professionals, who must continually be informed. Doctors must be aware which patients are to be immediately referred and which to be re-examined. There is usually some delay which is either due to the patient or to the doctor or to the system. The patient hesitates to visit the doctor immediately, mainly from fear and insecurity as to the diagnostic methods and/or the result, because he is not aware and does not correctly evaluate the symptoms correctly. A delay in visiting the doctor is usually caused because the patient is not aware of the seriousness of the situation.

Goals for effective and timely Diagnosis

A. Confirming the symptoms – Informing the public

- Developing / improving the strategy on informing the public with regard to the symptoms that would result in visiting the doctor. The Ministry of Health has issued many leaflets in the past as to when patients must visit the doctor. The MM must be involved and communication methods are to be used with the Local Governments. Furthermore, the Health Professionals must be immediately involved, as also the patients' stakeholders.
- The European Code against Cancer must be translated and made available.
- Introduction of the term "Watchful Waiting", so that the symptoms are not forgotten.
- Continuous training of Health Officers on cancer matters.
- Developing guidelines for referral/diagnosis, based on clinical data.
- Ensuring co-operation of primary / secondary treatment, in the event there is a suspicion that cancer exists and expediting the provision of services.
- Developing indexes and recording data to ensure the quality of treating the patient during primary treatment and his referral to secondary treatment.

Targets of Effective and timely Diagnosis

B. Investigation in secondary treatment

For a better diagnosis in secondary treatment, the following are recommended:

- Diagnosis and therapy of rare forms of cancer to be carried out at specialised centres.
- Identifying the cases, that are either admitted or referred with a suspicion of cancer, with the aim of speeding up the procedures.
- Co-ordinating a team of specialists in cancer diagnosis, through computerisation, to avoid unnecessary or multiple procedures/examinations.
- Applying a Quality and Ascertainment System of representation methods.
- Setting up a Data Bank for the Histopathology Department.

- Setting up daily care units, in accordance with the E.U. guidelines.

3.2 Medication

The therapeutic approach to cancer must be holistic. Surgical treatment, drug treatment and radiotherapy all play an important role. With regard to medication, the following are applicable, on the basis of the new European data:

- The role of modern drug treatment in treating cancer is increasingly important. Drug treatment is the most expensive therapy option.
- With the assistance of molecular diagnosis, specialised individual drugs shall be prepared, which shall restrict the costs and the un-economical trials.
- Citizens of every country must have access to specialised therapy within the scope of the European Union (Cross Border Health Care).

This is why the Ministry of Health shall be monitoring the developments in the drug treatment sector and custom pharmacology, through a team of specialists, and shall readjust the pharmaceutical protocols and patterns, and monitoring mechanisms, always in accordance with the E.U. guidelines.

3.3 Surgical Treatment

3.3.1 General Approach

Surgical treatment of cancer is determinative in therapy and in the patient's course of health (repetition)

It is estimated that 70% of cancers are detected after surgical intervention and that is why special importance and specialisation is to be given in the oncology surgery sector and the Ministry of Health:

- Shall strengthen its co-operation with specialists on cancer with surgery and laboratory specialisation.
- Shall ensure that additional resources are obtained to organise the laboratory infrastructure and research co-

ordination and retraining of new doctors in oncology surgery and of all the involved medical and paramedical staff.

Despite the existence of capable and experienced surgeons to treat nearly all the spectrum of solid neoplasia, including specialised occurrences (soft tissue tumours, jaw/face etc), by not restructuring the existing infrastructure, prevents the creation of a critical mass of occurrences and the creation of specialised units in sufficient sectors, which may be corrected with suitable planning. The basic targets for improving the existing system are the following:

TARGETS FOR IMPROVEMENT

- Holistic approach to diagnosis and therapy, strengthening the multi-disciplinary approach.
- Recording the procedures for continuous monitoring and evaluation.
- Concentrating cases in some specialised centres that provide clinical quality with the aim of focusing on the same interventions and continuous specialisation.
- Solving the technical infrastructure and organisational problems and rational referral.
- Developing guidelines for surgical treatment, based on the application of best practices covering all the stages from diagnosis, therapy to longitudinal monitoring of the patient.
- Continuous specialisation of the medical and remaining staff for example, nurses, physiotherapists, psychologists. It is important that surgeons are medically trained on a continuous basis as to the new surgical techniques and managing cancer.

