Planning the scientific presentation of March 23rd
Epidemiological methods in medical research 2023

Timeline
- Preparation: reflexion about a subject: who, what, why, how
  fill the project description template (see below)
- 23rd February (14.00-14.30): Peer-feedback session
  (17.00): send project description to brice.ozenne@nru.dk
- 20th March (18.00): send pdf of the presentation + short abstract
  to brice.ozenne@nru.dk
- 23th March (13.00-17.00): the class is split in 3 groups (BO,KSL,AMNA) of 10 students,
  Each student has 10 min for the presentation and 8 min discussion

About the presentation
To exemplify and discuss the use of epidemiological concepts/statistical methods

➔ Ideally based on one of your Ph.D. project: can be a study you are doing, have already published, or that you are planning (pre-register a study https://aspredicted.org/).
Otherwise based on a scientific paper (e.g. identify a methodological challenge you met during your Ph.D. and look for one or few articles on the subject)
⚠ Less is often better. Prefer to present in detail how you evaluate and communicate about the association between one exposure and one outcome than to present all the results from a project.

➔ Can be done alone or in pairs

➔ Can be about: how 'standard methods' can be used in your research
  how to communicate results from 'standard methods'
  how specificities in your study design challenges 'standard methods'
  pro/cons of two designs or statistical methods (traditional vs. new) in your field
⚠ the focus should be on the methodology more than on the clinical relevance/originality.
⚠ should be focused about a specific point – not a description of your Ph.D.

Recommended structure:

- introduce the context - 1 or 2 slide
- describe the research question - 1 slide
- describe the methodology (data collection, statistical approach) – 2 or 3 slides
  ⚠ avoid listing statistical methods. Instead first state what you want to estimate (e.g. ratio between the 1 year risk of death with disease A vs. disease B) and then how you estimate it.
- brief representation of the data + one or two key results – 2 or 3 slides
  ⚠ graphical representations are encouraged: e.g. do not just report a hazard ratio, illustrate the survival for (specific) patients under the different exposures.
- conclusion and comments about the strength/weakness of the methodology – 1 slide
  (adequation between the methodology and the research question)

About the short abstract

To give an idea about the content of the talk to the other students and to the teacher

➔ It does NOT need to follow the usual "intro/method/results/discussion" format

➔ Short is good (around 50-100 words): just describe in a few sentences what is your key message or what you are going to present, e.g.:
"In this presentation I will present the analysis of registry data to investigate whether hormonal contraceptive should be considered as a risk factor for depression. I have been using a Cox model to model this association and use survival curves to illustrate the risk of depression under different type of contraception. One difficulty I met was that some women changed type of contraception during their follow-up and I will discuss solutions I considered."

About the peer-feedback session

Brainstorm with another student topics and structure for the presentation

➔ In turn discuss the content/form/barrier/plan for your presentation (10 min each)

➔ Individually: based on your discussion update your project description (5 min)

➔ Individually: fill the section feedback with comments about the peer-feedback (5 min). You can also indicate if you would like some advice from the teacher or if something is unclear about how the scientific presentations will take place.

⚠ the peer-feedback session and project description are meant to help you in defining and planning your work. The project description you send at the end of the day does not need to be finished/polished/perfect. It should give an idea to you and to the teacher of where you are at and identify challenges and remedies.

Project description

Name:

Content: on what topic would you like to present? Alone or in pair (with who)?

own research or article from the literature? Which article?

what would be the take home message or key discussion point?

Form: will you follow the usual intro/method/result/discussion?

what do you anticipate will be difficult to communicate?

visual / graphical illustration that could summarize the key message

Barriers: what may limit your ability to make progress and possible remedies
- Practical (e.g. access to data, time, coordination with the other student, …)

- Theoretical (e.g. defining a research question, understanding of a statistical method, programming skills, …)

Plan: What will be the next steps?
- date 1: step 1
- date 2: step 2
- ….

Feedback to the teacher: