A Quick Guide to the Teaching Methodologies

used in EuTEACH.

This part of the curriculum provides some basic instructions and recommendation in teaching methodology. Users of the curriculum are strongly encouraged to go through this section before using the modules. Those teachers who are not totally familiar with adolescent medicine should also refer to the short description of the key concepts used throughout this curriculum (***key concepts***)

This present document should be considered as a series of quick 'tips' to help you improve your teaching techniques. It is not designed as an exhaustive textbook as these will be found under 'further reading' at the end.

Background

- There is clear evidence from teaching practice that 'knowledge' *alone*, in those being taught, is not enough to bring about the better delivery of adolescent health care.

- Although 'learners' often like formal lectures, the unidirectional transfer of knowledge using formal lectures is not, by itself, effective in increasing competence in the delivery of adolescent health care by those doing the 'learning'.

- The contemporary teaching methodologies which emphasize 'interactivity' (outlined below) have been shown to be a more effective basis for increasing competence in those providing adolescent health care

- EuTEACH conceptualises teaching as providing the 'learner' with 'knowledge', 'attitudes' and 'skills' in order to practice medicine more competently., It is considered important for teachers of adolescent medicine to emphasise the acquisition of 'skills and attitudes' as an indispensable 'add on' to the basic medical knowledge which the practitioner may/should already have.

- The teaching methodologies that a teacher finally chooses to use should be in accordance with the teaching 'objectives' (see below).

Key concepts used in medical pedagogy

Knowledge refers to the 'cognitive domain'.
>   To know = pure theoretical knowledge.
>   Know how = the application of knowledge

<u>Attitudes</u> refer to the affective domain that includes 'learner's' values, beliefs, biases, emotions, and role expectations that may influence the management of patients.

<u>Skills</u> are the actual abilities to put specific knowledge into practice (performance or clinical competence)**.**

> Show how = demonstrate the ability to use specific knowledge or adopt specific attitudes
> Do = demonstrate in his/her everyday work that he/she has integrated the objectives of the course.

Main Steps in planning a course

Once you have decided in broad terms *what* you want to teach, to *whom*, and *why* you want to teach it, - you need to:

- Set your teaching objectives (Because these objectives are *for* the learners, it is strongly recommended to discuss/develop these with the learners.)
- Choose your teaching methodologies for meeting your teaching objectives
- Decide how you will evaluate your teaching outcomes to see if you have met your objectives.

1) Setting your teaching 'objectives'

Your teaching 'objectives' should be based on three different sets of information:

1) The general knowledge, attitude and skills needed in the specific field of adolescent health and medicine that you have chosen from the EuTEACH program outline. Each EuTEACH module sets out the desirable goals and objectives for that module.
2) Your own knowledge of local population and geographical adolescent health/medical problems/needs in the subject area you have selected for teaching
3) The needs of the specific group of the 'learners' that you are teaching, in terms of their current knowledge, attitudes and skills. An initial '*needs assessment'* *(go to needs assessment sheet)* can be carried out by giving a questionnaire in advance of the teaching course and/or, at the beginning of the session, by utilizing the relevant module's Entry Scenario (a composite scenario exemplifying the variety of problems in a given area) to stimulate a discussion of what participants feel they need. Individual, as well as group goals and objectives, should be encouraged. Information helpful to the teacher to facilitate this process include a) learners' desired topics b) the learner's previous training c) available resources.

Note: It is useful to note the training objectives in writing, and to check that each is consistent with the larger goals of your course. Objectives should be clear and measurable so as to permit a meaningful *evaluation* (*go to how to run an evaluation*) of the teaching/learners' accomplishments. For example, "The learner, at the end of the course should be able to assess all the 'Tanner' stages of puberty."

2) **Using the curriculum, planning the course**

The curriculum is arranged in modules which are organised in two parts : *general modules* covering issues unique to adolescence, which are considered necessary in order to build the basis for working with youth, *and modules on specific themes*. Each module can be used on its own, however it is recommended that you cover at least a part of the general modules before tackling specific modules. Modules are organised in the following way :

- At the beginning of each module an entry scenario is provided. It can be used throughout the session to illustrate specific issues and aspects of the theme.

- Reference modules are given for specific topics, in order to show where to refer to for further details

- Each module is preceded by a statement of 2-3 major overall goals, which define the desired outcome on completion of the module.

- Learning objectives are always expressed from the point of view of the learner and relate to the different dimensions of learning : cognitive (knowledge), affective (attitudes) or of technical competence (skills)

- Modules are organised in a table with columns including :

  ◊ characterisation of the learning objective (Knowledge/Skill/Attitude),
  ◊ training objectives
  ◊ reference modules
  ◊ educational methodology
  ◊ Activities, issues, questions
  ◊ Suggested references

The modules have been designed to allow for flexible use. In principle, each module can be covered – in it's shortest version – in three to four hours (half a day). If one wants to cover an area in half a day, you should select the objectives of the modules which fits both the participant's level of knowledge & skills as well as their reported needs. Most module can be covered more extensively within a 2-3 days session. For instance, with an audience of gynaecologists, it may be appropriate to spend half day sessions on some of the general topics and spend three to four days on the issues specifically related to the sexual & reproductive health.

