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"We have Planted a Sapling of a Banyan Tree":

*Dr. Ashok Vaidya in conversation with Ravindra. R. P.**

RRP: Your article on the synthesis of Ayurveda and modern science published in *mfc bulletin* kick started a debate which continued for years within and outside mfc. What do you feel while revisiting it after three decades? What has changed, to what extent and what hasn't? Had you envisaged these changes while writing the article?

AV: I feel as if my dream is partly fulfilled. Of course, such dreams are never completely realized, not within a short period of time. A great dream uses you (as a medium for its revelation), and not the other way round. I have been extremely fortunate to have been a part of it, along with several others like Dr. Udupa, Dr. Narayana, Dr. V. Prakash (Director, CFTRI), Vaidya Antarkar (former Prof. of Kayachikitsa, Podar Ayurvedic College, Mumbai), Dr. Sharadini Dahanukar (former Prof. of Pharmacology, GS Medical College & KEM Hospital), Dr. Sumati Bhide (Ex- Director, Cancer Research Institute) and Dr. Bhushan Patwardhan. I do hope and pray for its fulfillment after my death. In fact, I am convinced that the nation has taken on a movement, which would continue for a hundred more years. We have planted and nurtured a sapling; but that is a sapling of a banyan tree.

Let me list in brief what has been achieved in these three decades- first and foremost, we have succeeded in bringing Ayurveda to global attention. It is no longer folklore; but has been established as an organized, scientific health system. Some colonial powers are threatened by its emergence, and hence its recognition is delayed. But, it can't be delayed for long. Second, both- modern science and Ayurveda - have opened up and are in a process of rapid change. Third, therapeutic utility of more than a hundred medicinal plants used in Ayurveda has been confirmed through use of established modern scientific techniques. The mechanism of action of several Ayurvedic preparations has been interpreted at the molecular level. Most importantly, it has opened minds, freed them from Macaulayean prejudices and complexes.

RRP: In that article, you had listed out some plants having tremendous therapeutic potential. What is the state of their research and clinical use?

AV: Several of them are already established globally. *Tinospora cordifolia* is being used in treatment of cancer; Kshar Sutra is under intense investigation. *Comnifera wightii* and many others have been studied and found to be effective by several agencies, ICMR being the most important among them. Curcuma (Haldi) has been so successful, you are aware of the patent controversy. In fact, Dr. Sumati Bhide and Dr. V. Prakash have supplied some of the most valuable documents to Dr. Mashelkar for the famous legal fight. Dr. Rama Vaidya has established not only the utility of Asoka in menstrual disorders, but also the exact subset of mechanism through which it acts. The first ever Indian plant to enter phase I studies in USA has been Mucuna.

RRP: Seventies was the period of staunch loyalties to one's own system of medicine. At that time, you had supported patients' right to amalgamate the

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**Dr. Ashok Vaidya was active in the mfc in its early days. A former Director of Ciba-Geigy Research Centre, his name has been synonymous with the resurgence of Ayurveda and with "Reverse Pharmacology". His article entitled "Ayurveda and Modern Science; a Synthesis for People's Health" was published in* mfc bulletin *(Sep 1978) and later in the anthology "Healthcare: Which Way to go?" Here Ravindra. R. P., in conversation with him, revisits the issues raised in the article. His email id : <rpravindra@rediffmail.com>.*

"pathies" and advocated free exchange and interaction among the various schools of health. What is the situation at present?

AV: I have always maintained that traditional systems should be exposed to modern sciences. Modern systems also have a lot to learn from traditional systems in very many ways. Earlier, advocates of stunted systems wanted to continue with their old ways. Similarly, loyalists on the other side maintained that their system was THE ONLY scientific one. It was a war of men like Khomeinis and Togadias. Luckily, the fundamentalism has declined. Young people are much more knowledgeable; they have started asking questions. The change has been more evident in Ayurveda. The younger generation is not complacent with whatever is traditionally handed over to them. They are eager to use the inputs from modern sciences. Some remarkable books have also helped in transmitting the Ayurvedic concepts to practitioners of modern medicine and to lay persons. *Ayurveda for Medical Practioners* by Kumud Nagral and Dr. M. S. Valianathan's twin books- *Legacy of Caraka* and *Legacy of Susruta*, being the most remarkable among them. *Evidence-Based Ayurveda* published by the Dept. of AYUSH is also very useful.

Dr. Ashok Vaidya

RRP: Your name has invariably been synonymous with "reverse pharmacology". Can you explain the concept and its role in the rejuvenation of Ayurveda?

AV: Conventional Pharmacology follows the path of "Experimental- Exploratory- Experiential." Reverse Pharmacology, thus has two connotations, both from different origins. In the West, it refers to the discovery of a ligand for the drug-like action of a novel human molecule. You come up with a molecule occurring within human body, and you want to find out what its therapeutic action is. On the other hand, for us, it means discovery of the pathway of action of a drug whose effects in human have been demonstrated long back. Therapeutic action of several Ayurvedic preparations have been proved, documented, tested and verified for thousands of years; but their exact mechanism can not be explained in the modern scientific, say molecular biological terms. Doing so is reverse pharmacology for us. Any way, in either case, "human" comes first! In conventional pharmacology, it comes last (as in case of human trials). Traditionally pharmacologists would attempt to "kill it early", while we would try to "feel it early". Thus, it is not just the application of pharmacology to traditional systems; it also means contributing to development of pharmacology through observations at the bedside.

RRP: I remember the very first reverse pharmacology experiment you undertook with Vaidya Antarkar- a double blind clinical trial of "Arogyvardhini" as a liver restorative. You had used all the tools of modern medicine- clinical trial, SGOT/SGPT levels to measure liver function. Do you think that the validation of Ayurveda using tools of modern science has now become a trend?

AV: Validation was the first step. That was Revivalism. Now, we are aiming at Renaissance! CSIR, ICMR and CCRS (AYUSH), all the apex bodies related to medical research have accepted reverse pharmacology. We (Dr. Mashelkar, Dr. Narendra Mehrotra and I) have proposed a golden triangle partnership consisting of modern medicine, traditional medicine and life sciences as the basis for this renaissance. We have already started training in reverse pharmacology. Soon we propose to start training sessions for faculty in any of the three fields to help them undertake teaching and research on these new lines. The need for objective markers of drug efficacy and safety in Ayurveda is distinctly felt in patient care as well as in research.

RRP: This sounds interesting. But, is the integration of Ayurveda and modern medicine- two systems which are so diverse, one supposedly holistic and the other reductionist, really possible?

AV: For this, our mind sets need to change first. Both so-called reductionist and holistic approaches have their own strengths and limitations and epistemologically, their integration is the most challenging task before us. The process would take decades as evidence has to be marshaled at all levels of biological organisation. But, an integrative synthesis brings out the best in each system and results in a truly remarkable contribution to human

health. Let me give an example. *Rauwolfia serpentina* (Sarpagandha) has been used in Ayurveda for centuries for the treatment of hypertension, anxiety, neurosis and snakebites. Then the alkaloid reserpine was isolated from it and used as an antihypertensive. That was a classic example of reductionist science. Dr. Gananath Sen conducted its trials on dogs. This experiment paved the way for the study of blocking the catecholamine uptake into synaptic vesicles by reserpine. It also led to the development of first animal model for reserpine- induced depression in rats and later to the development of a whole generation of anti-depressants. Reserpine use was severely limited due to its ability to cross blood brain barrier and cause severe depression in some patients. Recently, a quaternary derivative of reserpine has been synthesized, which does not cross blood brain barrier and thus may not cause depression. Today, reserpine is dead, but sarpagandha lives; and so the anti-depressants.

RRP: As a reputed pharmacologist actively propagating Ayurveda and as a key member of various national/international decision making bodies, you have often interacted with researchers and regulatory agencies in several countries. What has been your experience in Europe and USA?

AV: It was a continuous war of ideas and cultures. In 1993, our group with CHEMEXCIL published a book on selected Indian plants, which was systematically circulated in Europe and USA. It proved to be a "Trojan horse"! Their very first reaction was of shock and sensitization. They were not prepared to believe that the "folklore" methods could be so scientifically backed and thoroughly researched. The book contained more than hundred such plants. In the next move, the US lobby pushed "dietary supplements" to counter Indian plants. In every encounter thereafter, we have experienced that their prejudices have been reinforced by vested interests. Let me cite two experiences. The upper house of the British parliament appointed an expert committee under the chairmanship of Lord Walton. The committee placed Ayurveda in category III, along with dousing etc! This was when action of several Ayurvedic drugs like *Mucuna* on Parkinsonism was well- documented. I told Lord Walton that we have high regards for him due to his remarkable work on mitochondrial myopathy. But, if he persists in his way, his name would be associated with Lord Macaulay's in India.

Even later, (when Britain had accorded a respectable place to Ayurveda in its classification of health system), the EU is busy manipulating its ways so as to make Ayurveda "a part of the herbal remedies gamut". It sent a 2- member committee to India, whose members had no concept or any background of the work done in India. Unfortunately, the Indian government is not making sufficient efforts to counter such measures and to uphold the scientific basis of our system. Banning Ayurveda in these countries means depriving their citizens from their fundamental right to health and a belief system.

US FDA is no better. They were asking for evidence of use of drug for a period of 20 years as a measure of its efficacy and safety. When we suggested that that we have a record for several centuries, they were nonplussed! Forget the Ayurvedic texts; there are several records of documented use of such drugs by foreign authors. There is n excellent book entitled *Colloquia on the simples and drugs of India*, written by Garci Da Orta. He was a physician to the Governor of Portugal. The book was published on Apr 10, 1563. It was translated into several European languages

RRP: What will be the impact of the rapid proliferation of CROs- Contract Research Organisations- on clinical research in India?

AV: The CRO game is very dangerous. There is no connection with the original research; everything is fragmented. This can be very harmful for the patient and damaging for research. Data emerging at each stage of research needs to be continuously monitored by a multi-disciplinary team. We were studying a group of patients on metformin, an antidiabetic drug and found the condition of several of them was deteriorating. We later found out that they were on an Ayurvedic drug that decreased the bioavailability of metformin by 50%. Hence continuous monitoring and reassessment of data is very important at each activity, whatever may be the stage of research. At Ciba- Geigy, we had a new molecule *CGI 13866*. It showed good anthementic activity. However, animal studies were unsuccessful as rats died of diarrhea due to inhibition of cholinesterase. However, Dr. T. G. Rajagopalan studied the effect of the drug on isolated human appendix, where cholinesterase concentration is assumed to be high, and found absolutely no inhibition. The anticholinesterase effect was thus found to be species- specific. That's why the need to maintain

integrity of research throughout all stages!

RRP: While Ayurveda seems to be finally finding the pride of a place it deserves, nationally and internationally, Ayurvedic manufacturers seem to have imbibed all the vices of their allopathic counterparts- from unethical practices to irrational products to utterly false claims. What is your opinion about these happenings?

