acutely ill, is supported by scenes of open windows emitting screams and sounds of breaking glass. A therapeutic community at work?

The clash between the approaches of these two compassionate and committed men is clear in the programme. Roth's biological, individual approach is compared with Clark's

social model, but there is no attempt to evaluate either. Most psychiatrists will have sympathy for both views; it is a pity no synthesis was attempted in the programme.

The human story is well and movingly told; the optimism of the postwar years, the spirit of innovation, the handful of individuals who reversed the culture of an inhumane

institution. Sadly, the programme loses its way, echoing the fate of David Clark. It lacks coherence, leaving the viewer not only saddened but puzzled. If we are, in Clark's words, to "get the psychiatry we deserve," we need a better analysis than this programme offered.—SUSAN O'CONNOR, *psychiatrist, Bristol*

PERSONAL VIEW

This is where I start to draw the line

Neville Goodman

I sent photocopies of a couple of articles to a colleague. He threw them in the bin. Well, unsolicited mail deserves no more, whether from an insurance company or from a colleague. Except that the articles, though not written by me, summarised pretty well my unease with xenotransplantation, and his specialty will be affected greatly if these transplants work. His attitude, and I suspect the attitude of many who are directly involved, is quite simple: my patients will benefit; my loved one will get better.

Last June the BBC in a *Panorama* programme tackled animal transplants, but it looked no further. True, the programme carefully underlined the practical difficulties that still lie in the way of off the shelf organs, but the ethics of the issue were scarcely touched on. The Nuffield Council on Bioethics, we were told, had decided that xenotransplantation was ethical.

There is nothing cut and dried about ethics. There is no measurement of ethnicity, no associated value, in some way analogous to the p value of statistical probability. Is abortion ethical? It depends who you ask. A statement in the Nuffield report on xenotransplantation, much quoted in the media as justification for the use of animal organs, was of the large number of people on the transplant waiting lists. That is not ethics; that is means to an end. If xenotransplantation is ethical it does not matter how few patients need it. If most of the population was dying of a disease whose treatment required injections of material prepared from living human brains of non-sufferers it still would not be ethical to treat the disease.

I have no ethical worries about bits of animal getting inside humans. They already do, whether in sausages or as heart valves. It matters nothing to me whether animals are bred for food, shoe leather, or to supply organs for transplant. The ethical duties of autonomy (patients can decide whether they want xenotransplants), beneficence (patients clearly benefit), and non-maleficence (the risks of infection) have been covered. My ethical unease comes from the duty of equity, illustrated beautifully and I suspect unthinkingly in a few statements made on the BBC programme by various enthusiasts.

A scientist involved in breeding baboons for

xenotransplant experiments said that her baboons were "treated better than some people in third world countries." That anyone can use this inversion as justification for the use of animal organs shows just how blinkered some human beings can be. The problem of viral infection was seen as a risk—which might be worth taking "in the quest to end human suffering." As if human suffering, in the global sense, has anything to do with a lack of organs.

A British transplant surgeon, who sees animal organs as the future, and who, the programme suggested, will do the first animal to human transplant in this country within a year or two, pulled his shock figures out of his bag: 40 or 50 people die each day around the world waiting for transplants.

"I have no ethical worries about bits of animal getting inside humans."

Tuberculosis is on the way back; it kills about four million people every year (11 000 each day). Malaria kills almost as many. In the third world, 38 000 children die every day because they do not have clean water, basic food, or simple medicines. Year by year, the gap between rich and poor, haves and have nots, locally, nationally, and internationally, widens. Nearly 900 000 people are killed each year (2500 each day) by traffic accidents. Even here, once you correct for the number of vehicles, the third world comes off worst. The poorest of the third world come off worst of all because they do not just cross the street occasionally, as we do; they live on it. That is what I mean by equity. Thinking about it makes me uneasy.

There are no easy solutions. Many of the health problems of the world are political, not medical. Closing down xenotransplant research and spending the money on getting clean water to the people of Mali is unrealistic even if the money could be moved around in that way. Many doctors go from the developed world to teach doctors in the third world or trainees come here to our hospitals. Too often, the beneficiaries of this teaching are those

doctors' private patients in the big cities, not the rural, or even the urban, poor.

There are many other treatments that are questionable when looked at with global eyes. I have just read a submission to our local research ethics committee. The trial is well designed, with proper statistical calculations: to detect a 10% improvement in survival, not cure, needs 700 patients. The drug is expensive. Our ethics committee spends much of its time assessing trials of "me too" drugs or adjustment of doses of already accepted drugs for common chronic conditions, some of which respond poorly to any treatment. They represent nothing more than the commercial struggle between pharmaceutical companies; they have little to do with improving the health of the nation.

But at least a drug, if it is worth while, has a chance of making it into the third world. Xenotransplantation of whole organs can only ever benefit those who already take too much from the world. If a line has to be drawn somewhere xenotransplantation is where I start to draw it.

Of course, there are logical inconsistencies in my position. There are none in my colleague's position because he has simplified it, ignoring any consequence beyond his practice. I put to him the ultimate medical question. What if we could "cure" aging? He dismissed this as too far fetched, but billionaire octogenarians in the United States are funding genome research with just that purpose. The scientists are as enthusiastic and as unworldly in their outlook—"We will turn off the genes for cell death"—and as bound up in the financial implications as the xenotransplanters.

If failing the ethical duty of equity makes me uneasy it makes me more uneasy that many doctors do not seem even to think about these things. If they did then they might at least modify their rhetoric and stop inflating the importance of their interests.

One of the articles I sent my colleague was a letter in the *Guardian*, a response to its coverage of the Nuffield report: "Instead of this obsessive searching for grotesque ways to prolong life, why do we not devote what little is left of our wisdom to studying the acceptability of death?" A good question.—NEVILLE GOODMAN is a consultant anaesthetist in Bristol