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Victims of Apathy

Bhopal Disaster's Unenviable Legacy

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Contrary to all expectations, neither the Government of India nor the Government of Madhya Pradesh appear to be perturbed in anyway by their utter failure to assess and monitor the health status of the Bhopal gas victims and to take appropriate remedial measures. The gross indifference on the part of the Indian Council of Medical Research (ICMR) – the premier medical research institution in India – in this regard is equally shocking. Even thirty years after the disaster, the fate of the survivors is at the mercy of a poorly operated public health system.

It was thirty years ago on the night of December 2-3, 1984 that the people of Bhopal became victims of the world's worst industrial disaster when about two-thirds of the nearly 900,000 residents of the city were exposed to highly poisonous gases. The event that triggered the disaster was the escape of noxious fumes from the premises of the pesticide factory owned by Union Carbide India Limited (UCIL), a subsidiary of Union Carbide Corporation (UCC), a US multinational company, which is currently owned by the Dow Chemical Company (TDCC). The leakage occurred due to exothermic reactions that set off within a partially buried stainless steel tank containing about 40 tonnes of an extremely volatile and toxic chemical called Methyl Isocyanate (MIC), which was stored in liquid form. The flora and fauna in the city were equally affected. The cause of the disaster was the non-operation of even the underdesigned and sub-standard safety systems, i.e., the adoption of double-safety standards by UCC, which had installed far superior safety systems at its far bigger pesticide plant in West Virginia, USA.

The Coverup

UCC and UCIL made every effort to underplay the gravity and implications of the disaster. Not only had UCC/UCIL officials failed to notify the authorities and to forewarn the local population about precautionary measures to be taken in case of an accidental release of MIC and other toxic chemicals from the factory premises, but also even after the disaster they tried to mislead the local doctors about the grievous impact of exposure to MIC. According to a report published in 1985:

As victims crowded into the Hamidia Hospital, L D Loya, the company's medical officer, told the frantic doctors: "The gas is nonpoisonous. There is nothing to do except to ask the patients to put a wet towel over their eyes."

In fact, "...local Carbide officials... kept on insisting that MIC is only an irritant and not lethal." Apparently, a section of the local medical fraternity and the local administration too actively colluded with Carbide officials in misleading the public. Later when postmortem reports started revealing that many of the deaths may have occurred due to "cyanide" poisoning, the insidious propaganda to conceal the truth further intensified. The underlying reason was that since "cyanide" was well known as a highly poisonous chemical, Carbide officials did not want people to associate "cyanide" with MIC. The concerted attempts at spreading such misinformation had serious repercussions. For example, it resulted in non-administration of sodium-thiosulphate – the only known antidote to cyanide poisoning – to the vast majority of the exposed victims when timely administration of the same may have saved many lives or prevented aggravation of injuries. This was despite the fact that an ICMR study that was initiated in January 1985 in this regard had clearly pointed out that:

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"...the rationale for the use of sodium thiosulphate as an antidote has been established to ameliorate the lingering sickness of gas affected victims of Bhopal."³

Despite such findings, the all powerful pro-Carbide lobby in Bhopal and elsewhere easily managed to sideline ICMR's considered opinion about sodium-thiosulphate therapy. This sinister move effectively resulted in the denial of the much-needed timely medical relief to the bulk of the gas-victims. The maneuverings did not stop at that: unwarranted pressure was exerted from various quarters on the ICMR, which impelled it to ban any further publication of its Bhopal-disaster related research findings for several years.

The pro-Carbide lobby also managed to scuttle attempts at assessing the overall impact of the disaster and in properly identifying all the gas-affected victims. It so happened that in collaboration with the State Government, a voluntary initiative was made by the Tata Institute of Social Sciences (TISS), Mumbai, in this direction through a house-to-house survey in the gas-affected areas of Bhopal with the help of over 500 student and teacher volunteers from several schools of social work across the country. However, after considerable data was collected during Jan-Feb 1985 from about 25,000 households or about one-fourth of the total affected population (as per ICMR estimates), the State Government arbitrarily decided to disband the TISS survey. What was worse was that even the limited data that had been collected until then was confiscated by the State Government and was never shared with TISS or any other known agency, which could have properly analyzed that vital data. As a result, the opportunity to make a comprehensive assessment of the actual impact of the disaster immediately after it had occurred was lost and the State Government conveniently washed its hands off its responsibility in this regard. It was left to individuals to prove not only that he/she (or their kin) was a victim but also each of them had to provide sufficient evidence for the kind of injury suffered by him/her (assessment of which in most cases was beyond that individual's capability) by filing individual claims for compensation. This tedious process of filing individual claims began only after Sep 1985 with the promulgation of the Bhopal Gas Leak Disaster (Registration and Processing of Claims) Scheme. In short, while every attempt was made to underplay the magnitude and the grievousness of the disaster, very little efforts were made to provide proper medical care to the gas-victims or to ensure that adequate compensation was paid to them on the basis of the degree of injury and privations actually suffered by each of them.

Later, the Directorate of Claims carried out a socalled medical documentation exercise during 1987-1990, i.e., 3 to 6 years after the disaster, purportedly for assessing the degree of injury of each claimant. The exercise, which was a complete sham, covered about 3,61,966 claimants out of the nearly 6,00,000 claimants until then. A group of activists prepared a detailed critique of the medical documentation exercise aftercarrying out a medical survey in Bhopal in October 1989. The conclusion of the report, which was titled "Against All Odds", was as follows:

"By inadequately examining the claimants (clinically and through investigations) and by evaluating the injuries and categorizing them with the use of faulty tools biased against the gas victims, the Directorate of Claims⁵, Bhopal, has "defined" away the injuries of more than 90% of the victims as 'no injury' or 'temporary injury'."

Fight for Justice

The failure on the part of the State Government to provide necessary medical care to the gasvictims forced the Zahreeli Gas Kand Sangharsh Morcha and Jana Swasthya Kendra (voluntary organizations that had been set up in Bhopal in 1985 to take up the cause of the gas-victims) to seek justice from the Supreme Court of India. Through Writ Petition No.11708 of 1985 that was filed on Aug 1, 1985, Dr.Nishit Vohra and two gas-victims⁶ brought to the attention of the Supreme Court the various problems faced by gasvictims due to lack of proper health-care facilities and the poor state of health-care. Apparently in response to this petition, the Government of India on August 8, 1985 set up the "Scientific Commission for Continuing Studies on Effects of Bhopal Gas Leakage on Life Systems" headed by Dr. C.R. Krishna Murti (ex-Director, Indian Institute of Toxicology Research).⁷

In response to the said Writ Petition No.11708 of 1985, the Supreme Court, in an Order dated Nov 04, 1985, had observed as follows:

"It is desirable that some independent machinery must be set up which would ... carry out a proper epidemiological survey and also a house-to-house survey of the gas affected victims both of which will also be necessary for the purpose of determining the compensation payable to the gas affected victims and their families. It would be necessary for the purpose of ensuring proper medical facilities to the gas affected victims."

In addition, the Supreme Court on the same day set up a Committee of seven experts to make recommendations regarding medical relief and other related matters of Bhopal gas victims. The Committee consisted of 3 representatives from the ICMR, 2 from the Government and 2 representatives of gas-victims, namely Dr. Anil Sadgopal and Dr. Sujit Das. The terms

of reference of the Committee included such issues as: (a) detoxification of the gas victims by sodium thiosulphate therapy; (b) carrying out proper epidemiological survey and also houseto-house survey of the gas affected victims for the purpose of documentation and determining the compensation payable to the victims; and (c) provision of medical relief, monitoring, etc. Since the Committee could not come to a consensus, the minority members, Dr. Sadgopal and Dr. Das, submitted several Reports during 1987-88 and sought directions from the Court. Unfortunately, at that time, the Court ignored the well-considered recommendations made in the "Final Report on Medical Relief and Rehabilitation of Bhopal Gas Victims", which they had submitted to the Court on August 30, 1988.

Subsequently, following the unjust settlement of February 14/15, 1989, concerted pressure was mounted on the ICMR by organizations representing the gas-victims (BGPMUS, BGIA and BGPSSS¹⁰) to make public the results of the various research studies that ICMR had undertaken. By the time some information from ICMR began to trickle down, the ICMR was already in the process of abandoning all Bhopal disaster-related medical research, which it finally did in 1994 that too contrary to the explicit direction of the Supreme Court in the judgment dated Oct 03, 1991. While disposing of the review petitions against the Settlement Order, the Supreme Court had directed as follows:

"We are of the view that for at least a period of eight years from now the population of Bhopal exposed to the hazards of MIC toxicity should have provision for medical surveillance by periodic medical check-up for gas related afflictions." 11

Yet, over the years, there was little attempt by the ICMR and the State Government to systematically identify all the gas-victims, provide them proper medical-care, and monitor their health-status. This was despite the fact that considerable efforts were made by BGPMUS, BGIA and BGPSSS to dissuade ICMR from betraying the cause of the gas-victims. With the help of the International Institute of Concern for Public Health (Canada) and the Permanent Peoples Tribunal (founded by Bertrand Russell and based in Italy), they succeeded in constituting a 15-member International Medical Commission on Bhopal (IMCB) in 1993. It was composed of experts from 12 countries, with Dr. Rosalie Bertell and Dr. Gianni Tognoni as Co-Chairs, to assess the current health status of the gas-victims and to make necessary recommendations. The IMCB, which held its sitting in Bhopal in January 1994, later interacted with representatives of the ICMR as well. The IMCB also made many notable recommendations, which were brought to the attention of the Supreme Court by BGPMUS,

BGIA and BGPSSS during 1995-1998 while the Court was dealing with another health-related matter that resulted in the expansion of health infrastructure for gas-victims in the form of the Bhopal Memorial Hospital and Research Centre (BMHRC), which became functional in 2000. However, IMCB's recommendations too were largely disregarded by the Court in 1998. 12

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Utterly frustrated with the ICMR's indifference towards the gas-victims, BGPMUS, BGIA and BGPSSS filed a writ petition (No.50 of 1998) on January 14, 1998 before the Supreme Court urging the Court to direct the ICMR to restart Bhopal-disaster related medical research. The petitioners had also prayed that the ICMR and the Bhopal Gas Tragedy Relief and Rehabilitation Department (BGTRRD) under the State Government be directed to expand medical infrastructure for gas-victims, provide proper medical care to all of them, and to issue health-booklet to each gas-victim with his/her complete medical record, etc. As a result, the Supreme Court on July 25, 2001 issued the following directions:

"With regard to those gas victims who are entitled to receive free medical aid throughout the life, permanent cards will be issued, while in other cases where claims are under process, provisional cards will be issued pending final outcome of their eligibility."

Despite two further orders from the Supreme Court in this regard dated July 17, 2007 and November 15, 2007, ICMR and BGTRRD continued to flout the Court's orders with impunity. However, the victim-groups refused to give up and kept up the pressure because of which the Group of Ministers (GoM), which was constituted by the Government of India to oversee matters related to the Bhopal Disaster, at its meeting on April 17, 2008 took a positive decision regarding continuance of ICMR's Bhopal disaster-related medical research. Later, the Second GoM meeting that was held on June 3, 2008 also issued a specific directive to the Union Ministry of Health and Family Welfare in this regard. Despite such directives, the ICMR appears to have done little to set the process in motion. Finally, it was only after the Union Cabinet passed a resolution on June 24, 2010 in this regard that the ICMR has initiated steps to set up the National Institute for Research in Environmental Health (NIREH) at Bhopal, which formally came into existence on Oct 11, 2011.

Meanwhile, at the urgings of BGPMUS, BGIA and BGPSSS, the Court had also set up two committees – the Advisory Committee and the Monitoring Committee – vide Order dated August 17, 2004 in Writ Petition (C) No.50 of 1998 to assist the Court and to make appropriate recommendations. The Advisory Committee consisted of seven members representing the

ICMR, the State Government and thevictim-groups and among its tasks was: "To recommend/advice on the appropriate line of treatment to be offered to the Bhopal Gas victims". While the task of the Monitoring Committee, which was constituted of 5 members representing the State Government and thevictim-groups, was to monitor the quality of health services being provided to gas-victims in the various hospitals and clinics run by the BGTRRD and the BMHRC and to make appropriate recommendations to improve the same.

Except for the work carried out by a few dedicated doctors and researchers within it, the ICMR as an institution has not fulfilled its tasks as best as it could have done. As noted earlier, the ICMR has done little to identify all the gas-affected and assess the degree of injury suffered by them. It has to date not worked out a proper medical protocol for treatment of gas-victims.

Furthermore, the claim that the ICMR reports had an impact on assessing the total amount of compensation or in the award of compensation in individual cases is absolutely baseless. The Welfare Commissioner, under whose jurisdiction the Claim Courts had functioned, has himself clarified that the ICMR reports were never placed before the Claim Courts during the process of adjudication. This is evident from his Order dated Jan 31, 2009, which states as follows:

"Further, the ICMR Report has not been placed before the Tribunal nor has any such report was [been] produced in evidence. In future any such report, if it is published or made public, it will be for the Union of India, as a Welfare State, to consider the same and take action accordingly"¹³

It is, therefore, not very surprising that the ICMR has not made any reference to the 900+page Report of the Scientific Commission for Continuing Studies on Effects of Bhopal Gas Leakage on Life Systems titled "The Bhopal Gas Disaster: Effects on Life Sysyems", which was submitted to the Government of India in July 1987. In its Report, the Scientific Commission made adverse remarks about the conduct of the ICMR especially in relation to the design of the epidemiological study. In the Executive Summary of the Report of the Commission, it is noted as follows:

(a) "The progress of the epidemiological programme mounted in Bhopal has been tardy and suffers from many inadequacies in the design and in the infrastructure for implementation. The operation of the peer review system to evaluate the work and apply mid-term correction seems to be conspicuous by its absence. Monitoring for genotoxic effects in

a much larger sample size including childern and assessing impact on the immune and behavioral systems still need to be integreted into the epidemiological programme."¹⁴

- (b) "In general, the output of the epidemiological project so far has not equaled the magnitude of the tasks assigned to them presumably due to lack of resources, trained staff as well as physical inputs. An opportunity for mounting such a massive long-term longitudinal study on a population exposed to a one-time acute chemical stress may not present itself again and hence it will a pity if this opportunity is missed." 15
- (c) "The present services of this key unit [epidemiological services] in the organizational net work created in Bhopal are far from adequate.... In this context one recalls the role played by outstanding Indian epidemiologists in the twenties, thirties, forties and fifties of this century [1900s] in the control of communicable diseases.... One wonders with dismay as to where this rich tradition is gone and whether it can be salvaged and revitalized." 16

Instead of acceding to the sane recommendations of the Scientific Commission, the ICMR chose to completely ignore them. In the face of the above-stated perceptible observations of the Scientific Commission, it was a highly thoughtless and unwarranted decision on the part of the ICMR to close down its Bhopal Centre in 1994 and to discontinue all further medical research related to and arising from the Bhopal disaster. It was an equally appalling stance on the part of the ICMR to refrain from ensuring that the Government undertook the vital task of medical surveillance of the entire MIC-exposed population. The ICMR is in fact trying to feign ignorance about the very existence of such a vital Report from the Scientific Commission as early as 1987.

It is equally surprising that the ICMR had for a long time refrained from referring to the deliberations of the 7-member Committee appointed by the Supreme Court vide order dated Nov 4, 1985 in Writ Petition No.11708 of 1985 to make recommendations regarding medical relief and other related matters of the Bhopal gas victims.

It was only about twenty years later that the ICMR has formally conceded to the correctness of the findings of the "Interim Report on Sodium Thiosulphate Therapy of the Bhopal Gas Victims", which the 'Minority' members of the Supreme Court Committee had submitted before the Supreme Court on May 11, 1988 and on which no action was ever taken. In its "Technical Report on Population Based Long Term Epidemiological Studies (1985-1994)", which the ICMR had submitted before the Supreme Court on Nov 27, 2007 in Writ Petition No.50 of 1998, the

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ICMR has finally and publicly acknowledged as follows:

"A double-blind placebo controlled study using sodium thiosulphate revealed that administration of sodium thiosulphate resulted in symptomatic improvement and increased excretion of thiocyanate in urine." ¹⁷

Even thirty years later, as to who is to be held accountable for the failure to administer sodium thiosuphate therapy to the vast majority of gasvictims when it was most needed is left unsaid!

As far as the 'Minority' "Final Report on Medical Relief and Rehabilitation of Bhopal Gas Victims", which was submitted to the Supreme Court on Aug 30, 1988 is concerned, it may be noted that it had shed ample light on the then prevailing inadequacies in the provision of medical relief and rehabilitation. In particular, the Final Report drew attention to the following aspects:

- (a) the failure to evolve a more reliable methodology for estimating mortality due to the gas-leak;
- (b) the need for conducting a well-designed epidemiological study of the gas-exposed population of Bhopal;
- (c) the importance of reorganizing medical documentation exercise on scientific lines;
- (d) the urgency of reorganizing the line of treatment;
- (e) the significance of medical surveillance/monitoring;
- (f) the need for reorienting medical research, etc.

The fact is that the ICMR as an institution had refrained from adequately addressing the abovementioned aspects more because it chose to succumb to political pressure rather than because of its incompetence in dealing with the crisis. Whatever may the reasons, the ICMR owes an explanation to the nation for its failure to address the issues in time because the ICMR was the most competent body in the country for the purpose.

Indifference of the State Government

Even thirty years after the disaster, less than ten per cent of the gas-victims have been issued health booklets, which is supposed to record the case history of the investigations, diagnosis, and medical treatment provided to the gas-victims from time-to-time. Apart from the Supreme Court, directions to the Government of Madhya Pradesh to provide health booklet to all gas-victims was also repeatedly issued by the Monitoring Committee, which the State Government very conveniently continues to ignore. It is not due to any administrative laxity or inefficiency on the part of the State Government, which has stood in the way of issuance of the requisite health booklets. The reluctance to issue health booklets is certainly the result of a deliberate, conscious strategy, which the State Government has adopted, to frustrate the compiling of such medical data

that might shed light on the enormity and gravity of the health problems afflicting the gas-victims.

Therefore, it should be the task of the new ICMR centre, i.e., the National Institute for Research in Environmental Health (NIREH), to immediately commence an extensive campaign to ensure that every gas-victim and his/her progeny, who seeks medical treatment, are provided proper health booklets forthwith. The health booklet of each gas-victim/progeny should be periodically updated with precise information regarding his/ her case history including diagnosis, investigation and treatment. It should also ensure that complete medical records of all in-patients as well as outpatients in all the gas-related hospitals and clinics are computerized and networked. The entire information should be collated and categorized on a periodic basis in such a way that it facilitates the process of analyses and the drawing of correct inferences. It should prepare a protocol for treating each category of ailment that gas-victims are suffering from such as (a) respiratory diseases; (b) eye-related diseases (c) gastro-intestinal diseases; (d) neurological diseases; (e) renal failure; (f) urological problems; (g) gynecological problems; (h) mental disorders; etc. It should set in motion the process of medical surveillance of the entire gas-affected population of Bhopal and complete the process at the shortest possible time. It should cover not only all the 5,73,000-odd gas-victims, who were awarded compensation, but also their progeny, who could be potential victims due to possible genetic effects. It should hold periodic consultations with representatives of organizations representing the cause of the gas-victims on the quality, effectiveness and adequacy of the policies, programmes and activities formulated and undertaken by NIREH.