AV: There is quackery on both sides- allopathy and ayurveda. And organised quackery is much more dangerous. Ayurvedic industry is in very bad shape. It is not geared for the challenges lying ahead. Marketed Ayurvedic products contain ingredients in minute quantity. There is no justification for many formulations, except that there is some reference in the 53 Ayurvedic books about the use of a particular herb in the specified condition. Where is the guarantee that the product actually contains the ingredients in the stated and needed quantity? Irrational products, misleading advertisements, exploiting consumers – all this is being done not only by MNCs, but also by our Indian drug companies, by allopathic and ayurvedic manufacturers and that's very sad.

RRP: With such profit hungry industry, callous government and lethargic consumers, is their a way out?

AV: I am quite optimistic. A lot of ideas can be tried out. For a long time, we have been discussing the possibility of an Ayurvedic kit for the community health volunteer (CHV). 80% of common ailments could be treated by using simple Ayurvedic formulations prepared from locally available herbs. A suitable formulary could be prepared, specific to each locality. A group can undertake the responsibility of its production, quality control and distribution, while community health projects can ensure their proper utilization. The chemists and druggists can initiate such an enterprise. Even school teachers can play a role in such ventures. The LOCOST model would be useful for such an innovation. But the government should do away with its cumbersome and unnecessary provisions which are killing the small scale industry. It should focus only on quality control. People should not depend on pharmaceutical industry, but take health in their own hands and start a nation-wide movement. But for all this to happen, the Panchayat Raj needs to be strengthened and then health at the rural level can be addressed.

We are also proposing an amendment to Drugs & Cosmetic Act to introduce a new category of *phytopharmaceuticals.* It should be mandatory to submit all the basic data related to all aspects of the drug, including quality, safety and efficacy to the Central drug Authority of India (CDAI), proposed to be constituted in the next V year plan, before granting of licence and this should be applicable to all categories of phyto drugs.

We also need to take several measures to include Ayurveda in pharmacy. Dr. Narayana and Dr. Singh have already included 50 plants in the new edition of the Indian Pharmacopoeia (I.P.). We need robust formulations too. The role of pharmacy teachers becomes important in this context. At present, there is no interaction between pharmacists and physicians- two important organs of the health system. Why can't IPA- (Indian Pharmaceutical Association) and API (Association of Physicians of India) interact on questions of health of the Indian people?

We, as people need to be aggressive and politically aware and active. If EU decides to block the entry of Ayurveda because they want to protect their crumbling health system, we need to respond by not accepting European MNCs, if they consider 5000 year old Ayurveda not acceptable and dump it under 'herbal Medicine".

Though very few in the government are aware, sensitive and willing to take a stand on such issues, the contribution by academics and researchers in the synthesis of Ayurveda and modern science has been tremendous. And that gives me hope. Unfortunately, we don't have many groups who believe in nation-building through innovation. Some activists have been raising pertinent questions and protesting; but we have forgotten Mahatma Gandhi who maintained a balance between satyagraha movements and constructive work; we have forgotten the latter. He liberated initiatives and encouraged people to take solutions in their hands. Salt was a classic example. We need to initiate and sustain a nation-wide movement of *Jagruk Nagriks*, vigilant citizens. Ethics needs to be practised, not preached. Our education rewards only copycats. We need to rise above it. Bapu's legacy and power lies in it.

Commercialisation of Surrogacy in the Indian Context

*-N.B.Sarojini, Aastha, Preeti, Anjali and Deepa**

Surrogate motherhood is gaining popularity as both a 'profession' and a service - a highly commercialised activity that generally targets women from lower socio-economic background. The fact that the infertility industry operates with little or no regulation with regard to standardisation of procedures and other medical, ethical and legal implications is taking its toll on the surrogates.

The paper is divided into 2 broad sections. Section I explains the increasing commercialisation in surrogacy arrangements while section II deals with the issues left unaddressed in the guidelines on Assisted Reproductive Technologies issued by the government.

Introduction

Surrogacy is the practice of gestating a child for another couple/man/woman and could involve any of the various Assisted Reproductive Technologies (ARTs) like IVF (in vitro fertilization, IUI (Intra Uterine insemination) ICSI (Intra Cytoplasmic Sperm Injection), etc. Surrogacy has gathered much attention in the recent past due to the increase in the number of couples opting for surrogacy as well as in the women acting as surrogates. Surrogacy may be of two kinds, gestational and genetic.

Gestational surrogacy arises when the embryo is artificially implanted into the surrogate mother and is then carried by her. According to Indian Council for Medical Research (ICMR), this is referred to as "an arrangement in which a woman agrees to carry a pregnancy that is genetically unrelated to her and her husband, with the intention to carry it to term and hand over the child to the genetic parents for whom she is acting as a surrogate."

Genetic surrogacy arises when the surrogate donates the egg as well as carries the child. In a genetic surrogacy, therefore, the surrogate mother is an oocyte donor as well. This is referred to as "surrogacy with oocyte donation." ICMR defines it as "a process in which a woman allows insemination by the sperm/ semen of the male partner of a couple with a view to carry the pregnancy to term and hand over the child to the couple."

1. Commercialisation

According to a report by Confederation of Indian Industry (CII), medical tourism has a potential of growing by 25 per cent annually to fetch the country Rs.100 billion ($2.15 billion) a year.[1] Similar figures by media reports also suggest towards the growing trends of medical tourism. Figure by *Outlook* magazine of February 2006 issue mentions that medical tourism is slated to become $2.3 billion by 2012. The Indian government, and private hospitals endorse and promote this process of medical tourism by offering easy access to financial incentives like low interest rates for loans provided to establish a hospital, special 'medical visa', subsidized rates for buying drugs, import of equipments, subsidized lands etc.[2]

The key selling points of the medical tourism industry are its "cost effectiveness", i.e., providing technologically advanced/superior health care services at much cheaper rates than the developed countries and its combination with the attractions of tourism. The phenomenal growth in medical tourism is not confined to services like knee replacement, heart surgeries and eye treatment; ARTs including surrogacy are the latest addition to this list of services. The growing medical tourism industry has a substantiate implication on the incidence of surrogacy in a country like India. The past 2 years have seen a 150 per cent rise in surrogacy cases in India. In an article published in *The Telegraph*[3], Reena Martins reported that the incidence of surrogacy in India has doubled in the last three to five years. The approximate cost of surrogacy in India is Rs 8-10 lakhs[4] compared to Rs. 25-35 lakhs in the US.

The entire process of surrogacy, starting from advertisements to delivering the baby is the classic case of ARTs being commercialized and commodified. Though the practice of surrogacy has existed for a long time, in recent years, it has become a huge means to earn money, cutting across geographical boundaries. Services for surrogacy are advertised, and surrogate agencies make large profits in recruiting and providing/ arranging the services of surrogates. The advertisements for surrogacy are exemplary in driving this point home. A typical advertisement for surrogate in magazines generally reads,

Wanted healthy 20-35 years married/widow lady to bear child through IVF procedure proven fertile females preferred. Secrecy assured and suitably rewarded contact…

The selling point here is "quality" of the surrogate, which is determined by social background, physical attributes and, preferably, by proven fertility. Moreover, the offer of a 'suitable reward' mentioned frequently in the advertisements would be a punishable offence had the ad appeared in any country (with a functional law regulating surrogacy) other than India.

The concept of payment in return of hiring a womb makes commercial surrogacy legal in India, thus turning the normal biological function of a woman's body into a commercial contract. Many of the clinics that have a surrogate programme explicitly target foreigners and NRIs. Anand in Gujarat and Mumbai have been in news as the newest destination for surrogacy services. There are examples of women becoming surrogates repeatedly for economic reasons.

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The need for some couples to have a surrogate, and women offering their services because of monetary reasons, has turned the procedure of surrogacy into an industry. Some literature and research points to towards the evidence that "most surrogate mothers earn just above the poverty line, and less than four per cent of surrogate mothers are reported to have received graduate school education." Over 40 per cent of surrogates are unemployed, receiving financial assistance or both.[5] According to media reports also, even if the contracts for surrogacy are unenforceable, exploitation will the surrogates will continue. For example, an orphanage in Haryana sold a girl twice in three years to bear children for two childless couples.[6] One surrogate agent explains, "The only reason for which women opt for surrogacy is money. Each delivery can get a surrogate up to 2 lakh rupees." He also suggested that, "I feel this is an excellent opportunity for women to become independent from situations like prostitution or commercial sex work and trafficking.[7]

The current state of chaos in the fertility industry is taking its toll on the women who are increasingly being called 'professional surrogates'. There is an urgent need for regulation through a comprehensive law covering not only surrogacy but also the whole gamut of assisted conception techniques. Right now the sole regulation governing surrogacy and other Assisted Reproduction Technologies (ARTs) in India is 'The National Guidelines on Accreditation, Monitoring and Regulation of ART clinics issued by the Indian Council of Medical Research (ICMR), a legally non-binding document.

2. Regulation and Surrogacy

The National Guidelines for Accreditation, Supervision and Regulation of ART Clinics in India[8] have tried to regulate the functioning and conduct of clinics offering infertility services. Unfortunately many aspects have been left out especially with regard to surrogacy, particularly the legal aspects, rights of a surrogate mother and other measures to ensure the well being of the surrogate.

For instance, the guidelines prohibit ART clinics from advertising for surrogates, donors and from being a part of the monetary transactions between the commissioning couple and the surrogate and require that the couples find the surrogates themselves. But services for surrogacy are openly advertised by clinics and surrogate agencies and infertility clinics make large profits in recruiting and providing/arranging the services of surrogates.

Many clinics like Dr. Nayna Patel's Akanksha Infertility Clinic (Anand), Malpani Infertility Clinic (Mumbai), and Rotunda Centre for Human Reproduction were found to be operating networks of professional surrogates. Websites of several clinics include a separate section with a clinic-approved list of surrogates and also carry advertisements seeking new surrogates. [*"We can provide you an Indian surrogate recruited through advertisements in our local newspapers. All surrogates taken into our program are between 21-35 years of age. They are married with previous normal deliveries and healthy babies. They are made to run through basic serological screening tests as well as an infectious disease screen. They are also screened for Thalassemia. All couples including lesbian and gay couples and even single men and single women can avail of this facility to fulfill their dream of enjoying parenthood".*

(http://www.iwannagetpregnant.com/Surrogacy.asp)]

The ICMR guidelines state, "*A third party donor and a surrogate mother must relinquish in writing all parental rights concerning the offspring and vice versa. The birth certificate shall be in the name of the genetic parents. (3.5.4)"* By genetic parents, ICMR refers to the commissioning couple; the fact that the surrogate mother may also be one of the genetic parents is another typical ICMR discrepancy. Moreover, they say that the couple must adopt the child in order to become legal parents, unless they can establish their genetic link with the child through DNA fingerprinting. What actually happens is that after the child is born to the surrogate, the surrogate fades into the background anonymously and efforts are made to erase all evidence pointing towards use of a hired womb.

