

EXAMINATIONS

April 1999

Subject 201 — Communications

EXAMINERS' REPORT

Introduction

The attached subject report has been written by the Principal Examiner with the aim of helping candidates. The questions and comments are based around Core Reading as the interpretation of the syllabus to which the examiners are working. They have however given credit for any alternative approach or interpretation which they consider to be reasonable.

D S Brand
Chairman of the Board of Examiners

23 June 1999

Candidates were asked to prepare a letter to the editor of a newspaper challenging the conclusions of an article on post-operative mortality rates. This report summarises points which the examiners were looking for, and some common problems encountered.

1. The examiners expected a letter which was intended for publication in the newspaper, but did not penalise candidates who drafted a personal letter to the editor if the tone and content were appropriate.
2. Many scripts contained unexplained jargon which was inappropriate for the intended audience. This included words and phrases such as “mean death rate”, “standard deviation” and “statistical model”.
3. It was expected that candidates would provide some interpretation of the statistical information given in the question. This could be that if the average number of deaths is 300, we would expect 315 or more deaths about one year in every 5. Alternatively, it could be stated that one year's figures taken in isolation would not normally be considered exceptional if the number of deaths was between 266 and 334. Simply padding out the question was not enough.
4. The guideline length was 400-500 words. Scripts which were significantly longer than this invariably suffered from repetition and irrelevant detail, and were inappropriate for a letter to an editor.
5. The examiners expected the letter to be presented in a logical manner with appropriate use of headings and paragraphs. Many scripts displayed little evidence of planning. Grammar, spelling and punctuation were taken into account.
6. 30% of the marks available were allocated directly for technical aspects. It was not necessary to make all possible technical points to gain all these marks. However, candidates who missed key points also lost marks for failing to meet the objectives of the letter.
7. In summary, the examiners were looking for a letter which would enable the reader to understand clearly why the death rate for 1998 was not in itself a cause for alarm. Candidates who achieved this passed the paper.

A possible letter is attached. It does not cover all the possible points, and is not intended to be a model solution. In practice a wide range of responses was acceptable.

To the Editor, Daily Herald

Dear Sir,

Post-operative death rate

I read with interest the article "Cost-cutting costs lives" on 6 April. Clearly it must be a cause for concern if the death rate following quintuple bypass heart surgery increases, but I feel that it is premature to draw this conclusion from just one year's statistics.

When considering any statistic, it is important to assess whether variations are significant enough to suggest a fundamental change, or whether they simply represent normal fluctuations for which there is no consistent underlying cause. Your journalist concluded that the recently published increase in the number of people dying within one year of surgery was a result of lower operating standards. However, the figure for a single year could equally be affected by the average health of patients being slightly worse than in the previous year, or by slightly more patients failing to respond well to medication after their operations.

Two things might justify the conclusion that there has been a drop in standards. First, there might be an increase sustained over several years. If the number of deaths had stabilised over a period and then increased, even by a relatively small amount, for several years there would be evidence of an underlying change. That would justifiably cause concern. However, a single year is really too short a period to allow such a conclusion, especially when it followed reductions over a much longer period.

Second, if there was a very significant increase in the number of deaths, even just in a single year, there would be a strong case for further investigation. Statistical techniques can help in assessing whether a particular increase really is significant.

If one assumes that the average number of deaths within a year is now 300 out of 10,000 operations, then on average the number of deaths will be 315 or more about one year in five. Such a year would be slightly unusual, but certainly not exceptional and not concrete evidence of an underlying trend. There will be good years and bad years, both resulting from random fluctuations, and unwarranted conclusions should not be drawn from them.

I must stress that I do not wish to encourage complacency in any way. Efforts to improve the recovery rates following quintuple bypass surgery must continue. However, I do not think it is helpful to suggest a lowering of standards without substantive evidence. As I have demonstrated, a relatively small increase over a single year is most likely to be the result of perfectly normal fluctuations. On this evidence there is no need for public concern over the performance of this operation, but continuing vigilance is necessary in case a longer-term trend emerges.

Yours faithfully

J Smith