It appears to us that the NIREH has got its priorities wrong. It is as though the work of NIREH cannot get going without separate infrastructure and equipment. In fact, immediately after NIREH was established on Oct 11, 2010, it should have initiated work on setting up the computerized Central Registry, a task that its predecessor, the Centre for Rehabilitation Studies (CRS), was to undertake as per the decisions of the first meeting of the Advisory Committee dated Mar 16, 2005. As per point 2 of the terms of reference in the Supreme Court Order dated Sep 17, 2004, i.e., "To recommend/advice on the appropriate line of treatment to be offered to the Bhopal Gas victims", the Advisory Committee had at its first meeting on Mar 16, 2005 had recommended that: "...there should be creation of Central Registry, which should maintain a record of all individuals qualified under Gas relief from Govt. Hospitals, Medical College, and Govt. aided Gas relief Hospitals and BMHRC. Voluntarily, NGO's and private clinics, who want to become a part of registry, may also provide this data.

The Central Registry should include No. of visits to the Institutions and disease pattern, hospitalization rate including those in private Institutions wherever available, in reference to MIC exposure. This registry will be set up by Centre for Rehabilitation Studies (CRS) involving different institutions, with additional support of staff;"

Although at the Second meeting of the Advisory Committee on Jan 31, 2006 it was reported that the process of creating a computerised Central Registry had begun, there appears to have been no further progress in the matter in the last 8 years; and if, indeed, there was any progress, it has never been reported. Under the circumstances, there was an excellent opportunity for the NIREH to speed up the process but apparently it has done nothing in the matter nor is there any indication that setting up such a Central Registry is on the priority list of NIREH. Instead, as per the present time frame, NIREH's priority is on setting up a separate infrastructure. Moreover, there appears to be no time frame for meeting the immediate needs of the gas-victims!

Conclusion

There is no doubt there are several individuals, who were associated with the ICMR, who have done some commendable work that has benefited the gas-victims. However, their valuable contributions cannot cover up for the severe shortcomings on the part of the ICMR as an institution, which had betrayed the cause of the gas-victims at critical junctures. The ICMR, as "the apex body in India for the formulation, coordination and promotion of biomedical research"18, has certainly not fulfilled the mandate for which it was created at least in relation to the Bhopal disaster. We would like to know the steps that ICMR took for "developing alternative strategies for health care delivery"19 for the Bhopal gas-victims and for those affected by contaminated soil and water. What has the ICMR done "to reduce the total burden of disease and to promote health and well-being of the [gasaffected/effluence-affected] population?"20

Despite the delay of 14 years, the Supreme Court has at last passed a comprehensive Order on Aug 09, 2012 in Writ Petition No.50 of 1998²¹, which was filed by BGPMUS, BGIA and BGPSSS on Jan 14, 1998 for seeking proper health facilities for gas-victims. In the said Order, the Court has given clear directions to the Government of India, the Government of Madhya Pradesh, and the ICMR to comply with a variety of tasks. The most notable directions of the Court that have far-reaching implications can be summarized as follows:

• The ICMR as well as the NIREH have been directed "to ensure that research work is carried on with exactitude and expeditiousness and further to ensure disbursement of its complete benefit to the gas victims".

- The Monitoring Committee has been directed to operationalize medical surveillance; workout modalities for computerization of medical records; and to ensure that 'health booklets' and 'smart cards' are provided to each gas victim.
- The Monitoring Committee has been granted complete jurisdiction to oversee the proper functioning of BMHRC and other BGTRRD hospitals, with regard to problems relatable to gas-victims.
- The Monitoring Committee, with the aid of the Advisory Committee, NIREH and the specialized doctors of BMHRC, has been directed to prepare a standardized protocol for treating each category of ailment that the gas victims may be suffering from and also to scientifically categorize patients and injuries.
- The State Government and the Monitoring Committee have been directed to evolve a methodology of common referral system amongst the various medical units under the BMHRC and the BGTRRD to ensure that the gas victims are referred to appropriate centres for proper diagnosis and treatment in terms of the nature and degree of injury suffered by each one of them.
- The concerned authorities have been directed to take appropriate steps in all respects not only to fill up vacancies of doctors and supporting staff but also to provide such infrastructure and facilities so that doctors are not compelled to or prefer to resign from employment due to inadequate facilities.
- The Government of India and the Government of Madhya Pradesh have been directed to take immediate steps for disposal of the toxic waste lying in and around the Union Carbide factory, Bhopal, on the recommendations of the Monitoring Committee, Advisory Committee and the NIREH within the next six months.

By guiding the NIREH in the right direction, the ICMR will have created a unique opportunity to atone for all its grave sins that had greatly hurt the interests of the gas-victims/victims of toxic-waste in the past. It is hoped that the ICMR will not repeat its past mistakes and instead will take all necessary steps to fully implement the directions of the Supreme Court vide Order dated 09.08.2012 in Writ Petition No.50 of 1998.

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The reality, however, is that even two years after the Supreme Court had issued the said Order dated Aug 09, 2012, the ICMR and the State Government have done little to implement the directions of the Apex Court. In this regard, the Monitoring Committee, which is headed by Justice V.K.Agarwal (a former judge of the MP High Court), in its 2014 Second and Third Quarterly Reports that it has submitted to the MP High Court on June 12, 2014 and Oct 13, 2014 respectively,has expressed its anguish about the non-implementation of the Supreme Court's directions as follows:

- (a) "So far as computerization is concerned ... the NIC and the gas hospitals report that the computerization work is over. However, the Monitoring Committee is of the opinion that the same is not satisfactory and is not patient-centric, as it does not appear to be very useful in affording case history of treatment of the patient when they approach the concerned doctor for treatment." 22
- (b) "Similarly, the progress and status of the issuance of health booklets to the patients is also inadequate. It appears that though some booklets have been issued ... it has come to the notice of the Monitoring Committee that such booklets do not contain necessary and required treatment data/history. It was reported that filling up of Health booklet might take considerable time of the treating doctor, which would affect their treatment schedule and they may not be in a position to cope up with the treatment of large number of patients visiting the hospital.... However, the directions of the Hon'ble Supreme Court/High Court should be complied with. Therefore, it appears necessary and proper to evolve an appropriate mechanism for issuance of and proper recording of treatment details in health booklets."23
- (c) "...health booklets issued by the various gas relief hospitals only mention the name, father's name and address of the patient. However, they do not contain the vital data about the case history, the treatment given to the patients, etc. Thus, the very purpose of issuance of health booklets/smart cards is lost."²⁴
- (d) "It is rather disheartening that despite follow up action taken by the Monitoring Committee as well as directions issued by Hon'ble Supreme Court in the matter, the compliance thereof still remains incomplete." ²⁵

The Monitoring Committee's observations sums up the state of affairs as far as the basic task of computerization and networking of medical records of gas-victims and of issuance of a hard copy of his/ her complete medical records to each gas-victim. Under the circumstances, as to whether investigations, diagnosis and treatment are being properly carried out is anybody's guess.

Endnotes

¹See: http://cseindia.org/userfiles/THE%20BHOPAL%20 DISASTER.pdf, p.206

²Ibid. p.219

³See: "Health Effects of Exposure to Toxic Gas at Bhopal – An Update on ICMR-sponsored Researches". ICMR, New Delhi, 10.03.1985, p.18.

⁴Sathyamala C., Vohra, N. and Satish K (1989). Against All Odds: Continuing Effects of the Toxic Gases on the Health Status of the Surviving Population in Bhopal – Preliminary report of a Medical study Carried out Five years after the Disaster. Mimeo, New Delhi. ⁵The Directorate of Claims has since been converted as the Bhopal Gas Tragedy Relief & Rehabilitation Department (BGTRRD) of the Government of Madhya Pradesh.

⁶C.Sathyamala became a co-petitioner in the case in 1989. ⁷The Scientific Commission submitted its Report to the Central Government in July 1987. While the Commission was denied extension and was disbanded immediately thereafter, the Report was not made public until about a decade later.

⁸However, no such complete house-to-house survey was ever carried out in Bhopal other than the partial survey that was carried out at the initiative of TISS in January-February 1985.

⁹However, it is significant that after an avoidable gap of twentyfour years, most of the recommendations made by Dr.Sadgopal and Dr.Das in their Final Report have been accepted by the Supreme Court in its verdict dated 09.08.2012 in Writ Petition (C) No.50 of 1998.

¹⁰Bhopal Gas Peedith Mahila Udyog Sanghathan (BGPMUS); Bhopal Group for Information and Action (BGIA); and Bhopal Gas Peedith Sangharsh Sahayog Samiti (BGPSSS).

¹¹See: Para 203, Order dated 03.10.1991 in Civil Appeals Nos.3187-88 of 1988 at (1991) 4 SCC 683.

¹²Effectively several of those recommendations have been incorporated in the Supreme Court Order dated 09.08.2012 in Writ Petition (C) No.50 of 1998.

¹³See para 28 of order of the Welfare Commissioner dated 31.01.2009 in unregistered petition that was filed by BGPMUS and BGPSSS on 28.08.2008 before the Office of the Welfare Commissioner, Bhopal.

14"The Bhopal Gas Disaster: Effects on Life Systems – Executive Summary." Scientific Commission for Continuing Studies on Effects of Bhopal Gas Leakage on Life Systems, Cabinet Secretariat, Government of India, Sardar Patel Bhavan, Sansad Marg, New Delhi, July 1987, pp.11-12.

¹⁵Ibid., p.640

¹⁶Ibid., pp.641-642

¹⁷"Technical Report on Population Based Long Term Epidemiological Studies (1985-1994)." (Bhopal Gas Disaster Research Centre, Bhopal), ICMR, Ansari Nagar, New Delhi, 2007, pp.10-11, at: http://www.icmr.nic.in/final/BGDRC-Technical%20 Report.pdf

¹⁸http://www.icmr.nic.in/About_Us/About_ICMR.html ¹⁹Ibid.

20Ibid.

²¹http://judis.nic.in/supremecourt/CaseRes1.aspx

²²Para 6 (at page 8) of the Monitoring Committee's Second Quarterly Report dated 12.06.2014

²³Para 7 (at page 9) of the Monitoring Committee's Second Quarterly Report dated 12.06.2014

²⁴Para 4(3), page 2, Third Quarterly Report dated 13.10.2014 ²⁵Para 4(7), page 3, Third Quarterly Report dated 11.10.2014

Editorial

Bhopal was Inevitable!

The Bhopal Gas Tragedy was an industrial catastrophe that occurred on the night of December 2/3, 1984, at the Union Carbide India Limited (UCIL) pesticide plant in Bhopal, Madhya Pradesh. Estimates vary on the death toll. The official immediate death toll was 2,259 and the Government of Madhya Pradesh has confirmed a total of 3,787 deaths related to the gas release. Other Government agencies estimate 15,000 deaths. Around midnight on the fateful night, there was a leak of methyl isocyanate (MIC) gas and other toxins from the plant, resulting in the exposure of over 500,000 people.

But, this Disaster was Inevitable!

The MIC gas leakage caused the disaster, but this was not as sudden as it would seem. We were warned about the leakage and its consequences. Here, by 'we' I mean – the UCC, UCIL management, workers, public and our democratic representatives and the rulers.² The technology to produce Sevin – a pesticide, used by UCIL the then Indian subsidiary of the US company Union Carbide Corporation (UCC) (which is now a subsidiary of Dow Chemical Company), was faulty and insecure. Reports before and after the disaster by independent experts, organizations and auditors have brought this to our notice.³

If no actions were taken either by UCC or UCIL or the Government of India or of MP despite these reports, was it really an accident? Or Act 2 of the Epic of 'The Bhopal Tragedy'?

Some 25 years after the gas leak, 390 plus tons of toxic chemicals abandoned at the UCIL plant continue to leak and pollute the groundwater in the region and affect thousands of Bhopal residents who depend on it, though there is some dispute as to whether the chemicals still stored at the site pose any continuing health hazard. No actions have been taken either by Dow Chemicals (because according to Dr Abhishek Manu Singhvi, Dow Chemical is not liable to do so. And H Rajan Sharma has challenged his opinion.⁴) or by the UCC or by UCIL or by any public health authorities!

... and Such Disasters are still Inevitable!

Today, in the political arena, there is a debate about how and why Warren Anderson, the Chairman and CEO of Union Carbide, had been arrested and released on bail by the Madhya Pradesh Police in Bhopal on December 7, 1984. Or Arjun Singh, the then Congress Chief Minister, ran away etc. etc. Anderson was arrested at the airport and was taken to Union Carbide's house after which he was released six hours later on bail and flown out on a Government plane. Now, he was declared absconding by the police although his New York residential address is well known. Was this an error of omission or of

commission - the Act 3 of the Epic of 'The Bhopal Tragedy'?

The UCC established a pesticide plant in India under a subsidiary UCIL since the security rules for such industry are stringent, costly and are enforced strictly in the US. It is not profitable to do so there. Wasn't it the Act 1 of the Epic of The Bhopal Tragedy. Once the Government of India had accepted it under such 'relaxed' rules, its consequences were inevitable. Wasn't Anderson's arrival in India after the Act 2 and his release also a part of the drama?

Nowadays, these issues are discussed and debated by the politicians but the Politics of Governance does not limit it to the politicians – it includes the intellectuals, the law makers, the entrepreneurs, the citizens. There are contradictory news in the press⁵ about the Supreme Court bench headed by Justice Ahmadi in 1996 or that the Bhopal police in 1984 diluted charges to those of criminal negligence against the accused including Anderson. Under the Indian Penal Code, culpable homicide not amounting to murder (under Section 304 IPC) carries a maximum punishment of 10 years. Causing death by negligence not amounting to culpable homicide carries a maximum punishment of two years. That no action will be taken against Anderson was a part of the plot. If it was not, then why the appeal in the court of arresting him through Interpol, when he was on a tour of South East Asia, was dismissed on assurance from an eminent lawyer that he would come on his own? Was it not a sub plot of Act 3, since Justice Ahmadi on his retirement became the Chairperson of the UCIL's Trust for the victims of the Tragedy? If the charges of culpable homicide were not dropped, why the June judgment, otherwise quite well argued, logical and balanced, has punished the culprits for 2 years, as if it were a criminal negligence?

Using the victims as guinea pigs was another 'sidebusiness' carried out with blind eyes by medical councils, research organizations and drug controlling authorities. No clear laws and codes for clinical trials in India were framed even when loud and shrill whistles were blown by the 'referee and the linesmen'. Whatever rules were there, they were not inspected or applied.

Bhopal Disasters are Inevitable - Politics of Law (Non-)Enforcement

US laws and its enforcement agencies do not allow such disasters. Because its citizens including its entrepreneurs ensure that they do not allow such tragedies to happen. The culture of liberal democracy in US is embedded along with the principles of justice. Rule of law is framed by the citizens and applied by them. There are harsh punishments for breach of laws in the US. (I am aware that this American 'liberal' democracy is limited to the territories of its interest and priorities.)

The British did reform the practices of personalized justice by the kings, vassals and their bureaucrats, by the caste panchayats. In the past 60 years, we are taking a U-turn to the previous feudal system of law enforcement and justice. And that too, this is under the guise of liberalism and democracy! We talk about Anderson, as a 'free criminal'. What about the free criminals as rulers – at the cities, at the states and at the centre? What about the Ketan Desais? Where enforcement of laws and rules like BNHRA and PNDTs are considered impractical, disasters like Bhopal Tragedy are inevitable. We empower the status quoists because they come with solutions and programmes which satisfy our immediate needs. Toothlessness of those who are committed to the principles of justice will maintain the status quo, in this case, for the victims of Bhopal – the Bhopals will not change.6

Postscript

The editorial of one of us (DM) above in mfc bulletin 340-341 has not changed a word because the situation has not. This underlines the last line about our empowering the status quoists and its result to Bhopal victims. What we like to add is that denial of justice by US court in a global era is not just an aberration of legal interpretations of the event and evidences; it is a direct result of international politics. Interest of protecting 'my' company's faults in design against the lapses of 'your' company – the origin may be same. It is simply a corporate-state joint game plan of keep on passing the buck, if the public is unable to bend one or both and make it compensate for the disaster.

Union Carbide and James Hardie: Similarities and Contrasts

It is important to look back and analyze as to why persistent efforts by the victims of Bhopal tragedy are being stonewalled. Susan Engel and Brian Martin, in their examination of Union Carbide and James Hardie,7 throw light by analyzing the outcomes of the struggles by the public against corporate giants - the pesticide producing Union Carbide in India and asbestos producing James Hardie in Australia. According to them, "In terms of industrial disasters, the chemical release at Bhopal and the long-term production and use of asbestos products are two of the largest and most controversial cases. Both events backfired on the companies responsible, namely Union Carbide and James Hardie (which, in Australia, largely controlled the asbestos products market). Yet in the case of Bhopal, most victims have not been adequately compensated and, while compensation seems more assured for Australian asbestos victims, it has been a long and bitter battle for justice. How,

in a globalised world, can we ensure that corporate negligence backfires and victims receive justice?" The paper presents a framework for understanding how global corporations attempt to inhibit outrage and how to counter their tactics.

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This paper also summarizes what happened in on December 3, 1984 'the date of the world's worst industrial disaster'. In the 20-30 years since then "there have been many improvements in the handling of toxic chemicals and in corporate environmental responsibility," which can be attributed to the public interest and outrage provoked by Bhopal. Yet in Bhopal itself, some victims have received a negligible compensation while many others have never been compensated. It also highlights that '... those responsible for the disaster have never been brought to justice.'

It also narrates as to what happened at Australia twenty years after the Bhopal accident: (when) in December 2004, an agreement was signed between the company James Hardie, Australian unions and asbestos support groups. Thanks to James Hardie, the dominant manufacturer of asbestos-containing products in Australia, for decades Australia had the highest per capita use of asbestos in the world. Asbestos is the primary cause of a cancer called mesothelioma and is linked to lung cancer and the debilitating lung disease asbestosis. Around 7,500 Australians have already died of mesothelioma and a further 10,500 are expected to die by 2020. Hardie had knowledge of the dangers of asbestos from the 1930s but no warnings were placed on asbestos products until the late 1970s and production of asbestos-containing goods continued until the mid-1980s despite the availability of alternatives. The agreement with Hardie, formalised in December 2005, provides a legally binding agreement with an open-ended funding commitment and no cap on payments to victims. The paper examines these two industrial disasters as examples of global injustices that have, to an extent, backfired.

According them, "There are two key criteria for backfire: first, the event sparks outrage due to a perception of injustice; second, information about the event is communicated to a receptive audience." Both the events at Union Carbide and James Hardie clearly meet these two criteria. However, despite the fact that both cases involve similar legal constraints with issues of the responsibility of parent companies, jurisdiction and corporate restructuring, the public reaction has not ensured full justice for the victims in both cases. The Bhopal accident created massive international concern, which has affected chemical and toxic management and legislation internationally, but did not result in the victims being compensated adequately, if at all. In contrast, the indications are that asbestos victims in Australia may receive more satisfactory compensation.

The paper shows as to how the five key methods for inhibiting outrage from injustice - cover-up, devaluation of victims, reinterpretation of events, use of official channels to give the appearance of justice, and intimidation and bribery - operated and how globalisation made possible new variants of these tactics

According to the authors of the paper, cover-up is difficult in a globalised environment: "...there may be receptive audiences, such as action groups, in different parts of the world. On the other hand, the increasing intensity of communication can cause information overload...because there are ...many competing issues." Devaluation of victims can occur using existing prejudice(s) ... to vilify certain types of people, such as workers, and through discrediting of specific victims. ... The fact that most victims were from low castes and lived in slums served to reduce the sense of outrage. When an issue becomes recognised internationally, then, it is likely that local and national assumptions about the worthiness of victims lose some effect, whereas cross-national assumptions become more important. Reinterpretation of events is an ongoing process, ... from lying to framing. Here, "... the challenge for corporations in selling their viewpoint to the more diverse, potential audience: they can be caught out more easily."

Official channels may give the appearance of justice but in many cases provide little or no substance. The globalisation of corporations has further complicated the chances of legal success. The rules developed and enforced by World Trade Organisation,... may make it harder for governments. Large corporations ... use regulations and laws to their advantage: processes remain incredibly slow, so opponents are worn down while outrage dwindles; jurisdictional issues and rules remain complex and procedural, so attention is drawn away from the central injustices and placed on technicalities; expenses increased, so opponents may give up or settle for less than they deserve."

One solution may be to create better international law to cover transgressions by multinational corporations. But a backfire analysis suggests that it can be unwise to devote lots of effort to obtaining justice through official channels as they stand. ...It may be better to use a campaigning approach, aiming to apply pressure using publicity and direct action such as protests and boycotts. **Intimidation and bribery** are powerful tools for deterring action by people concerned about a situation. They are more effective when applied locally, because workers and local residents are more vulnerable to... a corporation. The corporates can use the official channel as they did in the past in both cases. The most effective way to resist intimidation is to refuse to acquiesce and to expose the attempt."

According to Engel and Martin, "Both governmental and legal channels have dismally failed the people of Bhopal. The Indian government, after legislating

to represent all victims in its 1985 Bhopal Gas Leak Disaster Act, decided to pursue the case in the US. The US case was dismissed in May 1986 on the basis of forum non conveniens, that is the existence of a more convenient and equally adequate jurisdiction for the trial, namely India. The US Government has utilize(d) foreign policy instruments to pursue the interests of its companies abroad. The case indicates ...the added complexities of legal channels in a globalised era: on the one hand, a sovereign state argued that its own legal system could not manage the case and, on the other hand, a multinational corporation argued it had little control over a subsidiary. In the Indian court, UCC argued that "there is no concept known to law as 'multinational corporation' or as 'monolithic multinational,'" saying it was actually a purely domestic corporation that owns shares in other companies around the world. The corporate veil certainly made the Indian government's case more difficult: much time at these and subsequent hearings was spent arguing about the relationship between UCC and UCIL.'

The paper concludes that "Opponents of corporate injustices should expect to encounter each of the five methods of inhibition and to be prepared with counter-measures: exposing the injustice; validating the victims; interpreting the events as unjust; avoiding or discrediting official channels; and resisting and exposing intimidation and bribery. Perhaps the most controversial recommendation is avoiding and discrediting official channels. Many people believe that laws, courts and government regulations are about dispensing justice. The paper does not "...argue that these channels should always be avoided, only that far more scepticism about them is warranted. The experiences of Bhopal and James Hardie show that in developed and developing countries alike, official channels may give only an illusion of justice.

"In other words, it took a tremendous and sustained level of public pressure (by Australian public) to succeed over the legal and financial power of governments and the corporation, a level that the victims of Bhopal have sadly never been able to mobilize in their support."

While we agree that there was mobilization of the victims of Bhopal Disaster, but the truth is that in the past 30 years, all mobilizations - with some exceptions, have been fractured, mainly of the victims and not mass movements and therefore unable to build a sustained public pressure to bring in justice to all.

On this 30th anniversary of the disaster, this special issue of the mfc bulletin carries articles on the aftermaths of the Bhopal Tragedy particularly for the millennium members of the medico friend circle.

Mfc members were involved in the movement of the victims of the Tragedy (see *mfc bulletin* 109,112-119, 121, 135. Also see 'The Bhopal Disaster Aftermath: An Epidemiological and Socio–Medical Survey', medico friend circle, March 1985; 'Distorted lives: Women's reproductive health and Bhopal disaster', medico friend circle, 1990), as an organization or in their individual capacities (see Abhay Bang,

"Learning from the Relief Work", *mfc bulletin* 109, January 1985). There were debates and controversies within mfc and with organizations working with the victims about the actions taken by the state or by mfc itself. But, there was an unanimous agreement that what occurred before, during and after the Tragedy, that the state had failed in preventing the tragedy. And again it had failed in treating, rehabilitating or in providing justice to the victims. The failure prevails but we hope that the consensus in the mfc also prevails.

In the current issue -

Victims of Apathy- Bhopal Disaster's Unenviable Legacy by N.D.Jayaprakash and C. Sathyamala reviews the response to the public health system and concludes that "Even thirty years after the disaster, the fate of the survivors is at the mercy of a poorly operated public health system."

An Illusion of Past Tense by Adithya Pradyumna, a young researcher, narrates that he learnt a lot from the Bhopal experience and challenges his cohort that without their empathy to take stock of thirty years of tragedy, without which "...as other Bhopals unfold, environmental health and social justice in India would probably find it difficult to move forward."

In *Days and Nights in Bhopal: A Doctor's Diary*, Prabir Chatterjee – a veteran mfc member and public health expert - recollects his involvement studying closely the aftermath of the disaster and emphasizes the of disaster preparedness related to any industry and seek alternatives to risky products like pesticides and fertilizers.

Corporate Crime and Citizen Action - A Case Study of Bhopal Gas-leak Survivors by Jashodhara Dasgupta and Satinath Sarangi is a study of the action taken despite the odd conditions by the survivors' organizations in Bhopal and considers the struggle as "an extremely unequal and long-drawn out contest between the tenacious slum-dwellers and the might of the state allied with a global power."

Endless Quest for Justice in India's Baghdad Continues by Gopal Krishna updates us about the status of a corporate crime and the fight for justice by the survivors on national and international judicial institutions and carves out the political nature of this quest for justice, succinctly.

Bhopal and the U.S. Courts: Catastrophe and the Dilemma of Law by H. Rajan Sharma, a lawyer who is representing residents of Bhopal in a Federal class action against Union Carbide in US courts, brings the legal story, outlines his case, and looks at what Bhopal means for the future of human rights. See also the special issue of Global Social Policy on the 25th anniversary (December 2009, Volume 9, No. 3. http://gsp.sagepub.com/content/9/3.toc).

In her editorial of *mfc bulletin* 236-237, *A Requiem for Bhopal*, C. Sathyamala questions the Supreme Court judgment of December 1996 as a clear signal sent out to hazardous industries, particularly those run by multinational companies, "that rules of justice need not apply to their operations in the country and that they can, literally, get away with murder."

Mfc's response to the disaster was a study *The Bhopal Disaster Aftermath* — *An Epidemiological and*

Medico-Social Investigation. The study was a first ever epidemiological study conducted immediately after the disaster. The final report was published in June 1985. Its summary published in *mfc bulletin* 114 is reproduced here to share the salient findings and main recommendations with the readers today.

Finally, the survivors' organizations lament the lethargy by the ICMR and the Government of Madhya Pradesh in maintaining their medical records in the era of digital information and data management revolution in A Letter to the Chairperson of the Monitoring Committee for Medical Rehabilitation of Bhopal Gas Victims.

Raghu Karnad in his story *Air, Water, Earth and the Sins of the Powerful* narrates the chilling story of Bhopal's ongoing disaster. Excerpts from his interview of Dominique Lapierre - a Padma Bhushan and the co-author of *Five Past Midnight in Bhopal* tells us the reasons of the disaster from his point of view.

Bhopal Gas Victims Used as Guinea Pigs, an editorial reproduced from MIMS, July 2010, is a scathing critique of the clinical trials conducted by ICMR on medicines having no use for MIC-afflicted victims of the tragedy.

Samanvay Rautray in his story *Bhopal Misses Recompense Law* highlights that because of US tort laws - which provide for substantial financial compensation - Americans enjoy a greater degree of protection against industrial disasters.

Mfc expresses its solidarity to the survivors for their struggles against the injustice they are facing. Bhopal Disaster and its aftermath is a watershed of our political and legal doldrums regarding industrial disasters resulting in poor public health system and elusive justice to the victims. Justice delayed IS after all, justice denied.

- Dhruv Mankad and C. Sathyamala

(Guest Editors)

Endnotes

¹http://www.mp.gov.in/bgtrrdmp/relief.htm

²Eckerman, Ingrid (2005). The Bhopal Saga: Causes and Consequences of the World's Largest Industrial Disaster. India: Universities Press.

³Eckerman, Ingrid (2001). Chemical Industry and Public Health: Bhopal as an example. Essay for MPH. A short overview, 57 pages.

⁴H Rajan Sharma. "Veil of Deception." Frontline, Volume 25 - Issue 07, Mar. 29-Apr. 11, 2008. Also at http://www.frontline.in/static/html/fl2507/stories/20080411250709400.htm

⁵a. http://www.ndtv.com/news/india/no-question-of-diluting-charges-against-anderson-former-sc-judge-30561.php

b. http://news.outlookindia.com/item.aspx?684794

⁶I am really grateful to Prakash Bal, a senior, committed journalist for his Marathi article – "Bhopal ghadnarch hotey!" Saptrang, Daily Sakal, Nashik Edition, Sunday, 13th June 2010, p 1-2. Our editorial here is based on a free translation of some of his writing. Obviously, the opinions expressed here are solely mine.

⁷Susan Engel and Brian Martin. "Union Carbide and James Hardie: Lessons in Politics and Power." Global Society, Vol. 20, ISS, 4, 2006.

An Illusion of Past Tense

- Adithya Pradyumna*

As I packed my travel bag last week, I noticed the copy of Ingrid Eckerman's *The Bhopal Saga* lying on my table among other books. This was lent to me by a dear friend who understands (to a certain extent) the kind of work I do. I had not read this book yet, but I did know that this book is banned in India. This book was gifted to him by the author during his recent visit to Sweden. Having worked in the field of environmental health in India for six years now, I have some idea about why it might have been banned. I was hoping to get through it by the time of the 30th anniversary of the tragedy, whichwould soon be upon us.

Just a few days before the disaster occurred in 1984, I had turned a year old. Then I was far away from Bhopal, if there is such a thing, in Kasargod, Kerala (learning much later that a pesticide called *endosulfan* was being showered like the rain over some villages thereduring those years leading to its own tragedy, Pradyumna & Narayan, 2012). In secondary school, where exam results were the end all, Bhopal was just a piece of information. That, of course, didn't stop the gang of boys from labelling large-framed girls as "Bhopal" to indicate the size of the disaster.

I was passionate about the environment even back at secondary school, but I never thought of Bhopal as an environmental issue until much later. I think we were made to believe, probably unintentionally, that "man-made" and "environment" are not related.

It was my good fortune that after medical college I got associated with a group that had responded to the Bhopal Gas Tragedy immediately after its occurrence. Interactions with my mentors gave me some

astounding insights on what really went on after the tragedy from their own personal experiences. The systematic non-disclosure of information, lack of value for life, and mockery of rights and justice among other things.

Who are the victims? A very important question constantly associated with such tragedies, as we need to know who gets the paltry compensation and medical care, and who doesn't. Time and again such questions have arisen, and we as health professionals have failed to provide satisfactory answers. The reasons may be technical or political to varying extents. More importantly, collectively we have failed to prevent the occurrence of similar disasters.

One of my favourite technical reports is Late Lessons from Early Warnings (EEA, 2013). It is beautifully worded, evidence based and hard hitting. It discusses with many examples the prevalent lack of foresight in decision-making on matters concerning environment and health, and the justification for the application of the precautionary principle. There were early warnings at Bhopal too. There are early warnings for many potential disasters even now. Take climate change for one. But there is just no political will for response. Forget "late lessons", there may have been no real lessons learnt at all. Recently, I reviewed India's Environmental Impact Assessment Notification from a health perspective, which showed that health is not a matter of primary concern in impact assessment processes of industrial and developmental projects. There is also no mandatory requirement to include health professionals (medical or public health) as part of impact assessment teams or as part of expert appraisal committees (Pradyumna, 2014).

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I visited the factory premises and surrounding colonies a few years ago, when I was in Bhopal for work. Things seemed quite all right to the naked eye. It didn't appear like a "disaster area". Life seemed to have moved on. The disaster appeared to be a thing of the past. And this frightened me. I also felt the same way when I visited a community living next to a terribly polluted river near Kochi where plants seemed to be growing very nicely alongside the waters and people lived alongside it. It is very difficult to register the health impacts and poor quality of life of individuals who have suffered or continue to suffer these exposures, especially in one visit. We know deep down that there is a big problem, but an illusion is created. Talking to the people brings perspective. Even rigorously conducted epidemiological studies are inadequate to document the impacts on the lives of those suffering (Vishvanathan, 1986). Can there ever be real justice in such a situation?

The Bhopal disaster called for leadership of some sort, someone to take account of what happened there, and to make things better. From what I understand, it didn't come. None the less, efforts of civil society organisations, such as the medico friend circle, have been applauded by some commentators whose involvement was described as "probably the most sane, compassionate piece of scholarship on the problem of relief in Bhopal" (*ibid*). Victims groups have supported the community over the years with assistance from a wider network from across the globe.

More recently, the National Institute of Research in Environmental Health (NIREH) has been established in Bhopal, but I am undecided whether this is appropriate or ironical, considering Bhopal is probably the venue of Indian academia's greatest shame (Pradyumna & Gaithonde, 2013). This institute has the official mandate to take forward such research in India. It remains to be seen whether it will be

another disaster. As a young researcher, I understand that there is a lot to learn from the Bhopal experience. The question is whether the new cohort of researchers is empathetic, willing and ready to take stock of thirty years of tragedy. Without that, as other Bhopals unfold, environmental health and social justice in India would probably find it difficult to move forward.

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- 5. Pradyumna A, R. Gaithonde (2013). "Research on Bhopal". Economic and Poliotical Weekly, Feb 15; 48(08): 68–9.

Days and Nights in Bhopal: A Doctor's Diary

- Prabir Chatterjee*

December 1984: When I first read about the gas leak in December 1984, I was in Nemur, a village 20 km from Villupuram in Tamil Nadu. The Centre for Rural Health and Social Education (CRHSE) in Tirupatturhad sent me to stay with a Siddha doctor. I had learnt enough Tamil to understand the headlines and was curious about how the doctors at CMC Vellore were responding to this emergency. It turned out that nobody had actually gone there. I read that in Bhopal some health staff got sick while treating patients, and I think I read that one or more had died. CRHSE had an Annual Meeting at Gurukul in Chennai where I met Sanjeev Choudhurie. He told me that Padhar Hospital had sent a team to work in Bhopal and that if I wanted to go, I could meet them at a school in Bhopal. All the staff of CRHSE got a Christmas gift from Dr. K, Rajaratnam, and I found that I got this windfall (probably Rs. 100/) and so bought a ticket and reached Bhopal on 23rd or 24th December.

Pastor Martin was welcoming. He arranged my stay and dinner that night. The medical team had gone back to Padhar for the week. So I went there and met Dr Tony Devasia (my senior) who took me out to the local shop for dinner and introduced me to the other staff. Dr AV Choudhurie (father of Sanjeev and of Dr Rajeev who is now Superintendent) was the Superintendent. He sent me to see their literacy work before the team returned to Bhopal. I also attended the Youth Group's X'mas lunch and heard the staff chatting in Chattisgarhi- which I had first heard at Dalli Rajahara in August.

At Bhopal there was Gali Number 3 of Kainchi Chhola - witharound 30 families - near the railway tracks where the Padhar team had opened a clinic. In one family three people had died and only one child had survived. There were still lots of eye problems when the team returned. Dr Jadhav looked after them and many others suffering from what the staff called "gas psychosis". There was very little diarrhoea. Maybe that was due to the season. I

hypothesized that it was due to the piped water supply or the sterilizing effect of the gas. On the 2nd of January I stayed in the slum and was taken to attend a rally against the government with the slogan "Galigali me shor hai, Arjun Singh chor hai!" Tapan Bose and his team were at the rally I remember. The next day I had to go with a lota to the railway line for morning ablutions.

World Vision tried to distribute oil and grains. They asked us for list of the socio-economically backward families. I remember going to give a coupon to a family in a hut on Sunday and realizing that they had a colour TV and were watching Rajiv Gandhi wrapping his shawl around as he listened to the election results. I refused to give the coupon to the family. It was obvious that the survey had a major flaw - it had only asked about occupation. This family owned three other huts - they were small "landlords". Another relief group tried to distribute clothes – but nobody lost clothes in the disaster. The Ramakrishna Mission and Catholics were working in neighbouring lanes. No group was willing to part with "their area"; after all, foreign funding depended on how big an area they could claim to have served. I was so upset about the competition in "disaster relief" that I avoided all relief junkets that came my way until 2009. I have worked with a disaster risk reduction programme after 2009. It should also be clear that my criticism does not apply to those organizations which have developed a long term partnership with local communities.

1989: A study was coordinated under the technical guidance of the faculty at the Centre for Social Medicine and Community Health, JNU (Sathyamala, Vohra & Satish, 1989). The team came from all over the country; there were women activists from the slum, doctors, social workers, students; most had paid for their own travel and the survey was organized on a shoe string budget from funds donated by friends and activist groups. The mission was to produce a valid method of assessing injuries due to the gas to produce an estimate of the

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real number of victims. I got caught taking the pulse without a watch. To tell the truth, I didn't have one. Anyway I buckled down – this was a serious scientific effort. We stayed at the Sindhi Dharmasala and had dinners at the local branch of the Coffee House. It was between Durga Puja and Diwali. This was the time of the build up to the Ayodhya demolition of Babri Masjid in 1992, and the 'Ram Sila' puja was being conducted on bricks supposedly intended for the Ram temple. There were these peculiar pandals with moving images and bricks marked Ram being sanctified to go to Ayodhya. We saw TV news at the Coffee House about communal tension. Later Rajiv Lochan and a friend came from Indore to join the survey team. The news of rioting in Indore preceded them. He told us about the efforts of the former education minister OP Rawal to prevent riots and how they actually accompanied a procession and saw the first stones being thrown but could not prevent the riot; how medical students wrote "Garv se kaho hum Hindu hain" in blood and how they stood outside the emergency room and operation theatre aggressively objecting if the injured brought in were Muslims.

The next day, Sanskruti Thacker (she was working in RBI, Bombay) and I were catching up on the survey work in a house in Anna Nagar when we heard the rumour that the riots had spread to Bhopal. I realized that a temple in front of the house was having a Sandhya Puja as the bell rung. Then the azaan sounded. The house we were sitting in was part of the wall of a mosque. There was I with a beard - my name is Chatterjee but my certificate says I am Christian. I saw Sanskruti talking to the family. I quietly took out a scrap of paper and described the situation and put it in my pocket. If I died, my mother might at least know what had happened. The family told us not to be afraid and promised to take us out of Bhopal in a jeep if there was no other way, they had drums of petrol. They said AK 47s had been stocked by the "others". "Why should we kill each other? We all suffered together in the gas disaster 5 years ago." Somehow they connected a landline to a plug next door and contacted relatives near the centre of the town and finally we breathed freely... it was just a rumour. But go back fast they said, who knows what will happen.