3.3.2 Specialised Breast and Gastro-Intestinal Centres

The Ministry of Health is promoting the creation of a Breast Centre on the basis of the relevant European Guidelines. The next step is to examine setting up a specialised surgery centre for cancer of the gastro-intestinal system.

The basic aims are the following:

AIMS OF SPECIALISED CENTRES

- To develop/improve the therapy sector in drug treatment by continuous adjustment of the protocols on modern therapy, including surgical treatment.
- Develop specialised centres for surgical treatment aimed at offering patients the finest and safest practices.

3.4 Radiotherapy

The need for radiotherapy has increased significantly. Suggestions for new therapies presuppose more complicated procedures and radiotherapy is used for follow-up treatment and Palliative Care. Technology renewal is important because modern technology gives better quality results reducing the time and duration of the therapy.

European research shows that the need for radiotherapy has increased by 40%. The Ministry of Health aims to ensure that the maximum time for waiting is four weeks and therefore the number of linear accelerators must increase accordingly, in relation to the entire population.

The needs of the Cypriot population must be examined, with a scientific approach, and to schedule purchases and installation, taking into account their scientific sustainability, in relation to future needs.

The basic Aims of the Radiotherapy Departments are the following:

- The provision of quality service to patients.
- Reducing the waiting time, to scientifically acceptable time limits.
- Continuous education of staff.
- Technological support for machinery/maintenance.
- Preparing guidelines on a national level for using radiotherapy.
- Accreditation of radiotherapy departments.
- Setting up a system for recording/monitoring to inspect the quality of the therapy

Linear Accelerators are to be installed at the Nicosia G.H., which shall be the Academic Foundation, part of the Medical School of

the University of Cyprus. Furthermore, the installation of Linear Accelerators in other large state hospitals shall be possible, depending on the needs and the scientific sustainability.

The installation has already commenced at the Limassol General Hospital.

An important factor is staffing these units with the necessary and suitably-trained personnel. It is noted that the Radiotherapy Departments are the most profitable for a hospital or clinic and it is estimated that with rational use, these machines shall be depreciated in four years.

At the same time and in accordance with the European Acquis, monopolies are prohibited because any monopoly is at the expense of the patients' health and of the economy in general, and the insurance funds.

3.5 Alternative Therapy

In various centres abroad, scientifically proven therapy protocols, which are at the experimental stage of application. Provided that the means that classic medicine has at its disposal have failed or the patient's particular features do not permit him receiving conventional therapy, then he may receive the experimental/alternative therapy after advice of the treating doctors and the Bioethics team.

CHAPTER 4: Palliative Care

Patients who no longer respond to therapy, need psychological and physical support. The same applies to their families. The aim is for a better quality of life. In Cyprus, Palliative Care is offered randomly by various private bodies and voluntary organisations.

The support provided by these volunteer groups is of significant importance, except that it needs an organised and co-ordinated effort to adequately respond to the increasing needs. The development of community service in general nursing, that offers home care, is necessary to extend all over Cyprus and to include cancer patients.

Only around 20% of cancer patients, in Europe, chose to die at home. Palliative Care must give the patient and his family the feeling of security to choose his place. Therefore:

- A holistic approach is required from trained personnel.
- Furthermore, guidelines must be put into place to apply Palliative Care, so that there are common quality indicators.
- Palliative Care Centres must be set up.

4.1 Substructure and Procedures

Palliative Care may be offered at the patient's home, at a nursing centre, old people's home, hospital, hospitality unit, Palliative Care centres and by health professionals. These must be supported by a specialised unit and other suitably organised services.

4.2 The support provided by voluntary organisation services and the state's contribution

Despite the fact that various voluntary organisations and private bodies offer Palliative Care with satisfactory results, nevertheless, the state must not entrust all the responsibility to charitable institutions. At the same time, individuals must be encouraged to offer specialised services and accommodation to cancer patients at the final stage.

The state has already proceeded in the application of a programme for home nursing under the direction of the nursing services. This service (General Nursing Community Service) provides home care to patients with all kinds of health problems.

At the same time, the state itself must organise Palliative Care Centres and Re-integration Centres in areas near the Hospitals, in order to:

- (i) Reduce the consequences from the disease and to offer the patient suitable therapy for relief from pain, with the participation of doctors of various specialties from the Hospital, with joint responsibility and a holistic approach.

- (ii) To offer hospitality to patients whose homes are far away and find getting around difficult when they need to have specialised long-term therapy (chemotherapy, continuous radiotherapy etc) or must have physiotherapy.
- (iii) Patients in the final stages must have the necessary care prior to their departure. At the same time they must not die near others who are being treated.