When participants meet for the first time, it is strongly suggested that they should first spend at least half a day and preferably one day - in covering the first module (A1) and another basic module, before tackling more specific areas. This allow the participants to get to know each other and to exchange common concepts, definition and approaches. This is especially important for audience involving professionals from various backgrounds and cultures.

3) **Recruiting and preparing the teachers**

Most of the time, especially if you want to keep the course interactive (i.e. in small group sessions) EuTEACH sessions involve several teachers. All the potential teachers should ideally be aware of the general philosophy of the curriculum and training methodologies used in the EuTEACH program. They should in principle meet before the course is given in order to discuss the organisation of the session and their own role.

4) **Choosing your teaching methodologies for meeting your teaching objectives**

The following are suitable for teaching 'knowledge':

1) Formal lecture (unidirectional monologue)
2) Mini lecture
3) Interactive lecture with student active breaks (bilateral exchange)
4) Reading
5) Audio visual materials (CD ROM, video tapes, etc)
6) Case studies
7) Individual research (internet, Cochrane review, local data sets, literature review etc)
8) Group discussion
9) Field work (observations, discussions with adolescents etc)

The following are suitable for learning about 'attitudes':

1) Group discussion
2) Exploration of personal attitudes
3) Focus groups
4) Exposure to views and values using real or 'simulated' patients, novels, biographies, videos, websites (DIPEx = date base of individual patients experiences), role models in adolescent medicine.
5) Promotion of attitudes such as 'openness' and 'introspection'
6) Field work (observations, discussions with adolescents etc)

The following are suitable for teaching skills:

1) Simulations (artificial models, standardised patients, role plays)
2) Supervised clinical practice
3) Video taping clinical situations
4) Guidelines for good practice (including check lists and handouts)
5) Group discussion
6) Field work (observations, discussions with adolescents etc)

A description of some of the suggested methodologies.

❑   The formal lecture (unidirectional monologue) and mini-lecture: The advantages of the formal lecture are they can be structured, use low technology, and offer the ability to teach many learners in a short period of time. The

principal disadvantage is that the learners are the passive recipients of information. Formal lectures are often considered to be optimal if speaking time is limited to 20-30 minutes followed by a 'discussion period' of a roughly equal length. A short form of the formal lecture, the mini-lecture of 5 to 15 minutes may be used to introduce a topic and structure; or animate a further activity which directly engages the learners, such as a 'group session'.

❑ The interactive lecture with active breaks involving the students: A formal lecture may be notably enhanced by strategies which involve the learners. With a little creativeness, a teacher may include several different methods such as 'problem solving exercises' and 'case studies' which deliberately engage the learners in a more active process. You can also use 'active breaks involving students' during which the learners discuss specific issues concerning the presented topic with one another.

❑ Reading: The efficiency of the learners' reading is greatly increased if they are given a specific list of references to draw on, and a number of explicit questions to answer from their reading. A review of the medical literature including journal articles and textbooks is an efficient method for gathering available information. Clinical practice guidelines can also be reviewed.

❑ Field work (observations, discussions with adolescents etc): Learners are invited to go out into various settings such as schools, local shops, fast food restaurants, and discos to observe adolescents' behaviours and engage them in relevant discussions. The field work can provide a unique opportunity for many learners to gain first hand experience of the contemporary world of adolescents.

❑ Audio visual materials (CD-ROM, tapes etc): These methodologies tend to be expensive because of the equipment needed. In the field of adolescent medicine, audio visual materials are at the present time, not readily available in some countries, nor in many languages, other than English. Some Internet sites can be used as audio visual material (e.g. www.healthteenagefreak.org). A search of the Internet around the subject of 'teenage health' can be useful to find this material

❑ Case studies: Case studies are 'real life' cases that can be used in class to illustrate major problems and solutions encountered in clinical practice. Case studies may be presented for general class discussion; for use in small work groups; or as an impetus for role playing. They allow the learners to practice applying recently acquired knowledge, and to obtain views from various other disciplines . The 'cases' chosen for any particular topic should be complex enough to 'bring up' the major points for discussion. Many short cases are provided within each EuTEACH module s0 as to allow the teacher to add on specific details. Such details can be elaborated in line with the needs of the class. Another efficient and useful source of 'case studies' is the learners themselves, who can present cases from their own clinical practice and experience. Case studies can also be obtained from Internet websites such as www.dipex.org

- <u>Individual research (the Internet, the Cochrane reviews, local data sets, literature review etc):</u> Like general reading assignments, individual research is best guided by the teacher. It is the teacher's role is to steer the learner to relevant resources in such a way that they understand how, in the future, they can use these resources by themselves. The advantages is that this approach promotes 'self directed' learning. The disadvantages is that it is time consuming and depends on the motivation of the learner.

