Training Programme (essential elements)

Clinical Practical Year (CPY)

at Medical University of Vienna, Austria

CPY-Tertial C

Social Medicine - Public Health

Valid from academic year 2020/2021

Responsible for the content

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This training programme applies to the subject of "Social Medicine – Public Health" within CPY tertial C "Electives".
The training programmes for the elective subjects in CPY tertial C are each designed for a duration of 8 weeks.

3. Learning objectives (competences)

The theoretical principles were taught to students in blocks 1, 6, and 22/23. These are developed and implemented as skills in the CPY. With some skills it will only be possible to practice in simulation or can only be discussed in terms of their importance, possibly supported with teaching materials. In such cases this is explicitly stated.

The following skills shall be acquired or deepened in the subject of Social Medicine – Public Health during the CPY.

3.1 Competences to be achieved (mandatory)

1. Identification and assessment of risk factors as well as lifestyle advice (physical activity, diet, smoking, alcohol, illicit drugs)
2. Data collection and assessment of the significance of indicators/data in order to address specific problems
3. Use of epidemiological analysis procedures in one of the specified areas of activity
4. Interpretation of relative risks
5. Interpretation of statistical significance
6. Writing up a summary while preparing health reports
7. Development of health promotion and protection concepts in accordance with evidence-based criteria
8. Planning of the implementation of measures to prevent and/or combat disease (e.g. pandemic or other infectious or non-infectious disease, or food-borne outbreak)
9. Researching scientific literature and basic statutory regulations

3.2 Optional competences

In addition to the competences that are mandatory to achieve, further competences from the following list may also be acquired.

1. Assessment of the efficiency and effectiveness of health promotion and protection programmes
2. Crisis communication (simulated situation, e.g. pandemic)
3. Assessment of the implementation of the objectives of "controlling health targets" as laid down in Art. 15a of the Austrian Federal Constitution Act

4. Information on verification of performance, on-going assessments

4.1 The following skills and problems can be assessed in the DOPS:

1. Ability to formulate written summaries when preparing a health report/research assignment
2. Research of literature/legislation (including survey of the epidemiological situation) around a specific problem
3. Methodology used (choice of indicators, choice of statistical methods) in a project or research assignment
4. Data analysis (descriptive statistics, statistical tests for differences and relationships, statistical significance) for the interpretation of results in a project or research assignment
5. Measures to tackle risk factors, health problems or illnesses
6. Presentation during a seminar or unit or centre discussion/review

This list can be expanded accordingly.

5. Subject-specific details regarding the CPY assignments

Training programme. The learning objectives are designed to cover the skills most commonly encountered in daily practice in the subject of Social Medicine – Public Health, which every doctor should master in her/his advisory role irrespective of later specialisations. In addition to the epidemiology of the most common diseases, this also includes the identification of risk factors, assessment of the effect of harmful exogenous factors (interpretation of thresholds and relative risk) and the recommendation of measures to promote health and reduce the incidence and prevalence of disease. CPY students should also be able to deepen their theoretical knowledge of modern health promotion, primary prevention and screening programmes.

The following CPY assignments must be completed in the subject of Social Medicine – Public Health:

(A) Active tasks – mandatory component	8 week period
Data collection: e.g. literature search, research into the basic statutory regulations relating to a particular problem, preparation of a questionnaire (80 – 120 hours)	1x
Performance of a data analysis under instruction, search for statistically significant relationships or differences (24 hours)	1x
Assessment of the results of a project or research assignment (8 hours)	1x
Written summary of the results (16 hours)	1x
Written discussion of the results (32 hours)	1x
Article presentation during a university unit-specific professional development/training event (e.g. ZPH Science Lunch) (20 min)	1x

