
Training in Adolescent Medicine

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**The Israeli Adolescent Medicine Society
Israel Center for Medical Simulation**



Why Adolescent Medicine

Adolescent medicine has emerged as a subspecialty in the second half of the 20th century as a result of the growing recognition of the special health needs of adolescents:

- Physical and emotional growth and development
 - Nutritional disorders
 - Risky behaviours
 - Chronic illness
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Emergence of an Academic Discipline

- **1904** - The first listing in Index Medicus of a published document under the topic of ***adolescence***
 - **1941** - A symposium on adolescence under the auspices of the AAP: considered as the initiating force incorporating adolescent medicine into the domain of pediatric practice
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Emergence of an Academic Discipline

- **1951** - J. Roswell Gallagher opens the first adolescent inpatient unit in Boston
 - **1967** - The first complete program in adolescent medicine initiated at Montefiore Medical Center/Albert Einstein College of Medicine
 - **1968** - Two dozen attendees formed the Society for Adolescent Medicine (SAM = SAHM)
 - **1994** - First examination for sub-board certification in adolescent medicine
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International Initiatives

- **1987** - Establishment of the International Association of Adolescent Health (IAAH)
 - **1990s** - National adolescent health associations and societies were established in Italy, Spain, Switzerland, England, Israel, Brazil, Argentina, Canada, Australia and New Zealand.
 - **2001** - Establishment of MAGAM
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IAAH Statement – 2006

Professionals who wish to provide health care to adolescents are required to receive training in the field of adolescent medicine and health care

Formal Training Programs in Adolescent Medicine

- U.S.A. – 28 fellowship programs
 - Canada – 2 fellowship programs
 - Australia – 2 fellowship programs
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Adolescent Medicine Training in Pediatric Residency Programs

Fox HB, et al Pediatrics, Jan 2010

- Despite the introduction of a mandatory 1-month adolescent medicine rotation in 1997, many pediatricians do not think that they are adequately prepared to care for adolescents
 - Significant variation and gaps persist in adolescent medicine training in pediatric residency training throughout the United States
 - Lack of adequate training on issues such as gynecologic and pregnancy care, anxiety and depression, suicide, violence-prevention counseling, managing a positive screen result for substance abuse, and smoking-cessation counseling
 - Implementing reforms carries a cost, but there is also a cost for not having future pediatricians adequately trained in the care of adolescents
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UK – 2008: The Royal College of Pediatrics and Child Health

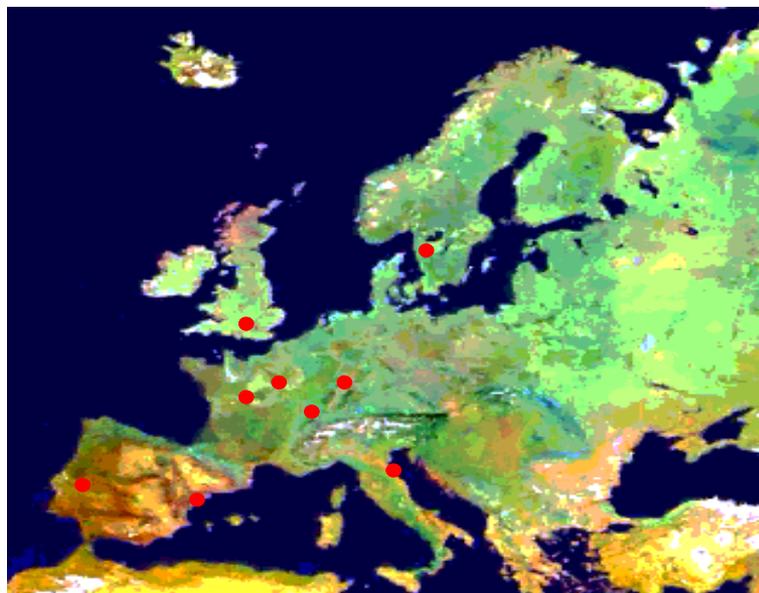
The "Adolescent Health Project"

- face to face learning
 - detailed e-learning modules
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EuTEACH

European Training in Effective Adolescent
Care and Health



THE EuTEACH NETWORK

EuTEACH: Objectives

- **To enable European health professionals to:**
 - adequately address & manage teenager health needs
 - integrate health education & prevention in clinical care
 - collaborate with families, schools and communities
 - assume responsibility in advocacy
 - **To set quality standards for adolescent health care**
 - **To initiate and support the development of adolescent health multidisciplinary networks**
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General Themes

1. Definition of adolescence & bio-psycho-social development
 2. Exploratory/experimental behaviour in adolescence
 3. Family interactions
 4. Communication skills
 5. Legal issues: rights and confidentiality
 6. Gender issues
 7. Socio-economic context & multicultural issues
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Specific Themes

1. Growth and growth disorders
 2. Sexuality and reproductive health
 3. Mental health
 4. Medical problems including chronic conditions
 5. Substance (mis)use
 6. Eating disorders
 7. Intentional and unintentional injuries, violence
 8. Nutrition, physical activity and related problems
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Public Health

1. Epidemiology
 2. Public health as applied to adolescents
 3. Principles of health promotion and school health
 4. Policy development, leadership skill development, advocacy
 5. Youth friendly health services
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Summer School - Educational Methods

- **Learner centeredness**
 - initial formal or informal assessment of learner needs
 - tailoring content and methods to learners
 - **Team work**
 - collaborative learning experience, assessment of team functioning, training in team skills
 - **Interactive learning**
 - Role-play with simulated patients, large-group discussions, small group work, larger role-play discussion
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US Guidelines

- Guidelines for Adolescent Preventive Services – 1995
 - G – Gather initial information
 - A – Assess further
 - P – Problem identification
 - S – Specific solutions
 - Bright Futures – 2008
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The Israel Society for Adolescent Medicine Initiatives

