EUROPEAN LIFESTYLE MEDICINE ORGANIZATION

Guideline for lifestyle medicine curriculum

Education Working Group
Project Coordinator: Dr. Ioan Hanes hanesioan@yahoo.com

Background

The World Health Organization estimates that in 2020 two-thirds of all diseases worldwide will be caused by lifestyle choices. By 2030, it is estimated that non-communicable diseases (NCDs) will account for 52 million annual deaths worldwide.

One of the priorities of The United Nations' high-level meeting of the General Assembly on NCDs in 2011 is to reduce "the level of exposure of individuals and populations to the common modifiable risk factors for NCDs, namely tobacco use, unhealthful diet, physical inactivity, and the harmful use of alcohol, and their determinants, while at the same time strengthening the capacity of individuals and populations to make healthier choices and follow lifestyle patterns that foster good health."

The biggest challenge in dealing with NCDs is to help patients change their health behavior. Physicians have the potential to influence their patients' health behavior by presenting them with a set of skills in managing their lifestyle choices and by being a role model by practicing a healthy lifestyle. Both approaches have been proven to be very effective in supporting behavioral change.

The practice of lifestyle medicine incorporates many public health approaches, but it is primarily a clinical discipline. We are faced with a challenge: on one side, preventive approaches (lifestyle modifications) are generally not recommended or adopted due to multiple etiologies: lack of time, knowledge and skills by primarily medical giver, lack of economic benefits to commercial companies and the biggest challenge of mankind to make a change in oneself behavior, even an unhealthy one. On the other side, treatment services such as medications and surgery are recommended and adopted when there is an evidence-based medical indication for a treatment.

This is the reality that medical students, medical residents and medical specialists or lifestyle medicine practitioners are facing: the increase in NCDs is influenced by the lifestyle of their patients. The little time they spend with their patients in the medical office and the lack of knowledge about their lifestyle behavior is frustrating not only professionally but also personally. At societal and policy level the public health system faces increased expenses due to our inability to efficiently prevent and treat obesity, diabetes, certain cancers, high blood pressure and other chronic diseases. Lifestyle medicine could partially prevent and treat NCDs by offering a concrete set of tools such as stress management, smart nutrition or exercise training accompanied with effective tools to support and guide health behavior change. These basic skills are not sufficiently taught in medical training programs.

Section A. Introduction

The purpose of this guideline is to provide a framework in the development of education and training in lifestyle medicine in the medical school and in the medical postgraduate training.

The main purpose is to improve the quality of teaching and learning in the area of prevention and treatment of lifestyle-related (chronic) diseases (non-communicable diseases) by appealing to lifestyle medicine.

The European Lifestyle Medicine Organization (ELMO) will take the responsibility for developing this guideline based on the experience of its members who are professionals in the area of primary care, academia, nutrition, internal medicine and health management.

ELMO was recently launched at European level as the new academic medical society, so as to support the new initiative of an evidence-based lifestyle intervention that promotes self-management for well-being, prevention of illnesses, and management of chronic diseases.

The guideline was developed in response to a perceived need based on three types of evidence in medicine: an increased interest among physicians to adopt a different approach in treating chronic diseases; an increase in literature in the last years related to the relationship between lifestyle and certain chronic diseases; and a growing consensus of different «classical» medical specialities on the importance of lifestyle choices in the prevention and development of certain chronic diseases.

The guideline content set forth in this document is voluntary, not mandatory; it gives aspirational teaching and learning objectives, not necessarily required standards. As such, they are intended to afford broad latitude for curriculum and continuing education program development in the new field of lifestyle medicine practice. The ultimate responsibility for matters of curriculum adaptation and pedagogy is that of the faculty in higher education institutions and programs. Even if the curriculum developed by The European Lifestyle Medicine Organization (ELMO) will be an evidence-based one, the guideline is not intended to take precedence over the judgment of faculty or of the academic authority responsible for specific education and training programs.

The premise on which the need for this guideline is based is as follows: lifestyle interventions are utilized in some form by every physician at some point, but physicians properly trained in health promotion, dietetic counseling and exercise physiology, to name just a few of lifestyle medicine tools, will be more effective in achieving an optimal treatment and management of chronic diseases.