A) Active tasks – mandatory elective component	Points	8 week period
Data collection: literature search relating to a specific problem (16 hours)	6	Elective assignments amounting to at least 15 points from at least 2 categories
Data collection: research of basic statutory regulations relating to a specific problem (8 hours)	4	
Data collection: preparation of a questionnaire for a respondent survey (80 - 120 hours)	10	
Questionnaire-based interview of respondents (40 - 60 hours)	10	
Preparation of data analysis: data input into statistical programs (40 hours)	8	
Performance of a data analysis under instruction, search for statistically significant relationships or differences (24 hours)	10	
Assessment of the results of a project or research assignment (8 hours)	4	
Written summary of the results (16 hours)	6	
Written discussion of the results (32 hours)	10	
Article presentation during a university unit-specific professional development/training event (e.g. ZPH Science Lunch) (20 min)	10	
(B) Attendance at training and professional development events – mandatory component		**8 week period**
Further training/intern training		2x
(B) Attendance at training and professional development events – mandatory elective component	**Points**	**8 week period**
Further training/intern training	2	Elective events amounting to at least 4 points from at least 2 categories
Participation in university unit-specific professional development/training event (e.g. DSPM regular meetings/"jours fixes")	1	
Participation in university unit-specific professional development/training event (e.g. ZPH Science Lunch) and interdisciplinary discussions	1	
"Morbidity & Mortality" conferences	1	
External training and professional development events per ½ day (congresses, conferences etc.)	3	
Course attendance per ½ day (e.g. burnout prevention, lecture series: Bewusst gesund@MedUni Wien, SPSS seminars, biometrics courses, Medical English course, presentation training for scientists, seminar: "Clinical Studies", publication workshops)	3	
Non-live events (e.g. Webinars)	1	

Appendix: Details of the CPY assignments in the subject of Social Medicine – Public Health

Data collection: literature search relating to a specific problem (16 hours)

Definition/framework:
1. Selection of a specific problem
2. Selection of database(s)/search engines where the search should take place.
3. Assessment of collected data, reliability of data source, sample size, number of available studies
4. Written description of the collected data, detailing the sources

What is to be documented:
Preparation time: none; time for the task: 30 min – 16 hours
Scope: max. two pages of writing (A4, Arial 12, line spacing 1 cm)
Framework: literature, databases, websites of official national and/or international institutions
Resources: meta-analyses in the literature

Rationale:
Why have you chosen this subject? What have you learnt from it?
Feedback from mentor and student
Documentation: written, keywords on each point

Data collection: Research of basic statutory regulations relating to a specific problem (8 hours)

Definition/framework:
1. Selection of a specific problem
2. Selection of database(s)/search engines where the search should take place.
3. Assessment of collected data, reliability of the data source
4. Written description of the collected data, detailing the sources

What is to be documented
Preparation time: none; time for the task: 30 min – 8 hours
Scope: max. one page of writing (A4, Arial 12, line spacing 1 cm)
Framework: literature, databases, websites of official national and/or international institutions
Resources: Internet

Rationale:
Why have you chosen this subject? What have you learnt from it?
Feedback: mentor and student
Documentation: written, as above, possibly further keywords on each item

Data collection: Preparation of a questionnaire for a respondent survey (80 - 120 hours)

Definition/framework:

1. Selection of a specific problem*
2. Planning of the study to be performed by means of a questionnaire-based interview: necessary size of sample, planned type of interview (phone, e-mail, personal interview of respondents)*
3. Selection of questionnaire target group (respondents)*
4. Literature search in preparation of the questionnaire, search for similar examples in the scientific literature
5. Assessment of the collected data
6. Written formulation of a questionnaire adapted to the specific questions
7. Selection of response option for each question with particular attention to the quality of the data thereby collected: response options (nominal scale, ordinal scale, metric scale).
8. Consideration of: anonymity of questionnaire, details of gender and/or age, socio-economic status
9. Checking questionnaire in terms of data protection, language, complexity and length

   * If points 1-3 have already been specified in projects or research assignments, student is to start at point 4.

