Lesson Plan for English 2

Audiences: MSc students in midwifery, Second trimester
University: Tabriz University & Medical Sciences- Nursing & Midwifery Faculty-
Midwifery Department
Designer & Instructor: Dr. Sakineh Mohammad- Alizadeh, PhD in Reproductive
   health

First Session- Students are expected:
1. To do an exam on health research terms (pre-test)
2. To explain the course and lesson plan for the course
3. To explain references for the course
4. To explain how to access to Interactive tutorials in Medlineplus

Second Session- Students are expected:
1. Pap Smear, Transcript, Tutorial
   a. To read and listen to the subject before the session
   b. To ask questions about the subject to better understand it
   c. To summarize the paper (orally or in written)
   d. To answer questions about the subject (orally or in written)
2. To define terms related to types of studies including Qualitative methods,
   Quantitative methods, Essential national health research, Pilot study/pre-test,
   Action research, Case study / Anecdote/Case history/ Single case report, Case
   series, Epidemiology, Observational study/ Non-experimental study,
   Descriptive study, Analytical study, Case-control study, Prevalence study,
   Cohort study, Prospective study, Retrospective study, Survey/Cross-sectional
   study, Longitudinal study, follow up, Intervention, Intervention study/
   Experimental study, Review , systematic review, Meta-analysis, Original study/
   primary study, Secondary study

Third session
1. Uterine Fibroids, Transcript, Tutorial
   a. To read and listen to the subject before the session
   b. To ask questions about the subject to better understand it
   c. To summarize the paper (orally or in written)

d. To answer questions about the subject (orally or in written)

2. To define terms related to types of studies including Pre-test/post-test design, Uncontrolled trial, Before-and-after study, Non-randomised study, Clinical trial, Controlled before and after study, Controlled (clinical) trial (CCT)/ Controlled trial, RCT/ randomised controlled trial, Arm, Parallel group trial/ Independent group design, Multi-arm trial, Paired design, cross-over trial, Washout period/phase, Run-in period, Carry over, Factorial design, Sequential trial, Interrupted time series, Multicentre trial, Open clinical trial/ Open trial, Open sequential design, Pragmatic trial, Explanatory trial, Cluster randomised trial, Non-inferiority trial, Equivalence trial, Positive study, Negative study, Phase l, ll, lll, IV clinical trials, treatment, Conventional treatment, Standard treatment, Gold standard, Co-intervention,

Fourth session- Students are expected:
1. Depression, [Transcript](), [Tutorial]()
   a. To read and listen to the subject before the session
   b. To ask questions about the subject to better understand it
   c. To summarize the paper (orally or in written)
   d. To answer questions about the subject (orally or in written)
2. To define terms related to sampling including population, reference population, Context, Eligibility criteria, Convenience sample, Consecutive sampling, simple randomization, Representative sample, Random sample, Systematic sampling, Stratification, Cluster sampling, Enrollment, assignment, Randomisation, Stratified randomization, Block randomization/ Random permuted blocks, Matching, Minimisation, Restricted randomization, unit of allocation, Sampling error, Generation of allocation sequence, concealment of allocation/ Allocation concealment, Allocation sequence, Deterministic method of allocation, Allocation ratio, Random assignment /Random allocation, Quasi-random allocation, blinding/ Masking, Single blind, Double blind, Triple blind, control group/ Comparison group, Historical control, sample size, Design effect, Contamination, validity, Internal validity, Applicability/ external validity/Generalizability, Reliability, Inter-rater reliability, Intra-rater reliability, Replicate/reproduce, Reproducible, Inference

Fifth session- Students are expected:
1. Breast Cancer, [Transcript](), [Tutorial]()
   a. To read and listen to the subject before the session
   b. To ask questions about the subject to better understand it
   c. To summarize the paper (orally or in written)

d. To answer questions about the subject (orally or in written)
2. To define terms related to variables including variable, Baseline, Baseline characteristics, Numerical variables, continuous data, Discrete or discontinuous data, categorical data, Nominal categorical data, Binary data/ dichotomous data, ordinal data/ Ordinal categorical data, aggregate data, Variability, dependent variable, explanatory variable, independent variable/ input variables, prognostic variable, outcome, outcome variable, primary outcome, secondary outcome, Causal effect, endpoint, Intermediary outcomes/ surrogate endpoints, Risk factor, confounder, interaction, confounded comparison, unconfounded comparison