While there are already medical specialists involved in management of NCDs such as epidemiologists, public health specialists and internal medicine (primary care) specialists, there is a strong need to adopt a new approach in treating NCDs that are lifestyle related.

Lifestyle medicine also differs, even if there are overlaps, from other aligned fields in medicine, such as preventive medicine, individualized or personalized medicine, and integrative medicine.

Section B. Implementation and maintenance of proposed guideline

Once approved, the guideline will be proposed to graduate and postgraduate departments of medical faculties and medical associations for possible use in graduate or postgraduate programs, conferences and workshops, distance learning, and other appropriate education and training events.

Section C. Content of proposed guideline

The leading principles of this guideline are: 1) evidence-based medicine; 2) scientist-practitioner; 3) evolving field; 4) non-exclusivity

General competencies:

The 15 overarching clinical competencies required to practice lifestyle medicine are established since a few years and generally accepted:

A. Leadership (2 competencies)

1. promote healthy lifestyle behaviors
2. practice healthy lifestyle behaviors

B. Knowledge (2 competencies)

1. demonstrate knowledge that lifestyle can positively affect health outcomes
2. describe ways in which physicians can affect health behavior change

C. Assessment skills (3 competencies)

1. assess social, psychological, and biological predispositions
2. assess readiness to change
3. perform lifestyle medicine focused history, physical and testing

D. Management skills (4 competencies)

1. use nationally recognized practice guidelines
2. establish effective relationships with patients
3. collaborate with patients and their families to develop specific action plans like lifestyle medicine prescriptions
4. help patients manage and sustain healthy lifestyle practices including referrals as necessary

E. Community support: schools, offices and workplace (4 competencies)

1. have the ability to practice in interdisciplinary and community teams
2. apply office systems and technologies to support of lifestyle medicine
3. measure processes and outcomes
4. use appropriate community referral resources to support implementation of healthy lifestyles

Specific competencies:

The guideline comprises sets of specific knowledge needed for a lifestyle medicine practitioner within a work and organizational context. The recommended competencies are related to:

1. **Introduction to Lifestyle Medicine (for prevention and for treatment)**:

    - definition
    - importance in treating lifestyle disease burden
    - the role of behavioral determinants
    - scientific evidence of association between risk conditions as key to health outcomes
    - description of screening and diagnostic tests relevant to lifestyle-related diseases and their interpretation
    - how to use evidence based national/international guidelines
    - physicians' health- self-evaluation, personal goals, the importance of being a role model
    - disease management: high blood pressure, diabetes, hypercholesterolemia, respiratory disorders, arthritis and other joint problems, digestive disorders, stroke, HIV/AIDS, infectious diseases, female reproductive health, men's health, geriatric diseases
    - health management: lifecycle health, community health care, environment and health, occupational diseases and prevention
    - code of ethics of lifestyle medicine: obligation to offer the patient the best treatment according to the last medical knowledge.

2. **Nutrition and Dietetics**:

    - fundamentals: ability to perform a basic nutrition assessment, how to prescribe nutrition for basic disease processes including inflammation: food patterns/ macronutrients, food types/ micronutrients, food preparation/oxidation
    - nutrition in different lifespan: pediatrics, young adulthood/middle age, geriatrics, women's health
    - nutrition support: the major nutrition studies and evidence-based for nutrition prescriptions
    - nutrition assessment
    - food labeling
    - nutrigenomics
    - diet in specific chronic diseases: cardiovascular system (hyperlipidemia and atherosclerosis, hypertension, heart failure and cardiomyopathy); metabolic/endocrine systems: obesity (generalities) and diabetes mellitus; other organ systems:

gastrointestinal, hematology/oncology, immunology, rheumatology, pulmonary, renal, bone
- obesity: epidemiology, environmental and genetic factors, obesity in children, regulation of food consumption, complications, prevention and treatment
- culinary medicine principles
- behavioral science principles applied in nutrition
- community and population health through nutritional approach

3. **Exercise and Fitness**:

- definition and benefits exercise and physical fitness
- physical activity and fitness assessment
- review pre-activity screening, exercise history and fitness assessments, determine safe and effective exercise programs to achieve desired outcomes and goals, implement cardiorespiratory exercise prescriptions using the FITT framework (frequency, intensity, time, and type)
- prescribe exercise programs for health special populations (i.e., youth, older adults, pregnant women)
- prescribe exercise programs for patients with common diseases such diabetes, hypertension, ischemic heart disease etc
- exercise counselling and behavioral strategies
- personal physician health- serve as a role model for patients to engage in a program of regular physical activity
- integrating a multi-disciplined team