When we reached Sindhi Dharamshala around 100 odd volunteers were sitting there; Nitish Vohra and K Satish of the coordinating team had brought many of them from the houses they were surveying; we were the last ones to return; we were the only two who could not be found as we were not where we were expected to be; there was a great collective sigh of relief. Everyone was tense. The rumours had been spread very efficiently. A Maruti van with a tape recorder had blared out a recording which sounded like the shouting of a violent crowd to make people believe the worst. Only luck and the experience of working together in 1984 had prevented the group from falling apart. I remember Mira Shiva, Binayak Sen, Punya Da, Satyabrata Kar, Sathyu Sarangi, an ESI doctor, many MFCites, the IGSS students present there. The coordinating team was clear about not wanting to put anyone's lives at risk. Sathyamala asked whether we would like to leave. Nobody could guarantee safety. Nobody would blame you.

Not one person left.

There were expressions of mental suffering which were termed 'compensation psychosis' to suggest that the distress was faked to receive compensation. However, the psychiatrists from Mumbai talked about PSTD. No,it wasn't "compensation psychosis" at all they said, there were clear morbidities. I remember visiting Eklavya at Arera Colony. Anu Gupta and Tultul, Vinod Raina of Ekalavya were with us too.

Later in Delhi, I remember a protest at the Boat Club against the unjust out-of-court Supreme Court settlement; a trainload of women from Bhopal had come, some of whom I saw fainting in the crowd. I had asked film students of Centre for Development of Instructional Technology (CENDIT) and a Jesuit theology student to buy oranges and make ORS. And I also remember meeting Bobby Roy- I had not heard of him in Vellore - but Manipur knows him as Laifungbam (now president) of CORE (Centre for the Organization of Research and Education, an indigenous people's centre for policy and human rights).

1994: After the MFC Meet at Wardha a group of volunteers including Anant Phadke, SJ Chander, Manisha Gupte, Mira Shiva, Mira Sadgopal and

Sathyamala set out to help as translators for the International Medical Commission on Bhopal. I remember the disagreement about sending samples out of the country. I remember the pomegranate in the pilau served by the support team at lunch. We did not stay at the dharamsala but in a "proper" hotel. The neuro physician who had studied the damage done by methylisocyanate used a gadget attached to a computer to quantify the movements in Romberg's Sign. The gas victims swayed much more than the controls. So there was an organic lesion - not PTSD, not "compensation". He advised PET Scans to demonstrate that people had been really affected. We did a write up based on the ICMR studies that had been released for the first time to the public (MFC 1997).

2011: I was asked by Red R to help in a Disaster Risk Reduction workshop for health professionals. I realized that more incidents of gas leaks had occurred in Bhopal over the years but the system was still unprepared for even small gas leaks.

2012: Spent a few days with the Sambhavana team in Bhopal surveying disabilities in those born after 1984. Since 2011 local medical staff as well as volunteers in Bhopal have carried out a screening for obvious congenital diseases amongst the affected community with a non-exposed control community. They have already identified a few hundred cases of congenital anomalies among the population exposed to the gas. Firstly these cases needed confirmation, diagnosis and proper referral services. Secondly, it may raise another dimension if occurrence of these cases are associated with allegedly contaminated water polluted by storage of toxic material in the factory.

A group of physicians have, in different batches, already travelled to Bhopal to confirm these cases and validate the findings of the field worker - we want to bring this survey to a close by examining the remaining number of cases. The cost of this survey including air fare, food and lodging for the participating physician are borne by the organisers. The funds come from donations from friends of the gas affected people's organisation. The survey is about to be completed, even as I write, and a batch of

Kolkata doctors is currently in Bhopal doing the last set of certificates for those who were traced in the survey.

Anna Nagar was a control area again. I tried to look for the scenes of the 1989 experience. We also studied an area just below the Secretariat. It was next to the scene of the 1985 January 2nd protest. The slum houses now have TV and piped water. No toilets though. Has anything much changed in 30 years?

The factory was just 3 km from the Railway Station. It is still impossible to explain why the factory was so close to the main town (now the town has grown around it). And did the factory expect workers to commute from far away? Why were there no quarters or transport for those who were connected to the factory? Nowadays those building factories speak of the advantage of ancillary industries. Surely the workers of these ancillaries will have to live close by and suffer if there is an industry related health problem.

To my mind it is essential - in Madhya Pradesh and everywhere else - to enlist the risks of any new industry; prepare local people, workers, civil administrators and health staff for any eventuality; list ways to reduce risks; implement these measures; put in place warning systems; do evacuation drills; identify the line of control in an emergency; think about alternatives; empower the vulnerable groups. Each of these are important. Alternatives may be the easiest to forget. Dowe need fertilizers? Should they be chemicals? Should they be mass produced?

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Corporate Crime and Citizen Action*

A Case Study of Bhopal Gas-Leak Survivors

- Jashodhara Dasgupta and Satinath Sarangi*

The Gas Leak Disaster

On 2nd December 1984, an explosive reaction took place in the storage tanks of the factory set up by the Union Carbide Corporation (UCC) of USA for the Union Carbide India Limited (UCIL) in Bhopal in 1969 to manufacture pesticides. The reaction caused a massive leakage of a cocktail of MIC, hydrogen cyanide, phosgene and other toxic gases. In the absence of any warning system, many sleeping in the neighbourhood of the poorer quarters of the city or at the railway station died in their sleep; others rushed blindly around in a stampede or died trying to escape the gases. Women aborted on the streets as the poison seeped into their bodies. Thousands died on the night; since then tens of thousands more have died. More than half a million are estimated to have been affected by the gas leak. But that day, there was no effort to verify the numbers of the dead. Doctors were unable to issue death certificates to everybody.

It is now 30 years since that disaster, and the struggle of the gas-affected communities continues for health, safe water, livelihoods and justice. About 70 % of the people exposed to Carbide's toxic gases were dependent on hard physical labour: at least 50,000 people are today in dire need for alternative livelihoods following exposure to toxic gases and consequent chronic illnesses.

Health Impacts

Many deaths are now occurring among the affected as a result of tuberculosis, cancers, liver diseases and of course chronic lung diseases. Between 120 and 150 thousand people are today battling chronic illnesses of the lungs, brain, eyes, immune system, reproductive system, musculoskeletal system and a range of mental illnesses such asdepression and anxiety disorders. But there has been absence of standardized treatment protocols specific to exposure induced physical and mental complaints. In a curative petition filed on the 26th anniversary of the disaster, December 3, 2010, the Government of India sought additional compensation from the American companies for 2,295 deaths (in addition to the 3,000 deaths it had earlier claimed) and 4,66,293 injured persons who had not been included in the initial settlement of 19891. Estimates of disaster-related deaths in the Government's own monitoring data are close to 25,000, which is nearly five times the figure being currently presented in

the GOI 2010 curative petition². The death figure in the curative petition is also at odds with that in the Madhya Pradesh Government's Action Plan of 2008, which says it is almost 16,000³.

A major fallout of the disaster and its aftermath is contamination of soil and groundwater with thousands of tonnes of abandoned hazardous chemicals and heavy metals that cause cancers and birth defects and are known to cause damage to the lungs, liver, kidneys, brain and skin. Chemical and heavy metals have been detected in high concentrations up to a distance of 3.5 kilometres from the factory and at depths greater than 30 metres.

State Response⁴

There was clearly some collusion between the regulatory authorities in Bhopal that permitted the presence of a dangerous chemical industry so near the city, saying that the gases were relatively harmless. During the disaster and immediately after, hospitals had provided emergency relief and no documentation. After a very perfunctory survey that was left incomplete, officials categorized around 94% of the survivors as 'temporarily injured' and awarded USD 300-500 as compensation (Amnesty International report, Clouds of Injustice). Conditionalities govern boundaries of identification, and the sick and impoverished survivors with no proper documentation had to travel all over the city to Government offices and stand in endless queues, despite which officials often dismissed their medical records as being inconclusive or not related to gas exposure. Given the complete inadequacy of official rehabilitation efforts the loss of regular income has driven tens of thousands of families to chronic starvation conditions and debt at usurious rates. Thousands of families with the death or disability of the main bread earner are being paid a very small amount as monthly pension.

Role of Community-Based Survivor Groups⁵

Sarangi classifies the response of the survivors into distinct phases: spontaneous protests in the immediate aftermath, a more organized response after that and then formation of survivors-led organisations⁶. The groups formed such as the *Nagarik Rahat Aur Punarvas Committee* (NRPC– Citizens' Relief and Rehabilitation Committee) focused on relief and rehabilitation and the *Zahreeli Gas Kand Sangharsh Morcha* (ZGKSM– Toxic Gas Disaster Struggle

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Movement, also called 'Morcha') stressed the need for a political organization to 'take up issues of justice, information, medical care, legal intervention'.

Starting with immediate concerns like jobs, social security such as pensions for the destitute and regularizing of employment rehabilitation centres, the survivor-led organizations such as Bhopal Gas Peedit Mahila Udyog Sangathan (BGP-MUS) and Gas-Peedit Nirashrit Pension Bhogi Sangharsh Morcha (GP-NPBSM) began to protest against the inadequacy of the health services being provided, and against rampant corruption in the healthcare system. As they figured out that a company producing toxic gases and hazardous materials should not have been there in the first place, they began to understand that the state was also responsible and that they would have to fight against the apathy and corruption of Government officials in the Government to demand medical care, monetary compensation, environmental rehabilitation and justice. At present they are part of the movement to ensure safe water for those living near the toxic waste-disposal sites.

Voice of a Survivor-Activist: "You can't get anything from the Government without a fight, whether it is employment, healthcare or compensation," says Shabana, an activist. "We had to fight with each successive Government, hit them with our shoes. None of the Government s did anything on their own for the gas-affected. No minister ever kept their promises." She is enraged by the failure of the Government of India to ensure justice. She visited Thailand, England, the US for two months and shared experiences of the Bhopal gas-affected with the media, students and other survivor groups, including those affected by UCC factories. Shabana was surprised that survivors in other countries had much better treatment than the poor of Bhopal; she noted that their lives had not been devastated by ill-health.

On every anniversary of the gas leak for the last thirty years, the survivors' organisations march through the city in huge rallies with effigies of Warren Anderson and UCC/DOW. They have participated in demonstrations addressing the Prime Minister, the Chief Minister, the District Collector, Union Carbide and DOW, and the US Government. In the last thirty years, there have been public meetings, popular protests, marches, demonstrations, picketing, protest-fasts, *padayatra* (long march entirely on foot), burning effigies, use of symbols (the broom, signifying cleanup), banners and slogans.

Once, fed up with the Government's apathy towards their legal demands as workers, the hundred odd women of the Stationery Women's union impulsively started a march on foot to New Delhi in 1989 to meet the Prime Minister, a 750 km long trek through forests, bandit infested valleys and tough terrain for five weeks in the height of summer. In 2002, campaigners had to undertake a fast unto death for 19 days, fax and email campaigns as well as 1500 relay hunger-strikes across ten countries to compel the GOI to serve the extradition order for Warren Anderson. CEO of Union Carbide, to the US. The global support group International Campaign for Justice in Bhopal (ICJB) campaigns to secure justice for the affected populations. Additionally, Greenpeace and Amnesty International have supported with research⁷ and advocacy the cause of justice in Bhopal. In 2003, trade unions from over 25 countries issued a joint appeal for the cause of Bhopal.

It is significant that none of the survivor organisations wish to access development assistance but rely on citizen contributions instead. The struggles over the last three decades show citizen action to promote accountability in the face of unending state apathy. A telling example is the ten year struggle to realize a claim for safe water.

Struggles for the Right to Clean Water: On May 7, 2004 the Supreme Court of India directed the Government of Madhya Pradesh to immediately supply clean water to all residents of the communities affected by contamination of groundwater by the toxic factory wastes. A year later with no action, several hundred residents of the 18 communities peacefully occupied the Directorate of Bhopal Gas Tragedy demanding clean drinking water. Several protestors were beaten up with sticks and 7 persons were charged under Sec. 3328 and other sections of the IPC. The Government started supplying drinking water in tankers but the supply was uncertain, insufficient and of poor quality. On January 21, 2006 over a thousand residents of the affected communities sat outside the residence of the Minister of Bhopal Gas Tragedy Relief & Rehabilitation demanding clean drinking water, for which nine protestors were charged under Sec. 1489 and other sections of the IPC.

A month later 52 Bhopalis including survivors and activists marched for 37 days to cover 850 kilometres from Bhopal to New Delhi, calling for the supply of clean drinking water among other demands. On April 17, 2006 following a seven-day fast by Bhopalis, the Prime Minister met with a delegation of Bhopalis and among other assurances promised to ensure funds for clean water supply. In June, the amount was transferred to the state Government whose officials said the work would be completed by September 2008.In February

2007, when the local organizations found that the GoMP had started no work, six activists including three affected persons fasted for 19 days until the official representative of the Chief Minister conceded that the work on the pipelines would be completed by November 2008. In February 2008 once again 55 Bhopalis marched with demands including the demand of supply of clean drinking water. After five months of sit-in protest in New Delhi that included a 21 days fast¹⁰ on August 8, 2008, the Minister of Chemicals and Fertilizers conceded the demands of the Bhopalis including that for clean drinking water. By December 2011 when the work was still moving at a snail's pace the campaigners organized a peaceful rail blockade stopping the movement of trains for 11 hours. While the Government charged 2000 protestors with serious criminal offences it also offered a fresh deadline of March 2012 for completion of the water supply. The Supreme Court was approached by the survivors' organizations on May 3, 2012, and directed the GoMP that "... The entire exercise should be completed within three months from the date of communication of this order....." Not surprisingly, the work took another two years, and now in August 2014, after ten years of relentless efforts, 50,000 residents are getting clean piped water.

Limitations of Existing Global Governance Mechanisms for Transnational Corporate Crimes

A large number of multinational companies function in various countries in collaboration with local partners and the Government. In this age of globalisation it is expected that there will be similar disasters with "cross-border or international dimensions, the same vexing complexities of liability, corporate structure, (and) jurisdiction."¹¹

The Bhopal case raises some fundamental questions about state-society relations: why would a Government suppress medical information on the effects of the gas leak when that would actually help physicians who are treating the survivors? Why an official climate of secrecy and cover-ups concerning what a corporation has done to the hapless people whom the Government is meant to represent and protect? Why were the elites who were part of the state bureaucracy more concerned with safeguarding the interests of the UCC than the poor? The extreme measures needed by citizen activists to compel the state to take action reflect the extent of contestation involved in granting their rights to the claimants.

The death and devastation caused by the factory and the callousness of the UCC provided the GOI with an opportunity to deter future corporate recklessness by taking a clear position to protect the rights of its citizens. Yet the state chose to collude with the UCC and refused to justify its negotiations of the infamous 'settlement' agreement that failed to secure justice for its citizens. The political and legal process in the case of Bhopal constructed the agency of rights holders as 'children' under the doctrine of 'parenspatriae' (the ruler as the parent) by immediately abrogating to the state the sole authority to litigate on behalf of the survivors or represent them in any process of claims (Bhopal Claims Act 1985) and enabled the GOI to function as the lawyer without any ethical obligations towards the client.

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The relationship of the state with such companies is mediated by those who are in positions of power and authority within the state. Those whose lives will remain unaffected by the companies negotiate the conditions of operation. Local communities whose lives and livelihoods may be affected by the entry of such companies are not consulted; however, local land, water and other resources may be taken by the state and given for the use of the companies. This is usually justified in the name of 'economic development' and 'progress' and the allure of employment opportunities is usually used to override disagreements. The pattern that has emerged is that local protests are quelled through unjustified use of state violence, and the police and district officials are clearly not on the side of the affected people.

In discussions on the relative economic and political power between corporations and Government it is often stated that the top 51 economic powers in the world are transnational corporations. It is because of this power imbalance that while trans-nationals operate freely across national boundaries there are no effective global fora¹² for holding these corporations accountable for their crimes against the environment and people. As a consequence of the following limitations of the existing governance mechanism for transnational corporate crimes, criminal corporations continue to enjoy near complete impunity three decades after the world's worst corporate massacre.

Uneven development of legislation among countries often lead to a situation where a country may not have adequate laws to effectively deal with crimes committed by a transnational: there are many instances where trans-nationals have taken advantage of the lack of legislative development in the countries where they conduct their hazardous business. Moreover, the lack of jurisdiction of national judiciary over the transnational's empire is the most glaring lacuna in the current governance mechanism against transnational corporate crimes

The many deliberate 'system failures' in the operation of the Bhopal factory are representative of the deliberate omissions of corporations that lead to routine 'accidental' releases of noxious substances

endangering life and health. An overwhelming majority of the deaths caused by industrial pollution and occupational hazards¹³ are predictable and preventable, especially as many hazardous processes or materials are not used in the parent country of the corporation, exposing deliberate double standards.

A Government may give more importance to attracting foreign capital than the lives and health of a couple of hundred thousand of the poorest citizens. Nonetheless, these are citizens, towards whom the state has an obligation. It is ultimately up to the state to regulate the entry and functioning of the non-state actor. The public health catastrophe of Bhopal was compounded by the impunity of the transnational company whose CEO never faced prosecution in India, and cannot be prosecuted by international criminal justice systems which do not recognize non-state actors.

In cases of crimes by transnational corporations there is a great need to ensure availability of judicial fora in the parent country. In addition, given the political clout that large trans-nationals can wield, and possible sell-out by the Government officials, it is imperative that a supra national forum is available to victims of transnational corporate crime that does not have to rely solely on national Government s for evidentiary material. Interim relief is an important means to ensure justice in cases involving transnational corporations who are known to use many dilatory tactics to delay the final resolution of the case and deny the victims just restitution.

Affected Communities as Conscience Keepers

The state consistently refused to recognize the agency of the survivor population in making decisions or choices that would affect their lives by making itself the sole legal representative (through the Bhopal Claims Act), denying them agency to make independent decisions about the adjudication processand the survivors' right to decide for themselves The survivors discovered they were expected to supplicate before a mediating administrative institution that stripped them of their dignity; whether it was hospitals, training centres, municipal water supply or compensation distribution mechanisms. In this bleak scenario, the Bhopal citizen movements emerge as powerful assertions of citizen rights: to claim constitutional guarantees from the state as well as enforce the state's responsibility to protect its poorest citizens through rule of law. In the absence of state regulation of the non-state actor, citizen action against the company's criminal negligence and continuing callousness emerges as a significant 'anti-corporate' strategy.

The Bhopal case study is remarkable in terms of the extremely unequal and long-drawn out contest between the tenacious slum-dwellers and the might of the state allied with a global power. Despite their extreme poverty, continuous ill-health and unending struggles against an obdurate state, community-based organizations of the survivors have remained the conscience-keepers that have kept the issue alive for thirty years, continuing to demand for justice and their rights to a healthy life. Their claims attempted to influence the fulfilment of rights in various ways through the definition, interpretation, as well as implementation of rights. The paper explores how this has been made possible and what are the implications for global governance mechanisms to safeguard public health.