In applying the above, many departments at the Hospitals shall be unburdened and many beds shall be freed, whereas at the same time more care may be given to the patients.

Palliative Centres have been set up in many European countries. In these centres, doctors, who are familiar with interventional techniques, which are necessary for the treatment of chronic pain and the use of opioids/analgesics, provide their services to cancer patients. Nursing officers are also employed in these centres, who are familiar with medicines, machinery and corresponding techniques. Palliative Centres also include psychological support teams and apply alternative medicine methods (acupuncture). The setting up of Palliative Centres in Cyprus could be examined.

4.3 Re-integration

The development in cancer therapy has significantly improved the quality and survival time of patients. The average survival rate for men, in Europe (for all cancers in 5 years) is 45% and 56% for women.

Most of these patients have gone through various types of therapy. Due to strenuous therapy and the general condition of their health, they often tire, lose weight, have pain, suffer depression etc. In this sector, the necessary infrastructure must be set up to offer the necessary services to improve the physical and psychological condition of such patients and to assist in their re-integration. International publications estimate that 70% of such patients need to be helped medically, so that they may be quickly re-integrated. This will be achieved with the co-operation of the specialist and general doctor. All stakeholders in the community may also play an active role.

Re-integration of cancer patients has so far been an individualised procedure. The following measures must be taken into account for a better organised procedure:

- Establishing indicators and developing guidelines for re-integration measures.
- Setting up a co-ordination group for primary/secondary /tertiary medical care/community nursing.
- Establishing protocols that will observe progress and monitor the effectiveness of the re-integration measures.
- An active role for Local Government.

TARGETS

- To fully develop the provision of Palliative Care service on an organised basis of non-governmental stakeholders.
- Developing the community nursing services to include cancer patients on a pan-cyprian scale
- Having specialised personnel and setting up palliative centres
- Establishing infrastructures, indicators and protocols regulating cancer patients' re-integration.

CHAPTER 5: Research

Cyprus is a small country, does not have a large pharmaceutical industry, has no Medical School and does not have the ability to expend large amounts of money on cancer research.

Despite these difficulties, it exhibits a remarkable undertaking in research at the Department of Biological Studies at the University of Cyprus, the Karaiskakio Foundation and at the Institute of Genetics and Neurology. Relevant studies are being carried out on the population's exposure to cancerous factors, through the environment and food, at The State General Laboratory, in co-operation with the Medical and Public Health Services.

TARGETS

- Establishing a European Programme sector at the Ministry of Health.

- Providing participation incentives for doctors/scientists.
- Establishing a suitable infrastructure and co-ordinating all existing research Centres to avoid overlapping of the infrastructure and the programmes.

CHAPTER 6: Cancer Registry

The Council of Europe requested the member states, in April 2008, to record cancer data, covering the entire population. This project shall provide a significant supportive basis for the preparation and monitoring of preventative cancer policies and therapy.

In Cyprus, the Cancer Registry has recorded data since 1998. Today, it comes under the Health Monitoring Unit and its upgrading is continuously promoted.

For this purpose the following are promoted:

Targets/Measures

- Speedy promotion of enacting legislation and special regulations for the lawful and correct operation of the Cancer Registry under the administration of the Ministry of Health.
- Declaration of cancer must be made compulsory from multiple sources.
- The link between the Cancer Registry and Cause of Death Registry must be promoted.
- A closer co-operation with the E.U. Cancer Registries.
- Continuing the co-operation and co-funding by the Middle East Cancer Consortium (MECC).

CHAPTER 7: Quality/Monitoring

A system of quality inspection shall be established for all levels Prevention/Diagnosis /Therapy/Re-integration. The development and use of indicators has priority. Monitoring the results of preventative measures (population screening) and of the various methods – therapy techniques must be continuous and comparative, so that whichever interventions are effective are acceptable.

The effectiveness of a prevention policy must be based on substantial and integrated observation. Other than evaluating the data of the Cancer Registry, population bio-monitoring, the method of measuring real levels of cancerous substances in the human organism and their fluctuations, is an important tool.

Bio-monitoring is an essential tool in detecting priorities and assessing the prevention policy and that is why it constitutes the strategy of the European Environment and Health Action Plan.

Targets

- A quality control system is to be set up for all levels of Prevention/Diagnosis/Therapy/Re-integration.
- Apply quality indicators.
- A systematic and integrated surveillance.
- Bio-monitoring, that is measuring pollutants in humans, as an indicator of the impact of the environment to health.

