Lesson Plan for English 2

Audience: MSc students in midwifery Faculty: Nursing & Midwifery Faculty University: Tabriz University & Medical Sciences Time: the second trimester 1389-90, Tuesdays 10-12 Place: Room 5, Nursing & Midwifery Faculty Designer & Instructor: Dr. Sakineh Mohammad- Alizadeh

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. 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 types of studies including Qualitative methods, Quantitative methods, Original study/ primary study, Secondary study, Epidemiology, Descriptive study, Analytical study, Action research, Prevalence study, Observational study, Intervention study, Experimental study, Nonexperimental study, Explanatory trial, Case study /Case history, Single case report, Case series, Interrupted time series, Survey/Cross-sectional study, Anecdote, Case-control study, Cohort study, Longitudinal study, Prospective study, Retrospective study, Review , systematic review, Meta-analysis

Third session

- 1. Mammogram, <u>Transcript</u>, <u>Tutorial</u>
 - 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, Phase I, II, III, IV trials, Clinical trial, Controlled before and after study, Controlled (clinical) trial (CCT)/ Controlled trial, RCT/ randomised controlled trial, Parallel group trial/ Independent group design, Multi-arm trial, Paired

design, cross-over trial, Run-in period/ Washout period/phase, Sequential trial, Multicentre trial, Open clinical trial/ Open trial, Open sequential design, Pragmatic trial, Cluster randomised trial, Design effect, Cross-over trial, Factorial design, Non-inferiority trial, Equivalence trial, Positive study, Negative study

Fourth 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 sampling including convenience sample, Consecutive sampling, Representative sample, Random sample, Randomisation, Systematic sampling, Stratification, Cluster sampling, Restricted randomization, Stratified randomization, Block randomization/ Random permuted blocks, Matching, Minimisation, Sampling error, Generation of allocation sequence, concealment of allocation/ Allocation concealment/ Randomisation, Allocation sequence, Deterministic method of allocation, Allocation ratio, Random assignment /Random allocation, Quasirandom allocation, blinding/ Masking, Single blind, Double blind, Triple blind, control group/ Comparison group, Confounded comparison, Contamination, Internal validity, Applicability/ external validity, Reliability, Inter-rater reliability, Intra-rater reliability, Replicate/reproduce, Reproducible, Inference, Safety, Side effect, Toxicity, Tolerability

Fifth session- Students are expected:

- 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 variables including variable, 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, Distribution, normal distribution, binomial distribution, dependent variable, explanatory variable, independent variable/ input variables, outcome, outcome variable, Causal effect, endpoint, Intermediary outcomes/ surrogate endpoints, Risk factor, confounder, interaction

Sixth 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)
- To define terms related to systematic errors/bias in health research including selection bias, performance bias, Dropouts/ attrition and attrition bias, Ascertainment bias, detection bias, Measurement or information bias, Objectivity, Subjective measures, reporting (publication) bias, Recall, Recall bias, Hawthorne effect, Rosenthal effect, and bias prevention

Seventh 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 on data analysis including Data monitoring committee, Association, Negative association, positive association, Correlation, Correlation coefficient, Causal effect, Decision analysis, Pre-specified analyses/ Planned analyses, Decision analysis, Multiple comparisons, Multiplicity, Data derived analyses, Data dredging, 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

Eighth 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 Coding, Anonymous linked information, P-value, Random error, Unit of analysis error, Alpha/Type I error, Beta/ Type II error, Power, statistical power, Precision, Normal distribution, Gaussian 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. Depression, <u>Transcript</u>, <u>Tutorial</u>
 - 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, hypothesis, Null hypothesis, 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, Heterogeneity, Contingency table, 2x2 table, Chisquared test, 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, Crude rates, 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, False positive, False negative, True positive rate, sensitivity, Detection rate, Specificity, Predictive value, Positive predictive value, Statistically significant, Clinically significant, Post

hoc analyses, Multivariate analysis, Adjusted analysis, 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
- **13**th session- Students are expected:
 - 1. Recent Use of Oral Contraceptives and the Risk of Multiple Sclerosis
 - a. To read abstract, introduction and methods parts of the article before the session
 - b. To ask questions about the parts of the article to better understand it
 - c. To summarize the parts of the article (orally or in written)
 - d. To answer questions about the parts of the article (orally or in written)
 - 2. To define terms related to ethical consideration including Informed consent, Duplicate or redundant publication, Fraud
- 14th session- Students are expected:
 - 1. Recent Use of Oral Contraceptives and the Risk of Multiple Sclerosis
 - a. To read results and discussioin parts of the article before the session
 - b. To ask questions about the parts of the article to better understand it
 - c. To summarize the parts of the article (orally or in written)
 - d. To answer questions about the parts of the article (orally or in written)
- To define other terms not above-mentioned including Literature, PubMed Central, Peer-reviewed journal, Impact factor, Subjects, Eligibility criteria, Enrollment, Proposal, Protocol, Protocol deviation, Open-ended question, Likert format, Questionnaire, Structured interview, Focus group discussion, Disability-adjusted life years (DALYs) lost, Quality assurance, Transcript, The 10/90 gap, Sample size
- 15th Session- Students are expected:

- 1. Can we prevent postnatal depression? A randomized controlled trial to assess the effect of continuity of midwifery care on rates of postnatal depression in high-risk women
 - a. To read abstract introduction and methods parts of the article before the session
 - b. To ask questions about the parts of the article to better understand it
 - c. To summarize the parts of the article (orally or in written)
 - d. To answer questions about the parts of the article (orally or in written)
- **16**th **session** Students are expected:
 - 1. Can we prevent postnatal depression? A randomized controlled trial to assess the effect of continuity of midwifery care on rates of postnatal depression in high-risk women
 - a. To read results and discussion parts of the article before the session
 - b. To ask questions about the parts of the article to better understand it
 - c. To summarize the parts of the article (orally or in written)
 - d. To answer questions about the parts of the article (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 Apr 17;134(8):686-689.
- Douglas G Altman, J Martin Bland. How to randomize. BMJ 1999; 319:703–
 4.
- Alonso Á, Jick SS, Olek MJ, Ascherio A, Jick H, Hernán MA. Recent Use of Oral Contraceptives and the Risk of Multiple Sclerosis. Arch Neurol. 2005;62:1362-1365.
- 6. Marks MN, Siddle K, Warwick C. Can we prevent postnatal depression? A randomized controlled trial to assess the effect of continuity of midwifery care on rates of postnatal depression in high-risk women. J Matern Fetal Neonatal Med. 2003 Feb;13(2):119-27.

Assessment

- Active participation in the sessions: 2 points
- Every session test: 6 points
- Final Exam: 8 points
- Translation of one original research article: 4 points