What is to be documented:
Preparation time: none; time for the task: 80 to 120 hours
Size: written questionnaire max. 8 pages (A4, Arial 12, line spacing 1 cm)
Framework: project/research assignment
Resources: similar studies in the literature, models from earlier studies from own institution

Rationale:
Why have you chosen this subject? What have you learnt from it?
Feedback: mentor and student
Documentation: written, copy of questionnaire, keywords

Questionnaire-based interview of respondents (40 - 60 hours)

<u>Types of survey:</u>
1. Telephone survey
2. E-mail/online survey
3. Face-to-face interview

What is to be documented:
Preparation time: 8 hours; time for the task 40-60 hours
Scope: maximum 150 interviews
Framework: project/research assignment
Resources: telephone book, Internet, e-mail distribution list, patient file cards

Rationale:
What are the pros and cons of the chosen type of survey? Where did you encounter problems?
Feedback: mentor
Documentation: written, keywords plus copy of anonymised list of participants

Preparation of data analysis: data input into statistics program (40 hours)

Definition/framework (contents):
Data input into SPSS statistics program. Personal data must be anonymised.

What is to be documented:
Preparation time: 16 hours; time for the task: 40 hours
Scope: data input of max. 150 respondents
Framework: project/research assignment
Resources:
- Achim Bühl. SPSS 20. Einführung in die moderne Datenanalyse. 13th edition 2011
- Felix Brosius. SPSS 20 für Dummies. Paperback

Rationale:
What have you learnt from it?
Feedback: mentor
Documentation: printouts, screenshots

Performance of data analysis under instruction, search for statistically significant relationships or differences (24 hours)

Definition/framework (contents):
Selection and performance of statistical test methods using the SPSS program. Other programs can be used for the data analysis.

What is to be documented:
Preparation time: 40 hours, deepening knowledge of test methods and use of SPSS.
Time for the task: 24 hours
Scope: analytical statistics
Framework: project/research assignment
Resources: similar examples in the literature, models from earlier studies from own institution

Rationale:
How would you carry out your own analyses?
Feedback: mentor
Documentation: printouts, screenshots

Assessment of the results of a project or research assignment (8 hours)

Definition/framework (contents):
Application of social medicine methodology.

What is to be documented:
Preparation time: none; time for the task: 8 hours
Scope: descriptive/analytical epidemiology
Framework: project/research assignment
Resources: templates/models from other studies

Rationale:
What conclusions can be drawn from data of this sort?
Feedback: mentor
Documentation: written, analyses, tables

Written summary of the results (16 hours)

Definition/framework (contents):
Application of social medicine methodology.

What is to be documented:
Preparation time: none; time for the task: 16 hours
Scope: descriptive and analytical epidemiology
Framework: project/research assignment
Resources: templates/models from other studies

Rationale:
What have you learnt from it?
Feedback: mentor
Documentation: written, preparatory concept for publication

Written discussion of the results (32 hours)

Definition/framework (contents):
Application of social medicine methodology.

What is to be documented:
Preparation time: none; time for the task: 32 hours
Scope: max. two pages of writing (A4, Arial 12, line spacing 1 cm)
Framework: project/research assignment
Resources: literature

Rationale:
How do I write a scientific paper?
What requirements must be met?
Publication styles of different magazines.
Feedback: mentor
Documentation: written, preparatory concept for publication

Article presentation during a university unit-specific professional development/training event (e.g. ZPH Science Lunch) (20 min)

Science Lunch is a meeting of scientists at which current projects and scientific publications are presented and critically discussed.

Definition/framework:
1. Summarise aim, methods and results of a study
2. Critical examination of methods and results
3. Structure of the presentation:
   Question – background – inclusion criteria – exclusion criteria – study design and methods – study location – interventions – outcome/results – comments – literature
4. Themes of the discussion:
   a. Conclusions verifiable?
   b. Is the data given sufficient?
   c. Results of other studies/authors
5. Audience feedback

What is to be documented:
Preparation time: 3 hours, time for the task: 20 minutes
Scope: written summary of at least 250 words
Framework: scientific colleagues
Resources: scientific literature

Rationale:
Relevance? Why choose this work?
Preparation of a presentation within a scientific framework
Feedback: mentor and participants at the presentation
Documentation: printout of the presentation