CHAPTER 8: Applying the Strategy and necessary structure

To achieve the targets it is necessary to develop integrated services that operate in a co-ordinating manner in a well organised system with mechanisms that ensure the co-operation of all those involved.

The introduction of the General Health System unavoidably determines and affects the organisation and application framework. Further on there is a brief reference to the necessary structures and the need to set up a co-ordinating mechanism. The suggestions were based on the experiences and suggestions of longitudinal studies on the matter and the positions of the guiding committee. The latest noteworthy attempt to code the problems of cancer services in Cyprus was carried out by the "CANCER SERVICES IN CYPRUS" group, known as the Lordos report. In Appendix I extracts are set out for ease of reference.

In order to implement the Strategy, the National Action Plan on Cancer 2010-2015 shall be developed, with specific actions and time schedules for the implementation of the targets.

8.1 Applying the GenHS and the possible impacts

The introduction of the GenHS shall reform the organisation and administration of all health services. The accomplished changes in the health sector must be seriously taken into account in preparing the Strategy for Cancer Treatment and in planning the actions and time schedules.

Cancer is the second cause of death and due to the long survival of cancer patients, they shall require long-term therapy from many health services at the same time (not only oncological), from which the GenHS purchases services.

In applying the GenHS the state ceases to subsidize the operation of state Hospitals, the BOCOC and the Institute of Neurology. State hospitals shall be autonomous and their survival shall therefore depend of the sale of health services. Patients shall have the option of choosing the doctor, the clinic or hospital between the private and public sector. Competition between hospitals and private hospitals is expected to be great, which is considered good practice and will assist in upgrading health services.

This is why the health services in the Public Sector with regard to Cancer must be upgraded.

8.2 The Necessary Structures

Exploiting the existing infrastructure and services is of fundamental importance. Their reorganisation is a necessary condition to exploit the services offered to a maximum. The following are therefore recommended:

- **The services are to be classified in three characteristic levels of care:
Tertiary, Secondary and Primary**
- **A rational organisation of primary health care** where the family doctor and other specialists doctors that carry out primary health care have an important role in the sector of prevention, detection and promotion of health. The continuous training of the above officers in oncology must be a matter of priority and to be organised on a permanent basis.

- **A “Primary” system of care must be set up** for patients (monitoring after therapy, Palliative Care etc) near their homes, like regional hospitals and/or other private clinics.
- **At the Secondary level, regional oncology units are to be set up, in public hospitals of other towns, Limassol being a priority, and also in private clinics / hospitals.**
- **Organising the “Tertiary” sector**, meaning specialised services for cancer. This will lead to upgrading quality and in the long term this will lead to attracting patients from other countries, mainly neighbouring countries, with positive results in the best exploitation of the resources available in this sector. Establishing specialised Centres, for example, Breast and large intestine tumour surgery.
- **The specialised services to be provided at referral centres:**
 - The New Nicosia GH is recommended to operate as a Tertiary Oncology Referral Centre (ORC), where modern equipment has been set up for all specialties that cannot be found in other hospitals. The ORC must be surrounded by suitably equipped and staffed Tertiary Oncology Units that will be in a position to offer the most demanding therapies and/or interventions.
 - The BOCOC shall remain a referral centre in oncology. The decongestion that will be achieved by setting up an Oncology Clinic at the Nicosia New General Hospital shall give it the opportunity for further development and to invest in the research sector. The BOCOC could be reformed into a fully independent foundation offering a high level of specialised oncology services.
 - By introducing the GenHS, the BOCOC must be ready, as all health service providers, to compete in attracting patients. This shall be in line with the European Directives that recommend co-operation (but also competition) between the various institutions offering services. Of course, certain adjustable regulations are to be established for the infrastructure and the BOCOC administration plan for full harmonisation of the services offered with the other Institutions. At the same time, it would develop Medical Tourism, one of its proposals when it commenced its operations.

- **The BOCOC and the New Nicosia GH Oncology Clinic are to co-operate and to complement one another.** The BOCOC may become the second academic centre of the University of Cyprus or other private universities.
- **An independent National Committee on Cancer is to be set up** under the supervision of the Minister of Health to map out policies and to be the co-ordinating body of all organisations and professional teams of the public and private sector and of the volunteer bodies, who provide valuable services.