In a recent landmark case in the High Court in Gujarat, the court issued an interim order ruling that the birth certificate of twins born to a surrogate mother should bear the name of the surrogate mother and the surname of the father

The order followed a petition filed by a German couple who had commissioned the surrogacy and who wanted to move to the UK after the birth of their twins. Their visas were refused on the grounds that the birth certificate of the children bore the name of the German woman while the German law recognizes the woman who has actually delivered the child instead of the woman for whom the child is being borne.[9]

Going by the ICMR guidelines, the surrogate should be giving the child in adoption to the couple, without being recognised as the parent in the first place. But this scenario is equally problematic owing to the rather unreasonable nature of the adoption law of the land. According to the Hindu Maintenance and Adoption Act 1956, only Hindus can legally take/give a child in adoption. If a non-Hindu couple has a child through a surrogate mother, they would probably not be able to become their child's legal parents. Moreover, only the father (in a 2-parent scenario) can give/take a child in adoption. If the child has been born using either the couple's egg and sperm or the surrogate mother's egg and donor/male partner's sperm, it would be the surrogate's husband who would be the father of the child and the one giving the child in adoption. The couple may also apply for a declaration of guardianship, a commonly

used alternative to adoption in India, but couples are rarely informed about this option.

The guidelines are vague about the age criteria for the surrogate mothers. The maximum age has been specified as 45 yrs while the minimum age has not been mentioned. They specify that the surrogate mother should belong to the same generation as the persons commissioning the surrogacy. But, there have been several instances of a mother/ mother in law acting as a surrogate for her son/daughter, which is in clear violation of this clause. Recently, a Gujarati woman in her late 40s became a surrogate for her daughter and gave birth to her own twin grandchildren (www.intendedparents.com/news/grandmother_is surrogate mother to grandchildren/). Apart from the changing definition of biological motherhood that such cases highlight, a much more serious concern is the side effect on the woman's body.

In order to address exploitation at some level, the guidelines state that a woman cannot be surrogate for more than 3 times. But this does not take into account the number of pregnancies she has already had and there is no way of monitoring the number of times a woman becomes surrogate. She can easily exceed the limit by going to different clinics each time or may be forced to act as a surrogate more than three times for financial gain. Keeping in mind the low socio-economic status of the women, which might be indicative of poor health status, undergoing multiple pregnancies following techniques like in vitro fertilisation or artificial insemination may seriously harm the health of the surrogate mother.

In addition to this, ICMR also feels that a surrogate *"must also provide a written certificate that 'she and her husband (to the best of her/his knowledge) have had no extramarital relationship in the last six months. (This is to ensure that the person would not come up with symptoms of HIV infection during the period of surrogacy.) (3.10.7)'"* Not only does this clause impinge on the sexual life of the woman and her right to privacy, it is absurd to assume that a married woman can acquire HIV only through extra marital relationships. Further, the clause leaves out the possibility of single/ lesbian women from acting as surrogate mothers. In another equally unreasonable clause, it is required that the surrogate registers 'as a patient' at the clinic in her own name.

Then there are other issues, which might spring up in the process like – what if the surrogate does not want to give up the child? What if the couple does not want the child after the surrogate has become pregnant or if the couple splits/gets divorced or passes away during the gestation period? Such situations must be addressed in the 'contract' and in the consent forms. Unfortunately, there are no standard forms or contract templates. They are chalked out with every surrogacy arrangement, where, more often than not, the clinic and the doctors are instrumental.

Conclusion

In India, with ARTs being available almost in the private sphere, and with the fertility market getting more and more commercialized, it is crucial for the State to play a considerable role in regulating and monitoring ARTs including Surrogacy. This is of immediate concern especially since legislation on Assisted Reproductive Technologies (ARTs), ART Regulation Act 2008, which includes surrogacy, is on the anvil.

Owing to the rise in unregulated and unethical practices in the field of ARTs and Surrogacy, it is important that a public debate on these issues is imperative on a wider and larger platform to tackle the adverse effects of these technologies on women and the society at large in terms of their legal and ethical implications.

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The Hunger Bazaar

Ethical Issues in Public Private Partnerships in Nutrition and Conflict of Interest

- Radha Holla and Lakshmi Menon[1]

During one of the debates related to Infant and Young Child Feeding at the World Health Assembly (WHA) in 2005, India took the following position: "Commercial enterprises by definition are profit driven entities. It is neither appropriate nor realistic for the World Health Organization (WHO) to expect that commercial groups will work along with governments and other groups to protect, promote and support breastfeeding." Following this, WHA adopted a Resolution 58.32, which further urges Member States "to ensure that financial support and other incentives for programmes and health professionals working in infant and young child health do not create conflict of interest".

Today, in the wake of several statements by the Indian government on the need for Public Private Partnerships (PPPs) for ensuring the citizens of the country can attain and exercise their rights to health and nutrition, the statement of 2005 seems to have been forgotten. PPPs today are being presented as the foundation on which a healthy, well nourished India can be built; that without this foundation, we will sink into a miasma of ill health, malnutrition, and underdevelopment, from which we can never rise. And so it is, in a world driven by markets and trade, where the World Trade Organization (WTO) dictates how food is to be accessed by people, where the World Bank promotes "social entrepreneurship" inviting "innovators" into the "marketplace" of development, where corporates are asked to exhibit their social responsibility.

The notion that profit-driven commercial interests cannot be at the vanguard of equitable development was first given concrete shape as the International Code of Marketing of Breastmilk Substitutes, adopted by the 34th World Health Assembly on 21st May 1981. This Code symbolized the coming together of civil society and international organisations such as UNICEF and WHO to meet the profit-driven industry in a head-on collision course and stay to win. That profit could not drive equitable development was clearly evident in a libel suit Nestle had filed in 1974 against AgDW (Arbeitsgruppe Dritte Welt, or Third World Action Group) who had published a pamphlet against the Nestle entitled "Nestle Kills Babies." Though the court's decision in 1976 was in favour of Nestle, because the company could not be held responsible for infant deaths "in terms of criminal law", the judge fined AgDW a token 300 Swiss francs, and warned the corporation that it "must modify its publicity methods fundamentally." The International Code was the first global instrument initiated by civil society to control corporate behaviour in its pursuit of profits.

The world has turned a full circle, and today, 27 years after the Code was adopted by all countries except the US, UNICEF is partnering with the Global Alliance for Improved Nutrition (GAIN), a body that furthers the interests of the food industry to push for increased profit-driven corporate intervention in nutrition and food policies and policy making in countries. In fact, UNICEF and WHO representatives sit on the board of GAIN with a leading baby food manufacturer, Danone, who has violated the International Code in several countries. As Board members of GAIN, UNICEF and WHO are also engaging with the International Life Sciences Institute, whose members include hundreds of other chemical, food and drug companies including Bayer AG, Coca-Cola, Dow Agrosciences/Dow Chemical, DuPont, ExxonMobil, General Mills, Hershey Foods, Kellogg, Kraft, McDonald's, Merck & Co., Monsanto, Nestle, Novartis, PepsiCo, Pfizer and Proctor & Gamble. (See box: ILSI India – Members). ILSI (International Life Sciences Institute) is an important driver behind the GAIN initiative, and together with Heinz Foods has been the main supporter and funder behind the development of Sprinkles, a product for treating iron-deficiency anemia in children 0-6 months of age, which will be discussed later in the article.

Who Gains from GAIN?

The Global Alliance for Improved Nutrition (GAIN) is essentially a body that lobbies with governments, advertising products of the corporate food manufacturers, to have these products introduced into national public health and nutrition systems. GAIN was founded at a special 2002 UN session on child health, to address the problems of inadequate diet in at-risk populations using food fortification through partnerships with the private sector. GAIN has been part of an "innovative" answer to malnutrition This answer, costing around US$70 million, has been the Bill and Melinda Gates Foundation's (BMGF) economic incentives to Kraft, Procter & Gamble, H.J. Heinz, and other food companies and pharmaceutical

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International Life Sciences Institute (ILSI)

List of Indian members

Ajinomoto Co., Inc.
Akzo Nobel Chemicals Pte. Ltd.
Bikanerwala Foods Pvt. Ltd.
Coca-Cola India
DSM Nutritional Product India Pvt. Ltd.
Frito Lays Div., PepsiCo India Holdings (P) Ltd.
Ganesh Benzoplast Ltd.
General Mills India Pvt. Ltd.
Haldirams Marketing Pvt. Ltd.
Hindustan Lever Limited
Hexagon Chemoils Pvt. Ltd.
ITC Foods Business
Kanmoor Foods Ltd. c/o Marico Industries Ltd.
Kejriwal Enterprises
Kellogg India Pvt. Ltd.
Mars Incorporated
Monsanto Enterprises Ltd.
National Dairy Development Board
Nestlé India Limited
Nicholas Piramal India Limited
Roha Dyechem Ltd.
RSA Vitamins Private Limited
Sayaji Sethness Ltd.
The NutraSweet Company
Vinton Healthcare Pvt. Ltd.

manufacturers like Roche[1] to fortify foods with micronutrients, according to a news item printed in *Wall Street Journal* some years ago[2]. In exchange, GAIN, led by BMGF and including UN agencies such as WHO and UNICEF, the governments of USA, Japan, Germany and Canada, would offer companies assistance in lobbying for favorable tariffs and tax rates and speedier regulatory review of new products in targeted countries. The consortium also would give local governments money for initiatives to help create demand for fortified foods, including large-scale public relations campaigns or a governmental "seal of approval."[3]

In India, GAIN has been engaging in several activities related to fortification of food. These include, according to its Annual Report of 2006-07,

- In September 2006, GAIN, together with World Food Programme and the Tamil Nadu State Aids Control Society initiated a project to provide nutrient-dense blended food to people living with HIV/AIDS in Tamil Nadu
- Again, in September 2006, GAIN supported the fortification of 10,000 metric tons of blended food to reach 400,000 children aged between six and 36 months in Gujarat.
- In January 2007, UNICEF (Rajasthan) received a US$ 198,480 GAIN grant for the fortification

The GAIN Board

According to its Annual Report 2006-07, the Board of GAIN is composed the following persons:

- Jay Naidoo, Chair (Chairman, Development Bank of Southern Africa; Chairman, J&J Group, South Africa).
- Jaime Sepulveda, Vice Chair (Director, Integrated Health Solutions Development Program, Bill & Melinda Gates Foundation, USA).
- Chunming Chen (Senior Advisor, Chinese Center for Disease Control and Prevention; Director, International Life Science Institute, China).
- Frances Davidson (Health Science Specialist, Office of Health and Nutrition, Bureau for Global Programs, U.S. Agency for International Development, USA).
- Christopher Elias (President, PATH, USA).
- Pierre Henchoz (Partner, Lombard Odier Darier Hentsch & Co, Switzerland).
- Richard Hurrell (Professor, Institute of Food Science and Nutrition, Swiss Federal Institute of Technology, Switzerland).
- Olivier Kayser (Vice President, Ashoka, UK).
- Ernest Loevinsohn (Director General, Health and Nutrition Directorate, Canadian International Development Agency, Canada).
- Franck Riboud (Président Directeur Général, Groupe Danone, Paris, France).
- Anji Reddy (Executive Chairman, Dr Reddy's Laboratories Ltd, India).
- Paulus M. Verschuren (Senior Director, Partnership Development, Unilever, the Netherlands).
- Julian Schweitzer, (Ex Officio Director of Health, Nutrition and Population, Human Development Network, World Bank, USA).
- Marc Van Ameringen, (Ex Officio Executive Director, GAIN, Switzerland)

The representatives of UNICEF and WHO had retired from their positions on the Board at the time of the publication of the report and were to be replaced by others from the two organisations.

of home-made complementary foods with a mix of vitamins and minerals – Sprinkles - aimed at 120,000 children aged between six and 36 months.

