On My Mind 4/10/00

Imagine being so far out in space that messages, instead of being relayed in nano-seconds, take 40 minutes to get to you from earth. No instant feedback from ground stations to help correct space ship malfunctions. No instant telemedicine access in case someone in the space ship is injured. No instant reassurances between crew and concerned family members. Science fiction? Right now, perhaps, but by 2020, NASA is projecting that it will become reality.

NASA, according to an article in a recent <I>New Yorker</I> issue, is planning on sending a crew to the planet Mars in 2020. The crew would spend six months in transit, two years orbiting Mars, and another six months to return. "The rocket science will be the easy part.....[NASA] technicians are reasonably confident about the mechanical aspects of the trip," reports Jerome Groopman, author of the article.

>
>

It's the medical aspect of such a venture, such as prolonged weightlessness, that NASA is finding it difficult to solve. The body's circulation and musculoskeletal systems require gravity's pull to function properly. The article isn't all that specific, but notes that "countermeasures" in use today are not very effective, and that astronauts' return to gravity is as "traumatic" as their adjustment to weightlessness - an experience that the astronauts are reluctant to talk about and NASA has been equally reluctant to publicize, says Groopman.

>

Odds are, Groopman points out, that over a three-year period, someone is bound to be injured. And even though the astronauts will receive medical training, treatment for that injury will be difficult. If there is bleeding, or the treatment involves even simple surgery, no way has yet been found to contain the blood and other body fluids that might be released. They would aerate and become "a wafting fog." Because there would be no way to provide help for complicated injuries, serious damage to an arm or leg would probably result in amputation.

There is also the risk of long-term exposure to deep-space radiation, or cosmic rays. Cosmic rays penetrate even bone, and trigger "what is, in essence, a nuclear reaction," says the article. Though again the article is vague on this point, it would appear that either through space walks, or an actual landing on Mars, NASA is assuming that U.S. astronauts will be exposed to this radiation by going outside the space vehicle.

>
>

NASA is working on finding solutions through, among other things, "analogue" missions in Antarctica, through field-testing in an international space station above the earth, through use of simulated gravity devices.

>
>

Science fiction has never appealed to me, which is probably why trying to overcome such odds at such expense - merely to get close to the planet Mars strikes me as the height of absurdity, foolishness, and colossal wastefulness. It isn't as though the earth is running out of space, or food, or water, or other natural resources. There is nothing on Mars that earth - or mankind needs.

>

On the other hand, there is a desperate need for the money, the efforts, the research, that NASA is spending to try get there right here on earth. Mankind has not yet learned to live peacefully. It has not yet learned to take care of its own nest. It has not yet learned to take care of its own family. How much more the quality of life could be improved for all of us if those resources were spent here on earth instead of being squandered on such needless exploits! $\langle br \rangle \langle br \rangle$

<center>* * *</center>

Moreover, the introduction of non-indigenous species - whether deliberate or accidental - is not a problem only for islands. It has caused problems throughout the world, from unwelcome mollusks in the Great Lakes along the U.S. - Canadian border to fast-breeding rabbits in Australia and the mongoose in Hawaii. To deliberately pollute the environment on Mars - as has already been done on the moon - by introducing humans and their trappings with no apparent concern about the long-range effects - is pure arrogance.

>

<center>* * *</center>

The efforts by Congresswoman Malua Peters to make access to cigarettes even more difficult for teen-agers is commendable, but, in my opinion, the accent is on the wrong syllable, as the saying goes. Prohibition, by itself, isn't always the most effective deterrent - as was proved on the mainland when an attempt was made to prohibit consumption of alcoholic beverages. Putting extra obstacles in the way of obtaining cigarettes has a tendency to make people more determined to find ways of getting them.

>
>

It might be more effective, it seems to me, to put more emphasis on educating children, teen-agers - and adults - on the damage that cigarette smoking does to one's body, and on the impact that damage has on a person's lifestyle.

>

For example, there is still the myth, out there in cigarette-land, that all one has to do to overcome smoking's bad effects is quit, at which point the lungs and other affected parts will fully recover - no harm done. But that is not correct. Smoking leaves residual damage. One's lungs never fully recover. And the longer one smokes, the more the damage. Nor are there easy ways to cure, or fix, damaged lungs. Lung transplants are still high-risk operations. There are no "by-pass" techniques, or artificial lung implants available.

>
>

The argument that people have been known to smoke for 60 years and, at 80 years of age, are still functioning isn't valid either. Cigarettes sold twenty to thirty years ago or more are not the same as the cigarettes being sold today. Today's cigarettes have been tampered with - they have been deliberately made more addictive, more poisonous, and, consequently, more damaging than they used to be.

>
>

When the lungs don't work as they should, the body can't work as it should, either. Breathing becomes a struggle. Climbing stairs is an effort. Sports are out of the question. Even swimming, much less scuba-diving, becomes but a fond memory. People with lung damage become dependent on medication by inhalator just to breathe normally. For some, even that

doesn't work, and they must carry oxygen tanks with them wherever they go, and breathe through tubes connected to the oxygen tank.

>
>

Lung damage from smoking is real. It is serious. It is debilitating. It is permanent. Yet that message is simply not out there. It is not broadcast anywhere, in any medium - not on the radio, not on tv, not in the newspaper, not in magazines, not on billboards, not on posters. No one ever talks about it - except, occasionally, the doctor, and then it's only to say one ought to quit. No picture is painted of what happens if one doesn't.

>
>

Disability and death aren't often very real to young people. To prevent them from smoking something more is needed than strengthening the barriers to access. They need meaningful information as to smoking's deadliness. The information should be made ubiquitous, readily available in a wide variety of formats, through a wide range of media. Maybe there should be a speaker's bureau, of people who have lung problems and are willing to share their experiences. It might even be useful to start up a "smokers anonymous" support group. Such strategies could, in fact, benefit people of all ages who are trying to quit smoking, not only young people tempted to start.

>

I speak from experience. I smoked for more than 40 years. And now I have COPD, or chronic obstructive pulmonary disease. I've had to give up beach-combing, scuba-diving. I am dependent on inhalators to breathe comfortably.

>

<center>* * *</center>

There's a billboard in the Gualo Rai area of Middle Road that keeps changing. (There may be changing billboards elsewhere, but I pass only this one on a regular enough basis to notice.) The message is always the same: use your seatbelts! But the imagery used on the billboard to get that message across doesn't stay the same. Though the message isn't always that clear - I remember one that left me puzzled for weeks - at least it attracts attention, which is, after all, the point.

>
>

My guess is that the messages have been designed and are being made available through the efforts of some national organization - that it isn't the local DPS that is spending the money to create them. But DPS is to be congratulated, nonetheless, for making the effort to keep the billboard interesting - and the message fresh - by seeing to it that every so often, the message changes shape and color. Very effective!