believe total withdrawal of the capsule formulation is possible by the end of the year.

We will be passing our results to the Advisory Council on the Misuse of Drugs and support the argument that the continued availability of temazepam tablets and elixir will provide adequate formulations for all patients.

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1 Fox R, Beeching NJ, Morrison C, Ruben S, Garvey T. Misuse of temazepam. *BMJ* 1992;**305**:253. (25 July.)

Predicting mortality from cervical cancer

EDITOR,—Cervical screening may be predictive, but it has never been shown to be protective in the ordinary meaning of the word. It is unfortunate that Gerrit J van Oortmarssen and colleagues use the word "protection" in their paper[1] because, although they define the term "relative protection" as meaning "the ratio of the risks in unscreened and screened women," readers have consciously to resist the implication that the screening process somehow confers protection. It does not, or at least has not been proved to do so.

More alarming still is the authors' statement that the International Agency for Research on Cancer's working group on screening frequencies "assumed that all women participate in screening." Could it really have assumed this? If so could its conclusions be flawed? How soundly based is current practice? There has not yet been a prospective, randomised controlled trial of screening or subsequent interventions. The need is as pressing as ever.[2] Perhaps the authors could tell us what would be required.

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1 Van Oortmarssen GJ, Habbema JDF, van Ballegooijen M. Predicting mortality from cervical cancer after negative smear test results. *BMJ* 1992;**305**:449-51. (22 August.)
2 McCormick J. Cervical smears: a questionable practice. *Lancet* 1989;ii:207-9.

EDITOR,—The report of Gerrit J van Oortmarssen and colleagues[1] shows that the potential effects of screening strategies need to be evaluated carefully. The authors suggest that five yearly screening from age 35 could have a similar impact on mortality from cervical cancer to that of more intensive and potential expensive strategies. This is based on as yet unattainable ideals: that all women enter the screening programme and are screened at the recommended intervals and that the sensitivity of the screening test remains constant across the vast array of potential smear takers.

Although mortality is a major end point for evaluating screening policies, this measure takes no account of the profound consequences to patients of the morbidity, both treatment related and psychological, of a diagnosis of cancer. On these grounds, reducing disease incidence—that is, prevention rather than cure—remains a vital component of screening. The need to address potential negative health effects of additional diagnostic and therapeutic procedures induced by screening is important and clearly needs critical evaluation, but it is premature to suggest that the magnitude of the problem merits allowing a proportion of women to develop invasive malignancy as long as no excess mortality results.

We agree that asymptomatic presentation due to abnormal cytology carries a better prognosis than presentation due to disease related symptoms, almost certainly because asymptomatic disease is more likely to be small volume and early stage. Our observations in stage I disease confirm this impression, with superior disease free survival in those presenting with abnormal cytology than in those presenting with symptoms[2] because of the correlation between symptoms and disease volume. Recent cancer registry data from our region suggest a trend toward presentation with early stage disease. Although this observation may not result from screening activity, detecting early invasion will considerably reduce mortality and treatment related morbidity and is a further cogent argument against reducing the frequency of screening.

With the current screening strategy in the United Kingdom no major reduction in deaths from cervical cancer has occurred. The most important high risk group is non-attenders, and every effort should be made to get uniform coverage of the target population. A move towards less frequent screening, no matter how tempting on economic grounds, should be avoided until the ideal of screening the whole female population has been achieved and until any adverse sequelae of diagnostic and therapeutic procedures induced by screening have been more thoroughly evaluated.

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1 Van Oortmarssen GJ, Habbema JDF, van Ballegooijen M. Predicting mortality from cervical cancer after negative smear test results. *BMJ* 1992;**305**:449-51. (22 August.)
2 Buxton EJ, Saunders N, Blackledge GRP, Kelly K, Redman CWE, Monaghan J, *et al*. The potential for adjuvant therapy in early stage cervical cancer. *Cancer Chem Pharmacol* 1990;**26**: 17-21.