- In May 2007, GAIN started working with Naandi Foundation in May 2007 to start the distribution of fortified meals to school children in Andhra Pradesh, Rajasthan, and Madhya Pradesh.
- In May 2007 again, in Hyderabad, Britannia Industries added fortified biscuits for 1,20,000 children, with help from GAIN. This intervention created a huge market for Britannia, one that was captured with no advertising costs, and got the following response from the company's Managing Director, Vinita Bali (reproduced from GAIN's annual report):

  "Britannia is delighted to be partnering with GAIN in a first-of-its-kind public private partnership in the school feeding program in Hyderabad wherein we make and supply specially fortified biscuits to some of the most disadvantaged children. We are grateful to GAIN for supporting our work."

GAIN is now working with DSM Nutritional Products, Cargill, Akzo Nobel and Procter and Gamble to create the *GAIN Premix Fund*, which will give loans and grants to people to purchase the products, probably through programmes run by NGOs and even governments. This enthralling[4] "endeavour" was launched at a meeting of the Clinton Global Initiative in September 2007.

In 2005, GAIN, together with the World Bank, founded the GAIN Business Alliance. Over 200 companies have become partners since its inception. In March 2007**,** **t**he first GAIN Business Alliance Global Forum, held in India, brought together 130 business and government leaders from fifteen countries to explore new partnerships to "fight malnutrition".

GAIN and the Issue of Conflict of Interest

As indicated above, GAIN works closely and actively with several organisations including Danone, Helen Keller International, Micronutrient Initiative - a Canada-based international not-for-profit organization dedicated to eliminating vitamin and mineral deficiencies worldwide, National Fortification Alliance – an alliance that brings together government, international organisations, civil society and the private sector to implement food fortification in GAIN projects, Tetra Pak, UNICEF, World Bank Initiative, World Food Programme and WHO. It is also a member of several alliances and coalitions that are lobbying with the government on the national nutrition policy. One such coalition is the Coalition for Sustainable Nutrition Security in India, chaired by Dr. M.S. Swaminathan. This Coalition has set up a Task Force for Children under Two to identify steps to prevent/ reduce malnutrition in infants and young children. UNICEF is also a part of both the Coalition and the Task Force. This raises the issue of conflict of interest, as GAIN has a baby food manufacturer on its Board. GAIN's presence also violates the IMS Act (for instance Art 3, 4 and 9 among others).

India translated the Code into the IMS Act (The Infant Milk Substitutes, Feeding Bottles and Infant Foods (Regulation of Production, Supply and Distribution) Act, 1992), and amended it in 2003 to make it even stronger. The IMS Act bans the following:

i. All forms of promotion of baby foods and feeding bottles meant for babies under two years of age
ii. All forms of advertising by print media, electronic media, or any other method
iii. Providing gifts and free samples to anyone; contacting pregnant or lactating women
iv. Donation of products, educational material or equipment
v. Using pictures of mothers, baby, cartoons or other graphic material on cartons, labels and tins
vi. Using educational material or advertisement giving incomplete or incorrect information to pregnant or lactating women
vii. Display of posters or related material in hospitals, pharmacies and chemists' shops
viii. Making payments to health care workers
ix. Sponsoring gifts, meetings, conferences, seminars, contests, or giving funds for any other activity to health care workers and their associations.

Thus the presence of GAIN – an initiative whose main purpose is to create markets for products of corporate manufacturers - in such coalitions and alliances, which are essentially bodies that lobby in the context of policy, raises issues of conflict of interest, especially if GAIN provides financial or logistic assistance. When the issue of conflict of interest was raised at an early meeting of the Coalition, the UNICEF representative was asked to form a committee to look into the matter. This representative, together with the National Coordinator of Breastfeeding Promotion Network of India, who was an invitee at the meeting, developed a statement on Conflict of Interest, to be signed by the various participants. UNICEF finally refused to sign its own statement. When the representatives of the Working

Group for Children Under Six – A Joint Working Group of Jan Swasthya Abhiyan and Right to Food Campaign, sought a meeting with the Country Representative to take up this matter, she refused to meet them, citing a busy travel schedule as the reason.

Earlier, on 15th April 2008, the Working Group together with several other civil society organisations, professional bodies and health groups, had organized a protest at a meeting "India Alliance for Infant and Young Child Nutrition (IYCN) called by the GAIN in Delhi. Government of India¹s Ministry of Women and Child Development, Ministry of Health and Family Welfare, Ministry of Food Processing and many international and national agencies including UNICEF, WHO, DFID and many experts were listed as potential members of the Alliance.

The group submitted a protest note (See pp.18-19, *mfc bulletin,* Feb-May 2008, for the complete text of the protest note and also the text following "Questioning Market Solutions for Child Malnutrition") to the GAIN representative in India and also interacted with the participants who were invited at the meeting and offered to answer any questions if they have. Two members of the protest group also participated in the meeting and raised the points of 'conflicts of interest' while entering into any partnership.

Since then, BPNI has, through the Right to Information Act, sought information from the the Planning Commission, the Ministries of Health and Women and Child Development to disclose their engagement with GAIN. None of these requests have been satisfactorily answered.

How Necessary are Micronutrients and Food Fortification?

On May 15 2008, the *Lancet Series on Maternal and Child Malnutrition* was launched in India. The meta-analysis had been funded by BMFG. The series focused on several interventions: breastfeeding, removing vitamin A and zinc deficiency, health education on a massive scale, providing adequate budgets and programming for exclusive breastfeeding and other interventions. However, the focus of the launch was entirely on the micronutrient bit. The brief prepared for the press included little other than recommendations for including micronutrient fortified foods in the public health and nutrition systems. One person missing at the launch, which included GAIN, Micronutrient Initiatives among others, was Dr. H.P.S. Sachdeva, one of those engaged in the meta analysis related to vitamin A. Dr. Sachdeva had challenged the paper written by Dr. Zulfikar Bhutta for the series. His contention was that if an industry-sponsored study was ignored in the meta analysis, then there was no role for vitamin A for neonates for reducing either infant mortality or malnutrition. Interestingly other studies, such as the Lucknow study which also supported Sachdeva's contention, were not taken into account in the meta-analysis. The matter was commented upon by Piyush Gupta, the editor of *Indian Pediatrics,* who asked, "Do We Need Universal Neonatal Vitamin A Supplementation?" (See box of the same name) Gupta concludes a call for urgent action, "because there might be intense lobbying for initiating newborn vitamin A supplementation in the country. Even UNICEF and WHO may buckle to the pressure of this so called "core intervention"." He warns that "Attempts could be under way to commercialize micronutrient malnutrition in the country by presenting incomplete evidence".

Let us look at the case of zinc deficiency. Zinc becomes available to the body through consumption of food grown in zinc-rich soils. As it is not created, it needs to be replenished through organic methods of agriculture. Chemical fertilizers, especially DAP, leaches zinc from the top soil layers, making it unavailable to the plant. The use of such chemical fertilizers, together with the discontinuance of use of organic material as manure, is the major cause of zinc deficiency. Addressing this deficiency through supplementation and fortification, without looking at agricultural practices, is akin to giving a person repeated blood transfusion without stemming the flow of blood from the wound.

In the case of fortification of *atta* (wheat flour) with iron, the presence of phytates will now allow optimal absorption of iron, and will also affect its keeping quality. This would mean that if benefits of fortification with iron has to reach the people, Indians must replace *atta* with *maida* (refined flour) in their food as fortification is more successful with *maida*. However, such a change in the gastronomic habits of the country would mean that new deficiencies – that of several vitamins, fibre, etc. would start becoming visible in the near future. Of course, as far as industry is concerned, this would provide the market for several other pill-based solutions.

Sprinkles, the other market solution to iron deficiency anemia, does offer several benefits over fortification. [Sprinkles comes in the form of sachets (like small packets of sugar) containing a blend of micronutrients in powder form, which are easily sprinkled onto foods prepared in the home.] Trials are on to see its effect if it is distributed through the Integrated Child

Development Services (ICDS). It is another matter that where iron is concerned, pediatric drops of iron are not available because of policy problems, corruption and the like. If such problems were not there, pediatric drops were a good enough answer. Another problem in this case is logistic – how do you reach the people. The main reason for the failure of the ICDS system has often been cited as the disinterest of the anganwadi worker, the inadequate number of workers, political interference in the anganwadi worker's selection and duties, and of course, corruption. Will these problems suddenly disappear if iron supplementation programme is replaced by a Sprinkles distribution programme? A further problem is that currently ICDS is a government programme. However, there is no certainty that such a programme would continue indefinitely for a decade or more. What happens if the government withdraws the programme? Do people then have to buy Sprinkles from the market? At what cost? As it is, the current budget allocation for the entire ICDS programme falls far short of the recommendation by the Supreme Court Order, wherein ICDS is to be universalised, and all children should get supplementary nutrition at Rs. 2 per day, an extremely inadequate amount to begin with. From what budget head will the money for Sprinkles be taken? It definitely will not be from the salaries of the bureaucrats, it will be from the supplementary nutrition programme for children, pregnant and lactating women and adolescent girls.

It is in the context of such problems that the push towards fortification of food, and market solutions like Sprinkles must be examined.

GAIN and Creation of Friendly Legislation

A stated objective of GAIN is to create friendly legislation. Several of the initiative's announcements make it clear that this friendly legislation will include legislation on complementary feeding. India's IMS Act is the most baby friendly legislation in the world. It is another matter that its violations are not being acted upon. It bans advertising of branded baby foods meant for complementary feeding. Does GAIN look upon this Act as friendly legislation? Or will the word "friendly" apply only to manufacturers? An answer is apparent in GAIN's strategy of influencing parliamentarians. Witness Sachin Pilot's strong comment on the need for fortifying milk with vitamin A, after GAIN organized a meeting with young Parliamentarians:

The fortification of processed milk with vitamin A could be a low-cost and good strategy to combat malnutrition among children.... No doubt, a balanced diet, rich in fruits and minerals, will be an ideal approach to tackle malnutrition among children. But milk fortification could be an effective way towards this endeavour.[5]

Pilot has gone further and has introduced a private member's Bill in the Lok Sabha regarding food fortification, to make it mandatory for food processors to ensure the desired level of nutrients in processed food. This ignores the fact that the of the 86 percent of Indian children between 0-6 years of age who do not get adequate amounts of vitamin A, few, if any will be able to access processed milk (cost would be a prohibitive factor); they can barely access fresh milk, which with its higher fat content than processed milk, would in any case give them the vitamin A they need. Pushing for fortification to processed milk with vitamin A to meet the needs of the poor for this micronutrient is somewhat akin to what Danone is doing with Grameen Bank in Bangladesh – fortifying and converting milk into "Shakti Doi" and selling it for 7 takas/80 ml, when fresh milk with a fat content ranging from 3.5 to 4 percent costs a little less than 2.5 takas for the same amount.

