## Editorial

## What Goes Around Comes Around

In 1950 I had my first experience with a mental hospital. The Saskatchewan Hospital at Weyburn, Saskatchewan, was in 1954 declared one of three worst mental hospitals in the world by Dr. J. Weir, Medical Director of the Rockefeller Foundation. Within ten years under the careful medical direction of its Superintendent Dr. H. Osmond, with the support of Dr. D. G. McKerracher, Director of Psychiatric Services Branch, and the premier of Saskatchewan, Mr. T. Douglas, it had become one of the best. In 1950 one of the wards housed (if one can use that term) about 80 female patients, aged from about 30 to 60 or more. The floor was plain concrete with many holes gouged out of it. There was no privacy. The patients were mostly unclothed. If they got too dirty they were hosed down with water. But the hospital thoughtfully kept the temperature at 80°F in order to protect these patients against pneumonia. I was horrified by this situation. Perhaps this was one of the events which inspired me to pursue our research as we did.

Dr. Osmond knew that the situation would have to be remedied as soon as possible. One of the first things he did was to raise the question "Why did the women refuse to wear clothes?" The hospital staff had become inured to the situation and consoled themselves with the view that one of the symptoms of chronic schizophrenia was the desire not to wear clothes. This idea was so firmly ingrained that it became very difficult for Dr. Osmond to introduce the changes that were necessary. He and I often discussed this problem. Dr. Osmond thought that it was not the nature of schizophrenia but was in fact a direct outcome of the way they were housed and treated. He concluded that if the women were treated with more respect, if they were given personal clothing like bras, if they were given clothing that was much more appealing, perhaps they would not tear them up. This ward destroyed many dozen cheap dresses each week. His solution was to buy much better quality dresses made from much better material for the patients. An experiment was run over several weeks. The patients on this ward were given a weekly allotment of nice, good quality dresses. To everyone's amazement the

women kept their dresses on. The rate of destruction dropped to below six per week and the hospital saved a lot of money. They had been buying large numbers of cheap dresses which cost more than the smaller number of much better dresses.

Prof. Robert Jones once remarked cynically at a meeting I attended that there was a shift in public attitude and behavior toward the mentally ill every 40 years. An era during which the mentally ill were allowed to roam on the streets or were housed in small places would be replaced by an era in which they would be housed in large institutions. Dorothea Lynd Dix was instrumental in getting the patients back into hospital in the middle of the nineteenth century. It has been said that a humane society will treat their mentally ill in good hospitals while a less humane society will dump them into prison and onto the streets. But 50 years later these good hospitals had deteriorated to the mental hospital slums of the beginning of the Twentieth Century.

Jones was not accurate in his estimate of the time required, but he was essentially correct in his observation. Beginning in the 1950s strenuous efforts were made to improve the hospitals but by the end of 1980 equally serious efforts were underway to destroy the hospitals and once more "house" the patients in the streets and in small places. The program to make the whole community the mental hospital was in full swing. But what do you do when you are very sick, have committed petty or more serious crimes and the hospital will not take you back? The problem is not that difficult, you throw them into prison. The modern prisons are becoming the new mental hospitals for the mentally ill. The prisons have not yet been given the option of refusing admission to those who are sentenced.

I think that a small percentage of our total population has to be kept in institutions, either because they are sick or because they must be incarcerated for the protection of society. But society has the option of housing them either in mental hospitals or in prisons. The humane society will house them and treat them in hospitals, and the inhumane society will throw them into prison. There will be a flow from one set of institutions to the other, a kind of tidal from the Washington Post, Mary Jordan, wrote movement with the tide changing every 60 or so years. I predict that as we become more humane we will once more reopen good mental hospitals where patients can be treated and held until they have recovered to a level from which they can continue to recover after discharge.

A brief note in The Globe and Mail July 7, 1993, brought back to me these memories of Weyburn and the overly warm ward for naked psychotic ladies. This note said "Florida's Dade County Jail holds more mentally ill people than any hospital or institution in that region, says the Miami Herald, which adds that the crowded jail is kept chilly to subdue prisoners. 'I've had difficulty interviewing inmates because the inmates are so cold, they're shivering,' said assistant state attorney Elaine Hill." This prison has discovered a new tranquilizer, hypothermia. This note brought back to me the saying "What goes around comes around." We are well into the modern era of housing our mentally ill in the prisons. Presumably they keep their clothes on and do not have to be heated up. They can be chilled into control.

## **Alaskan Bears and Double Blind Controlled Experiments**

In Alaska, people are convinced that a shot of cayenne pepper blown into the bear's snout stops them in a hurry. But the Environmental Protection Agency, EPA, USA, is not convinced, and has removed this popular spray from the shelves. Cayenne pepper cannot be advertised as an animal repellent because it has not been registered as a pesticide or tested for effectiveness. But since EPA has no jurisdiction on what can be sprayed on humans, it can be relabelled as Mace and used on people. In fact, the Alaskan bears are pests in the community but the usual pesticides will have no effect. We need something that could be called bearicides. The bears are not much deterred by rubber bullets or noise. Said one observer in Alaska, "The black bears don't like it at all. They sit back on their haunches and try to get it out of their eyes and sinuses." This observer preferred the pepper spray to guns with real bullets. (Times-Colonist, Oct. 7, 1993.)