8.3 Establishing a National Committee, Permanent Secretariat and an Advisory Body

The reformation of policies, the hierarchy of priorities, co-ordinating and monitoring the implementation of the National Strategy shall be vested in a National Committee on Cancer. The Committee shall be supported by a scientific/executive secretariat set up by the Ministry of Health which will gradually turn into a body with its own staffing and structure in the Neoplasia Network (NN). An Advisory Body to the Committee shall be set up, with the participation of all the stakeholders, services, patients and volunteer groups involved.

Integrating all these bodies and services into the proposed NN to be operated under the umbrella of the National Committee on Cancer shall strengthen the co-ordination and effectiveness of the currently disbursed activities. The funding of the Committee and its bodies must be by the state, donations, funding by the E.U. and other bodies.

The Committee shall consist of 5-7 members and shall report to the Minister of Health. The Committee's term of office shall be for a period of five years, with a possibility to be renewed for another term.

The Committee, through its bodies:

- Shall advise the Minister of Health in reforming policies and strategies.
- Shall reform, promote and apply the necessary Legislative Framework.

- Shall coordinate all the bodies involved.
- Shall promote the co-ordination of clinical and laboratory services on cancer and shall be responsible to implement the quality control programmes.
- Shall manage the Neoplasia Registry (NR).
- Shall reform the priorities of continuous training of human resources and research.
- Shall design and implement programmes on primary and secondary prevention in healthy people who are considered “high risk” to develop neoplasia.
- Shall develop programmes to enlighten the public on matters of cancer-prevention including predetermining genetic factors.
- Shall be responsible for designing and co-ordinating the National Action Plan:
 - Determining specific actions and activities to achieve the strategy
 - Costing the actions
 - Preparing the Budget
 - Supervising and evaluating its implementation
 - Shall be responsible for reviewing the strategy.

Committee’s Constitution

The Committee shall be appointed by the Council of Ministers upon the recommendation of the Minister of Health and shall consist of:

- The President of the Committee.
- Four Distinguished Personalities with contribution in matters of public interest.
- Representatives from the Referral Centres.
- A representative from the Ministry of Health.

8.4 Time Schedule for implementation

The National Strategy shall be implemented within a six-year Action plan. The first one within the 2010-2015 time horizon.

8.5 Inspection-Control System and Public Report

The implementation of the Action Plan shall be accompanied by a continuous process of Inspection-Control, for the purpose of:

- Re-determining the aims and re-designing the actions.
- Securing and evaluating the effectiveness of the Action Plan.
- The best administration of resources in the battle against cancer.

The inspection and evaluation shall be carried out on the basis of objective, scientific indicators and data provided by the data collection system.

The inspection and evaluation procedure is linked with a continuous procedure of public report as to the course of the Action Plan and its results. For this purpose, the committee is obliged to submit an annual report on the activities and an evaluation as to the course and implementation of the activities to the Minister of Health and to publish its results on the internet and to the Mass Media, so that the population may be informed, in an effective and timely manner, as to the achievement of the National Action Plan targets.

CHAPTER 9: Conclusions and Suggestions

9.1 Conclusions

Despite the progress made in the last few years, Cyprus is not as yet in a position to offer integrated services for cancer. The patients' inconvenience, the weakness in exploiting the existing human resources, the lack of a quality control system and co-ordinated programmes for primary and secondary prevention, and reliable statistics, are some of the weaknesses in the existing system. At the same time, pressure from organised entities are becoming stronger and this involves the risk of forcing the State to take spasmodic and possibly unnecessary and or wrong measures, which increase the costs, without substantially assisting the patients.

Scientific research on cancer is very restricted because the structures are not there for securing substantial funding from various funding mechanisms from the E.U. and the possibility for competitiveness in an international environment.

Concentrating cancer services in only one Referral Centre presents, on the one hand, the advantage of creating a “critical mass” and specialisation; on the other hand it presents certain disadvantages, such as patients’ inconvenience involving simple examinations which could be offered at a lower cost closer to their home.

The National Strategy and its implementation within the Strategic Plan is a unique opportunity to overstep the existing unfavourable circumstances, of co-ordination and exploitation of the private and public sector. The effort to set up a co-operative but also competitive environment is an indication of culture and respect of the patient’s rights. At the same time, the National Committee’s constitution and of its bodies as an administrative stakeholder, aims at strengthening the co-operation between specialist technocrats and is in line with the spirit of the era.