Making a Killing on the Hunger Bazaar – Market Solutions to Malnutrition

GAIN advocates the use of "market solutions" to deal with malnutrition and micronutrient deficiencies. In India alone, GAIN aims at creating a market of one billion people for micronutrients and fortified foods. As mentioned earlier, GAIN provided Britannia Biscuits with the opportunity to reach with its products over a lakh children every day in Hyderabad alone. This is the huge potential of the hunger bazaar to feed corporate greed for profits.

One vital problem with market solutions is that they do not allow us to question the reason why inequities that are behind malnutrition exist. Fortification with iron will not reduce anemia until the cultural, social, and health problems that contribute to the presence of anemia will not be solved. If women continue to eat last and least, they will continue to be anemic. If the problems of hookworm, malaria and amoebiasis are not resolved, anemia will persist. The cure for the problems of diarrhoea are not increasing zinc or vitamin A in diets; it lies in recognizing the right of every person in this country to clean drinking water and ensuring its availability in to every house. It also lies in the upscaling of an extremely cost-effective and proven remedy – ORS – for diarrhoea. Presently, according to National Health and Family Survey 3 (NHFS 3), the use of ORS in treating diarrhoea is less than 30 percent. It is the mindset that does not promote

ORS, according to Dr. Arun Gupta, National Coordinator of BPNI, which does not allow a budget line for protecting, promoting and supporting breastfeeding in spite of overwhelming evidence that early initiation and exclusive breastfeeding is the single most effective tool to reduce neonatal and infant mortality. This is why the PCV (Pneumococcal vaccine) protocol, costing Rs. 4,500 per dose to be given to infants at 6, 10 and 14 weeks of age, followed by a booster dose,[6],[7] is being preferred for treating pneumonia when initiation of breastfeeding within an hour of birth, and exclusive breastfeeding for six months is the most effective immunization as well as treatment for this important cause of neonatal and infant mortality. The PCV is a wonderful "market solution" not just because it is expensive and there are tens of thousand infants dying with pneumonia in India, but it also requires a good cold-storage chain network, that is another source of profits to the "do-gooders" in the corporate sector.

Endnotes

1 The world's largest manufacturer of vitamin A

2 Rachel Zimmerman, "Gates Fights Malnutrition with Cheese, Ketchup, and Other Fortified Food Items", *Wall Street Journal*

3 Rachel Zimmerman, "Gates Fights Malnutrition with Cheese, Ketchup, and Other Fortified Food Items", *Wall Street Journal*

4 *Thrall* in its original usage meant holding someone in one's power; thralldom was a form of serfdom. To enthrall, was to bring someone within one's power and make captive. The word is used in this context.

5 "MPs call for milk fortification", *Indian Express*, March 16, 2008.

6 Kounteya Sinha, "New vaccine to combat pneumococcal disease", *Times of India,* April 20, 2008

7 Kounteya Sinha, "Delhi, Bengal top charts in pneumonia deaths", *Times of India*, April 27, 2008. See also "Immunity to Reason", *Outlook Magazine,* Sep 8, 2008. "It just prevents 3.6 instances of radiological pneumonia, a rarer form of pneumonia, in every 1,000 children vaccinated. It causes severe respiratory disease in every 1.3 cases per 1,000 vaccinated," quoting Dr Jacob Puliyel etal.

Urban Initiatives for a Fossil Fuel Free Society

- T. Vijayendra[1]

With the world production of oil reaching a peak, we need to move towards a fossil fuel free society. The transition can be ordered or chaotic depending upon the choices we make today and initiatives we take. Urban initiatives are more important because urban communities consume the bulk of the fossil fuels. To begin with we must tackle the urban mindset. Initiatives will have to be around relocalisation and rebuilding the communities. Initiatives around issues of children, solid waste disposal, urban gardens, fuel, transport, water, consumer cooperatives and health care are discussed. Cuba's experience is both educative and inspiring.

Peak Oil has arrived! That is, the world production of petroleum has reached its peak and it has started declining. Hence the rise in not only petrol and diesel prices but a generalised inflation all over the world. What will happen in next 20 years depends on humanity's response to this crisis. Different countries will evolve in different ways. But they all will go through a period of transition, which will involve a lot of hardships to millions of poor people. The only viable future is a society based on a much lower level of energy consumption, which will come from renewable sources. This will also mean self-sufficient smaller states. As of today, Cuba appears to be best prepared for such a future and may have a most ordered transition. How much the transition will be chaotic or ordered depends on our readiness to face it and respond to it.

In tackling problems arising out of Peak Oil urban areas are more important because they consume bulk of the energy from fossil fuels. They do so because they are centres of power. There are various forms of power. Thus: (a) Political power, (b) Judiciary, (c) Police and jails, (d) Presence of army in bigger cities, (e) Economic power: production, trade centres, banks, finances, accounting firms and so on. (f) Centres of higher education and culture. Demands in rural areas are influenced by trends in urban areas. Also within urban agglomerates demands in smaller cities are influenced by bigger cities. Consequently reduced demands in urban areas will have a spill over effect.

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Urban India

India has an urban population of 300 million, greater than the population of USA or for that matter greater than any country except China. They live in a total of 400 urban agglomerates. 180 million people live in 35 cities that have a population grater than a million. The three metros, Mumbai, Kolkata and Delhi have more than 10 million whereas Hyderabad and Bengaluru have more than 5 million. In a sense it will be easier to tackle the problems of 120 million people who live in 365 urban agglomerates of less than one million population and many of the success stories will first come from them. On the other hand many groups and individuals in bigger cities are more aware

and have resources to start alternatives and can help the groups in smaller towns.

The Urban Mindset

Before we take up concrete programmes we should first understand the urban mindset, because it is crucial in working out the details of the programmes. In urban areas individualism or alienation is very significant. People are used to be on their own and not relating with their neighbours. Any solution to the urban problems will have to tackle this issue first.

Capitalism breeds capitalist individualism and breaks down communities. What is capitalist individualism? It is the belief that one is free if one has money in one's pocket to spend as one likes. The more money you have, the more freedom you have! However this very money is obtained through jobs, which implies wage slavery. So at one level this freedom is mythical. At another level, historically it meant getting out of the oppressive bondage of a caste system or a patriarchal family. So it did mean freedom. Thus the growth of capitalist individualism and the breaking down of the communities are one and the same process. The democratic state also aids the process of breaking down communities through promises of a welfare state and through killing traditions of self-management of local issues.

The real freedom is to get out of wage slavery and feudal bondage. On the other hand the human species is a social species. How to combine the urge to freedom with the need to be part of a community? It cannot be done by going to the past and building the community on the basis of caste, as Gandhi tried to do. We propose that this be done by disengaging with capital and the state and rebuilding the community on the basis of *a free association of free people*. What does it mean in practice and where and how does one begin?

The basis of one's freedom is respecting other person's freedom. Respecting, loving and caring for the *other* is the basic principle on which a free association can be built. So we should get to know each other directly, be they poor or rich, of our caste/class or of another. But our history, our views, inhibits us. Learning to accommodate diversity will be the basis of building community. We start from where we are and move in the direction. We should credit ourselves on how much diversity we can relate to; particularly with the poorest families, people living in the *basties*, servants, so-called untouchables and so on. In urban areas there is a horrifyingly stupendous waste of food because things come easily to them. People in urban areas do not produce food. Otherwise they would have known better. We should reduce our consumption systematically and incrementally.

So when we are discussing concrete projects they are not just technological fixes of public transport versus private, separating solid waste at source, urban gardening, changing incandescent bulbs to CFL bulbs etc. They will all require rebuilding the community and that can be done mainly through local associations and trade unions. In most of these initiatives, the size of the community should be on human scale, say, a population of 10, 000 or so.

Children

In urban areas children have lost their childhood, particularly in metropolitan situations. They are engulfed in the vicious circle of school, tuition, and consumerism promoted by TV channels and peer-group pressures. Organising children's groups play and library at a local level is a very important activity. As far as possible, encourage children to go to local schools so as to cut precious travel time and save transport costs and fossil fuels. We have to pose the question, 'Why can't we make the local school as good as the distant one?' We should actively participate in the management of local schools, be they private, government, or run by local associations.

Organising children's Eco-clubs, either at the school or in the locality, can be very important. Children are receptive to new ideas and some of the local initiatives described below can be started at these clubs.

Solid Waste Disposal and Urban Gardens

The urban situation implies separation of people from the land. The nutrients are transported away from the crops and farms where they originated, and accumulate as waste product in the cities, depleting the soil. Urban waste disposal methods thus cut at the very root of the nitrogen cycle by not allowing the biodegradable waste (the nutrients of the soil) to go back to the soil. Hence, separation of biodegradable waste at the source and composting at an individual or community level is an absolute must. Related issues are rainwater harvesting and urban vegetable gardens. This will reduce transport costs, (both in transporting waste to dumps outside the city disposal and bringing vegetable to town) provide fresh food, and consume the compost produced locally. This takes care of nearly 70 per cent of the waste. The remaining waste, metal, glass, plastics, etc. can go to recycling more easily and in greater quantities because it is already separated.

Fuel

Almost all domestic fuel consumed in cities today is of fossil fuel origin. With the cost of cooking gas and kerosene slowly going up, people will be forced to move to wood fuels. Where is the wood fuel? Our forests are already under great stress. The only solution is to grow fuel wood within the city. Now unless we start right now we will not be ready when the crisis

deepens because trees take time to grow. Secondly solar box cookers/ovens can save at-least half the total cooking fuel.

Transport

Transport of course is the biggest fossil fuel guzzler today. We have discussed children's school transport, transport of solid waste and bringing in vegetables and fruits from rural areas. There still remains general inner-city transport and in big cities two wheelers, cars, auto rickshaws create terrible problems of road accidents and air pollution. Recent rises in fuel prices are putting great pressures on two and three wheelers because they are used by relatively lower income groups. Many auto drivers feel that the days of autos are numbered and that cycle rickshaw will come back. Most probably there will be a phase of share autos before they will get phased out. Similarly for two wheelers they probably will go through a phase of battery operated Luna style minis or bicycles. It will all happen first in smaller towns and then in bigger cities. Small towns with distances of 5 km or so don't need any fossil fuel vehicles. It is just aping the big cities and expression of power. They can easily launch on the path of becoming fossil fuel free cities straight away. So as we said above it will be easier to take initiative in smaller towns.

Improved cycle rickshaws-lighter and with gears-have been around for some time. In Delhi, Chandigarh, Agra, Mathura and Jaipur several lakhs are plying. In Maharashtra there is a design in which the rickshaw puller can rearrange the seat and convert into a bed!

For the bigger cities there will have to be a more comfortable and rational urban public transport system. It is a political battle which many civil society groups are waging. Meanwhile local groups can take initiative in use of cycles and bringing back the cycle rickshaws, particularly in the outlaying areas.

Water

The size of any human settlement is determined by the amount of water available. Today almost all the million plus cities and many smaller cities are dependent on water being brought from a distant river or lake. In many cases this was required not only because increase in population, but also due to polluting the existing source. There will definitely be conflict over the issues in future. The aim should be that every human settlement is self sufficient in water resources. Two initiatives are possible: 1. Water harvesting at roofs of individual buildings. 2. Cleaning up the existing resource to make it potable. It will require, mainly diverting the polluting source.