Endnotes

¹Curative petition (Civil) No. 345-347/2010 filed by Union of India in the Supreme Court of India 2010

²Intervention Petition in Curative Petition (Civil) No 345-347/2010 filed by Union of India in the Supreme Court of India, by Bhopal Gas Peedit Mahila Stationery Karmchari Sangh, Bhopal Gas Peedit Nirashrit Pension Bhogi Sangharsh Morcha, Bhopal Gas Peedit MahilaPurush Sangharsh Morcha, Children against Dow/Carbide and Bhopal Group for Information & Action 2011

³Government of Madhya Pradesh, Bhopal Gas Tragedy Relief and Rehabilitation.Memorandum on plan of actions for the relief and rehabilitation of Bhopal gas tragedy victims 2008. Document obtained under the Right to Information Act by Ms. RachnaDhingra, Bhopal Group for Information and Action

⁴Several facts about the state response are from the publication The Bhopal Marathon available at http://bhopalmarathon.org/cryforbhopal/index.html

Someof the information in this section is from Dasgupta J 'Leaving our fears behind: women's rights claiming after the Bhopal Gas disaster. A case study' in Gender, Rights and Development: A Global Sourcebook ed. Mukhopadhyay M and Meer S. Royal Tropical Institute Netherlands 2008 available at http://www.kit.nl/gender/wp-content/uploads/publications/1456_GenderRightsDev-web.pdf

⁶Sarangi, S 'The movement in Bhopal and its lessons' in Environmental Victims ed. Christopher Williams Earthscan 2013

⁷Amnesty International issued a report called Clouds of Injustice that shows how corporations and Government s are evading their human rights obligations and underlines the need for universal human rights standards for businesses.

⁸Causing hurt to a public servant and preventing discharge of duties, can lead to imprisonment upto three years

⁹Rioting armed with a deadly weapon, can lead to imprisonment upto three years

¹⁰Several women activists were fasting inside the maximum security Tihar Jail

¹¹H. Rajan Sharma, 'Catastrophe and the dilemma of law,' in Seminar 544, Elusive Justice, December 2004

¹²The only available framework is the Guiding Principles endorsed by the UN Human Rights Council outline how States and businesses should implement the UN "Protect, Respect and Remedy" Framework in order to better manage business and human rights challenges.(See A/HRC/RES/17/4 of 2011 and Guiding Principles: http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf)

¹³UNEP's Global Chemicals Outlook Report of 2012 lists diseases caused by industrial pollution among the five leading causes of death. ILO estimates that about 3 million deaths are caused annually worldwide due to occupational hazards.

Endless Quest for Justice in India's Baghdad Continues

- Gopal Krishna*

About 30 years before his death on September 29, 2014 at a nursing home in Vero Beach, Florida, USA, Warren Anderson was arrested at 2 PM on December 7, 1984 in Bhopal, Madhya Pradesh. Anderson was the supreme authority for Bhopal based plant of UCC's subsidiary. Prime Minister Narendra Modi met the US President Barack Obama for official talks on September 30, 2014 on the 5th day of his visit in USA. It is not clear whether the Prime Minister was aware of Anderson's death when he met Obama. But it is quite abundantly clear that the US authorities kept the news of Anderson's death under strict secrecy because its disclosure could have overshadowed the meeting between Modi and Obama.

The Bhopal plant was under the supervision of the Executive Vice-President, Agricultural Products Division, UCC who was directly answerable to Anderson. Anderson approved and ratified the double standards in design, safety and operations by which UCC imposed at its subsidiary in Bhopal in comparison to its Institute, West Virginia factory in USA. He was charged with culpable homicide not amounting to murder, grievous assault and killing and poisoning human beings and animals. As of now the disease he was suffering from is not known. It may come to light when Central Bureau of Investigation (CBI) succeeds in procuring his death certificate. CBI had filed the charge sheet against Anderson on December 1, 1987. Several summons served on Anderson through Interpol. CJM, Bhopal proclaimed Anderson an absconder on February 9, 1989 for repeatedly ignoring summons and directed him to be present in its court on March 31, 1989.

Anderson's death without appearing in the Bhopal court demonstrates that US Government failed to comply promptly with their obligations under the US India Treaty on Mutual Legal Assistance (MLA) and to support efforts to ensure that Dow and UCC comply with the summons issued by the CJM.

Both Government of India and USA have adopted double standards in the matter of liability for the Bhopal gas disaster due to leakage of 40 tonnes of lethal methyl isocyanate gas and other undisclosed gases from UCC's plant into the surrounding environment. They have remained insensitive to more than 23,000 deaths, lakhs of disabled survivors of Bhopal disaster besides inter-generational effects.

The very first accused that the judgment on the Bhopal Gas Disaster in the Court of Chief Judicial Magistrate (CJM), Bhopal, Madhya Pradesh, dated June 7, 2010 mentions is: "Sri Warren Anderson S/O Sri John Martin Anderson Former Chairman, Carbide Corporation, 39, Old Ridgebury Road, Danbury USA 06817 (Absconder)".

The concluding paragraph no. 226 of CJM's verdict reads: "Mr. Warren Anderson, UCC USA and UCC Kowlnn Hongkong are still absconding and therefore, every part of this case (Criminal File) is kept intact along with the exhibited and unexhibited documents and the property related to this case, in safe custody, till their appearance." Government of USA ensured that he never appeared in the Bhopal court in India.

Anderson was released on a Bail Bond in Hindi dated December 7, 1984 that reads:

"I, Warren M Anderson s/o John Martin Anderson am resident of 63/54 Greenidge Hills Drive, Greenidge, Connecticut, USA. I am the Chairman of Union Carbide Corporation, America. I have been arrested by Hanumanganj Police Station, District Bhopal, Madhya Pradesh, India under Criminal Sections 304 A, 304, 120 B, 278, 429, 426 & 92. I am signing this bond for Rs. 25,000/-and thus undertaking to be present whenever and wherever I am directed to be present by the police or the Court."

It was signed by Anderson. His signature was obtained after the language of this bond was translated into English and read out to him.

It is noteworthy that under the MLA the summons for Anderson from the Bhopal Court was communicated to Department of Justice, USA.

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It is quite unlikely that Department of Justice, Government of USA served the summons to Anderson while he was alive in pursuance with its obligations under MLA.

The partially declassified CIA document of December 8, 1984 has revealed that Rajiv Gandhi, the then Prime Minister led Government ordered Anderson's release the same day in an extraconstitutional manner and arranged red carpet send off to him on a State Government plane to New Delhi and from there to USA after meeting President of India and others. The signed letters of Arun Jaitley of Bhartiya Janta Party and Abhishek Manu Singhvi of Indian National Congress absolving Dow, the current owner of any liability for Bhopal disaster underlines the complicity between the leading national ruling parties of India to subvert all institutions to protect corporate interests at the cost of victims of Bhopal and their living environment.

When J F Keenan, District Judge of the District Court of USA pronounced his verdict on June 26, 2012 in the case of Janki Bai Sahu, et al Vs Union Carbide Corporation and Warren Anderson, he rubbed salt to the wounds of the victims. The judge in question revealed his cruelty and insensitivity for the third time by referring to victims' quest for justice as "a discovery expedition worthy of Vasco da Gama."

US judiciary's indefensible approach towards the victims of industrial disaster in India's Baghdad, gives a sense of déjà vu.

The US Environmental Protection Agency issued a final rule on July 12, 1989, banning most asbestoscontaining products. After spending ten million dollars and conducting a ten year study, USEPA accumulated a 100,000 page administrative record, announcing that it would phase out and ban virtually all products containing asbestos. This ban was to apply to the manufacturing, importing, processing and distribution of asbestos products. US EPA's grounds for the ban states: "asbestos is a human carcinogen and is one of the most hazardous substances to which humans are exposed in both occupational and non-occupational settings. But the verdict of October 18, 1991 by the Fifth

Circuit US Court of Appeals of New Orleans in the asbestos matter overturned the ban imposed by USPEA. Giving a severe blow to the reputation of US judiciary, International Labour Organization, World Health Organisation and several other UN agencies besides more than 50 countries have found that USEPA was right because it is impossible to use asbestos in safe and controlled manner.

Ironically, in the US, Dow Chemicals Company has set aside \$2.2 billion to address future asbestos-related liabilities arising out of the UCC's acquisition. UCC formerly made products containing asbestos, and UCC once mined asbestos for sale to customers. The mine of the UCC was sold in 1985. Dow which purchased UCC and its Indian investments in 1999 has consistently denied inheriting any liability for the Bhopal gas disaster. If Dow can assume responsibility for asbestosinduced illnesses among victims in USA, how can it deny responsibility towards the victims of Bhopal disaster and its continuing toxic legacy in an explicit case of double standards? The victims of the industrial disaster of Bhopal rightly seek monetary damages and medical monitoring for injuries caused by exposure to soil and drinking water polluted by hazardous wastes produced by Anderson headed UCC's plant in India.

Anderson personified corporate crime but his death does not end the quest of justice against the corporate manslaughter, inter-generational assault and ongoing contamination in Bhopal. The case against UCC, USA and UCC Kowlnn, Hongkong is intact despite his demise but concerned institutions in India and USA appear to be colluding through delay to make them accountable. Meanwhile, the new Prime Minister Narendra Modi has dismantled Group of Ministers (GoM) on Bhopal Disaster along with other 18 GoMs.

In the meantime, Madhya Pradesh High Court has held UCC's parent company, Dow Chemicals Company responsible for the clean-up of the contaminated site in an ongoing case. On August 4, 2014, a Bhopal court issued its third criminal summons to Dow directing it to appear before it on November 12, 2014 and explain why it has not produced UCC before the court.

Bhopal and the U.S. Courts

Catastrophe and the Dilemma of Law

- H. Rajan Sharma*

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The juridical field is the site of a competition for monopoly of the right to determine the law. Within this field there occurs a confrontation among actors possessing a technical competence which is inevitably social and which consists essentially in the socially recognized capacity to interpret a corpus of texts sanctifying a correct or legitimized vision of the social world. Such a process is ideal for constantly increasing the separation between judgments based on the law and naive intuitions of fairness.

-Pierre Bourdieu1

Around midnight on December 2-3, 1984, a pesticide plant leaked some twenty seven tons of a methyl isocyanate, a highly toxic chemical gas, leaked out into the air over the sleeping city of Bhopal. The results took the form of an enormous tide of death that welled up in the city's hospitals and morgues. Official estimates, probably understated, put the toll at a staggering 2,000 dead but reliable unofficial estimates suggest a soul- numbing figure of nearly 6,000 or more dead in the 48-hour aftermath of the disaster.

The cause of death was described in most cases as pulmonary edema, a polite medical euphemism for an excruciating manner of death by slow drowning in one's own bodily fluids. According to the Indian Council for Medical Research, more than 250,000 people continue to suffer from permanent disabilities and chronic ailments as the result of exposure to the poisonous gases on that night. This December marks the twentieth anniversary of this unparalleled disaster, perhaps the single worst industrial catastrophe ever to befall a civilian population. By some accounts, at least 20,000 persons have died over the past two decades. The International Commission for Medical Research on Bhopal has concluded that, due to chromosomal and genetic damage among the victims, the wake of this unprecedented catastrophe will continue to ripple through the next three to four generations in Bhopal in the form of birth defects.

The word 'tragedy' has shown a talismanic insistence in appearing and reappearing in the context of this incident. Perhaps it helps us soothe the conscience by lending an air of the inevitable or unavoidable to these events or maybe it helps us invoke that Faustian mythology so typical of modern society in which nameless others are sacrificed at the hallowed altar of progress for our technological hubris. But this Universary should not just memorialize the tragedy of Bhopal. It should be an occasion to recall the travesty of what the victims have been made to endure over the past twenty years. Despite all the fine sentiments and noble ambitions expressed in what the Indian Supreme Court, in this case, referred to as the "uncertain promise of law," the fact of the matter is that the law, in all its abstract majesty, has utterly failed to provide the victims of the world's worst industrial disaster with so much as a semblance of justice over the past two decades.

Instead, the law has been the principal author of a kind of Kafkaesque parody of justice that has played itself out in the courts of the United States and India. The so-called wheels of justice have, in this case, turned only to crush the hopes of the survivors beneath them. The seemingly endless processes of the law have, in fact, perpetuated and compounded an injustice too fearful to contemplate, which has been allowed to stand without redress or remedy for twenty years, seven thousand three hundred days (to be precise), each day a shameful vindication of the maxim that holds that laws are like cobwebs, strong enough to only detain the weak and too weak to constrain the strong.

The epitaph has yet to be written on the sordid record of what may justifiably be called the Bhopal travesty. The plant belonged to Union Carbide India Limited, an affiliate of Union Carbide Corporation, a multinational corporation headquartered in the United States. Union Carbide owned 50.9% of its Indian affiliate at the time of the disaster and was responsible for transferring proprietary technology to the Bhopal plant for manufacturing Sevin, a patented product in which methyl isocyanate was one of the key ingredients. It was determined shortly after the disaster that a "runaway reaction" of a highly volatile chemical, methyl isocyanate or MIC, had taken place in one of the plant's storage tanks.

The most likely cause was the introduction of water into the tank. It is undisputed that a routine "waterwashing" operation prescribed by the American company's operating manuals were being conducted on the night of the disaster. Numerous

^{*} H. Rajan Sharma, a lawyer who is presently representing residents of Bhopal in a Federal class action against Union Carbide in US courts, brings the legal story up to date, outlines his case, and looks at what Bhopal means for the future of Human Rights. A chapter, written in 2004, from The Bhopal Reader, edited by Bridget Hanna, Ward Morehouse, Satinath Sarangi, Apex Press, 2006.

independent investigations have concluded that, while the entry of water into the storage tank may have triggered the runaway reaction, the real causes of the catastrophe can be traced to the decision to store methyl isocyanate in large quantities for long periods of time, the badly flawed design of the plant as well as the near-total absence of safety provisions and emergencypreparedness measures. Needless to say, Union Carbide has strenuously contested this version of events, disclaiming any managerial responsibility for the design, day-to-day operation of the UCIL facility or its safety features and asserting that its relationship with its Indian subsidiary was a hands-off or arm's length relationship.

The survivors and their representatives, meanwhile, have maintained that the U.S. company deliberately chose to bequeath to Bhopal an obsolete, dangerous and ill-equipped plant, with grossly inadequate technology, pointing to Carbide's methyl isocyanate facility in Institute, West Virginia as an example of the company's discriminatory imposition of double standards of risk, safety and emergency-preparedness.

The Institute plant, they argue, was designed with significantly higher parameters for safety and emergency-preparedness: e.g., computerized warning systems, larger capacity safety devices, and safer processes for storage and containment of methyl isocyanate. For the past two decades, Carbide has insisted that standards of design, technology, safety and emergency-preparedness were either uniform or at least comparable at all of its worldwide operations, including at Bhopal. To date, Union Carbide continues to withhold scientific and medical research on the toxicology of the leaked gases which could assist in the treatment of innumerable victims on the specious grounds that this information constitutes a "trade secret."

In the disaster's aftermath, hundreds of lawsuits were filed in jurisdictions across the U.S. against Union Carbide by American contingency-fee lawyers. These were ultimately consolidated into a single proceeding before Judge John Keenan in the Southern District of New York. Fearing that the victims claims might be exploited by an army of private lawyers, the Indian Parliament enacted the Bhopal Gas Leak Disaster (Processing of Claims) Act, on March 25, 1985. The legislation was based on a doctrine under international law known as "parens patriae" (literally, "parent of the country"), which held that the State was empowered to act the legitimate protector of its citizens and their environment. The Act conferred upon the Indian government the full power and authority to act as the exclusive legal representative of the survivors in all claims for compensation before foreign or domestic courts, subject to its obligation to consult and cooperate with the victims and their representatives in the prosecution of such claims. Framers of the legislation argued that it would enable the Indian government to provide centralized, integrated decision-making and control to prosecute claims on behalf of the mostly destitute victims, bringing all the nation's resources to bear against the multinational might of the corporation.

Based on this legislation, the Indian government filed suit against Union Carbide on April 8, 1985, in the courts of the United States, where, in what can only be described as a profoundly ironic exercise, India argued that the interests of justice required the case to be tried in the United States on the grounds that its own legal system was backward and procedurally outmoded, lacking any class action device or other provision for representative suits, burdened with the legacy of colonialism, and subject to massive delays caused by endemic docket backlogs. The company countered that the case ought to be tried in the courts of India, without burdening American taxpayers, and showered praise upon the legal system of the "world's largest democracy", particularly to the extent it was "based on sound and established principles of Anglo- Saxon law." On May 12, 1986, Judge Keenan conditionally dismissed the consolidated action on the grounds that India was the more appropriate forum for the resolution of this litigation. The decision rested, in part, on the notion that trying the case in the US courts would amount to "yet another instance of imperialism" imposing foreign legal standards upon a developing country with "vastly different values", different levels of "population" and "standards of living." The dismissal was conditioned upon Union Carbide's "consent to submit to the jurisdiction of the courts of India." Meanwhile, criminal proceedings and investigation had already been initiated against Union Carbide and its former director, Warren Anderson, in the Bhopal District Court in 1984 and formal charges of "culpable homicide" and "causing death by use of a dangerous instrumentality" were framed by India's prosecuting agencies on November 30, 1987. The charge of culpable homicide under the Indian Penal Code is equivalent to manslaughter, causing death by reckless indifference.

By the time the case first reached the Supreme Court of India on the issue of whether interim relief assessed against Union Carbide on behalf of the victims was appropriate, litigation had continued in India for more than five years without even reaching the commencement of pretrial discovery. The mostly destitute victims had received nothing in the way of compensation from their erstwhile 'parent,' the Union of India. On February 14, 1989, Chief Justice

Rajinder S. Pathak interrupted the proceedings to announce that he felt, in light of "the enormity of suffering occasioned by the Bhopal gas disaster and the pressing urgency to provide immediate and substantial relief to the victims," that the case was "preeminently fit for overall settlement." The Chief Justice then entered a judicial decree preliminarily recording the terms of this settlement which required Union Carbide to pay \$470 million in damages in order to extinguish all civil and criminal liability.

The Indian Supreme Court, however, gave the victims and their able counsel a last opportunity to challenge the terms of the proposed settlement. In its final decision of October 1991, the Indian Supreme Court justified the settlement giving it final approval on the grounds that the victims' fate could not be left to the "uncertain promise of law," but modified its terms and conditions by mandating the prosecution of criminal charges against Union Carbide and its former director, Warren Anderson, which had been pending since 1987.3 Criminal charges against Union Carbide and Warren Anderson were accordingly renewed in the Bhopal District Court. In March 1992, the Judicial Magistrate issued an arrest warrant for Warren Anderson and gave lawyers for Union Carbide a month in which to appear for trial. Neither of the parties presented themselves in court and Union Carbide's official spokesperson stated that the company would flatly refuse to submit to the jurisdiction of India's criminal courts. Summons served on Union Carbide through the U.S. Department of Justice were ignored. In 1992, the Bhopal District Court proclaimed the company and Mr. Anderson to be "absconders", i.e. fugitives from justice. To date, neither Union Carbide nor Anderson have appeared to face the criminal charges pending against them in India. As recently as 2004, the Indian government submitted an extradition request for Anderson under the Indo-US Treaty of Extradition which was, reportedly, rejected. Progress in the criminal case against Indian officials has been, if anything, equally glacial.