Sixth session- Students are expected:
1. Mammogram, Transcript, Tutorial
    a. To read and listen to the subject before the session
    b. To ask questions about the subject to better understand it
    c. To summarize the paper (orally or in written)
    d. To answer questions about the subject (orally or in written)
2. To define terms related to systematic errors/bias in health research including selection bias, performance bias, Dropouts/ attrition/ loss to follow up, attrition bias, Ascertainment bias, detection bias, Measurement or information bias, Objectivity, Objective measures, Subjective measures, reporting (publication) bias, Recall bias, Hawthorne effect, Rosenthal effect, and bias prevention, Quality assurance, Quality, Quality score, Methodological quality, Placebo, Placebo effect

Seventh session- Students are expected:
1. STDs, Transcript, Tutorial
    a. To read and listen to the subject before the session
    b. To ask questions about the subject to better understand it
    c. To summarize the paper (orally or in written)
    d. To answer questions about the subject (orally or in written)
2. To define terms on data analysis including Data monitoring committee, Audit of trial, Test of association, Association, Negative association, positive association, Correlation, Negative correlation, Correlation coefficient, Causal effect, Decision analysis, Pre-specified analyses/ Planned analyses, Multiple comparisons, Multiplicity, Data derived analyses, Data dredging, unplanned analyses, Intention to treat analysis, Per protocol analysis, Sub-group analysis, Interim analysis, Stopping rule, Sensitivity analysis, Cost-benefit analysis, Cost-effectiveness analysis, Cost-utility analysis, Stratification

Eighth session- Students are expected:
1. HIV AIDS, [Transcript](), [Tutorial]()
      a. To read and listen to the subject before the session
      b. To ask questions about the subject to better understand it
      c. To summarize the paper (orally or in written)
      d. To answer questions about the subject (orally or in written)
2. To define terms related to data analysis including Coding, P-value, statistical significance, statistical significance test, Random error, Unit of analysis error, Alpha/Type I error, Beta/ Type II error, Power, statistical power, Precision, Normal distribution, Gaussian distribution, Distribution, Probability distribution, t distribution, Skewed distribution, Bell-shaped curve, Frequency distribution table, Bar or column charts, Pie chart, Histogram, Scatter diagram, Descriptive statistics, Central tendency, Mean, Median, Mode, Range, Interquartile range, SD/Standard deviation, Variance, SMD/ Standardised mean difference

Ninth session- Students are expected:
1. Newborn Screening, [Transcript](), [Tutorial]()
      a. To read and listen to the subject before the session
      b. To ask questions about the subject to better understand it
      c. To summarize the paper (orally or in written)
      d. To answer questions about the subject (orally or in written)
2. To define terms related to data analysis including Point estimate, SE/ Standard error, CI/ Confidence interval, Confidence limits, Imprecision, Incidence, Prevalence, Objective, hypothesis, Null hypothesis, Equipoise, Univariate analysis, hypothesis test, Test of association, Non-parametric tests, Parametric tests, One-sided test/ One-tailed test, Directional research hypothesis, Two sided / Two-tailed, Contingency table, 2x2 table, Chi-squared test, cross tabulation tables, Trend, t test / Student's t-test, DF/Degrees of freedom

Tenth Session- Students are expected:
1. Influenza, [Transcript](), [Tutorial]()
      a. To read and listen to the subject before the session
      b. To ask questions about the subject to better understand it
      c. To summarize the paper (orally or in written)
      d. To answer questions about the subject (orally or in written)
      a. To define terms related to data analysis including Estimate of effect/ Treatment effect, Effect size, Efficacy, Effectiveness, Probability,

Control event rate / Control group risk / risk, Rate, Ratio, proportion, Crude rates, Basic risk, Event rate, Odds, OR/ Odds ratio, RR/risk ratio/ Relative risk, Risk difference, Relative risk reduction, Attributable risk

11ᵗʰ session- Students are expected:

1. Avian Influenza, [Transcript](), [Tutorial]()
   a. To read and listen to the subject before the session
   b. To ask questions about the subject to better understand it
   c. To summarize the paper (orally or in written)
   d. To answer questions about the subject (orally or in written)
2. To define terms related to Period effect, Survival analysis, Time to event, Person-years, Hazard rate, Hazard ratio, True negative, False positive, False negative, True positive rate, sensitivity, Detection rate, Specificity, Predictive value, Positive predictive value, Negative predictive value, Statistically significant, Clinically significant, Post hoc analyses, Multivariate analysis, Adjusted analysis, Adjusted rates, Regression analysis, Logistic regression, Regression equation, Regression coefficient, Regression line, Regression to the mean, Multiplicative model, Additive model, Dose response relationship

12ᵗʰ session- Students are expected:

1. H1N1 Influenza, [Transcript](), [Tutorial]()
   a. To read and listen to the subject before the session
   b. To ask questions about the subject to better understand it
   c. To summarize the paper (orally or in written)
   d. To answer questions about the subject (orally or in written)
2. To define terms related to data analysis including NNT/Number needed to treat, NNTB/Number needed to treat to benefit, NNH/ Number needed to harm, NNTH/Number needed to treat to harm, Forest plot, Linear scale, Logarithmic scale, Log-odds ratio, Heterogeneity, Homogeneous, Heterogeneous,