Health Care

Urban lifestyles, pollution, and chemical addiction (narcotics, tobacco, and alcohol) have created severe health problems. Privatisation of health care, particularly corporatisation, has made it the biggest direct exploiter of the people. Pediatric and geriatric health care are particularly prone to exploitation as they involve the emotions of people. There is an urgent need to initiate community-based people's health care groups whose aims can be:

1. To move towards informed self care
2. To promote healthy lifestyles and preventive health care
3. To provide professional care service through a trained family physician.

Consumer Co-operatives

Urban life is dominated by irrational consumerism and choices in the market that are not easy to discern. So the basis of the local shop should be a limited choice of reliable products in terms of quality and price. This will reduce inventories and save money both for the shop keeper and the consumer. The shop can be kept by any one in the community or can be run by a society. A committed membership helps in bulk purchases. The community can also work with one village for bulk purchase of organic products.

Unto the Last

In rebuilding the community the need of the poorest comes first. While charity may be needed initially to overcome hunger and starvation, the long term solution is to create new jobs within the community, such as gardeners and compost makers, cycle rickshaw drivers and repair people, local crèches, local bakeries, community service centres for plumbing, carpentry, masons, tailor, general repair and maintenance shops etc. The goal should be that basic securities of shelter, food, fuel, education of children and health care should be available to all irrespective of income within the community and with the community resources.

Get Started

One should begin with oneself and start implementing some of the ideas within one's own control. For example, using bicycles, segregating waste at source, buying a solar cooker, planting a tree etc. Then one should start forming a group. The first thing is to expose the group to the full nature of Peak Oil. Then one can start planning activities within the resources of the group. The aim should be to work within the resources of the micro community one is part of. Federal links and mutual support with similar neighbourhood groups will come later. As soon as possible members of the group should join associations and trade unions within the community as well as become members of the existing city groups such as bird society, snake club, horticultural society,

environmental groups and so on. This will give access to vital resources within the city.

Talking about Peak Oil can be very frustrating in the beginning. We are all so used to our life style, particularly if we belong to middle and upper middle class that it is difficult to conceive life without oil. As Bush said we are addicted to oil. And like in all addiction cases the first stage is to deny that there is a problem. Then to hope that some magic technology solution will come and so on. Of course events of rising prices do help but still it is very difficult to overcome inertia coupled with the problem of alienation that has been discussed above.

It may, therefore, be easier to work in smaller towns. So if we are living in big cities, it may be worthwhile to develop links with the nearest small town and either move there or develop initiatives there. Finally it may be worthwhile to look at Cuba's experience for inspiration.

Urban Initiatives in Cuba

Cuba is where agriculture without fossil fuels has been put to its greatest test, and it has passed with flying colours. The year 1989 ushered in the "Special Period". In 1989, the collapse of the Soviet bloc and the tightened US trade embargo exposed the vulnerability of Cuba's Green Revolution model, and it was plunged into the worst food crisis in its history. Cuba was faced with a dual challenge of doubling food production with half the previous inputs, with some 74 percent of its population living in cities. Yet by 1997, Cubans were eating almost as well as they did before 1989, with little food and agrochemicals imported.

A spontaneous, decentralized movement had arisen in the cities. People responded enthusiastically to government initiative. By 1994, more than 8 000 city farms were created in Havana alone. Front lawns of municipal buildings were dug up to grow vegetables. Offices and schools cultivated their own food. By 1998, an estimated 541 000 tons of food were produced in Havana for local consumption. Food quality has also improved as people had access to a greater variety of fresh fruits and vegetables. Urban gardens continued to grow and some neighbourhoods were producing as much as 30 percent of their own food.

Many of the gardeners were retired men aged 50s and 60s, and urban women played a much larger role in agriculture than their rural counterparts. Gardeners come from all walks of life: artists, doctors, and teachers. Fernando Morel, president of the Cuban Association of Agronomists said: "It's amazing. When we had more resources in the 80s, oil and everything, the system was less efficient than it is today." The City of Havana now produces enough food for each resident to receive a daily serving of 280 g of fruits and vegetables a day. The UN food programmes recommends 305 g.

Urban agriculture nationwide reduces the dependence of urban populations on rural produce. There are over 104 000 small plots, patios and popular gardens, very small parcels of land covering an area of over 3 600 ha, producing more than the organoponicos and intensive gardens combined. There are also self-provisioning farms around factories, offices and business, more than 300 in Havana alone. Large quantities of vegetables, root crops, grains, and fruits are produced, as well as milk, meat, fish eggs and herbs. In addition, suburban farms are intensively cultivated. Shaded cultivation and Apartment-style production allow year-round cultivation. Cultivation is also done with diverse soil substrate and nutrient solutions, mini-planting beds, small containers, balconies, roofs, etc. with minimal use of soil. Production levels of vegetables have double or tripled every year since 1994, and urban gardens now produce about 60 percent of all vegetables consumed in Cuba.

The success of urban agriculture is put down to the average Cuban citizen's commitment to the ideal of local food production. There is so much for the world to learn from the Cuban experience, not least of which, agriculture without fossil fuels is not only possible but also highly productive and health promoting in more ways than one.

Notes and References

1. Peak Oil: http://www.peakoilhasarrived.com/ . This is an Indian site with very good links.
2. Many of the ideas discussed above originated in the garden city movement in the early twentieth century. In the Indian context city urban planning exercises carried out by Patrick Geddes in the 1920s give a good historic perspective. See *Patrick Geddes in India*. 2007, Select Books, 71, Brigade Road Cross, Bangalore 560 001. Price:Rs.250/-
3. Urban Garden: A good place to start would be to contact 'The Horticulture Society' in the city.
4. Solar Cooker: http://en.wikipedia.org/wiki/Solar_cooker. This is a good starting point. The box solar cooker is probably the safest and cheapest.
5. ImprovedCycleRickshaw: http://www.itdp.org/index.php/projects/detail/india_rickshaw_modern/

   http://www.eco-web.com/editorial/06554.html
6. Consumer co-operatives: http://en.wikipedia.org/wiki/Consumers'_cooperative. See the section on Japan.
7. Cuba: http://www.i-sis.org.uk/OrganicCubawithoutFossilFuels.php
8. On the net if you type out 'Post carbon cities', 'relocalisation', 'solar box cookers', 'improved cycle rickshaw' 'urban gardens', 'Cuba' etc. you will get lot more information about these groups and resources.

Concept Note about Debate on Infection Control

- Dr. Pankaj Shah, Dr. Rajesh Patel, Dr. Uday Gajiwala & team.
SEWA-Rural, Jhagadia[*]

All of us are aware of the unfortunate incident that occurred in an NGO Hospital, Valsad district.[1] It is very painful for sure. This should not have occurred. We should do everything to ensure that it does not occur, particularly with the recent advances in the science. BUT it is also a fact that we keep hearing this kind of news every now and then. In the month of February 2008, it occurred in Uttar Pradesh. It happened in Assam in January 2008. In August 2008, it has happened in Tiruchirapalli. And there are many more such episodes that can be listed.

Any common man will naturally start thinking whether the doctors were careful enough or not and why this happened. It is very much justified to think like this as lay men. Here, we want to present the other side of the coin – the story from the doctor's perspective.

What is the rate of post operative infection in the best hospitals of the world?

To prevent infections in any operation is the job of science of asepsis and anti sepsis. The understanding of this science has made rapid progress and the rate of infections in eye operations in Western countries has come down to 1 in 10,000 or 15,000 operations. We do not know the rate of infections in India because the true rates of infections do not get reported. However, today we believe that a rate of 1 in 1000 operations in Indian context should be considered OK.

Let us look at some facts to understand the whole thing better.

1. We have much higher amount of dust in our country.
2. Hygiene is poor in our country.
3. Poor people do not get nutritious food and hence their body's capacity to fight against external factors also is less then adequate.

How does the patient get infected post operatively?

Any post operative infection is part of hospital aquired infection which is a major problem even in developed countries. The infection control guidelines from the Joint Commission International [http://www.jointcommission.org] states that almost 25% of the patients getting admitted in the hospital develop hospital aquired infection and this rate is nearly 50% in developing countries. Hospital aquired infection means the patient gets the infection after getting admitted in the hospital. And most of the times, hospital staff unknowingly spread this infection. The book states that maintaining cleanliness of hands (hand hygiene) plays crucial role in spreading the infection. And that it is difficult to develop the habit of maintaining the cleanliness of hands. This we are talking about the scenario in developed countries, naturally the situation in developing country like India will be the same.

Does other type of surgeries also end up with infection?

The post operative infection rate applies to all kinds of operations and not just eye operations. Other types of operations also have similar rates of infections BUT in other operations, it results in delayed wound healing without any other major untoward effect. Whereas in eye, it destroys the eye with resulting loss of vision and that makes it more apparent and alarming because vision is very important for all human beings. It is difficult to think without being able to see the world.

Why the rate of infection following cataract surgeries is higher in India?

On the other hand, India has the largest cataract backlog of the world. At the same time, the number of ophthalmologists available in the country is mearly 11000. There are 2.5 crore legally blind eyes due to cataract in the need of cataract surgery. Against this the annual performance of the whole country is a meager 4.5 million. More then this number gets added every year to the pool of existing cataract blinds. The average performance of an ophthalmologist in India is barely 400 per year. This figure is much higher among ophthalmologists in NGOs, namely 1000. The need to perform more numbers is evident from these facts. Then comes the time required for cataract surgery which is hardly 10-15 minutes in the hands of an experienced surgeon. All facts put to gather, the ophthalmologists try to increase their output. When we try to perform more number of surgeries in less time, the chances of accident naturally goes up. It is like driving on an express highway where many vehicles get involved in an accident at the same time. Here, we have to choose between whether we want to try and do more surgeries with given constraints

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OR do not try hard and accept the high prevalence of blindness. There could be a long term answer to the question by producing more ophthalmologists BUT that will take very long time and there are many issues involved in creating more doctors with the given limitations of the medical education which are briefly highlighted below.

Do we train the doctors enough in infection control measures during medical education?

The worst thing comes now, it is painful fact that our medical curriculum lacks in training the doctors in infection control measures. As students, we never knew that infection control is a subject in itself. We always learnt scrubbing, gowning and gloving and other important aspects by observing our seniors – nobody ever talked about the science of infection control. How can we expect the doctors to practice the science which they never learn? All that we are trained for is doing cataract surgery – to become cataract surgeons. A famous saying from our teacher Dr. R.N.Mathur was that, "It is easy to become a good cataract surgeon but it is very difficult to become a good ophthalmologist." He was right. We consider the patient as one more cataract – a pathology but we do not look at the patient as a whole. Not just that, we get to perform only about 30 cataract operations during three years of our residency - we get a degree at the end of three years but we are not confident to perform good operations by ourselves. What a dichotomy! We need to produce more doctors in the country BUT the training infrastructure is not capable of taking the load. Where or what is the answer?

Is this information available to the other philanthropic minded people who set up and run hospitals?