4. **Stress therapy:**

- the anatomy and physiology of stress
- a model to elucidate the phenomenon of stress- characteristics of stressors, expressions of stress, coping with stress, acute and chronic stress damage, positive aspects of stress
- screening tools for stress, depression and anxiety, components of emotional wellness self-management, basic skills of stress reduction techniques
- stress management: psychodynamics of behavior, stress, health damaging and health promoting behavior
- burnout

5. **Behavior change**:

- basics of effective relationship with patients
- tools that facilitate changes from different realms: motivational interviewing, health coaching, cognitive behavioral and positive psychology techniques

- developing an action plan adjusted for the appropriate stage of change, strategies for helping patients maintain health behavior

6. **Sleep**:

- physiology of sleep
- sleep disturbances
- the role in health and chronic disease, understanding the clinical implications of sleep disturbance
- improving sleep through lifestyle- based activity, dietary, environmental and coping behaviors

7. **Sexual health**:

- definition and the importance of sexuality to health
- sexual scripts
- specific sexuality management: in adolescents, sexual minorities and older age
- principles of sex analysis and their influence in a healthy sexuality
- the role of physicians in diagnosing and treating disorders of sexuality, tools for conducting a discussion on the subject of sexuality, recognizing limitations and situations that require referral to specialists (PLISSIT model)
- erectile dysfunction: definition, as sign in early detection of chronic diseases, evaluation and psychological and medication treatment

8. **Environmental Health**:

- definition and importance in health
- endocrine disruptors, heavy metals
- air pollution, electromagnetic pollution

9. **Tobacco cessation**:

- the physiological, psychological and behavioral components of cigarette addiction and its treatment
- the evidence-based literature on tobacco cessation interventions
- developing abilities to help patients in implementing plans for tobacco cessation

10. **Managing risky alcohol use**:

- the role of moderate alcohol use in the prevention and treatment of chronic diseases
- diagnostic tools for risky alcohol use
- developing ability to assist patients in developing and implementing plans for avoiding risky alcohol use

11. **Communication**:

- strategies for a clinical practice to obtain information about local community resources, reference and collaboration with other health professionals to enhance health behavior change interventions
- strategies for an efficient and evidence- based information dissemination with mass media and general public

Domain- specific competencies :

Domain specific competencies are organized into three broad domains of lifestyle medicine expertise that are considered important in becoming competent as a lifestyle medicine referent: individual, group/ special population needs, and organizational/ system. This model is intended for organizing and conceptualizing purposes when thinking about curriculum design issues and continuing education programs.

Interventions through different processes:

1. Educational
2. Training
3. Counseling
4. Coaching

1. **Individual- Level Domain**: the lifestyle medicine referent learns the skills for performing assessments and interventions centered on persons as separate entities. The self care of the referent is part of this competency as we can teach what we preach.

2. **Group- Level Competencies:** take the group as the primary unit of analysis and interventions. The group- level frame of reference pertain on interpersonal relations, role analysis, leader-follower behavior, interpersonal conflict, workflow intergroup relations, diversity, authority dynamics and inter-organizational relations.

3. **Organizational/Systemic- level Domain**: lifestyle medicine speciality focuses on interventions in which entire organization are either the targeted intervention level, or in which the organization itself is integral in effecting changes to segments of the larger organization or system.

The team of contributors and editors of the guideline on behalf of European Lifestyle Medicine Organization:

Dr. Ioan Hanes, Brussels, Belgium, Coordinator of the guideline
Dr. Stefania Ubaldi, President of The European Lifestyle Medicine Organization(ELMO)
Dr. Ioannis Arkadianos, Vice President of the European Lifestyle Medicine Organization (ELMO)
Dr. Lilach Malatskey, MHA, Head of The Israeli Society of Lifestyle Medicine
Prof. Adrian Kennedy, PhD. (USA), ELMO Ambassador in UAE&India, Arabian Wellness&Lifestyle Management
Dr. Valentini Konstantinidou, ELMO Ambassador in Spain
Dr. Rani Polak, Research fellow, PM&R Department, *Harvard Medical School*

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