The compensation tribunals, established by the Union of India, the erstwhile 'parent' of the disaster victims, did not even begin functioning until 1992. Presentday estimates by non-governmental organizations indicate that over 90% of claimants have received less than \$400 from the claims process in India, an amount insufficient to pay for medications over a five year period. Meanwhile, tests of the water supply of as many as sixteen communities residing near the plant site and surrounding environs have revealed severe environmental contamination of the aquifer in Bhopal chemicals and by-products produced there. Recent soil and water sample tests conducted by an independent British laboratory for Greenpeace and certain victims'

organizations indicate massive contamination of soil and drinking water around the facility in Bhopal. To cite one instance, the Greenpeace report states that water samples taken from the Bhopal site contained carbon tetrachloride, a carcinogenic chemical, which exceeded maximum tolerance limits established by the World Health Organization by 1,705 times. Union Carbide claims that it has no further responsibility or liability for the environmental remediation of the plant site because it has sold its shares in its Indian subsidiary and the land was returned to Madhya Pradesh in 1998.

In litigation before the Indian Supreme Court, the Union of India has sought to utilize the interest earned on the settlement fund, over the many years that it remained undistributed, to clean-up and remediate the badly polluted plant site and the groundwater aguifer which provides the drinking water of as many as 20,000 residents of affected communities. The Supreme Court has, mercifully, denied its request and ruled that the victims must receive the remainder of these sums to which they are legally and morally entitled. But lawyers for political parties have filed objections claiming, with truly democratic largesse, that these funds should be allocated to a dozen or so municipal wards in Bhopal where the effects of the disaster were felt principally in the form of a temporary inability to find good maids and kitchen help.

As an attorney who has had the privilege of representing the survivors' cause in the courts of the United States, it pains me to admit that my own efforts have achieved only modest success in turning the tide of this battle. That litigation, commenced in 1999, consisted primarily of an effort to translate the unresolved criminal liability of Union Carbide into an actionable violation of international human rights law. The complaint also included claims for damages to physical health and property as a result of the contamination of drinking water as well as for injunctive relief in the form of clean-up and remediation by Union Carbide of the severely polluted land for its factory, which still has thousands of metric tons of waste stored above-ground and buried in a landfill on site, and the aquifer in Bhopal. Those efforts were unavailing largely because the American courts gave scant weight to our argument that Union Carbide could not claim the benefit of the 1989 settlement since the company had refused to appear to face criminal charges in India. They concluded instead, ignoring the carefully framed arguments under resulting from the indiscriminate disposal of toxic international law, that only the Indian government had standing to complain of a breach of that settlement because it was the Indian state, not the

victims on whose behalf it was supposedly acting, which was a party to that agreement.

On remand from the appellate courts, Union Carbide was obliged, for the first time, to submit to certain limited discovery for documents relating to the history of its operations at Bhopal. One of the documents was a UCC Capital Budget from 1973 for the transfer of technology which Union Carbide approved to the Bhopal plant for the manufacture of the pesticides including the technology for methyl isocyanate ("MIC").

Under a section entitled "Technology Risks," the document revealed for the first time that the "comparative risk of poor performance and of consequent need for further investment to correct it is considerably higher in the UCIL operation than it would be had proven technology been followed throughout," noting in particular that "even the MICto- Sevin process, as developed by UCC, has had only a limited trial run." In March of 2004, the same appellate court ruled that the claims of those affected by environmental contamination may be allowed to proceed, including claims for environmental remediation of the land of the Bhopal factory and groundwater aquifer.

One of the imperatives of this anniversary should be to remedy the failure of law which made the Bhopal travesty possible and to prevent its recurrence when the law is again confronted, as it almost certainly will be in this age of globalization, with another disaster having the same international or cross-border dimensions, and the same vexing complexities of liability, corporate structure, jurisdiction, conflictsoflaw and forum. Legal reform is a cause that has seldom, if ever, managed to fire the activist imagination in India or elsewhere. If anything, however, the Bhopal travesty offers a dizzying, vertiginous glimpse of how the economic logic of globalization can become inextricably intertwined with a politics of catastrophe, in which developing countries bargain with foreign investors and multinational corporations by staking the health and lives of their citizens or their environment like gambling chips. This kind of moral abyss is made possible and underwritten by the failures and lacunae in the 'rule of law', domestic and international.

The forces that created Bhopal are on the march everywhere today. A recently released report by the United Nations Research Institute for Social Development, called for the implementation of such a legally binding international code of conduct, some 60,000 multinational corporations in 1998 accounted for more than one-third of world exports, with annual turnovers that dwarfed the gross domestic products

of most of their host states in the developing world. "There is a danger that corporate self-regulation, as well as various partnership arrangements," the report warned, giving the example of Bhopal, "are weakening the role of national governments, trade unions and stronger forms of civil society."

As an Organization for Economic Cooperation and Development ("OECD") study pointed out, as early as 1993: "Environmentally-dirty industries, particularly resource-based sectors, have migrated over the last two decades to lower income countries with weaker environmental standards: the result is a geographical shift in production capacity within sectors with a consequent acceleration of industrial pollution intensity in developing countries."4 The study adds that "liberalised trade and investment rules among countries with unequal levels of environmental protection may create incentives for companies to relocate to jurisdictions with lower levels of environmental regulation and lower compliance costs." The dilemma of law, as Bourdieu has pointed out, is that any rule-based system no matter how impartially administered or fairly conceived will tend inexorably towards outcomes that are not necessarily consonant with intuitive constructions of justice. By the same token, one can scarcely conceive of a political dispensation or social configuration that can be trusted, in and of itself, to deliver any 'social justice' worth the name without something closely resembling the normative episteme of the rule of

Yet, the law cannot remain indifferent to the demands of justice on the specious grounds of an appeal to higher-order concepts of justice "under the law" as the sole and exclusive foundation of its claims to "universal acceptance through an inevitability which is simultaneously logical and ethical," as Bourdieu has written. In the last analysis, the law must secure acceptance of its moral authority from those who seek its protections by aspiring to deliver some modicum of meaningful justice or else depend entirely on the armed power of the state to justify its pretensions to legitimacy.

In the context of Bhopal, that objective requires India and the international community to undertake the following measures to ensure that the law will finally remedy this perversion of justice on its twentieth anniversary. India must commit itself to legal reform. The Bhopal case presents the spectacle of an official indictment of its own legal system by the country's government before the courts of a foreign power. This is nothing short of an acknowledgement that the sovereign, with full knowledge of its consequences, has deliberately been unwilling or unable to remedy this problem in the more than half-century since

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independence. Civil litigation in India remains subject to delays of 20 years or more. These kinds of delays are effectively tantamount to a denial of justice. India is a signatory to the International Covenant on Civil & Political Rights which provides, in Article 14, that: "In the determination... of his rights and obligations in a suit at law, everyone shall be entitled to a fair and public hearing by a competent, independent and impartial tribunal established by law."

Legal reforms in India must include provisions for representative suits or class actions to address mass claims of liability like those in Bhopal. Never again should victims be subjected to something like the Bhopal Act which not only enabled the government to function as their lawyer, without observing the minimal professional duties or ethical obligations of an attorney towards his client, but permitted the government to begin functioning as the client as well, stripping the victims of any legal personality and denying them any meaningful role in the decisions that affected their case. Article 16 of the International Covenant guarantees that: "Everyone shall have the right to recognition everywhere as a person before the law."

In honor of the victims of Bhopal, India should lead the effort to enact into international law by treaty or other instrument a legally binding and enforceable code of conduct for multinational corporations, including provisions of liability concerning the export of hazardous technology. Our legal strategy seems to have presaged the UN Human Rights Norms for Business and its Commentary which were recently approved by the Sub-Commission on the Protection and Promotion of Human Rights. These do not, however, have the force of law. India should work to transform these norms into an international legal framework.

The International Law Commission ("ILC"), an authoritative body charged by the United Nations with the progressive development and codification of international law, has already articulated the majority view that international liability, arising from transboundary environmental harm like Bhopal, should be imposed on states that export hazardous technologies. Even before the disaster, some members of the Commission and the Sixth Committee had suggested that the state of nationality of a multinational corporation should be liable when it "exports" dangerous industries to developing states and harm results. During the discussions on these issues, the U.S. delegation expressed their official view that "under customary international law, States are generally liable for significant transboundary harm caused by private entities acting on their territory or subject to their jurisdiction or control" adding only that "from a policy point of view, a good argument exists that the best way to minimize such harm is to place liability on the person or entity that causes such harm, rather than on the State." The Union of India agreed that liability for environmental harm originating in another state "must be imputed to the operator who was in direct physical control of the activity." But the split in the Commission on this question, ensured that the Commission's draft articles of "International Liability for Injurious Consequences Arising from Acts Not Prohibited By International Law", remain unsettled on this point. India should work to close this omission in the draft articles and resolve the issue of international liability for the export of hazardous or dangerous technology.

Last but not least, India must secure the appearance of UCC or its new parent, Dow Chemical, to face trial on the criminal charges pending against it in the Bhopal District Court. The criminal case against Indian officials has dragged on for a number of years and judges presiding over the case against UCC have been repeatedly transferred. A single judge should be appointed to preside over the entire matter and expedite proceedings so that the criminal case can be quickly adjudicated and disposed of under the law. India has an obligation to ensure that this crime is effectively prosecuted. Article 8 of the Universal Declaration of Human Rights stipulates that: "Everyone has the right to an effective remedy by the competent national tribunals for acts violating the fundamental rights granted him by the constitution or by law." Pursuant to Article 2 of the International Covenant on Civil & Political Rights, India has undertaken to "ensure that any person whose rights or freedoms as herein recognized are violated shall have an effective remedy," and to "ensure that the competent authorities shall enforce such remedies when granted."

References

1 Pierre Bourdieu, "The Force of Law: Towards A Sociology of the Juridical Field," Hastings Law Journal 38 (5): 814-53 (1987). 2 Union Carbide Corp. v. Union of India, 1 S.C.C. 674, 675 (1989).

3 Union Carbide Corp. v. Union of India, Review Petition Nos. 229 and 623-24 of 1989, 70 (1991).

4 Candice Stevens, Synthesis Report: Environmental Policies and Industrial Competitiveness, in Environmental Policies and Industrial Competitiveness 7 (OECD ed., 1993).

5 International Law Commission, Second Report on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law (Prevention of Transboundary Damage from Hazardous Activities, A/CN.4/ 501, 5 May 1999.

From the Editor's Desk

A Requiem for Bhopal

- C. Sathyamala

On September 13 of this year, the Supreme Court came out with a verdict on the framing of Criminal charges against the main accused* in the Bhopal Gas Leak Disaster case. This judgement brings to an end, for all practical purposes, the possibility of pinpointing liability and punishing the guilty.

The charges framed against the accused by the Sessions Court at Bhopal, later upheld by the MP High Court at Jabalpur, were: culpable homicide not amounting to murder in the death of 3828 or more human beings, causing grievous hurts to 21,694 or more human beings, causing of hurts to 8,485 or more human beings, and committing mischief by killing 2,544 or more animals.

Quashing all these charges, the Supreme Court has stated that, on the basis of the evidence provided by the government, the "alleged" act of the accused, at best, could be considered the "direct result of rash and negligent act" carrying a maximum penalty of 2 years of imprisonment only. But it appears that the accused may not get even this penalty because it rests "ultimately on the evidence it is found that the act complained of was not the proximate and efficient cause of death and intervention of others' negligence has taken place the accused may get acquittal after facing the full-fledged trial." In effect all those who were responsible for the 'accident' that killed thousands of people and caused serious and permanent injury to more than 2 lakhs of people are going to be 'proven' innocent by the law of the land. And this in the absence of a trial which is necessary for establishing criminal liability.

This judgement also appears to lay the ground for the 'sabotage' theory floated by the Union Carbide as the cause of the disaster by invoking "intervention of others' negligence."

In passing this order, the learned judges necessarily have had to contradict themselves. Elaborating on the charges of rash and negligent act, the judges accept that, "the material led by the prosecution ... prima facie shows that there were not only structural defects in the working of the Plant on that fateful night which resulted into this grim tragedy." But the evidence was, according to the judges, considered insufficient to show prima facie, "that on that fateful night when the Plant was run at Bhopal it was run by the accused concerned with the knowledge that such running of the Plant was likely to cause deaths of human beings... mere act of running a Plant as per the permission granted by the authorities would not be a criminal act. Even assuming that it was a defective Plant and it was dealing with a very toxic and hazardousness substance like MIC, the mere storing of such a material by the accused in Tank No. 610 could not even prima facie suggest that the accused concerned had knowledge that they were likely to cause death of human beings."

Thus, according to the judges, even if the management had knowledge that they were running a defective Plant or that they were storing toxic materials in contravention to regulations, this knowledge could not be considered sufficient grounds to prove that the management had knowledge that such acts could cause death and suffering.

With this judgement, a clear signal has been sent out to hazardous industries, particularly those run by Transnational Companies, that rules of justice need not apply to their operations in the country and that they can, literally, get away with murder.

Eveready battery was a well known consumer product of Union Carbide. Following the gas leak disaster in Bhopal, a campaign was launched, primarily by KSSP for the boycott of Eveready batteries. Campaign posters depicted the 'cat' (of nine lives!) in the battery with its jaws dripping with blood. As part of the damage control activity, UCIL, sold its battery unit. The new Company is now selling the batteries under the same brand name Eveready. As though to make a mockery of the sufferings of the people in Bhopal, the recent advertisement for the Red Eveready Battery plays upon the word "Red". "Give me Red," is their slogan. It appears that they are not satisfied with the red blood they shed in Bhopal.

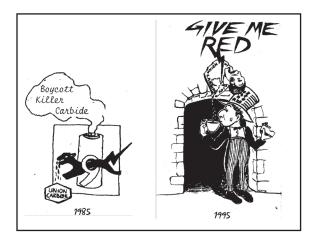


Illustration: K Khanna in "Swasthya Aur Samaj: Ek Bhin Swat', C Sathyamala, N Sundharam, N Bhanot, 1996. KSSP poster, 1985.

(Reprinted from mfc bulletin, Nov-Dec 1996, Issue No 236-237).

Endnote

*Accused No. 1- Warren Anderson, Chairman of UCC; 2 - Keshub Mahindra, Chairman of UCIL; 3-VP Gokhale, Managing Director of UCIL; 4- Kishore Kamdar, Vice President and Incharge of AP Division of UCIL. 5- J Mukund, Works Manager of the Bhopal plant; 6- RB Roy Chaudhary, Assistant Works Manager; 7- SP Chaudhary, Production Manager; 8- KV Shetty, Plant Superintendent; 9- SI Qureshi, Production Assistant; 10-UCC (Union Carbide Corporation); 11- Union Carbide (Eastern) Inc., Hong Kong; 12- UCIL (Union Carbide Corporation India Ltd.)

The MFC Study: The Bhopal Disaster Aftermath

An Epidemiological and Medico-Social Investigation

The medico friend circle survey team which undertook an epidemiological and medico-social survey in Bhopal, of a randomly selected community based sample of 60 families each of J. P. Nagar (severely affected) and Anna Nagar (minimally affected) from 19th to 25th March 1985 has found that more than 100 days after the disaster the people affected by the toxic gas exposure which included MIC suffer from a multisystemic manifestations of physical and mental ill health further compounded by psychosocial and socio-economic family and community crisis.

Salient Findings

- A multidimensional symptomatology reflective of pulmonary, gastrointestinal, neuro muscular and visual dysfunction
- Disturbance in vision particularly distant/near vision problems
- Disturbances in menstrual function in women with an increase in certain types of gynaecological problems, as well as a disturbance in sexual functions in male.
- An established effect on Lactation in nursing mothers
- A highly probable risk to the child in utero.
- A large magnitude of psychic impairment

All the above ill health is within the social context of a highly disadvantaged, low income group of basti-dwellers, whose earning capacity has been further compromised due to loss of wages; physical disability and mental stress affecting work performance; and who have escalated into an acute socio-economic crisis due to inadequate compensation and greater indebtedness due to increased loan taking.

Recommendations

The relief and rehabilitation of the affected population must therefore be through an integrated community health and development plan which is evolved by multidisciplinary interaction and close collaboration between the Govt. and non-Govt voluntary agencies and citizens groups fully involving the affected community in planning, decision making, organising and maintenance of the services.

We recommend,

1. A community oriented relief and rehabilitation strategy which must include

- (i) Occupation/economic rehabilitation
- (ii) Basic supplies till (i) is over
- (iii) Psychosocial support
- (iv) Medical relief including detoxification
- (v) Medical Monitoring of affected people
- (vi) Community health orientation of medical relief centres
- (vii) Family based records.

-- Only this will meet the people's needs and expectations.

2. A communication strategy which will include

- (a) A continuing education strategy for all health personnel working in gas-affected areas in Govt or voluntary agency clinics.
- (b) A creative non-formal health education of the affected people in which available knowledge of the disaster and its effects on health must be translated into supportive interventions in lives of the people.

This strategy must be dynamic, responding to new developments in the people's health status as well as to research findings as they become known.

3. An integrated, community based, epidemiologically sound, research endeavour. This must shift focus from hospital or dispensary based samples to population based samples. Epidemiological profiles of ill health and disability need to be built up using sodium thiosulphate and other treatment not only as therapy but also potent epidemiological tools through well designed community based trials.

Urgent issues needing focus are risk to the unborn foetus and risk to the reproductive system of affected individuals. There is also urgent need for informed consent as a minimum medical ethic.

4. Government-voluntary agency collaboration

Closer coordination and encouragement of active collaboration by Govt, ICMR and local decision makers with voluntary agencies, citizens committees, action groups and socially sensitive sections of the medical and scientific community.

This coordination must be dynamic, open to dialogue and debate, mutually supportive and free of suspicion. The welfare and rehabilitation of the disaster victims must be our primary concern.

(Note: The above is a synopsis of our conclusions and recommendations which will be available as printed report of the mfc study by the middle of the month (cost Rs. 5/-). The report includes the detailed findings of the team; including tables; review of available literature on MIC and details of ICMR and other studies in Bhopal, some observations on the psycho-social dimensions of health; a review of the medical relief and rehabilitation services being organised; and a study on the people's perception of these; the scientific controversy about the cyanogen pool and thiosulphate treatment and our recommendations for relief, rehabilitation, communication, research and Govt-NGO collaboration. The report also features a reference list of over 80 articles relevant to the Bhopal disaster.

We release this report with the sincere hope that it will support the affected people in their demand for justice and meaningful relief and rehabilitation.)

(Reprinted from *mfc bulletin*, No.114, June 1985)

Letter to the Chairperson, Monitoring Committee

Dated 04.11.2014

From

- Bhopal Gas Peedith Mahila Udyog Sanghathan (BGPMUS), 51 Rajinder Nagar, Bhopal 462010.
- Bhopal Gas Peedith Sangharsh Sahayog Samiti (BGPSSS), C/o Delhi Science Forum, D-158, Saket, New Delhi 110017.