There are so many philanthropic minded noble souls around the country who are trying to do what ever is possible for them in very remote difficult areas where there are no other facilities available. At times, they are doing the work facing life threats also particularly in Naxalite areas. BUT do they all know how to run a hospital? They are all kind hearted individuals without the knowledge of hospital administration. There are guidelines available in the national programme but the information does not reach every body or rather it reaches very very few people. How many of us know that there are guidelines for setting up of hospital available from the National Accreditation Board for Hospitals? Do we know how much of space should be allocated to each bed? As such, enforcement of rules and regulations is universally poor in India everywhere, which makes it easy to continue to operate without complying with the laws: that is making the pharma industry produce substandard drugs and get away scratch free. We need to find ways to make sure that this information reaches everybody involved with health care delivery.

What can be done to make sure that we bring down the rate of post operative infection in eye surgeries in today's given situation?

Right now, we are focusing on the post operative infections in eye operations and so let us restrict ourselves to the subject.

- Come up with a revised infection control guideline under the national programme
- Spread the information among all the players in the country – larger level action
- Add infection control as a separate subject in the medical curriculum
- Have an outbreak policy in place so that unwarranted harsh steps are not taken by administration.
- Make all the people involved in medical care more quality conscious
- Enforce implementation of the guideline through various supervisory inputs

Most important of all, let us understand that the medical science also has its own limitations and we do not have answers to all the questions. Occasionally cluster infection will occur in spite of all the precautions that we will take (It occurs in developed countries also.) In the given circumstances in India, the chances of these kinds of accidents are naturally slightly higher at this given moment. A lot needs to be done to improve the situation and all of us will need to act in a much more quality conscious manner to reach this goal.

References

1 Nine villagers in Valsad lost eyesight in one eye after they underwent cataract surgery at a free medical camp at Dharampur on February 23, 2008. All the villagers are from Shahuda village, about 50 km from Dharampur. Two of the nine are women. For the complete report see: <http://timesofindia.indiatimes.com/Cities/9_lose_sight_in_one_eye_after_surgery/rssarticleshow/2835234.cms>

Dharampal, 1924-2006

- A Homage

-M.R. Rajagopalan[1]

Dharampal breathed his last on October 24, 2006 at Wardha. Not exactly a popular person – for the media. But he was well known and revered in some circles concerned with People's Science.

Whether a person was worthy/worthless will be determined by his legacy – what he leaves behind. That is what our sage Thiruvalluvar has said.

Considering the significant and original contributions of Dharampal – surely he was a worthy person. Very few Indians have produced original works like Gandhi – Hind Swaraj and Constructive Programme, like D.D. Kosambi's works or like Amartya Sen and may be a few more – you could count on your fingers. Dharampal is surely among this distinguished group. Many other Indians – have often expressed borrowed ideas. Dharampal's significant works are on Indian Science and Technology, Indian Polity, Indian Education, On Understanding Gandhiji, Agriculture and Cattle Issue in India, Resurgence of India and the Asian region.

I would like to present two aspects of his writings.

On Science and Technology

I took a degree in life sciences. Later, I switched over to history and philosophy. I was attracted by history of science. I found in the volumes during my study almost nothing about India - except for some indirect reference to mathematics and algebra whereas China, Egypt, etc. had a good coverage. This is due to the absence of documentation – perhaps Indians were not in the habit of documenting their activities. Even in History, credible sources start only after the 10th Century mainly from Muslim invaders.

In such a situation when Dharampal's book on Indian Science & Technology in the Eighteenth Century was published, it gave new insights. Till then, Indians were proud only about their achievements in spiritual fields – Advaita, Upanishads, etc. Now they can rightly claim that they were the first in Inoculation and Plastic surgery – that their Agricultural Technology in the 18th Century was the best in the world – they were producing the best Iron & Steel – as evidenced by the Iron Pillar in Delhi – 1200 years old – and not rusting. Other achievements were in the field of astronomy and mathematics: binomial theorem, animal husbandry etc.

On Gandhiji

In Dharampal's own words "Born in 1922, I consider myself a child of Gandhian era as I spent the first twenty five years of my life in Mahatma Gandhi's reign.

That is how the book begins. "Understanding Gandhi" is an apt title. It not only informs us how Dharampal understood Gandhi but it also enables the readers to understand Gandhi in a proper perspective.

I consider each of his books I have come across as source books. They are authoritative in the sense that important points made in the book are linked to sources which are authentic. Only a master writer could write such books. Very few Indians have produced books with some original ideas with facts and figures based on reliable sources. Kosambi, the famous historian comes to my mind. After the publication of his seminal work "Aspects of Ancient History and Civilization," a new trend was created in the writing of Indian History. Irfan Habib, Romila Thapar, etc. are followers of Kosambi. In a similar way Dharampal has created a new trend. Many writers in the PPST Group etc. have been influenced by Dharampal.

The manner in which he delved deep into some expressions of Mahatma Gandhi is really amazing.

Gandhiji's observation on passive resistance: "I remember an incident when, in a small principality, the villagers were offended by some command issued by the prince. The former immediately began vacating the village. The prince became nervous, apologized to his subjects and withdrew his command. Many such instances can be found in India. Real home rule is possible only where passive resistance is the guiding force of the people. Any other rule is foreign rule".

Yet another observation of Gandhiji was that India had been more literate prior to British rule.

For both these observations Dharampal did some investigational research and traced the source material.

These are only examples. As a model or ideal writer – a writer who could inspire other writers - Dharampal has produced many a great article/work.

One can go on quoting either Gandhiji or what Dharampal has said about Gandhiji endlessly. Though it would be still interesting, it will not be appropriate to repeat entire essays or books. Yet I am tempted

[1] *Secretary, Gandhigram Trust, <ggmtrust@sify.com>.*

to quote a little more. One of the statements made by Gandhiji on God is "God is neither in heaven, nor down below, but in every one" which made him endeavour "to see God through service of humanity".

Later on Gandhiji elaborated, "I claim to know my millions. All the 24 hours of the day I am with them. They are my first care and last because I recognize no God except the God that is to be found in the hearts of the dumb millions. They do not recognize His presence; I do. And I worship the God that is Truth or Truth which is God through the service of these millions."

Dharampal's interpretation is as follows: It is possible that after Gandhiji had achieved his dharmarajya, or perhaps if he had been persuaded to seek God 'in a Himalayan cave', he would have gone there too as countless men since the beginning of time have done in their quest for moksha. But as it happened it is clear from these words of his that it was through what he did that he considered he came face to face with God. In this lie his distinctiveness, his present as well as his historical relevance.

Dharampal is no more - but his legacy will live on.

Guardian of Our Secret Hometowns

Dr Binayak Sen embraced what everyone wanted to escape. Filmmaker SUDHIR MISHRA remembers the gentle friend of his childhood

IT WAS THE USUAL sultry Bombay morning. I don't know much about mornings, as I go to sleep only when those who do nothing else but look after their health are about to leave for their morning walk. That day I could see them from my window as the morning broke and I realised that sleep was not going to be possible because it was a "ghost day".

In my dictionary, a "ghost day" is a day when the past intrudes into your present, pushes aside the immediate, and snarls. "Talk to me," it says and depending on what conversation it wants to have and who it brings, it's either a good day or a bad one. Today, it wasn't particularly bad because it brought along many old friends from Sagar, where I had grown up. One of them was Dipankar Sen. I was glad since he was one of my closest buddies, somebody with whom I had done most of my growing up rituals, all the usual "firsts".

I don't know why I looked at my phone just at that moment. I realised that it was on silent mode and someone was trying to get through. It was Dipankar! Many would consider it spooky but these coincidences happen all the time with me so I have stopped trying to figure them out. "Hello," I said. His voice on the other end was tense. "My brother is in jail! The charge is sedition… waging war against the State."

This is not the kind of news one hears everyday so there was silence. And then, because he had two brothers, I asked, "Which one?" "Binayak," he said.. When he said that, many things struck me. I realised it had been a long time since I'd actually had a conversation with Dipankar. It also struck me that the Binayak Sen I'd been reading about was Dipankar's Binayak Da.

I remember thinking when we were growing up how the two brothers were totally unlike each other. Dipankar was great fun. He was tough, aggressive, with a loud laugh and with an equally loud sense of humour. Binayak was soft, gentle and, according to most people, quite brilliant. He was not merely different from Dipankar but also totally unlike other sons of army officers, the core group of the friends I grew up with.

Sagar was really a one-horse town where a remarkable man called Hari Singh Gaur had built a university that had a rare academic quality at that time. Before that, the British had built a large cantonment there that housed the 36th division of the Indian army and also the Mhar Regiment. If you read the British author John Masters, you can read about the lads of Saugor playing cricket matches with the lads of some other town. Dipankar and Binayak's dad was an army doctor who was posted there.

Even though Binayak was different, he followed in his dad's steps and became a doctor. That was where the resemblance ended. Or did it? What hidden strengths Binayak inherited from his father I do not know, but his mother has a strength of character I did not suspect at that time. It's strange how you meet people almost everyday and don't know them. When I hear about the courage of Binayak's mother, how at the age of 80, she fights for her son while running a school at the same time, I can't quite reconcile her with the image in my mind of the "aunt" of my childhood.

Actually, when you grow up in a small town you live

in a fantasy world which you concoct for yourself. The reality is too grim or simply boring. People who think that big city kids are selfabsorbed have no idea about the small town kid's obsession with himself and his single-minded devotion to one single cause: how does he get out of this f***ing hole!

When you grow up in a small town, you just want to leave and reinvent yourself in some other place. Most of us get the hell out and never look back. Of course this happens over years, but one day, you suddenly discover that the connection has snapped. Somebody else lives in the house of our old friends and some other lovers hold hands in the secret places that we thought were ours alone.

Another strange thing happens once the connection snaps. We receive news about our home as if it is from some alien land. "Did you hear about the massacre of the Dalits in your part of the world?" says the big-city smartass shaking his head with disbelief and derision at the savagery and backwardness of heartland India. You look at the moron with some amount of pity because he has forgotten the savagery of his own city. And the countless children who are sodomised in the dark of the night.

You also want to tell him of the divisions between religious communities and the lack of concern for any one else's death, which is euphemistically called "the spirit of the city". But we have lost the connection with where we came from to such an extent that we lack even the basic information required to stand up for ourselves. Plus, we have a horrible suspicion that most of the things that are being said are probably true. Inside ourselves, we know that the big city has given us a home, hope and a chance to reinvent ourselves. We also know that there is nothing much to say and a lot to do. The truth is that we are embarrassed and often pretend that we are from nowhere.

What can you do if your home has no place for you? Sometimes we invent a mythical homeland where everyone loved each other, families were united and people held hands during times of sorrow and joy. Because, back home the shits have taken over, and the young don't have a hope in hell of competing with the rest of India. Except for one or two exceptions, everybody slowly deteriorates. Nobody ever goes back there except to die.

Nobody except people like Binayak! He left the comfortable club we all are part of and went to a place where there are no clubs. Dipankar, his brother and my friend, once told me that the time he spent in Sagar was synonymous with hell, that when he was there he had a terrible feeling that he would never be able to get out.