Cancer patients must not be inconvenienced with continuous transferrals from doctor to doctor and from one health service provider to another. The global approach to the illness and the conditions that predispose the same shall significantly upgrade the services offered to the patients, shall improve primary and secondary prevention in high risk groups and shall, in the long term, reduce the morbidity and mortality from cancer in Cyprus, the main aim of the present strategy.

In implementing the strategy, the following are to be seriously taken into account:

- (i) The decision of the ECHR, which is now a European acquis, that patients are entitled to seek therapy abroad, if they do not receive therapy in time, at the expense of their insurance carrier.
- (ii) The W.H.O.’s appeal (May 2005) to all member states that: Cancer is developing into an epidemic, worse than Aids and all members states are called to increase the care provided to cancer patients and at the same time to increase the beds in state hospitals.
- (iii) The European Acquis prohibits monopolies in every field.

9.2 Suggestions

- The following suggestions shall be implemented within the actions of the Action Plan to be prepared, in detail, by the National Committee, to be appointed by the Council of Ministers. The Committee shall prepare policies and shall, first and foremost, be the co-ordinating body for all organisations and professional groups, not only for the private and public sector but also for volunteer groups, who provide valuable services.
- The services are to be organised in three identifying levels of care:
Tertiary, Secondary and Primary.
- Organising a “Tertiary” sector of high quality.
- The specialised services are to be provided in two referral centres at the Nicosia New GH and the Bank of Cyprus Oncology Centre.
- Gradually setting up Regional Oncology Units at Public Hospitals.
- Establishing specialised Centres, for example Breast and Gastro-Intestinal.
- Establishing a “Primary” system of care for patients (monitoring after therapy, Palliative Care etc).
- Private oncologists are to be supported and be provided with facilities in state hospitals. Furthermore, incentives are to be given to other private oncologists to operate surgeries in other districts (Limassol, Larnaca, Ammochostos and Paphos).
- Incentives and scholarships are to be given to surgeons to specialise in oncology surgery.
- Quality control systems are to be developed for all services or stakeholders, who are involved with cancer patients, to provide high specification services.
- The legislative framework on the basis of the Precautionary Principle in order to drastically reduce the population’s exposure to cancerous factors, with emphasis being placed on the populations vulnerable groups.
- To strengthen the co-ordination, at the level of implementation design, between the parties involved and evaluating the relevant programmes and to extend population screening.

- Legislation and a Special Regulation on the Cancer Registry is to be enacted immediately, for its lawful and correct operation under the administration of the Ministry of Health, which Legislation, among other things, shall render the declaration of cancer from multiple sources, compulsory.
- Hospitalisation care in the oncology sector is to be strengthened, in the clinical and community area.

9.3 Time Schedule for implementation

Once the Council of Ministers has approved the Strategy on Cancer, it must be promoted immediately, with the Minister's of Health relevant proposal for the constitution of the National Committee and its bodies, ie. the Advisory Body and the Executive Secretariat.

The National Committee, within three months of its appointment, shall prepare the Action Plan for 2010-2015 which will include, in detail, the actions to achieve the aims of the strategy.

The National Committee shall also prepare, in co-operation with the Ministries of Health and Finance, the budget to implement the strategy.

APPENDICES

APPENDIX 1

Extracts from the “CANCER SERVICES IN CYPRUS” work group, known as the Lordos report.

The study suggests setting up a Cancer network as a solution, and concludes as follows:

“... that the Government must proceed with setting up a Special Oncology Unit under the control of the State Medical Services at the New General Hospital, under construction in Athalassa, and which, having all the medical expertise, shall be a tertiary Public General Hospital. This Unit must also operate within the framework of the General Hospital, as a tertiary Oncology Referral Centre, equipped with the necessary and most modern technology, in co-operation with all other medical specialties found in the New Hospital. The New General Hospital’s closeness with the University may, in addition, offer the increased possibility of establishing a Medical School, as planned ...”

Further on the same study states the following:

“... The Bank of Cyprus Oncology Centre, once the proposed Oncology Referral Centre has been established, could be reformed into a fully independent institution offering specialised oncology services of a high level to the Gen HS, who will be purchasing services from the BOCOC, which is in complete ... with the European Directive that recommends co-operation (but also competition) between the various Institutions Offering Services. Naturally, certain adjustments will have to be made in the structure and to the BOCOC administration plan, to be in harmonisation with the services offered with the remaining Institutions, Services and Centres....”.

Finally, it concludes with the following:

“... Furthermore, Regional Oncology Units are to be set up in the future, in the other towns,