Would it not be possible to maintain supplies of urofollitrophin (Metrodin (Serono)) until further consultation? In addition, Organon has just launched a gonadotrophin preparation with low luteinising hormone concentrations (Normegon). Perhaps, Serono will reflect on the consequences of its unilateral action.

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Manufacturer's response

EDITOR,—The human gonadotrophin preparations that have been used for 30 years are crude urinary extracts: 95-98% of the proteins are derived from serum and urine, and the hormone constitutes only 2-3% of the proteins.

The urine derived proteins in these preparations are uncontrolled and mostly unidentified; some are biologically active (uromodulin, IgG, epidermal growth factor, etc) (unpublished data). In analytical tests this heavy bulk of proteins masks the follicle stimulating hormone, which therefore is not characterised with respect to its isoform composition and profile. The only quality control is an in vivo animal bioassay developed in the 1950s, and this has a large inherent variability.

Recently, state of the art purification methods have been applied to obtain follicle stimulating hormone that is more than 95% pure, the other proteins being reduced to a minimum. To increase purity from 2-3% to over 95% entails severe losses during purification and expensive procedures. Stringent quality control of the highly purified follicle stimulating hormone preparation (Metrodin high purity (Serono)) is of a physico-chemical nature and guarantees batch to batch consistency of the hormone. This may reduce the intercycle variations in patients' responses that were observed with former gonadotrophin preparations.¹

The large amounts of extraneous proteins in gonadotrophin preparations have important clinical disadvantages. A recent report described severe local reactions to crude urinary gonadotrophins that did not reappear when the highly purified follicle stimulating hormone preparation was administered.² Further case reports from other countries confirm this observation.

Metrodin high purity is suitable for subcutaneous self administration, which appreciably reduces the stress and the financial burden of treatment as injections may be given at the patient's convenience without the need for frequent trips to a clinic or general practitioner's surgery. Thus the availability of a highly purified follicle stimulating hormone preparation may reduce the stress of infertility treatment, a factor linked to some cases of failure.³

In summary, Metrodin high purity is a state of the art drug whereas the old gonadotrophin preparations are obsolete crude urinary extracts. When a high purity drug is available the use of crude extracts cannot be justified. Serono has therefore discontinued Metrodin in the United Kingdom. Administration of a human gonadotrophin preparation such as menotrophin

(Pergonal (Serono)) is justified only in a small proportion of patients with hypogonadotrophic hypogonadism. In the near future the recombinant gonadotrophins that we are clinically evaluating should become available and replace all urinary preparations.

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Increasing rate of deliberate self poisoning

EDITOR,—We note with interest the recent figures highlighted by the Samaritans showing that the incidence of suicide in males seems to be increasing. Our experience indicates that this also applies to hospital admission for deliberate self poisoning. Since 1987 the Cardiff Poisons Treatment Unit has received more than 90% of all patients admitted with self poisoning in South Glamorgan (population 403400). The table shows the data on men and women.

Although violent methods and gassing are the commonest means of committing suicide or

Numbers of men and women admitted with self poisoning in South Glamorgan by year with ratio of men to women

	1987	1988	1989	1990	1991	1992
Women	513	464	537	582	537	629
Men	299	283	357	432	441	557
Total	812	747	894	1014	978	1186
Men:women	0.58	0.61	0.66	0.74	0.82	0.89

inflicting fatal self injury in England and Wales (36.8% and 30.4% of deaths respectively),¹ self poisoning is the cause of death in 22% of cases. Non-fatal incidents of deliberate self poisoning may identify men at risk of subsequent fatal events. A regional poisons unit, as advocated in a report of the Royal College of Psychiatrists in 1983,² enables psychiatric and social support to be coordinated for such patients as soon as they have recovered medically; we commend such an approach in tackling this difficult problem.

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HIV infection in Uganda

EDITOR,—In the Rakai district of Uganda, Maria J Wawer and colleagues have shown that, despite universal knowledge of AIDS, extensive education, and programmes for distributing condoms, the incidence of HIV infection remains high.¹ The failure of such programmes to curb the epidemic

may not be unique to Rakai, given that HIV continues to spread in many parts of Africa where prevention programmes exist.² Rather than intensifying programmes,¹ however, we must ask why the necessary behavioural change has not occurred. We therefore conducted in depth interviews about the context in which people have sex. We drew our sample—17 key informants from three villages in Rakai and 31 female prostitutes and 44 other residents from Kimwanyi, a poor neighbourhood of Kampala—from those used in two unpublished studies that required representativeness of the population.

