

HIV being able to attach to or infect spermatozoa. A highly significant reduction in the risk of viral transmission is achieved if spermatozoa are first washed free of seminal plasma and non-sperm cells before insemination into the woman at the time of ovulation. This technique of "sperm washing," pioneered in Milan,<sup>10</sup> is now practised in several centres in Europe, including the Chelsea and Westminster unit in the United Kingdom.<sup>11</sup> As a risk reduction option, results are convincing. Three hundred healthy children have now been born after more than 3000 cycles of sperm washing and intrauterine insemination treatment or in vitro fertilisation, with no reported seroconversions in either partner or children.<sup>10-12</sup> Prevention of viral transmission from an infected woman to an uninfected man is less sophisticated and relies on timed self insemination using quills. Couples who fail to conceive in this way are likely to revert to unprotected intercourse if fertility advice and treatment are not available.

HIV is a changed disease. Life expectancy has increased dramatically and effective treatments are available to reduce the risk of viral transmission from man to woman and from mother to child. We believe that couples in whom one or both partners are infected should have access to the same fertility advice and treatment as non-infected individuals to allow them to conceive with the minimum of risk to their partners or children. We further recommend that all infertile couples should be tested for HIV as part of their investigation, not for the purpose of excluding HIV positive patients from treatment but to offer them preconceptional counselling and risk reducing fertility treatments and antenatal care. In terms of controlling the epidemic, the cost of failing to recognise the needs

of these patients will be a high price to pay in both the short and long term.

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## Practice based primary care research networks

*They work and are ready for full development and support*

Primary care p 588

Practice based research networks are research laboratories as essential to advancing the scientific understanding of medical care as bench laboratories are to advancing knowledge in the basic sciences. The medical establishment has been slow to realise patients' needs for a robust research enterprise in family practice and primary care. But a paper in this week's *BMJ* adds to evidence that research networks in primary care have come of age and deserve sustained support (p 588).<sup>1</sup>

For much of the past century the prevailing view was that the problems faced in family practice could be resolved by research carried out by others in other settings. The failure to implement research findings in daily practice raised some researchable questions about knowledge transfer, but it did not engender a spirit of excitement about the research needs and opportunities intrinsic to family practice. The notion that there were important questions, fundamental to the origins of health and disease, that could be investigated best or only in family practice proved elusive.

Countries rich enough to afford medical research have devoted much of their resources to establishing the laboratories, scientists, and methods necessary to

advance genetic and molecular knowledge—as if this would prove sufficient to relieve most human suffering and provide an adequate scientific basis for practice and policy making. This approach is exemplified dramatically in the United States where annual investment in the National Institutes of Health, of more than \$20bn (£13bn), contrasts with expenditure of \$0.27bn by the only federal agency charged with primary care research, the Agency for Healthcare Research and Quality. No one would rightly argue that there has not been a fantastic return on these billions that have been invested outside primary care, and the further harvest of cures and ministrations that will continue to emerge from it will benefit many. Yet the recent ranking by the World Health Organization of the US health system at 72nd in the world in terms of disability adjusted life expectancy<sup>2</sup> shows that there are other factors at play that determine the performance of a health-care system and the health of a nation.

There is reason to believe that among these other factors is the solid foundation of primary care.<sup>3</sup> There is also reason to believe that primary care is amenable to discovery and improvement through the methods of science, just as is the rest of medicine.<sup>4</sup>

*BMJ* 2001;322:567-8

Fortunately, family physicians worldwide have managed to shine enough light on the world of front-line primary care practice to glimpse the potential enhancement offered by research done in networks of practices. They have done this largely through spirited volunteerism, the help of enlightened collaborators, and raw stubbornness. The paper this week by Thomas et al reports more progress in establishing one of the critical infrastructures for family practice and primary care research: the laboratory known as the practice based research network.<sup>1</sup> As they note, early surveillance systems in the United Kingdom and the Netherlands inspired family physicians in other countries to create during the past 40 years research networks that explored frontline clinical practice.

These networks typically adapt to the characteristics of their practices, leaders, opportunities, and health systems. Just like other human organisations, they require leadership, personnel, communication systems, expert consultation, and time to mature. The descriptions of networks in the United Kingdom, Israel, and France, and the lessons reported in the paper by Thomas et al are consistent with experience elsewhere, from New Zealand to South Africa to Canada. Indeed, there is now a substantial literature that confirms that these networks are feasible and capable of important research that can affect not just a few people but virtually everyone.<sup>5-11</sup>

What these laboratories need now is broader recognition of their viability, importance, and impact, and acceptance that they merit sustained funding as a continuing infrastructure, akin to a reusable rocket. Such a rocket can carry different payloads at different times. And, over time, just as a space station can be created, a new understanding of how people get sick, how they get well, and how they stay healthy can be discovered using the reusable practice based research network. This journey has been and can continue to be as exciting as exploring outer space or revealing the genetic and molecular mechanisms of life. There must be well trained explorers with curiosity and ambition, and they must have helpers and tools such as measuring devices, classification and coding systems, and information systems.

The message of Thomas et al's paper re-emphasises the message that practice based research networks are one of the critical medical laboratories, now available for everyday use. The pilot phase has involved descriptive and intervention studies, quantitative and qualitative work, surveillance, and hypothesis testing research. It is time to move into full implementation and secure these networks as a place of learning, where doctors and patients in the community are united with science to search for answers that can provide a better basis for daily practice. When this happens in countries around the world, the world will be a better place for all who become patients.

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SD and LG have both worked with several practice based networks, and the Graham Center received a contract from the Agency for Healthcare Research and Quality.

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## Management of stage 1 endometrial carcinoma

*Postoperative radiotherapy is not justified in women with medium risk disease*

**E**ndometrial adenocarcinoma mainly affects postmenopausal women. The mainstay of treatment is hysterectomy with bilateral salpingo-oophorectomy. Most women are diagnosed with stage I disease, where the tumour is limited to the body of the uterus. Within this stage the differentiation grade and depth of myometrial invasion are among the most important predictors for the presence of regional (pelvic and para-aortic) lymph node metastases and recurrence.<sup>1 2</sup>

In the absence of mature results from randomised trials, debate continues on the merits of pelvic and para-aortic lymphadenectomy and postoperative radiotherapy.

The practice of lymphadenectomy varies considerably.<sup>3</sup> Several opinion leaders, mainly from the United States, state that every women with endometrial carcinoma should undergo complete lymphadenectomy. Some gynaecologists who as a rule do complete lymphadenectomies restrict themselves to selective node sampling in certain subgroups of women. One subgroup comprises patients who are less suited to complete lymphadenectomy because of age, obesity, or frailty from complicating medical problems—and up to 70% of patients with clinically early stage uterine cancer have significant coexisting cardiac, pulmonary, vascular, or endocrine disease.<sup>4</sup> A second subgroup comprises those with a low risk of lymph node metas-

*BMJ* 2001;322:568-9