To

Hon'ble Justice V.K. Agarwal

Chairperson, Monitoring Committee for Medical Rehabilitation of Bhopal Gas Victims

Sub.: Medical Records of Gas Victims & Quality of Drugs Being Dispensed To Gas-Victims

Respected Sir,

- 1. It is deeply disheartening that even thirty years after the Bhopal disaster, the India Council of Medical Research (ICMR) and the Government of Madhya Pradesh have failed to computerize and network the medical records of all gas-victims seeking treatment at the Bhopal Memorial Hospital & Research Centre (BMHRC) and at the Gas Relief Hospitals and clinics.Moreover, despite numerous directions from the Hon'ble Supreme Court especially vide Orders dated 25.07.2001, 17.07.2007, 15.11.2007, and 09.08.2012 in Writ Petition (C) No.50 of 1998, the ICMR and the State Government havealso failed to issue health booklet to each gas-victim with his/her complete medical record.
- In this regard, BGPMUS & BGPSS crave to draw the attention of the Monitoring Committee to the following. According to its 2014 Third Quarterly Report:
 - "It was reported that the BMHRC has patient data of about 3 lakhs 86 thousand (3,86,000) patients to whom cards have been issued. Further reportedly gas relief hospitals have data of about 80 thousand patients. However, the Monitoring Committee was informed that the data structure of the two groups of patients as above are different and therefore not compatible with each other and are not mutually useful and cannot be interchanged for computerization."
 - [Para 4(d), page 2, 2014 Third Quarterly Report of the Monitoring Committee that was submitted to the Hon'ble Madhya Pradesh High Court at Jabalpur on 13.10.2014]
- 3. Under the circumstances, BGPMUS & BGPSSS, hereby, request the Monitoring Committee to direct the BMHRC and the State Government to handover two separate CDs with the complete computerized data of the medical records of all the gas-victims in their possession. While BMHRC should be directed to handover the data on medical records of 386 thousand (3,86,000) gas-victims with their address, compensation Claim No. and the department in which each of them is undergoing treatment, the State Government should be directed to provide similar data with respect to the medical records of 80,000 gas-victims. By this process, it would be possible to estimate the number of gas-victims undergoing medical treatment in each of the

- concerned departments in BMHRC and its outreach centres as well in the various Gas Relief Hospitals and clinics. This information would also contribute towards developing an appropriate treatment protocol for each type of ailment a task that the BMHRC as well as the Gas Relief Hospitals have failed to fulfill to date despite specific directions from even the Hon'ble Supreme Court.
- 4. In addition, the Monitoring Committee itself had raised concerns about the quality of drugs being dispensed to gas-victims. In the 2014 Second Quarterly Report, the Monitoring Committee had noted as follows:
 - "It was brought to the notice of the Monitoring Committee that some patients are not satisfied with the quality of medicines being prescribed and issued to them by way of generic medicines. The Monitoring Committee was, therefore, of the opinion that an independent agency should be determined and specified for testing such drugsand to confirm and certify their efficacy on random basis."
 - [Para 4 (at page 7) of the Monitoring Committee's 2014 Second Quarterly Report that was submitted to the Hon'ble Madhya Pradesh High Court at Jabalpur on 12.06.2014]
- Under the circumstances, BGPMUS & BGPSSS are of the considered opinion that the Monitoring Committee itself should play a major role in fighting the menace of dispensing of spurious and sub-standard drugs to gas-victims. Therefore, BGPMUS & BGPSSS, hereby, request the Monitoring Committee to make surprise visits to BMHRC and its outreach centres as well as to the Gas Relief Hospitals & clinics and collect random samples of drugs that are in their stock and are being dispensed to gas-victims. The drug samples that are thus collected may be appropriately sealed and sent to accredited drug testing labs for necessary quality tests. The present questionable practice of the staff of the respective hospital administration themselves undertaking the task of sending drugs for quality tests, defeats the very purpose of conducting such drug tests. This is because, it is difficult to establish as to whether the drugs that are sent for testing are the very drugs that are being dispensed to gas-victims.

It is hoped that the Monitoring Committee would give due consideration to the above requests and would do the needful.

Thanking you, Yours sincerely,

(Abdul Jabbar Khan) (N.D Jayaprakash) for BGPMUS for BGPSSS

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Air, Water, Earth and the Sins of the Powerful

The factory that killed 15,000 in 1984 is still poisoning new victims. As survivors march to Delhi, Raghu Karnad tells the chilling story of Bhopal's ongoing disaster

THERE IS a face of our democracy that you only see when you follow a 60-year-old woman marching 800 kilometres on swollen knees. That is the distance from Bhopal to Delhi, and she hopes that if she walks for a month, instead of taking the overnight train, she will remind Delhi about something in Bhopal. Not that the gas that leaked from the Union Carbide factory on December 2, 1984, killed 15,000 people. That is world history; that is not why she is marching. Some people remember that the five lakh Bhopalis who survived that night had their bodies ruined. This explains her swollen knees, her painful lungs, the sudden dizziness that occasionally drops her onto the roadside.

Fewer people heard that after being denied a hearing in court, after being denied a humane compensation, the gas peedith are spending their lives being denied medical care they were supposed to receive, being denied jobs they were trained to do, being denied justice. But there is another reason she is marching. Almost nobody ever heard that the factory which leaked poison into the air in 1984 [see box: The Story of that Night] has been leaking it, constantly, into the soil and water ever since.

For 23 years, the chemicals that went into Carbide's pesticide process have been ignored, left to leach into the groundwater. That groundwater feeds tubewells and handpumps from which 25,000 people in neighbouring areas drink. Most of these people were nowhere near the gas leak on December 2. They belong to a new category of victims, the paani peedith, and every year their numbers and their toxicity symptoms increase. Their existence is being denied altoget her. Everyone knows the Union Carbide gas leak killed more than 15,000 people. Almost nobody has heard that the killing never stopped. That is why the woman is marching.

AS YOU READ this, 50 padyatris between the ages of 11 and 82 will be entering New Delhi. For a month, they have been hitting the highway at 5 am, marching until the sun burns the neck like a rash, breaking for a nap, then marching again until Delhi is 25 km nearer. They've been sleeping in school houses, wedding halls, open fields. Most are in ill-health from exposure

to toxic gas or water: what keeps them going is sweet tea in the morning, painkillers at night and a fierce desire to hold their Prime Minister to account. This is not the first time they have made the padyatra: it is a Bhopal survivors' tradition. In 2006, a group marched to Delhi and presented their demands to Manmohan Singh.

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In essence, the demands were: provide support to the survivors. Clean up the toxic waste at the plant. Give water to the communities whose water it has poisoned. Take legal action against Dow Chemicals, which bought over Union Carbide in 2001. They say the Prime Minister nodded as they read out the first three, and when they reached the fourth, he placed his hands over his ears. He would not endorse any bans or any arrangements for the special prosecution of Dow. Many of the padyatris from 2006 are marching again this year, to remind him of those promises.

There has been a little progress on the first three demands – not much, but enough to put the survivors' movement on its strongest footing in years. But as it turned out, that fourth demand is a wedge under the door. Ever since 2001, Dow Chemicals has maintained that while it acquired Carbide's assets, it did not inherit its liabilities. The survivors are det ermined to see Dow held to account. The Cen tre is determined to see it let off. For two years, the tangled question of Dow's liability has ensnarled progress on every other front.

NATHIBAI, HER HUSBAND and their three-yearold son Sonu left their village in 1990 and moved to AtalAyub Nagar. This mohalla presses up against the wall of a dilapidated factory, and terrible stories about what had happened there were repeated to Nathibai often. Many of her neighbours were gas peedith – survivors of that night – their lives were pitiful, wasted waiting in lines at the hospitals. The factory still looked desolate, perhaps haunted, but the compound was full of ponds and birdsong.

IT WAS two years before Sonu began having problems. He never learnt to talk, and although he continued to grow, he became uncontrolled and erratic. His mind was regressing; he droo led and was incontinent. Today he is 21, but mentally still an

infant. Nathibai is around 50, but looks two decades older. She can never leave Sonu alone. Sometimes he becomes violent, striking and scratching her. Doctors never explained what was wrong. Something was poisoning the community.

Children who had been healthy for years developed neurological conditions, even regressed into mental disability. Newborns had low birthweight, grew too slowly, suffered from cerebral palsy and deformities. Healthy children began to behave in frighteningly abnormal ways, with disorders like Pica: compulsively eating mud, faeces, bone, even glass. People who had never been near the gas found their families beginning to sicken, and sometimes die. In two wards - 18 communities- there was a slow escalation of the rate of anaemia, skin disease and cancer. Girls in their late teens had not started menstruating and women in their mid-thirties had stopped. Entire communities sagged under fatigue, nausea and bodily pain. 'Now people here just stay ill constantly,' Nathibai says, 'There is no respite.'

WILDFLOWERS GROW INSIDE the Union Carbide compound; palash trees are in full bloom and look like dynamite suspended mid-explosion. Cowherds graze cattle on the thick brush until guards come by and threaten them. The rust monsters tower above this pastoral scene, skeletal arrangements of girders, inscrutable valves, disembowelled regulators and long, long intestines of rusted piping. Nostrilsingeing chemicals cling to the machinery, especially the huge, corroded storage vats in the processing plant. In the summer, says the guard, the wind blows a stinging scent through their quarters. They develop headaches, and become dizzy on their rounds. He knows the word – dichlorobenzene – even though he was never warned about toxicity when first posted here. He hustles us on, 'It is not good to stay here long.' An hour wandering through the buildings leaves you swooning like a seven-year-old smoking a cigarette.

THREE YEARS ago, all the visible toxic material scattered around the premises was gathered together in one vast warehouse. The guard teases we won't find what we're looking for – it's all been locked up. But he leads us to the building and to a peep-hole in the wall. Hidden under tarpaulin sheets, sackfuls of chemicals are heaped like haystacks, one heap after another, as far as the eye can see in the dim interior light. In any case, the guard is wrong. There is a barren field in the north-east corner, from where you can

throw a stone in three directions and hit someone's jhuggi. This is where, in the mid-90s, Carbide made a landfill for the industrial residue excavated from their solar evaporation ponds. It was buried and soil was bulldozed on top.

Today a depression has formed in the earth, where toxic tar is creeping back to the surface. It looks gratifyingly evil, like a small prehistoric tar pit, reliquified and shimmering in the March sun. It is not shallow – place a large rock in the puddle and it is slowly swallowed, until the tar closes over it like a mouth. How is it possible that Ground Zero of the worst industrial disaster in history was left so vividly and potently contaminated?

After 1984, the Carbide management had only one thing on its mind: to get out of India before its liability was fully calculated. This required them, on the one hand, to restrict proof of the extent of damage and, on the other, to unload assets as fast as possible. They did both ruthlessly. For example, Carbide refused to disclose proprietary research that would help doctors understand the physiological effects of gas exposure and treat victims. It disrupted independent research on drugs like sodium thiosulphate, which would have helped detoxify victims but would also have proved that the gas entered the bloodstream and caused multiple-organ damage.

The Indian Council of Medical Research began a study on the impact of the gas on the next generation – this was mysteriously cancelled when results began to point to extreme damage. Satinath Sarangi, 54, is one of the principal leaders of the Bhopal survivors' movement. He abandoned a doctorate in metallurgy at Benares Hindu University to arrive in Bhopal the day after the gas leak. He co-founded the clinic that ran the improvised sodium thiosulphate trials - until it was raided by the police and every single datasheet confiscated. Today, by compulsion, he is a self-trained physician, lawyer and detective.

'Carbide had the best emergency response you could imagine for bringing down the appearance of damage,' Sarangi says. 'It was like there was a Department of Dirty Deeds dedicated to this, a system in readiness – and it involved scientists and researchers, which makes it seem even more evil.' Sarangi can spend hours listing the ways the company co-opted the government to suppress evidence of damage. 'First it happened with the gas deaths, then with the gas injuries, now with the contamination.' Carbide was

relieved of all civil liabilities after paying a \$470 million settlement – leaving each bereaved family with Rs 63,000, and each injured person with Rs 25,000. Warren Anderson, Carbide's CEO, could not be extradited, so their criminal liabilities were immaterial.

WHAT THAT left was the actual factory site. A month after the gas leak, the gates were padlocked, the factory abandoned in suspended animation. The dial for tank E-610, which had released the lethal methyl isocyanate (MIC), stayed stuck on Overload. All the chemical ingredients of Sevin, the pesticide end-product, stayed exactly where they had been that night — in warehouses full of iron drums and sacks, inside the pipes and the tanks of the actual plant. Residual waste sat in solar evaporation ponds. For a decade, only time touched the factory: the sacks ruptured and the pipes corroded, loosing the chemicals onto the ground.

Pesticide is a form of poison, so it should come as no surprisethatits ingredients, likeMIC, were highly toxic: mercury, dichlorobenzene, hexachlorocyclohexanes, lead. On nights of heavy rain, the factory became a toxic marsh. The land had been given to Carbide on lease by the state government; in order to relinquish it, Carbide needed the Madhya Pradesh Pollution Control Board (MPPCB) to certify the land was not contaminated. In 1989, and then again in 1994, the National Environmental Engineering Research Institute (NEERI) of Nagpur was asked to measure soil and water contamination.

Carbide had been privately testing their own samples, and found high levels of naphthol and Sevin. But NEERI's reports summarily acquitted Carbide. It said the soil in the area was clayey and impermeable, and would keep contaminants from reaching the groundwater table for at least 23 years. It declared that 'the water meets the drinking water quality criteria.' This was such cavalier logic that even Carbide's consultant, Arthur D. Little (ADL), found it insupportable. In a private response to NEERI, they urged: 'The sentence 'The groundwater appears to be suitable for drinking purposes' is too strong,' and, 'The conclusions regarding travel time to the water may significantly underestimate the potential for contamination... clay is only present to a depth of 6.1 meters... The worst case scenario travel time would be 2 years.' But NEERI's final report included none of ADL's revisions.

The MPPCB, a body so corrupt it was fired en masse three years later and its chairman arrested, looked at the flimsy report and discharged Carbide's lease: the land became the problem of the Madhya Pradesh government. Since then, the NEERI report has been the touchstone for both Carbide and government officials. Both use it as proof that there is no groundwater contamination, or if there is, it is not on account of the factory waste. They steadfastly ignored the multiple studies that found contamination present and growing – that was to be expected from pesky activist groups like the Boston-based Citizens' Environmental Laboratory and Greenpeace. In 2002, the Delhi based Srishti environmental research group found heavy metals, the pesticide HCH-BHC and volatile organic compounds (such as dichlorobenzene) in samples of soil, groundwater, vegetables and breast milk collected in the areas. But the NEERI report overrode all contrary indications. The issue of cleaning up was mothballed. The official response became: of course, people in these areas are sick. The poor always are.

THERE WAS little urgency for the first 20 years about planning the 'site remediation'. According to Digvijay Singh, the CM of Madhya Pradesh from 1993 to 2003, the main issue during that span was funding. 'There were very few experts, and the foreign firms we contacted wanted to charge 30 million dollars.' Singh also believes that the contamination issue 'is being played up by activist groups for publicity and funds.' Scepticism persists among the state officers whose support matters most.

Ajay Vishnoi, the BJP Minister of Gas Tragedy Relief and Rehabilitation, denies the contamination firmly. 'A total survey has just been conducted, but it has not been announced yet. What has been reported to us is that there is no contamination of the groundwater in any of the tubewells in those areas,' he said, adding, 'beyond tolerable limits.' Arif Aqeel, the former Minister of Gas Tragedy Relief, has an even slicker response to claims of water contamination. 'While I was the Minister, the locals were complaining. They asked me to come drink the water myself,' he says, chuckling, 'I asked, this water is bad? And I drank two glasses right in front of the entire media, in front of the public. If there had been something wrong with it, I'd also have had the problem – but nothing happened at all.' Sarangi was there to watch Ageel drink the water. He swears in all seriousness that the Gas Minister excused himself straight away, went around back and vomited it.

OUT OF THE factory gates, and a few minutes later we are in Atal Ayub Nagar, across the wall from the tar pit. It is one of 18 communities ranged around the factory's northern perimeter, collectively home to 25,000 people. Ninety percent of residents, including Nathibai's family, draw water from its wells. It tasted like phenyl was mixed into it, and often it had an oily sheen. 'But what other water was there?' Nathibai explains, 'Eventually we stopped tasting it.'

It is eerie to be a visitor in a community of illness. The adults suffer diseases that are mostly internal and invisible. Some, from foot to knee and hand to elbow, have skin that burns and is cracked so deep it bleeds. But the horror is what has happened to the young: every alley has households with children with developmental problems – like five-year-old Amit, who cannot walk or talk and whose parents are still praying; older ones, like 32-year-old Munni Bai, who was a normal teenager before 'her mind was lost.' She can no longer feed herself.

ONLY IN the last few years have state officials been compelled to acknowledge that this is happening. At first, all that happened was that workers came through, painted the hand-pumps red, painted – 'Paani peene yogya nahi hai' – and left. In 2004, the recalcitrant MPPCB admitted it had found pesticide in water-samples from around the plant. IIT Kanpur found high concentrations of endosulphan in the breast milk of mothers. The same year, acting on a contamination report from its monitoring committee, the Supreme Court directed the state government to provide clean drinking water to the contaminated areas.

Fourteen crores were allocated to pipe water in from the Kolar reservoir; in none of these areas has that arrived, but some are serviced by tankers or water piped from the Rasla Kheri bypass. The day we visited Annu Nagar, the Rasla Kheri water was cloudy pink. Where the tankers go, each family receives less than four litres per day. On days when the pipes are empty or the tankers missing, residents return to their handpumps, and mothers urge their children not to drink. As we crossed from Atal Ayub Nagar to Annu Nagar, we passed a child pissing on the railway track, his urine almost orange.

EARLIER THIS YEAR, VS Sampath, Secretary, Department of Chemicals & Petrochemicals as well as Chair of the Central Task Force on Bhopal, addressed a CII conference. In his speech, he said that

India needs to attract Rs 80,000 crore of investment in the petrochemical sector. Sampath refused to be interviewed for this story. But one could guess that he does not consider this a good time to antagonise the world's second-largest chemical manufacturer. On the contrary, the government has been most patient with Dow's errors. For example, last year Dow disclosed that its Indian subsidiary, DE-Nocil, had slipped more than Rs 80 lakh under the table to Indian officials to get approval for three pesticide products — including one called Dursban. Local people were charged with bribery and criminal conspiracy, but no action was ever taken to revoke the product approval.

Dursban was banned in the United States in 2000, after it was found that exposure to it caused headaches, vomiting, and diarrhoea, and risked permanent neurological damage to children. It is still manufactured and sold here. Dow has already begun investing in major new projects, including an R&D facility in Shinde-Vasuli in Maharashtra, where it is already embroiled in controversy. Civil society groups claim it concealed information about 20 hazardous chemicals it would manufacture at the plant. Last month, the residents of Shinde-Vasuli dug up their own roads to keep out Dow's construction teams

IT WAS A SMALL, upstart motion that finally gave the issue of site remediation a shot in the arm. In 2004, a PIL filed in the Jabalpur High Court requested that the Court direct the government to get on with the clean-up. The Court's proactive instructions in this case had two effects: they threw a new momentum behind the survivors' efforts to haul Dow back into the picture. They also revealed the Central government's determination to keep Dow out of it. Among the Court's first actions, it directed the formation of a Central government Task Force to implement the clean-up. To advise it, the Court constituted a Technical Sub-Committee, which included the eminent biologist PM Bhargava.