Well buddy, your brother went to a worse place and voluntarily agreed to stay there, forever. He could have been in Bombay with me, in Washington with my sister, in Turkey with your other brother, or in Belgium, with you. He would have been an extremely successful medical man and, to quote a comic sage of our time, Sajid Khan, "he would not have just been rich but very very rich"

ALSO, AND NOW I'm misquoting, "his life could have been about loving his children, his wife and four bank accounts." Because he is not from Bollywood, he would not have been able to give his opinion on all subjects, from public toilets to higher education, but then life is not perfect and the paychecks would have compensated. Instead, he chooses to go to a place where in place of appreciation he gets locked up in jail! Where the initial FIR of the police states that he is not even a doctor. Where the people who run that place are using him as an example to all those who dare raise their head that if they don't retreat, they will face the same fate as him. And where his wife fights a lonely battle to get her husband back.

This is the same place, a famine-struck village in Uttar Pradesh, my maternal great grandfather left to make a living. I'm not into self-flagellation and my life has had its share of struggle but I dip my hat in admiration for Binayak. I'm also not an elementary Marxist and certainly do not believe that power flows through the barrel of a gun but I'm sure, neither does Binayak.

I think India needs to listen to people like Binayak, and through him, look at the problems he is addressing. I think more violence will follow if we do not listen to Binayak Sen's urgent plea for compassion. I think different places have their own unique problems and need unique ideas to resolve them.. Thank you for talking on behalf of at least one of the homes that I have left behind, Binayak Da! •

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Testing Untested Foreign Drugs on Indian Patients: Sky to be the Limit

In a move that could put many poor, illiterate patients in India in grave risk, the government is planning to further "liberalize" rules governing the conduct of clinical trials on foreign untested new drug substances not even tried in their countries of origin. New "drug substances" are new chemical entities not approved as medicines for human use. Thus their safety and efficacy profile is not known. Some individuals who were administered such substances in the past have either suffered major injuries or died in the past. Barely three years ago rules were changed to help foreign drug companies try their new drugs in India without waiting for results of similar trials abroad.

A perusal of the draft proposal shows that its language is so loose that new rules when notified can be interpreted the way it suits drug companies and other vested interests both at home and abroad. Let us look at some of the major proposals.

It is proposed that new drug substances can be tried on human subjects in India if there is "agreement" between the foreign innovator and an "Indian company" to jointly develop the substance. The nature of such agreement has not been specified. In practice a foreign drug company can sign an agreement with an Indian company whereby the local entity is paid a small amount of money annually and thus become a "partner" in drug development! Given that there are more than 20,000 small pharmaceutical manufacturers in India, it would not be difficult to arrange a partner merely as a legal fig leaf.

Moreover the "Indian company" has not been defined. Which is an Indian company? A company registered in India? If so then multinational companies such as Pfizer, GlaxoSmithKline, Merck, Bayer, just to mention a few are all Indian companies. Does it mean that Pfizer, United States can enter into anagreement with Pfizer Ltd., India and start testing new untested chemical entities on Indian subjects? Or is ownership the yardstick? Since shares of drug companies are traded on the stock exchanges, ownership keeps on changing and foreign investors are free to own such shares. Is Ranbaxy to be treated as an Indian company even though the promoters have sold their controlling shares to the Japanese? None of these issues have been tackled, much less resolved. Elsewhere the draft proposal requires pharmaceutical manufacturers to disclose the "change in the regulatory status," (such as ban, restrictions etc.), of drugs in other countries. This rule has been part of the Drugs and Cosmetics Rules for decades. The only amendment is that any such change should be notified "within 30 days" to the Drugs Controller General, India (DCGI). This rule has invariably been broken with impunity. For example, has any manufacturer notified the DCGI about the ban on nimesulide in Ireland, Singapore and Nigeria? Moreover no penalties are proposed if the rule is broken. No law ever succeeds if its violation does not result in penal action. The rule also does not cover the socalled "voluntary withdrawal" of medicines. It is widely known that when a drug is found to be unsafe in western countries, the manufacturers withdraw the same ahead of legal ban and hence the question of formal regulatory action does not arise. Recent cases include the "voluntary withdrawal" of rofecoxib in the United States and other western countries. Such practice is designed to kill two birds with one stone: a formal ban in advanced countries is avoided while unsafe medicines can continue to be sold in developing countries since their laws do not take cognizance of such developments. Is it not a pity that Indian drug regulator is oblivious of this widely known danger? Drug laws should protect Indian patients, not interests of foreign companies.

*Source:*Editorial in *Monthly Index of Medical Specialities July 2008.* Reproduced with thanks.

Sun Pharma gets Marketing Approval for Letrozole

The DCGI's approval to Mumbai-based Sun Pharmaceuticals to market letrozole for treating sub-fertility in young menstruating women in the country has raised eyebrows among the medical fraternity as its use in women of child bearing age is strictly prohibited elsewhere in the world due to severe side effects such as estrogen deprivation, ovarian atrophy, uterine atrophy, increased incidence of foetal malformations, foetal resorption and foetal death.

Letrozole, a product of Novartis, is indicated for use in cases of breast cancer in postmenopausal women all over the world.

According to sources, the DCGI has approved the drug on the basis of the phase III trials conducted by Sun Pharmaceuticals on a mere 55 patients, that too conducted by private practitioners in personal clinics. These studies should have been conducted on more number of patients by independent, experienced investigators in large, research hospitals attached to medical college to avoid any bias results.

All this is happening in India, while the Canadian drug regulator and the innovator company Novartis in individual letters to gynaecologists all over the world have warned them never to use letrozole for female infertility since research on 150 pregnancies has shown that babies born to mothers who had taken the drug suffered from bone malformations, heart defects and cancer.

Expressing concern over the DCGI decision, well-known health expert and Editor of the medical journal MIMS, Dr CM Gulhati said that letrozole has been granted approval in flagrant violation of Indian safety laws. "As per Drugs and Cosmetics Rules, even an old drug when used for a new indication is deemed to be a "New drug" and must undergo a series of safety and efficacy studies both in animals and humans before its use in general public is allowed", he said.

*(*August 27, 2008, Ramesh Shankar, Mumbai,
Extract from *Pharmabiz.com)*

I'm Fine Thank You

Dear Chinu,
You wanted me to write something. And, this is it. Do whatever you want with it. Kamala Jaya Rao, c/o, Home For The Aged, C R Foundation, Kondapur, Hyderabad 500032, Ph: (040) 2311017.
There's nothing the matter with me,
I'm as healthy as I can be.
I have arthritis in both my knees,
And when I talk, I talk with a wheeze,
My pulse is weak, and my blood is thin,
But I'm awfully well for the shape I am in.
I have arch supports for both my feet
Or I wouldn't be able to be on the street.
Sleep is denied me night after night,
And in the morning I am just a sight!
My memory's failing, my heads in a spin,
But I'm awfully well for the shape I'm in.
I think my liver is out of whack,
And a terrible pain is in my back
My hearing is poor, my sight is dim,
Most everything seems to be out of trim.
I'm peacefully living on aspirin,
But I'm awfully well for the shape I'm in.
The moral is this, as my tale I unfold,
That for you and me who are growing old,
It's better to say,' I'm fine' with a grin,
Than to let people know the shape we are in.
How do I know that my youth is all spent?
Well, my get up and go' has got up and went.
But I really don't mind when I think with a grin
Of all the grand places my 'get up' has been.
Old age is golden; I've heard it said,
But sometimes I wonder as I get into bed,
With my ears in a drawer, my teeth in a cup,
My eyes on the table until I wake up,
Ere sleep over takes me I say to myself,
Is there anything else I could lay on the shelf?
When I was young my slippers were red
I could kick my heels over my head.
When I was older my slippers were blue,
But I still could dance the whole night through.
Now that I'm old my slippers are black,
I can walk to the store but pull my way back.
I get up each morning and dust off my wits,
I pick up the paper and read the 'obits'.
If my name is still missing I know I'm not dead,
So I have a good breakfast and go back to bed.
Courtesy: *Vedanta Kesari*, May, 2001.
Ramakrishna Math, Chennai
Sent by–You know who. If not, well, you too are old.

Kamala's Lines

From: Shyam Ashtekar
<shyamashtekar@yahoo.com>
Date: Monday, September 1, 2008, 12:45 AM

It is so touching to read Kamala's lines from the old age home. *mfc bulletin* should carry this.
Shyam Ashtekar

From: Jan Swasthya Sahyog
Sent: Monday, September 01, 2008 10:03 PM
I agree completely. Some of the most earthy writing that I have read, one that grounds you.
Yogesh Jain

From: Mira Shiva
Sent: Monday, September 01, 2008 2:25 PM
1. I met Dr Kamala in the RK Mission twice many years ago. Last time they said she had left and I could not get her contact number. Her piece in *mfc bulletin* on "Tonics, How much an economic waste" was one of the first pieces related to the rationality, actually lack of it, in early 80's.

2. Her humility and sincerity even though she was Deputy Director NIN, and her academic activism in what we valued is very important . What little kind gestures mean to every individual much more so for the Elderly is well known but often forgotten fact.

3. Dr Uma Sridharan after passing away of Dr Sridharan moved to an old age home in Bangalore, even as she was battling with cancer. I met her there; she was frail, but painting for Cancer kids. Dr Uma had brought out wonderful interactive, learning tools which she used in a participatory manner with school kids; Dr Uma was/is an artist as well as medical doctor.

4. Dr Marie D'Souza who wrote the *Tribal Medicine* book is in Goa with her brother as she too has cancer and needs caring. Najundwar where she worked for long, Mumbai where pollution is high were not conducive. Someone in US has plagiarized Dr Marie's book and is selling for profit without her knowledge. Some one saw it on the net and informed her.

5. Mr B.K Keayla or Keaylaji as we fondly call him is over 83. He is the Convenor of National Working Group on Patent Laws which was formed in 1988, in his home over tea with 4-5 of us. Initially it was to address Paris Convention. Tomorrow all the people part of or associated with the Advocacy and Campaign work on IPR issues will meet to celebrate 20 years of working together and discuss the concerns that need to be addressed.

6. Dr Bala, Coordinator HAI-AP is over 80 years and with his wisdom and experience continues to take up the challenges and contribute in Rational Use of Drugs

& Drug Policy.

7. Justice Krishna Iyer is over 90 and continues to contribute with his pro-people position

As part of JSA booklets there was one on Vulnerable Sections. I wonder what happened to it. I had done the section on elderly very painstakingly. There was a section on Tribal Health which Sister Prabha was to do and on Dalits, and Premdas of CHC Bangalore (*sic)*. I will find out and send it to Chinu.

We need to address the concerns of the Elderly which have never been adequately addressed , as Elderly abuse increases in a money and market driven society, as families, NGOs also increasingly fall in that trap, the need for caring and kindness to our own fellow workers and colleagues comes up.

Mira Sadgopal used to raise this concern about the need to build a culture of kindness. We had discussed it in the Patiala mfc meeting. The poem "I am Fine" Dr Kamala Jaya Rao has sent actually is something deeper than the obvious meaning.

It should be printed in a special issue of Elderly, and we must make a collective effort to locate our old colleagues. It should cover the concerns as well as celebrate growing old. Mira Shiva

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