

UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For The Following Qualification:-

M.Sc.

M.Sc. Psychiatric Research: Written Examination

COURSE CODE : PSYR0001

DATE : 09-JUN-03

TIME : 14.30

TIME ALLOWED : 3 Hours

MSc in Psychiatric Research Examination

2003

Each of the 3 sections below (A, B and C) carries an equal number of marks.

Section A – Short Notes

You should spend no more than 10 minutes writing short notes on each of the questions in this section.

1. Describe three criteria for deciding whether a research study involving participants who cannot give informed consent is ethical.
2. An association has been found between a suspected risk factor and a disease. List four criteria which may be useful in deciding how likely this association is to be causal.
3. Comment briefly on the quality of the following two questions, designed to be included in postal questionnaires sent to mental health service users.
 - (i) If you are taking an anti-depressant, which of the following adverse effects have you experienced from the anti-depressant you are taking?
 - a. Dry mouth
 - b. Nausea
 - c. Headaches
 - d. Constipation
 - e. Urinary retention
 - (ii) Are you satisfied with the service provided by your CPN and psychiatrist?
 - a. Very satisfied
 - b. Fairly satisfied
 - c. Dissatisfied
 - d. Neither
4. Data has been collected regarding insight into mental illness among male and female users of a service. The measure of insight is one which is usually regarded as yielding continuously distributed data, and data for insight in this study show an approximately normal distribution.

TURN OVER

- a. You wish to test the hypothesis that women have more insight into their illness than men. Which statistical test could you use?
 - b. You find a significant difference in satisfaction between men and women. However, you suspect that this is due to the confounding influences of differences in age and in severity of psychotic symptoms, also measured in the study. What statistical method could you use to investigate this possibility?
 - c. In the same study, compliance with medication has also been measured, yielding a categorisation of sample members into 'compliant' and 'non-compliant' groups. What statistical test could you use to investigate whether there is an association between gender and compliance with medication?
5. Define the terms 'sensitivity' and 'specificity', as associated with screening instruments.

Section B Protocol planning – quantitative methods

Answer one question only within this section. Include a brief summary of the main advantages and disadvantages of the study protocol you have outlined. Assume that your study budget, though not limitless, is reasonably large (up to around £400,000 if required).

1. It has been suggested that depressive illness is more likely to be missed among general practice attenders from Black Caribbean backgrounds than among White attenders. Outline a protocol which would allow you to investigate this.
2. A small pilot study in one community mental health team has suggested that relapse rates in schizophrenia may be reduced by providing training for care coordinators in psychoeducational family interventions intended to reduce expressed emotion. You wish to investigate whether such training is worth providing on a wider scale to community mental health teams in the NHS. Outline a protocol which would allow you to do this.
3. A small survey has suggested that the proportion of sufferers from Alzheimer's disease who have received education or professional training after the age of 18 years is low. Outline a protocol which would allow you to test the hypothesis that people who have had such education or training are at lower risk than others in the population of developing Alzheimer's disease.

Section C Protocol planning – qualitative methods

Answer one question only. Briefly summarise the advantages and limitations of the protocol you have outlined. Assume that your study budget, though not limitless, is reasonably large (up to £200,000 if necessary).

1. A new crisis resolution team, providing intensive home treatment in psychiatric emergencies, has started in a catchment area. A randomized controlled trial indicates that it is associated with considerable lower hospital admission rates for patients than for control group members to whom it is not available. However, researchers have been surprised to find that, on a quantitative measure of satisfaction, those receiving care from the crisis resolution team are on average no more satisfied than the control group. This is despite the fact that the local psychiatric hospital is known to be unpopular with service users. Outline a protocol which would allow you to reach a better understanding of this finding.
2. Epidemiological surveys have suggested that rates of drug problems among the Black Caribbean and Black African populations are as high as among the White population. However, members of these groups have been found to be almost entirely unrepresented among users of the drug services in a catchment area with a substantial Black Caribbean and Black African local population. Outline a protocol which would allow you to explore the reasons for this.
3. Wide variations have been found in the extent to which psychiatrists regard people with borderline personality disorder as likely to benefit from psychiatric treatment. Outline a study protocol which would allow you to explore factors underlying these variations.

END OF PAPER