- Frontal lectures and bed-side teaching in all 4 Israeli medical schools
 - Regional one-day conferences on adolescent health issues for primary care physicians
 - Dedicated sessions on adolescent health care in the yearly national conferences in pediatrics, family medicine, and gynecology
 - Post-graduate diploma course in adolescent medicine
 - Simulated-patient-based training programs at the Israel Center for Medical Simulation
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Principles in the Design of Adolescent Health Education Programs Based on the Steps of Learning New Skills

- Presentation of theory
 - Discussion about implementation
 - Practice in a simulated setting
 - Feedback on performance
 - Coaching for transfer of skills into the work environment
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Post-graduate 3-year Diploma Course in Adolescent Medicine

- Aim – expose participants to a large variety of issues relevant in the comprehensive health care of adolescents
 - Participants – primary care pediatricians and family physicians
 - Weekly 4 hours afternoon sessions, for 6 academic semesters
 - Frontal lectures, workshops, communication exercises, case studies, and participation in adolescent medicine clinics
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Curriculum of the Diploma Course – 400 h

<u>Topics</u>	<u>Academic Hours</u>
Normal development (bio-psycho-social)	24
Epidemiology and health promotion	12
Legal and ethic considerations	16
Communication with adolescents (lectures and exercises)	20
Adolescents with special needs	6
Adolescents in transition	4
Nutrition, obesity, eating disorders	24
Drugs and alcohol	12
Endocrinology	12
Gynecology	20
Sports Medicine	10
Psychiatry	32
Infectious diseases including STD	12
Adolescents aspects in various medical specialties*	104
Emergency issues	10
Alternative medicine	8
Teaching adolescent medicine	10
Adolescent medicine clinics models	4
Practical exposure to adolescent medicine clinics	60

*Dermatology, Orthopedics, Cardiology, Pulmonology, Gastroenterology, Neurology, Hemato- oncology, Nephrology, Urology, Immuno-rheumatology, Ophthalmology, ENT, Genetics, Imaging

Present and Future re: Diploma Course

- So far 3 such courses were held, and 58 participants were entitled to receive the diploma in adolescent medicine.
 - At least half of them are already involved in operating adolescent clinics in the community
 - A 2-year adolescent medicine fellowship program was approved by the Scientific Council of the Israel Medical Association
 - Future fellows will train in adolescent health centers and will be required to attend future diploma courses
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Simulated-patient-based training programs at the Israel Center for Medical Simulation

- Actors (SP) train physicians in communication with adolescents – 8 recorded simulated encounters
 - Encounter – 10 minutes
 - Evaluation – 5 minutes
 - SP
 - Trainee
 - Observer
 - SP's feedback – 5 minutes

 - Debriefing discussion: clinical and communication aspects utilizing video-recorded encounters
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Scenarios for SP workshops – I

- Dysfunctional uterine bleeding presenting as fatigue and social withdrawal
 - Physical abuse by a parent presenting as recurrent abdominal pain
 - An adolescent girl who has been raped
 - Recommendations for birth control and sexually transmitted infection prevention
 - Pregnancy presented as secondary amenorrhea
 - First time pelvic examination
 - Explaining normal pubertal development to a mentally retarded adolescent girl
 - Eating disorder
 - Exacerbation of asthma
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Scenarios for SP workshops – II

- Recent onset of a malignant condition
 - Confidentiality regarding the disclosure of drug abuse
 - Crohn's disease presenting as underweight
 - Depression presenting as underweight
 - Consulting for HPV immunization
 - Parent's reluctance to medication for ADD
 - Multiple physical complaints to avoid military service
 - STD presenting as dysuria
 - Drug abuse presenting as tiredness and decrease in school performance
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470 physicians were trained in the Simulation Center in 7 years

- 327 (70%) – Primary care physicians
 - 44 (9%) – Physicians attending the 3-year diploma course in adolescent medicine
 - 34 (7%) – Gynecologists
 - 65 (14%) – Physicians practicing in military recruitment centers
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Pre-training Questionnaire

- 77% - received little exposure to adolescent medicine in medical school
 - 52% - received little exposure to adolescent medicine during residency
 - 96% - encountered adolescents in practice
 - 83% - perceived lack of skills in communication with adolescents
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Physicians' feedback to the SP-based workshops: Top 2 scoring of Likert scale

N – Physicians	N – Quality (%)	N –Contribution (%)	N – Value (%)
327 – PC	320 (98)	288 (88)	310 (95)
44 – DC	43 (98)	43 (98)	43 (98)
34 – GYN	32 (94)	33 (97)	34 (100)
65 – MRC	53 (82)	34 (52)	23 (35)

P<0.001

PC = primary care; DC = diploma course; GYN = gynecology; MRC = military recruitment centers

SP-based Programs Improved the Quality of Medical Encounters in Military Recruitment Centers

Pre- and post- intervention questionnaires filled out by candidates for military service demonstrated

- An increase in physicians' interest in the candidates' personal lives
 - A more relaxed atmosphere during the encounters
 - A decrease in omission of medical information
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Development of A Medical Curriculum - A Six Step Approach*

1. Problem Identification and
General Needs Assessment

2. Needs Assessment of Targeted
Learners

3. Goals and Specific
Measurable Objectives

4. Educational Strategies

5. Implementation

6. Evaluation and Feedback



Conclusions

- Professionals providing health care to adolescents require special training
 - Undergraduate and postgraduate courses in adolescent health care need to be available
 - Simulation settings are effective in improving communication skills with adolescents
 - Opportunities for the establishment of adolescent health services can be developed for health care providers who wish to start programs in their own countries
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Thank You