Preliminary analysis suggests the importance of three themes. Firstly, despite knowledge that a man has died of AIDS the tradition of "widow inheritance" continues; secondly, technical knowledge of use of condoms is poor: 25 of 32 men expressed uncertainty about how to put on a condom; and thirdly, many places where sexual intercourse is practised lack privacy and this thus adds stress to sexual play. In Rakai all respondents were or had been living with their parents until marriage; as love making is prohibited in the parents' house they could have sexual intercourse only in the banana plantation and the bush. In Kimwanyi 31 of the 44 non-prostitutes had frequented public latrines, 19 had used back streets, and 22 had used the bush for sex with premarital or extramarital partners in the past five years. Most of the prostitutes (26 of the 31), however, took their clients to their rooms, regardless of the presence of others.

Several questions emerge from the above. Firstly, why do men sleep with widows of men who have died of AIDS and why do widows have new sex partners? Secondly, how can young people learn to use safer sex? Thirdly, how can people practise safer sex in the bush? There are no straightforward answers, but, clearly, information in itself does not make people change behaviour. Sexuality is deeply rooted in people and cannot be modified in isolation of sociocultural and emotional aspects of life. Sex education will continue to remain difficult, but, unless contextual factors are taken into account, studies like that of Wawer and colleagues are likely to continue to generate concerns about the adequacy of prevention of transmission of HIV in many parts of Africa.

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Women's reproductive health

Women left destitute by AIDS

EDITOR,—Though women's reproductive health in the developing world undeniably depends on a country's "social, economic, and cultural pressures,"¹ the profound additional influence of HIV infection and AIDS should not be forgotten. Uganda seems to be doing its best to wake up the world. With 20 years of unrest and civil war, a ruined economy, minimal healthcare equipment, a dearth of medical professionals, and a 12% prevalence of HIV infection in the adult population, Uganda may seem from the outside to have a problem too bewildering to contemplate. Yet with insight into Ugandan society it is possible to under-

stand the problems that HIV infection presents, especially to the country's women.

In Uganda "to die without a child is to leave without a trace." Therefore, despite the dangers of transmission of HIV infection inherent in pregnancy, women continue to get pregnant. Ugandans are polygamous, and this poses a major problem. A man who is HIV positive may pass the virus on to several wives. In the past, if a man died his wives and children would be inherited and looked after by his brother. AIDS has changed all that. Now brothers are no longer willing to "marry" these widows for fear of catching the disease themselves. Furthermore, women work the land but do not own it. As a result, thousands of vulnerable women are being left destitute and rejected from families they were once considered part of. The extended family is breaking down. The best a woman can hope for is that her children grow up fast enough to fend for themselves and that she can make some provision for them before she too dies.

A tenth of children under the age of 15 in Uganda have lost at least one parent. In one sense, while polygamy remains, AIDS in Uganda is predominantly a woman's problem. AIDS agencies such as the AIDS Information Centre and the AIDS Support Organisation—both non-government organisations—have taken on the huge task of trying to counsel and support these people. Prevention is best, and knowledge is power, but psychological support and preparing people for death are proving to be the biggest and perhaps most rewarding challenge of all. The emphasis is on planning for a positive future.

Satellite clinics and community initiatives have been set up all over Uganda to provide a sophisticated chain of practical support and counselling, from referral centres in hospitals to support in isolated country villages. Communities, rather than individual people, are beginning to recognise the value of "shared confidentiality" and are accepting joint responsibility for their members.

Perhaps what comes across most of all is the openness that Ugandans display. While many African countries deny vehemently that they have an AIDS epidemic, or indeed that HIV even exists, Uganda has ensured that its problem is broadcast to the world. This may be a backlash to President Amin's policy of secrecy and subterfuge, but as a result more international aid has been delivered to Uganda in recent years than to any other African country with a similar plight. Equally importantly, the rest of the world has much to learn from Uganda. Its experience and skill in education, counselling, and support for people with HIV infection are unique. This was particularly evident at the ninth international conference on AIDS in Berlin (June 1993), where representatives from the AIDS Information Centre received a standing ovation for their presentations.

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Pregnancy causing a "silent slaughter" in the developing world

EDITOR,—The editorials by Alison Tonks¹ and Marc J N C Keirse² highlight the enormous disparity in maternal mortality between North and South. Although Tonks quotes a maternal death rate for Africa of 600/100 000, in some rural areas the rate is over 1000/100 000. Only a tiny fraction (600) of the 500 000 maternal deaths each year occur in developed countries.

This "silent slaughter" was discussed at the first regional conference (Africa and Near East) of the Medical Women's International Association, which was held last December. The conference, entitled "The health of women and safe motherhood," took place in Nairobi, Kenya, where the

World Health Organisation launched its "safe motherhood initiative" in 1987. Since then, despite serious medical efforts, Africa is the only region where maternal mortality has increased in the past six years. Why is this?