AUTHORS' REPLY,—In our paper we addressed the appropriate interval between successive Papanicolaou smear tests and the way that this problem was dealt with by the International Agency for Research on Cancer (IARC) working group on cervical cancer screening. For this reason we followed the concepts and the terminology in the IARC's paper in which the relative protection against invasive cancer was the principal outcome.[1] But we agree with C M Anderson that we should have avoided using the word "protection."

Both Anderson and C J Buxton and colleagues emphasise the impracticability of realising 100% attendance. The IARC group assumed 100% attendance in order to calculate the impact of regular participation. This is the correct approach when the aim is to inform individual women about the benefits of screening. On a public health level non-participation is important. In our calculations of cost effectiveness we assumed 65% attendance, as observed in the Netherlands. We also analysed non-participation and its association with increased risk of cervical cancer in more detail to assess both the public health consequences and the economic consequences of low coverage.[2] The results of this analysis underscore Buxton and colleagues' remark regarding the need for attaining full coverage in the United Kingdom. It seemed that considerable resources may be used to increase participation; this increased participation would yield a greater reduction in mortality than would using these resources to increase the frequency of screening. Indeed, similar arguments can be used to show the importance of a high quality of the screening test. In other words, frequent screening of women who are eager to participate will not greatly improve the performance of the screening programme and will not solve the problem of low coverage and uneven quality.

With regard to the need for a randomised trial, we think that the empirical evidence of the effectiveness of screening—for example, the studies by the IARC group and by others[3]—precludes a trial in which the control group is not screened at all. On the other hand, frequent screening is also unethical because of the adverse health effects for a considerable proportion of the women screened.[4] Therefore, a trial in which two screening intervals —for example, three years and seven years—are compared would in our opinion be both ethically justifiable and informative for practical decision making.

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1 IARC Working Group on Evaluation of Cervical Cancer Screening Programmes. Screening for squamous cervical cancer: duration of low risk after negative results of cervical cytology and its implication for screening policies. *BMJ* 1986;**293**: 659-64.
2 Koopmanschap MA, van Oortmarssen GJ, van Agt HMA, van Ballegooijen M, Habbema JDF, Lubbe JThN. Cervical cancer screening: attendance and cost-effectiveness. *Int J Cancer* 1990;**45**:410-5.
3 Lâårå E, Day NE, Hakama M. Trends in mortality from cervical cancer in the Nordic countries: association with organised screening programmes. *Lancet* 1987;i:1247-9.
4 Van Ballegooijen M, Habbema JDF, van Oortmarssen GJ, Koopmanschap MA, Lubbe JThN, van Agt HMA. Preventive Pap-smears: striking the balance between costs, risks, and benefits. *Br J Cancer* 1992;**65**:930-3.

Quality of life of cancer patients

EDITOR,—Maurice L Slevin states that doctors may feel that emotional support of terminally ill patients is more appropriately delegated to nurses, psychologists, or social workers.[1] He fails to mention the supportive role of the general practitioner in caring for the physical, psychological, and emotional problems of such patients and their families, and the importance of this role in enhancing the patient's quality of life.

During a six month period, 65% of dying patients in this practice died either at home or in the local community hospital, looked after by their general practitioner and appropriate members of the primary health care team. A minority of these died suddenly, but most of the others spent their last few weeks at home. The general practitioners have a vital role in assessing and supporting the quality of life of such patients, particularly as they are in the privileged position of having an overview of the patient, the family, and the social circumstances, to which hospital doctors seldom have access.

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1 Slevin ML. Quality of life: philosophical question or clinical reality? *BMJ* 1992;**305**:446-9. (22 August.)

Oesophageal achalasia mistaken for anorexia nervosa

EDITOR,—Discussing diagnostic confusion between anorexia nervosa and achalasia of the oesophagus, K M Pagliero states that because "most patients with dysphagia have a physical obstruction endoscopy should be the first choice [of investigation]"—presumably preceding barium swallow.[1]

Achalasia may indeed be misdiagnosed as anorexia nervosa by the unwary because the regurgitation of food masquerades as self induced vomiting, but it should not be forgotten that the