When the Sub-Committee drew up a list of recommendations, the topmost was that Dow be made responsible for taking the surface waste and contaminated soil out of country for disposal; and that it should pay for the long-term decontamination of the water, which might take upto 20 years. This was endorsed unanimously. 'My strong view is that there is simply no alternative to Dow doing this,' Bhargava says. 'No one in this country has

the expertise to evaluate the waste, and we have no capacity to incinerate waste of this kind and quantity. Besides, the principle is simple – the polluter pays.'

Mysteriously, when the minutes of the meeting were presented to the Task Force, the suggestion involving Dow had fallen from first to last in the order. The Task Force ignored it, preferring instead a proposal to incinerate some of the waste at an industrial incinerator in Ankleshwar, Gujarat, and to bury the remainder in a sealed tank in Pitampur, MP. Preparations for this went ahead full-steam until the end of last year, when the Gujarat Pollution Control Board took stock of its facility and suddenly refused to participate. 'It's very clear that the government isn't interested in Dow's responsibility,' Bhargava says, 'but the incineration in Gujarat could have been another disaster.'

The Gujarat PCB's rejection has not yet sunk in – in Bhopal and in Delhi, officers insist the plan is moving ahead. There has been no talk of an alternative. The Jabalpur High Court put in motion another chain of events, which again revealed that on questions of Dow's liability, the government had its hands over its ears. This time its soft spot for Dow was not just the Central Insecticides Board or the Task Force on Bhopal. It was the most powerful men on the Union Cabinet. When Alok Pratap's PIL was registered, Dow found, to their horror, that they had been named as one of the respondents. This was the first time since their acquisition of Union Carbide that Dow had been impleaded in a case relating to Bhopal.

To represent them, they secured the services of Abhishek Manu Singhvi, the Congress Party spokesperson. The High Court was restless to see action on the clean-up front – but who was going to pay? To general surprise, in an application in May 2005, the Union Ministry of Chemicals and Fertilisers (MoCF) coolly suggested that Dow pay the government an advance amount of Rs 100 crore. Work could then begin. They could pay the difference afterwards.

THIS WAS exactly the kind of payment against which, for years, Dow had barricaded itself with deadly seriousness. "'We all ask the same question: 'Why isn't this site cleaned up?' "says Dow's spokesperson Scot Wheeler. 'As owners of the site, it is the government of Madhya Pradesh that has the ability and, more importantly, the authority to clean up the site.' Ever since it bought out Carbide, Dow

has emphasised that it never owned or operated the Bhopal plant. 'Union Carbide Corporation had stopped doing business in India long before Dow acquired UCC's shares in 2001,' says Wheeler. 'UCC remains a separate company, which manages its own liabilities.'

In the United States, however, barely a year after completing the acquisition, Dow settled an asbestos-related lawsuit that had been filed against Union Carbide in Texas. The MoCF proposition was a nightmare sprung to life – not because Dow, which made Rs 11,600 crore in profits last year, was daunted by a pay-out of Rs 100 crore, but because of the precedent such a payment would set. What might litigants expect them to pay for once their gates of liability were cracked open? For further clean-up costs, if the Rs 100 crore were to fall short?

Last year Yashveer Singh, the officer incharge of the MoCF Bhopal wing, guessed that final costs might reach Rs 500 crore. What if Dow were asked to pay compensation and medical expenses for the victims of the groundwater contamination? Where might it end? It was time for lateral thinking. The MoCF was dragging Dow into the harsh light of liability because it needed the money. If the money could somehow be arranged, the MoCF would relent and Dow would be back in the clear. Dow made its move around the time of the high-powered US-India CEO Forum in New York, in October 2006. The Forum, a bilateral government initiative to encourage trade and investment, is co-chaired by Ratan Tata, the benevolent giant of Indian business. Dow CEO Andrew Liveris was a member as well.

On July 9, months before the Forum began, Tata wrote to Finance Minister P. Chidambaram and Planning Commission Deputy Chairman Montek Singh Ahluwalia, about resolving the 'legacy issues' of Bhopal. In his letter to the FM, he made a striking offer: 'We should be concerned about the lack of action on remediation of the old Union Carbide disaster site... I believe that responsible corporates in the private sector and in the public sector might be willing to contribute to this initiative in the national interest and Tatas would be willing to spearhead and contribute to such an exercise.'

At the Forum, Dow held a meeting to discuss its liability problem. Afterwards, Ratan Tata resumed the correspondence. In another letter from him to MS Ahluwalia, copied to the PMO: 'It is critical for

[Dow] to have the MoCF withdraw their application for a financial deposit by Dow against the remediation cost, as that application implies that the GoI views Dow as liable in the Bhopal Gas Disaster case... My offer for the Tatas to lead and find funding... still stands. Perhaps it could break the deadlock?'

The Cabinet leapt at Tata's overture. Chidambaram gave his support. So did Cabinet Secretary BK Chaturvedi. MS Ahluwalia said: 'The Chairman of Dow indicated that they would be willing to contribute to such an effort voluntarily, but not under the cloud of legal liability.' Minister of Commerce & Industry Kamal Nath came right out with it: 'While I would not like to comment on whether Dow has a legal responsibility or not, as it is for the courts to decide, with a view to sending an appropriate signal to Dow Chemicals, which is exploring investing substantially in India, and to the American business community, I would urge that a group... look at this matter in a holistic manner.' The idea quickly fizzled out after the press and activist groups caught wind of it.

By January 2007, the Tatas were playing defence. They released a statement regretting the 'considerable misalignment and misunderstanding' of Tata's offer, which was 'no different from any public-spirited initiative to clean a polluted river or a site damaged by some abnormal phenomenon.' The Tatas' reputation for philanthropy did not incline the survivors to believe in Ratan Tata's public spiritedness. In their eyes, Tata's corporate responsibility only arrived in time to relieve Dow's corporate liability. A clearer picture never emerged about what motivated Ratan Tata to offer his shareholders' money to clean up the Carbide site - and to enable Dow to contribute voluntarily to a cost it might have to pay involuntarily if the court finds it liable. But it was made quite clear that key Cabinet Ministers are ready to work to keep Dow out of trouble in the 'holistic' interest, even to the extent of helping it evade judicial process.

If a national economy could accept a bribe, this is what it would look like. Then again, would it be so terrible if somebody else cleaned up the plant? At this point, many officials say, the survivors are their own worst enemies. Their desire to see Dow's atonement is limiting the scope for quicker alternative solutions. Ratan Tata's consortium might have begun the clean up already. Arif Aqeel has ideas about why the survivors pursue Dow, even though it prolongs their poisoning. 'What I'm saying is clean it up! Let Dow do it, let the Indian government do it, let a foreign country come and do it,' he says. 'But once the chemicals are gone, certain leaders will be

unemployed, they won't have anything to do without their zindabad-murdabad.' The government wrings its hands and says the same – why are they making this so difficult?

The answer to that depends on another question: who are these people? Two views contend. Either they are the typical poor: exploited and misled, as always, but this time by activist leaders who are careerists or ideologues. Or, they are people in whom tragedy and poverty, and also education and leadership, have realised a potential for participatory citizenship. Survivors talk about 'moral responsibility' less often than the media makes it seem. More often, they talk about deterrence – making sure Bhopal never happens again.

Their insistence on Dow's liability is not vindictive; it is to ensure that their own personal justice becomes a precedent for wider justice. Jabbar Khan, who is marching with his daughters, says: 'If Dow is let off now, it will go somewhere else in the country and Bhopal will be repeated. We don't just want to be paid off. We want justice to be done. Even if we have to wait another 20 years.' Many of the survivors, whether or not they articulate it this way, are insisting on corporate and industrial liability.

That is why they have allied with other groups – mercury survivors from Cuddalore, Endosulphan survivors from Kasargode – people even more obscure and powerless than them. Some of the marchers – like 82-year-old Shantha Bai, who marches with her sari hitched up above her sneakers, and with a pace so fierce they call her the Bhopal Express – may not survive to see vindication even if it comes. Their fight stopped being about personal recompense a long time ago. To a great extent it is about the lives of their children, and their children's children. There is also a whole country to be saved from contaminated lives.

As you read this, the padyatris will have entered Delhi, carrying 20 questions to put to their Prime Minister. They can anticipate what his answers will be. Reaching Delhi may not mean the end of their road. But neither will it mean the end of their tether. If your swollen knees have carried you 800 kilometres, they will not fail you when it is time to stand your ground.

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'I said, Mr Prime Minister, 25 years after the Bhopal disaster, the toxic effluents are still there'

The same day he visited the Bhopal survivors' protest at Jantar Mantar, Dominique Lapierre received the Padma Bhushan from the President. The co-author of *Five Past Midnight in Bhopal*, with Javier Moro, Lapierre is a notable philanthropist, directing half of his royalties to charities in India. He is also the author of two other books about India — *Freedom at Midnight*, with Larry Collins, a bestselling history of the independence movement, and *City of Joy*, a novel about life in a Calcutta slum. He spoke to **RAGHU KARNAD** in New Delhi

Some excerpts...

Congratulations on your award.

It is very important for me, because it gives me official recognition for all the work I've done writing about the history of India, popularising this history around the world, and also for 27 years of humanitarian action. We have been instrumental in curing 4 millionTB patients, 10,000 leper children, we've set four hospital boats on the Ganges Delta. So this is an official recognition for all this special work. Up to now the Government of India hadn't paid much attention to our work... especially to what we have been doing in Bhopal.

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I also spoke to the Prime Minister. I admire the man. I said, Mr Prime Minister, I admire you, but I had one question — 25 years after the disaster in Bhopal, the toxic effluents are still there. I have myself drunk one glass from those tube wells — poisoned water — which instantly gave me a rash. We cannot let this continue. Please, see those people who are now in Delhi, and work with them. He said, yes, yes, I have already given instructions to do that. We shook hands for a long time. But I'm afraid he gets fifty similar requests a day.

What drew your attention to Bhopal in the first place?

I had been involved with these humanitarian actions in Bengal, and I suppose SathinathSarangi, one of the activist leaders, had heard of them. He said, could you come to Bhopal? I had never been in Bhopal, but when I went I thought it was beautiful, very cultured — I was really taken with the city. I called Javier (Moro), and I said, lets engage with this city and figure out why this tragedy happened here. Why would they plant this factory in the middle of this fantastic city? One of the most striking things about the book is that it explains how Union Carbide entered India with these grand hopes, this mission of emancipating people from hunger. Of course. Those North American engineers were not murderers. They loved India and they were

very proud to have produced a pesticide that would help farmers protect their crops. Everything was looking like a fairytale... until it became a nightmare. They began to lose money, and when you have a capitalistic logic, losing money is a sin. So you try to reduce costs and wait for a better time. And how do you reduce costs? By cutting down on security: instead of paying an engineer from America 10,000 dollars a month, you take a local engineer, who may not be as competent. Then came the sin of sins: they cut the cost of maintaining the refrigeration of those huge tanks containing methyl isocyanate. Javier and I tried to calculate how much of their electricity costs would have been reduced — it was something as stupid as \$100 a day.

In an interview, speaking about troubled fishing communities in the Sunderbans, you said "they do not exist." There are so many communities like that in this country. What is your understanding of Indian democracy, given that part of how it works is by keeping people non-existent?

Those people live on 54 islands, which you cannot find on the maps. Literally. But it is such a huge democracy. I was looking at Manmohan Singh last night, and I thought — my god, what a job he has. Running a place like India. I don't know whether I would say people are being kept invisible — but no one is devoting enough attention to them. And that is why we try to wake them up. You, the media, have a tremendous role to play. The fact that the Times of India, which is the biggest paper here, never said a word about the Bhopal survivors coming to Delhi... I find it more of a scandal than the Indian authorities who refused to receive them. I'm much angrier at them than at the politicians. It seems like nobody cares in India, but there are reasons. The government, they don't want for outside firms, who could come and invest billions here, to be fearful that if something goes wrong, they might go to jail. They don't want Warren Anderson brought over. If we brought Anderson to them on a plate, they would quickly dump it into the Yamuna.

Because it seemed like an ethical model for a writer?

No, because I met Mother Teresa in an alley of this slum, and I saw what she was doing, and I thought, if that old woman can do that, surely we can all do it. We went to Bhopal, we did our story, and afterward Sathinath said, can you help us with a clinic? So we devoted our money to building the Sambhavana gynaecological clinic, which is the only clinic that really attends to the needs of the totally destitute women there. We married our story, we married our book.

• • • •

From Tehelka Magazine, Vol 5, Issue 20, Dated May 24, 2008

Bhopal Gas Victims Used as Guinea Pigs

Following the 1984 Bhopal gas disaster that killed thousands and maimed over half a million, a government-funded Bhopal Memorial Hospital and Research Centre (BMHRC) was set up in the year 2000 with the avowed aim of "providing superspeciality care to the survivors of the tragedy." The hospital was also supposed to carry out "research on long term effects of methyl-iso-cyanate (MIC)" chemical that caused the holocaust. MIC-afflicted patients suffer from a variety of serious disorders involving respiratory, gastro-intestinal, ophthalmic, reproductive, nervous and immune systems. In other words they are seriously sick suffering from multiple disabilities.

Instead of concentrating on MIC-related issues, the Hospital became a hot spot for conducting clinical trials on untested drugs that were primarily designed to help pharma companies. Drugs in the trials included telavancin (patented by US company Theravance), tigecycline (Wyeth), prasugrel, fondaparinux (GlaxoSmithKline) and fixed-dose combination of cefoperazone with sulbactum (Magnex) sold by Pfizer in India.

Curiously cefoperazone is no longer marketed either in the United States or other advanced countries like Australia, United Kingdom, Ireland etc. Its fixed dose combination with sulbactum was never approved in the United States, the home base of Pfizer though it is sold in some developing countries like India (annual sales Rs. 70 crores), Chile, Colombia, Peru and Vietnam.

Except for fondaparinux, other agents tested in Bhopal were all new chemical entities (NCEs) or investigational new drugs not approved for human use anywhere. Consequently their side effects were not fully known when the trials started in Bhopal.

The morbidity and mortality caused by these NCEs on unfortunate, unsuspecting victims in the Bhopal trials is not known.

Despite repeated requests, the Hospital has failed to produce copies of prior approvals from the Drugs Controller General, India (DCGI) which are mandatory for all trials involving human beings and legally should be in public domain. The trials started in 2004 when phase III trials of new medicines discovered abroad were not allowed in the country unless the same were approved for sale in developed countries. Apparently the laws governing clinical trials were violated by

administering unapproved drugs.

Since testing new chemical compounds on humans always involves unpredictable risks, the Indian Council of Medical Research (ICMR), Council for International Organisations of Medical Sciences (CIOMS) and WHO have issued codes of conduct for drug trials. Guidelines require that:

- People with "reduced autonomy" should not be subjected to trials. Bhopal gas victims have zero autonomy since they are totally dependent on treatment provided by the BMHRC. Can a patient refuse to take a drug prescribed by the attending doctor at the only hospital in the country meant for gas victims?
- Trials are not normally mixed with medical care. If the investigator is serving both as a researcher and the patient's physician, this fact should be told to the subject. In such cases the informed consent should be sought by a third party (e. g. by a neutral, independent physician or in the presence of an NGO).
- In disaster areas, the research should be aimed at effectively dealing with similar events in future and not on non-specific drug trials.
- Ethical standards applied in a host country (such as India) should not be less stringent than they would be for the same trials conducted in the country of innovation (such as United States or Britain). Can any hospital in the West dare to conduct clinical trials on victims of disasters like the one in Bhopal?
- The source of funds for the trial must be disclosed to patients.
- Subjects should be reimbursed for lost earnings, travel costs and other related expenses while participating in trials.
- The results of the trial should be communicated to the participating subjects.

Many patients interviewed by NGOs and the media have categorically said that while being treated at the BMHRC they were never told that they were "voluntarily participating in any drug trial."

Source: MIMS, Editorial, July 2010. Reproduced with thanks.

Bhopal Misses Recompense Law¹

Wanted, a law to let in "ambulance chasers"

- Samanwaya Rautray

New Delhi, June 8, 2010:

The jet-set legal hawks, who represent victims of corporate wrong in America, might have made a difference had they been allowed to take up the cause of the Bhopal gas victims.

Under US tort laws, these lawyers can charge as much as 33 per cent of the total amount awarded under any court order or offered as a settlement to the victims as "contingency" fee, lawyers familiar with American law said.

It is because of these tort laws - which provide for substantial financial compensation - that Americans enjoy a greater degree of protection against industrial disasters.

But such award-linked fees are not permitted in India. Lawyers can only charge "professional" fees - not lucrative enough to chase ambulances and get victims to file suits seeking astronomical sums which they get to share.

Even 25 years after the gas tragedy, India does not have a formal law of torts which would allow victims of any industrial tragedy to move court for compensation.

High litigation costs and delays plaguing the Indian judicial system equally deter litigants from approaching courts for compensation in case of a civil wrong.

Even if a litigant were to incur substantial expenses and move court for monetary compensation, there's no certainty that he would win, lawyers said. Moreover, litigants would also open themselves up to costs slapped routinely by courts, British style, should they lose the case.

All this has meant that class action suits, in which a large number of people move court to seek compensation, have been a rare phenomenon in India, unlike as in the US, where such suits originated and thrive, riding on the back of the "ambulance chasers".

In Britain, too, there is no direct equivalent of the US class action suit. But there are various forms of collective action and other mechanisms to pursue "group complaints".

In India, unfortunately, though courts have over the years extended the scope of civil damages, there is still no structured law to deal with massscale tragedies such as Bhopal, lawyers said.

In this case, the central government hurriedly brought in a law - the Bhopal Gas Leak Disaster Act - which allowed the government to represent the interests of the victims. The idea was to stop the ambulance chasers who flew into India within hours of the tragedy.

But no attempt has since been made to put in place a law that would address such gross cases of corporate negligence - both in terms of compensation and the inescapable criminal consequences that must follow, lawyers said.

Not even, they said, when the debate peaked over a stalled nuclear liability bill that limits the responsibility of foreign firms in giving compensation to victims of nuclear disasters.

If another tragedy on the scale of the one in Bhopal were to hit Indians, victims would still have no legal recourse to compensation, activists have warned.

However, the history of the law of tort in India is old. The first tentative attempt to draw up a formal law of tort was first made in 1886 by Sir Frederick Pollock. The law, called the Indian Civil Wrongs Bill, was never passed.

Public interest petitions have helped pushed the cause of class action victims, especially in cases of custodial deaths and other instances of abuse of power by state authorities. The doors have also opened for class action suits in consumer cases.

A much-awaited companies' bill has a clause that would permit corporate class action suits. But for now everything still remains on paper, lawyers said.

¹Reproduced in public interest from The Telegraph, Calcutta, Wednesday, June 9, 2010

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