13ᵗʰ session- Students are expected:

1. To read abstract, Background and Methods/design (until Data collection in page 4) of the following study protocol before the session
   A randomised non-inferiority controlled trial of a single versus a four intradermal sterile water injection technique for relief of continuous lower back pain during labour (Lee et al 2011)

a. To ask questions about the parts of the protocol to better understand it
b. To summarize the parts of the protocol (orally or in written)
c. To answer questions about the parts of the protocol (orally or in written)
2. To define terms related to ethical consideration including Informed consent, Duplicate or redundant publication, Fraud, Beneficence, Non-maleficence, Anonymous linked information, Unlinked information, Quality assurance, Quality score, Methodological quality, Distributive justice, Safety, Side effect, Toxicity, Tolerability, Adverse effect, Adverse event, Adverse reaction, Co-morbidity, Search strategy, Intramural, Extramural, Register of controlled trials, Mission Statement, Vision

14th session- Students are expected:
1. To read from "Data collection" in page 4 till end of the study protocol before the session
   A randomised non-inferiority controlled trial of a single versus a four intradermal sterile water injection technique for relief of continuous lower back pain during labour (Lee et al 2011)
   a. To ask questions about the parts of the protocol to better understand it
   b. To summarize the parts of the protocol (orally or in written)
   c. To answer questions about the parts of the protocol (orally or in written)
2. To define other terms not above-mentioned including Literature, PubMed Central, MEDLINE, CINAHL, CLIB, Cochrane Library, Cochrane Collaboration, Cochrane Review, Peer review, Peer-reviewed journal, Impact factor, Subjects, Participant, Consumer, Proposal, Protocol, Protocol deviation, Open-ended question, Forced-choice format**,** Likert format, Questionnaire, Structured interview, Focus group discussion, Disability-adjusted life years (DALYs) lost, Transcript, The 10/90 gap, Grey literature, Ephemeral literature**,** Abstract, Conference abstracts/proceedings , Key words, MeSH headings, Referee, users of reviews, Critical appraisal

15th Session- Students are expected:
1. PErineal Assessment and Repair Longitudinal Study (PEARLS): protocol for a matched pair cluster trial (Bick et al 2010)
   a. To read abstract, Background and Methods/design including the figure (until Intervention in page 3) of the study protocol before the session
   b. To ask questions about the parts of the protocol to better understand it
   c. To summarize the parts of the protocol (orally or in written)
   d. To answer questions about the parts of the protocol (orally or in written)

16ᵗʰ session- Students are expected:

1. To read from "Intervention" in page 3 till end of the following study protocol before the session
   a. PErineal Assessment and Repair Longitudinal Study (PEARLS): protocol for a matched pair cluster trial (Bick et al 2010)
2. To ask questions about the parts of the protocol to better understand it
3. To summarize the parts of the protocol (orally or in written)
4. To answer questions about the parts of the protocol (orally or in written)

References

1. Glossary of terms in the Cochrane collaboration, Version 4.2.5, 2005.
2. Glossary of terms in health research. A practical guide for health researchers, 2004, PP: 216-226.
3. Altman DG, Schulz KF, Moher D, Egger M, Davidoff F, Elbourne D, et al. The revised CONSORT statement for reporting randomized trials: explanation and elaboration. Ann Intern Med. 2001, 17;134(8):686-689.
4. JAMAevidence Glossary. Available at: http://www.jamaevidence.com/JAMAevidence_Glossary_Final.pdf Accessed 2/6/2012
5. Lewis S, Clarke M. Forest plots: trying to see the wood and the trees. BMJ 2001;322:1479–80
6. Lee N, Coxeter P, Beckmann M, Webster J, Wright R, Smith T, Kildea S. A randomised non-inferiority controlled trial of a single versus a four intradermal sterile water injection technique for relief of continuous lower back pain during labour. BMC Pregnancy and Childbirth 2011, 11:21.
7. Bick D, Kettle C, Macdonald S, Thomas PW, Hills RK, Ismail KMK: PErineal Assessment and Repair Longitudinal Study (PEARLS): protocol for a matched pair cluster trial. BMC Pregnancy and Childbirth 2010 10:10.

Course scoring:

1. Active participation in the sessions: 2 points
2. Mid-term exam: 4 points
3. Final Exam: 10 points
   Mid-term & Final exams includes: Writing and filling blanks (the X-plain reference summaries 40% points), Description of the terms (in Persian 40% points, in English +17% extra points), translation of the texts from English into Persian (20% points),
4. Translation of one research protocol: 4 points