One reason is the lack of family planning, which leads to illegal, unsafe abortion. Only 9% of African women have access to contraception, although 39% of recently delivered women want no more children and most wish to delay their next pregnancy for three years. Too often advice on family planning is not seen as part of the maternity service. There is also reluctance to offer advice to teenagers or to unmarried people. A large study of Kenyan schoolgirls found ignorance of sexual matters and little practice of contraception, though the mean age at first coitus was 13.5 years for boys and 14.5 years for girls. Three quarters of African teenage girls become pregnant.

Other reasons for the increase in maternal mortality are economic and political. In the past few years 37 of the poorest countries have cut spending on health by half and on education by a quarter; total annual per capita expenditure on health in some countries often amounts to little more than the price of one AIDS test. The money goes instead on servicing Africa's debt, which currently drains the region of £107 billion annually.³ In addition, the International Monetary Fund's monetarist policies of structural adjustment have consigned the poorest countries to deepening poverty and despair. At one rural hospital in Zimbabwe, in 1992, after the introduction of such a programme there was a one third fall in antenatal attendance.⁴ The introduction of "cost recovery" invariably excludes women from health and education, although literacy has been strongly linked to safe motherhood.⁵

As the chairperson of the conference in Kenya said, "There is both social justice and economic value in health for women." Women's wellbeing and empowerment are critical to sustainable development and even to population control. We agree with Tonks that the pace of change to improve women's health is far too slow. Investment in women is a development priority that demands an urgent change in attitude by politicians and by international financial institutions.

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Family planning and AIDS prevention can be combined

EDITOR,—Alison Tonks's editorial on pregnancy's toll in the developing world brought attention to the need for integrated service programmes for reproductive health.¹ As discussed at the meeting of Advocacy for Women's Health last November, there is an urgent need to address more comprehensively the full range of women's reproductive health concerns and, in particular, to design effective programmes of prevention and treatment for sexually transmitted diseases, including AIDS. Unfortunately, the comments attributed to me by Tonks concerning the possible stigmatisation of family planning programmes resulting from efforts to prevent sexually transmitted diseases and AIDS misrepresented the remarks I made at the meeting.

Many family planning providers, policymakers, and donors have hesitated to promote the integration of efforts to prevent sexually transmitted diseases and AIDS within family planning pro-

grammes because of fears that stigmatisation would harm the performance of the programmes. The Population Council, together with Profamilia (the Family Planning Association of Colombia), undertook a quasiexperimental, controlled study to address this question. Vernon *et al* assessed an intervention in which responsibilities for providing information on preventing AIDS were added to the assignments of community marketing fieldworkers involved in the distribution of contraceptives.² In the experimental arm fieldworkers were instructed to dedicate a fifth of their time to activities aimed at preventing sexually transmitted diseases and AIDS, while in the control group the workers simply responded to spontaneous demand for information on sexually transmitted diseases and AIDS.

Considerable demand for information on AIDS was found among regular family planning audiences, and fieldworkers who dedicated a fixed proportion of their time to activities concerning AIDS were more likely to give more talks on AIDS than the fieldworkers who responded only to requests for information. Furthermore—and most importantly with regard to the issue of the performance of programmes—activities to prevent AIDS did not cause the workers' sales of contraceptives to decline. An independent assessment of a radio campaign aimed at preventing AIDS showed no negative impact on Profamilia's image.

At present there is little experience to guide cost effective efforts to integrate programmes for preventing unwanted pregnancy and sexually transmitted disease. Identifying successful service models will require a willingness to experiment with structures for delivering services and adequate resources for evaluation. Such efforts should not be delayed by speculation about ill effects on the performance of programmes that are not supported by the available data.

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Standards in medical research

Criticism unjustified and unfair

EDITOR,—We wish to clarify the matter raised in the letter from Ray Jones and colleagues, which was published under the subheading "sloppy use of literature often to blame."¹ Our paper on the influence of social deprivation on illness in diabetic patients² was prominently cited as an example of sloppy use of the literature.

To make these adverse criticisms of our research is unjustified and partly misdirected for reasons that may not have been apparent. Our article was originally submitted as a full length paper with numerous references. The paper was accepted as a short report and hence was reduced to only 600 words with at most five references; we note that in their letter Jones and colleagues were allowed 17 references, three of which they seem to consider that we had overlooked; two of these, however, were irrelevant to the main theme of our paper, which dealt with smoking and cardiovascular morbidity in patients (median age 57) attending a hospital based adult diabetes clinic in Britain. The study of Virtanen was of metabolic control in Finnish adolescents; that of Salive *et al* concerned blindness, which we did not study. We acknowledge priority of the work of Robinson *et al*.³ We intended that our study of patients with diabetes should be set in the context of prior work and major influences, including Black, Townsend, and