- <u>Group discussion:</u> Discussion can be used in many different teaching situations and helps to promote an understanding about the different views and opinions that may arise from clinical situations. While the interaction it induces amongst peers is valuable it needs, where possible, to be structured and directed by the teacher in order to obtain maximum benefit. The teacher's skills in questioning, keeping the discussion focused, and summarizing is vitally important.

- <u>Simulations (artificial models, standardised/simulated patients, role play):</u> Of these 'role play', whereby learners assume the roles of the different people involved in a complex problematic situation and try, through spontaneous acting, to find solutions, is the easiest to implement and does not normally need many resources. It allows learners to try new techniques, experience different roles, actively test their ideas and reactions, make mistakes and repeat their performance until a skill is achieved. The performances can be videotaped for feedback or used as audio visual resources in other situations[1]. .

- <u>Supervised clinical practice:</u> the classical approach to this is 'see one; do one; teach one'. A 'learner' watches a demonstration by an experienced clinician, then ~~to~~ practices the skills demonstrated under supervision with feedback on their performance, and finally teaches a fellow 'learner' in order to consolidate and condense the key elements of the experience. The development and use of checklists can enhance this approach.

- <u>Video taping clinical situations:</u> Clinical situations can be videotaped for use as a teaching tool, and is especially good for stimulating dialogue about good and bad practices.

- <u>Guidelines for good practice:</u> Guidelines (often in terms of flow diagrams) are available for the treatment and management of a number of health problems. These are ideally linked with a review of the relevant medical literature, a can act as a hallmark for practicing 'evidence based medicine'.

- <u>Exploration of Personal Attitudes:</u> Methods to facilitate learner 'attitude openness' and 'introspection' include individual exercises in self reflection, group discussion, and focus groups. In order to elaborate a non-judgmental approach to the practice of adolescent medicine, exercises are designed to expose the learners to situations where they have to reflect on or confront their

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[1] *Role play can evoke strong emotions. Less experienced teachers may want to refer to the guidelines available for running role play sessions (see ref 5 below). Standardised/simulated patient is someone who has been trained to act the 'part' of a patient*

own beliefs, values and attitudes which might influence the way in which they manage their adolescent patients. For example, patients/videos/case histories of adolescents heavily involved with drugs may be used to provoke group discussion wherein individual learners are challenged to inspect their personal attitudes, and the roots of their individual reactions to drug taking amongst young people. Because discussions of personal attitude may be tinged with emotion, the teacher needs to provide some structure and be alert to the possible need for guidance.

❑ Exposure to a variety of views and perspectives on adolescents and adolescent behaviour: Trigger tools for this approach can include real or 'simulated' patients, novels, biographies, videos, websites (DIPEx = date base of individual patients experiences), adolescent role models. These exercises allow the learners to be exposed to a variety of different (and sometimes opposing) views and values about adolescence and adolescents.

❑ Focus groups: Focus groups are made up of 8-12 learners and are normally setu up with the purpose an carrying out an 'in depth' exploration of a variety of views around a particular topic/s. It represents a 'brainstorming' session in order to obtain as wide a range of views as possible, rather than attempting to obtain a consensus view. Focus groups may also include outside experts or other representatives interested in the issues (see reference below).

If you need extra basic material to build your course we strongly recommend the use of an educational site developed by Prof. Laurence Neinstein in Los Angeles (*www.usc.edu/adolhealth*) . This site was developed for use by health care professionals involved in either the teaching of adolescent health or clinical care of adolescents and young adults. The material was developed to either stand alone or to be supplemental material to the EuTEACH curriculum of adolescent health. It includes in each section text background, cases, questions and answers, weblinks and a small reference section. The reader can use the text alone, the cases alone or the questions and answers alone. This is not meant to be an exhaustive curriculum in adolescent health but a supplement to other teaching modalities

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Further reading and other resources

1. Curriculum Development for Medical Education: a six-step approach. David Kern et al. Publ by Johns Hopkins University Press, Baltimore and London. 1998.

2. Data Base of Individual Patient Experience. www.dipex.org

3. Educational handbook for health professionals. Geneva. WHO 1987.WHO Offset Publication. Vol 35.

4. Integrated Management of Childhood Illnesses. Facilitators Guide to Modules. WHO and UNICEF 1997. Section on 'Guidelines for all modules' I 1 to I 15. (available on the WHO internet site).

5. Kim S, Stevens NG, Pinsky L. New ideas in medical education;
    Casting anxiety in small group facilitation: faculty development via role play.
    Medical Education   2003 37 : 489

6. Krueger R.A. Focus groups: a practical guide for applied research. 2nd Ed.
    Thousand Oaks. Sage 1994.