According to EPA there was no scientific proof that pepper stopped charging bears. They required efficacy and safety data. The reporter

that pepper is safe to eat as in a bear stew, but not proven safe if it is used to spray on live bears if they are chasing someone. Recently I saw a report on television which showed bears in cages being sprayed with the pepper. It was clear they did not like it. It is possible a charging bear could not suddenly stop its charge because of its inertia, but there is little doubt it could not keep on charging very far since it would be too busy trying to get rid of the pepper.

People who read this report may be puzzled about the kind of proof the EPA will accept as scientific and adequate. I think they want double blind, prospective controlled experiments, as do other agencies of government, such as the FDA. If applied to bears this would mean that neither the bears nor the experimenter would be allowed to know that pepper was being used in the spray. I think we could dispense with informed consent on the part of the bears. But it might be difficult to convince a bear that any spray which did not act as did pepper was not pepper, nor that any spray not pepper was pepper. Nor do I think that the experimentalist would have much confidence in trying this experiment if s/he thought there was fifty percent chance the spray was placebo and not the real thing. One could spray the bears in cages, but that would not be a proper field experiment since the effect of the pepper on the charge could not be tested. Most cages are not large enough to permit a real good charge by an angry bear. Taking all these difficulties into account, I suspect it will take a good deal of planning, consultation, meetings and analyses to produce a design that will please the scientists, whose final word will determine whether pepper spray can be labelled as a deterrent for charging bears.

I am trying to highlight a very serious issue: What is scientific evidence when it comes to determining whether substances should be allowed to be used in therapy, and advertised for certain purposes? The FDA in the United States has a set of standards it follows, which are used to determine whether drugs should be released for human disease. These are generally toxic drugs which have been tested very carefully and for which claims may be made if the therapeutic trial warrants these claims. When it comes to nutrients the FDA finds

itself in a different environment, and it tries to apply the drug standards to the use of nutrients. They know that vitamins are safe, but only one vitamin has passed the rigorous tests they demand; niacin is allowed to be advertised as a substance for lowering cholesterol in people. But it is highly unlikely that vitamins in general will receive approval since the cost of proving to the FDA that something works and is safe may run to 300 million dollars over 12 or more years. There are no vitamin distribution companies able to spend these sums of money, since no patents are possible on vitamins.

The possibility that the FDA will get control over the distribution of vitamins has created great anxiety in the USA, and many people are protesting to their representatives. In his journal, Vol. 7, 1993, Dr. Bernard Rimland discusses this danger under the heading ARRI Alert: Disaster looms! FDA anti-nutrient rules near. He writes, "Unless Congress acts in the next few weeks to stop the FDA, new regulations created by the FDA will go into effect which will prevent you from buying significant amounts of vitamins, minerals, amino acids and other nutritional supplements. The new regulations may also make it a criminal offense, punishable by huge fines and long prison sentences, for the ARRI or any other publication to tell you the positive results of research on any nutritional supplement, unless prior approval was granted by the FDA."

That is indeed possible. One needs only to remember how Dr. Jonathan Wright was raided last year by an FDA order using local police with guns to break into his clinic. They seized some vitamins in pure solutions from Europe, used for patients with allergies because they were not available in USA. A few days ago on Larry King program on CNN, there was a discussion between a representative of the FDA and Senator Orrin Hatch. Senator Hatch is sponsoring a bill to prevent FDA from seizing control of all USA vitamins. During the polite but heated discussion, Larry King made a very dramatic gesture, a statement that summed up in one brief statement what the FDA was doing. Senator Hatch had just finished telling us about the raid on Dr. Wright's clinic. Just before the break Mr. King laughingly said, "Was it something like, 'Hands up. Give me your bee pollen'?" Larry King was delighted with his own statement and was amused the rest of the show. In fact, this is what the FDA has been doing, holding up health food stores to seize what they consider to be illegal — these highly toxic vitamins.

The FDA has the authority today to remove from the market any substance which is toxic or mislabelled. They do not need any additional powers according to Senator Hatch. Since they have little experience dealing with nutrients used as therapy, and since they appear to use only experts who are not expert in this new and rapidly expanding field, they should allow the people to use these nutrients as they have been doing. There has been only one death in the past ten years from vitamins, from niacin used to lower cholesterol, the vitamin they have approved. None of the other vitamins have caused any deaths. Compare this to the drugs officially released for treatment in medicine and psychiatry.

There have been a number of deaths from contaminated tryptophan, imported into the USA. Pure tryptophan has not caused any toxic reactions. In Canada it is freely available on prescription. There have been no reports of similar toxic reactions. If it were toxic, I doubt any people would be alive today since it is one of the major essential amino acids present in foods. If the FDA were equally solicitous about the health of the people they would also remove every therapeutic drug available today including aspirin.

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