A CLUSTER-RANDOMISED TRIAL OF WORKSITE CARDIOVASCULAR RISK REDUCTION

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1. INTRODUCTION

This paper illustrates some of the issues raised by David Hand in his opening address to the workshop. In it I will describe a study being undertaken by a PhD student in my department who has a background in psychology. I believe it is important in such circumstances that the student should do the analysis herself, so the issues of comprehensibility and software availability become major considerations, which must be weighed against mathematical sophistication and statistical optimality.

2. DESCRIPTION OF STUDY

This study aims to evaluate four multiple risk factor interventions in a worksite setting. These are health assessments only (HA), health education (HE), behavioural counselling (BC), and incentives (I). The worksites are ambulance stations in the Sydney metropolitan region. There were 28 ambulance stations randomised to the 4 interventions, 8 to each of HA, HE and BC, and 4 to I. All staff within a station received the same intervention. A total of 431 staff participated in the trial.

Participants were assessed at baseline and at 3, 6 and 12 months from baseline. The major study outcome variables were: body mass index (BMI=weight/height²), %body fat, systolic and diastolic blood pressure, serum cholesterol, number of cigarettes per day, smoking status (validated by cotinine) and aerobic capacity.

Missing data occurred for two reasons. First, data were missing at baseline because of problems with testing which were discovered too late: