

Medico friend circle bulletin

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Points of View: Medicine 2000 AD

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AT a time when-Nobel awards for Medicine chase only the molecular biologists, when the Basic-science route is considered *the* way to medical *nirvana*⁵⁻¹ when Presidents and politicians roll up their sleeves to conquer, say, cancer^{6, 7} at any cost, it is time to speculate on the shape of medical things to come, by the close of this century.

The air, an industry overdeveloped or otherwise, is of given-enough-dough-anything-can-be-achieved. Assuming the entire OPEC earnings were pipelined to medical research from today, what would 1 Modem Medicine (MM) be in the 21st century? Let us consider the medical futurama in 3 parts: (a) where MM is right now; (b) why it is where, it is; and (c) what would MM be, given 25 years and money for the asking! Diseases in our medical school days were conveniently classified as congenital and acquired, the latter comprising traumatic, infective, neoplastic, metabolic, degenerative, and psychic; the same classification can be used here.

Where MM is right now

"It is a sobering thought that after several decades of research, a number of international conferences and many other meetings, seminars and symposia, the problem of human malformations remains essentially unchanged." Having so introduced a symposium, McKeown⁸ proceeds to chastise MM further on-human malformations— etiology unknown, rate unchanged, relative contribution to infant mortality greatly increased. Trauma, MM can "treat," for God, *a la* Ambroise Pare, continues-to heal the wound with the same pristine secrecy that a century's research⁶ on wound-healing has not scratched even on the surface. "Few things are certain in life, but the rapid appearance of bacterial resistance

To a newly introduced drug is one of them."¹⁰ The latest bug to bug antibioticism is the penicillinophagic gonococcus, report by Phillips¹¹ from St. Thomas's London. Dubas¹² begins his chapter with disquieting heading—THE SO-CALLED CONQUEST OF MICROBIAL DISEASES—pointing out that there has been no decline in the percentage of hospital beds occupied by patients-with infections, as compared to 50 years ago. On the tumor front,¹³ the outcome of untold man hours of research and uncountable moneys a— now more people live on cancer that die of cancer¹⁴— has been "precisely nil."¹⁵ the whole anticancer crusade having been declared as "Scientifically bankrupt, therapeutically ineffective, and wasteful" Diabetes mellitus, as a paradigm of metabolic disorders, continues to all from definitionlessness and is comprehended the less and less the more and more we know about it.^{17, 18} Cardiovascular disorders have not decided where they etiologically belong and research on its leading members— myocardial infarction, hypertension, stroke—offers nothing special to write home about.¹⁹⁻²⁴ On the senescent front, rats kept in a "Rat Palace" senesce same way as do rats in sewers, forcing the investigators to declare that degeneration and death are unalterably, and predictable, built into the rats, the rat-findings being comfortable extrapolatable to the human situation²⁵. While hopes are raised that some wundermittel might prevent the decay of aging,^{26, 27} Selye²⁸ concluded a gerontology symposium on a totally pessimistic note. Finally coming to psychiatric disorders, one has only to see/read **One Flew over the Cuckoo's Nest**, to realize where the psychiatrists and their patients are.²⁹⁻³¹ It

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may be that the foregoing forced Malleison³² to write *Need your Doctor Be So Useless?*, and Burnet³³ to candidly declare that MM as an enterprise has virtually reached the stage of zero return.

Why is MM where it is?

The responsible factors operate both within MM, and without. The former include MM's **causalism, experimentalism, compromisism and promisism**. The latter comprise bioforces that are wholly outside MM's realm-**individuality**, heredity (**herd-ity**), and temporality.

Causalism—the kill-joy crusading that makes break fast butter less / breadless/sugarless/cyclamate less/coffee less, and amorous bedtime fraught with cancer-has not for once satisfied the basic tenet of causalism: the **cause** must be followed by the **effect**, and the **effect** proceeded by the **cause**, without any temporal gap in between. Bertrand Russell³⁴ threw away causalism from “advanced science” long ago, but it seems to survive in MM, probably because MM is neither advanced nor scientific. A direct offshoot of causalism is preventionism which “contains more unknowns than scientific truths.”²² The unmitigated failure of MM on all major fronts is by itself a testimony to the failure of MM's **experimentalism**. In cancerology, for example, experimentalism has not provided one causative/curative cue that was not known before the experiments were started.³⁵⁻³⁶ A learned book³⁷ purporting to solve MM's problems has a recurring refrain—“the absence of a suitable (animal) model”; yet having admitted so, it goes on to describe one experiment after another, in one section after another. The force that keeps MM's experimentalism alive and kicking has been aptly summed up by Burnt: ³⁸ “I believe, however, that one might justly summarize American medicine as being based on the maxim that what can cure a disease condition in a mouse or a dog can, with the right expenditure of money, effort and intelligence, be applied to human medicine.” MM's **compromisism** consists in its being unable to define essential hypertension, diabetes mellitus, cancer, immunity, tumor immunity, and so on, and yet spawn on each one of these a burgeoning science—each oversized, amorphous and labyrinthine, with ramifications that have neoplastic autonomy, draining away resources in “a remorseless but seemingly purposeless growth.”³⁹ MM is more political ^{1, 6, 7, 40} than potent, and hence **promisism** is its only way of survival. That is how cancer is **cured** every week,⁴¹ and prophylaxis and cure of diseases are promised via **genetic engineering**⁴² that also forms the title of a new MM journal⁴³.

The more important thwarters of MM are too far from its curative reach, too abstract to be attacked

by OPEC opulence. Every human being is governed by the bioforces of individuality, heredity, and temporality—biolaws that understood, not altered. Individuality implies, in Dubosian⁴⁴ phraseology, unprecedentedness, unparalleledness and unrepeatability, an unsituation form which even homozygous twins are not exempt. Heredity means that every feature—anatomic, physiologic, pathologic—of an organism is a part of the whole herd, enjoying its own place somewhere on the curve of normal distribution and falsely designated hyper-, eu-, or hypo- by the medical men suffering from diagnosophilia. Temporality or chronicity (chronos, time) is a bit difficult to appreciate, but Portmann⁴ makes it lucid: “Animal life is configured time.”

Individuality rules out our breaking the transplant barrier, even among the inbred animals. No two individuals throughout the history of mankind would have the same “immune” genotype for the individualistic repertoire of DNA is endless—“the figure 256 followed by 2.4 billion zeros.”⁴⁶ Despite “successful” renal transplants⁴⁷ now running into thousands, the problems³³⁻⁴⁸ of altering the selfishness of a single human being, a situation that makes transplant, a hit-and-miss measure for all time to come.

An individual's biotrajectory is an unpredictable element⁴⁹ ruling out modern medicine's ability to predict who will get what disease, when, and to what end. Screening programmes will thus always remain a travesty of medical common sense; prognostic judgments shall betray the judge now and again; therapy by rule of the thumb (and so it will always be because of an individual's unpredictability) will boomerang often to prove costlier than the disease. Many a patient, with diabetes for more severe than that of his physician who strives to be fit as a fiddle, will outlive the latter, a thing equally true of heart disease, hypertension or cancer. Physician, better kneel before the nemesis of thy perennial ignorance!

Heredity is the least understood aspect of biology: It is, to use a Galtonian phrase, “the supreme law of unreason” that governs the **distribution** of all phenomena in a herd, thus dictating that someone with carcinomatous stomach dies at 19 and someone at 91, or that someone's serum cholesterol level should be on the “higher” side because someone else has it on the “lower” side, both being normal. Willis,⁵⁰ the tumour pathologist, has alluded to “the smooth

ideal curve of the age distribution of a large series” of cancers in general. What is normal, MM seems to forget, is the frequency distribution, that shows itself as the typical bell-shaped Gaussian curve serenely ruling over such mundane things as ocular refraction,⁵¹ and the effect of PH/temperature on enzyme activity,⁵³ as well as such anxiety-making things as blood pressure,⁵³ serum cholesterol,⁵¹ IQ,⁵⁴ age-incidence at diagnosis of/death from gastric ulcer,⁵⁵ duodenal ulcer⁵⁵ carcinoma stomach,⁵⁰ in men and women. The tails of the normal Gaussian curve stretch to infinity,⁵⁶ a thing that explains carcinoma tongue in a new born, or a disease free individual aged 105 years. Summarizing, one may define heredity as a force that governs the ages, levels and so on, in a herd, the herd controlling the individual and vice versa. “Population thinking denies uniformity and looks to the range of diverse individuals within a group. The range, not the average, is the reality.”⁵⁷

If, *a la* Portmann,⁴⁵ man is configured time, then man as being time-bound, is unhelpably and unarrestably prone to disfigurement on passage of time. Cancer is not a disease, but a programmed event, strictly obeying the **temporal** programme within an individual, in consonance with the herd. Senescence takes a generally similar form in each species, whether judged by the physicochemical changes in collagen, the incidence of degenerative changes in blood vessels or the high incidence of malignant disease...The essence surely is that there is a genetic 'programme in time' laid down for each species. There must be a biological clock and a means by which a series of processes can be made to occur according to the expediencies of evolutionary survival.” This **timely** statement by Burnet¹⁵ on human/animal survival and senescence sums up the truth about herd mortality governed by time. The appellation **chronic**, is most appropriate for all forms of degenerations ranging from a symptom less cervical spondylosis to a rapidly lethal cervical carcinoma, since both the processes are temporal, or Chronic. It is not this gene or that, which mediates the occurrence of heart attack or cancer. It is the time-order that the genes follow in harmony with the herd and in conformity with the individual's programme.

What would, or should, MM be by 2000 AD?

By then, it may have freed itself of the anthropocentric do-goodistic cocoon, to view life, disease and death from a wider, biological, perspective, hopefully, then, MM would be more aware of the ignorance it is steeped in and the uncertainties it faces. When this is made public, more doctors and more patients will

Abjure “exaggerated opinion of the powers of medicine,” a relevant warning-phrase that Jacob Bigelow⁵⁹ uttered in the earlier half of the 19th century. Medicine, like women's shoes, is governed by the dictates of fashion.” Having said the Humphries⁵⁹ suggests that the fashion ought to turn in the direction of economy rather than into that of waste and pollution. If Humphries is heeded tomorrow, the **Everest Complex** — “because it is there”—would no longer dominate medical research, although this is a moot point on which, to cite an example, two top men^{3, 33} from the same leading institute hold polar-opposite views. MM had better bear in mind its rank ignorance on such simple things as would healing or the definition of a gene, so as to persuade the engineering-proponents⁴² into crying a halt. The hazards of tinkering with the genes may more than offset the gains.⁶⁰

Thanatorealism— that death has its own right reasons for being around-is gradually dawning upon lay and medical minds.⁶¹⁻⁶³ To this robust approach to death, MM may add a robust approach to life by emphasizing a **al** Thomas,^{27, 64} the built-in durability and sheer power of the human organism, instead of portraying it-as is the raging fashion now-as a teetering, fallible contraption always in need of watching and doctoring. Life may not be demedicalized to the Illichian extreme, but surely, all that is unnecessary- 9/10th of what is prescribed⁶⁵ —could easily be done away with, by 2000 AD.

References

Readers interested in references quoted in the above text may write to the editor.

THE EFFECTS OF THE PROFESSIONAL AGNOSTICISM OF SCIENTISTS

In spite of a few notable exceptions it must be confessed that scientist did not win the freedom they have generally enjoyed, and they have not been conspicuous in defending this freedom when it has been threatened. Perhaps they have lacked that confidence in absolute truth and that emotional exaltation that have led martyrs and heroes to welcome persecution and death in defence of their faith. Today as in former times it is the religious leaders who are most courageous in resisting tyranny. It was not science but religion and ethics that led Socrates to say his accusers, “I will obey the god, rather than you.” It was not science but religious conviction that led Milton to utter his noble defence of intellectual liberty, “whosoever knew truth put to the worst in a free and open encounter....” The spirit of science does not cultivate such heroism in the maintenance of freedom....

— Edwin Grant Conklin
(An eminent Biologist)

Book Review

The Child in the Health Centre

D.V. Nene

With a change in the power structure in the Capital there has been rethinking in the problems of health. Gone is the coercive approach in family planning, infact, rightly the word has been replaced y family welfare meaning thereby a total care of by family welfare meaning thereby a total care of the family. In the past sterilization operation ended the family growth but little care was taken to look after the existing units, particularly the little ones in the family. Infacts, that was one of the major hurdles in family planning—in case a child or two die because of malnutrition, infection or an accident, and the incidence was not small, there was hardly anything that the State can do for the family. It is hoped that in the new set up the young ones will be fully covered.

The book, *The Child in the Health Centre*, (Published by The Lembaga Keshatan Nasional, Jalan Inderpura, Surabaya, Indonesia) beautifully furnishes the medical worker, medical student, nurse and the intern doctor with a wonderful stock of information with beautiful line drawings about the child care in a package form. Now and then it is full of special tips, such as: A child who gets enough protein and energy food usually gets enough vitamins also, or, No child should die because he has not had the fluid he needs, etc. The World Health Organisation has assisted in the production of this book and is a easy language and beautiful drawings facilitate the reader, never mind what his standard is, and is down to earth realistic. Most of it is a practical training with a minimum possible theoretical knowledge.

There are useful tables, such as the dehydration score (p 230) with details of rehydration methods explained superbly with to help of diagrams. In case you have no sophisticated equipment your work should not suffer. With this objective the book has given practical tips how you can prepare in your own clinic a working equipment with the help of usual things around. Thus, if you have no scalp vein needle the book asks you to prepare one out of a plastic tubing and a needle whose adopter has been broken off and the two are sealed by heating on the ordinary

match flame. The ten questions to be put to a patient suffering from a skin lesion are so easy that even a basic medical worker can understand and can arrive at diagnosis. (p 275) Similarly, it has given five golden rules of good nutrition for baby. It warns, “If there are advertisements for bottle feeding on the clinic wall, take them down.” (p. 182) The description of blocks in the food path or the socio-economic causes of malnutrition are the same as in India.

The practical hints or tips given now and then are useful, e.g. babies have very little muscle in their bronchi, so don't give children ephedrine tablets, or an adrenaline injection unit they are a year old. Ephedrine nasal drops can be used. On p. 370 we find a useful diagram of converting an ordinary paper clip into a hooded wire for removing a foreign body for the ear canal. It is truly original and is thought provoking for medical workers in any underdeveloped county. Very similar is a method demonstrated in a diagram on p. 346 of the method to examine the underneath of the upper eyelid with the help malformations is superbly written and is full of practical hints given in separate box, such as, Treat talipes during the first tow days. (p. 497)

The cover back has an illustration of a baby telling the reader the ten steps in child care, viz. weighing, history, examination, special tests, diagnosis, management, treatment, explanation and education, family planning, recording and reporting. The list of basic drugs and minimum equipments for certain procedures or for certain illnesses is also useful for the medical workers, particularly at the rural health centres.

This book should be immediately printed in this country with the help of the World Health Organisation and the Indonesian Govt. so that a useful manual is handy with our workers for the total family welfare. There are very few books of this type which explain in simple language all the techniques in so lucid and illustrated way. Its Hindi edition should be made ready as soon as possible. The Ministry of Health both at the Centre and the State levels should take interest in making this wonderful manual available for the army of our health visitors, medical students, nurses and interns.

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