

## MY EXPERIENCE WITH FORENSIC TESTS

Many friends & well-wishers have suggested that I should write down some of my experiences of the forensic tests (Narco-analysis, lie-detector and Brain-mapping) conducted on me at the Mumbai and Bangalore Forensic Science Laboratories (FSL). Below is an attempt in that direction. I have heavily borrowed, especially the scientific aspects from a lecture given by Dr. Amar Jesani at the 22nd Dr. Ram-anathan Memorial meeting organised by PUDR (Delhi). Other information has been collated from press reports & interactions with other jail inmates on whom these tests were conducted; such as, the 7/11 Mumbai train serial blast accused and the Bilki's Banu case (Gujarat) accused. In this present discourse I have not gone into the legal, medical, ethical and scientific aspects about why such forensic tests should be discontinued, but have instead delved upon my own experiences and its similarities with those of others, ~~accused~~ at the Mumbai & Bangalore FSLs.

### ON THE QUESTION OF 'VOLUNTARILY CONSENT'

After being arrested by the Maharashtra police in Nagpur on May 8th, 2008, myself alongwith three other persons were charged with sections of the UNLAWFUL ACTIVITIES (PREVENTION) ACT, and were sent to police custody by the Magistrate for approximately eleven days. To justify our 'sedition' intentions the police concocted a story that our arrests were a preventive measure since "we intended to blow up the Ambedkar Memorial at Deekshabhoomi". During police custody my interrogators kept forcing me to sign a letter of consent for Narco-analysis to be conducted on me. Although I declined to sign such a letter, I was shocked that the prosecution produced this letter of consent with my forged signature in court. Both Ashok Reddy (my co-accused) and myself represented by our lawyers rejected such a letter as proof of our consent while in Police custody. But alas, the magistrate permitted such tests to be conducted on us even though we did not furnish our consent in court. Subsequently we were taken to the Mumbai FSL at Kalina where four forensic tests were conducted on us viz. Psychological Profiling, Narco-analysis, Brain-mapping and Lie-detector tests. With no satisfactory results and having failed in this exercise of manufacturing proof of our criminal intentions (if any), the Maharashtra police soon tried to get us undergo another test. This time, the Bangalore FSL was fixed as a venue since it had a reputation of 'success' in aiding the security agencies in their investigation. The requisite court permission was obtained from a lower court in Bhandara in a murder case. (The particularities of the murder case we are irrelevant since none of the questions asked during the three forensic tests dealt with the case details) This time neither ourselves nor our lawyers had any inclination that such an order was passed. The Magistrate even denied the existence of such an order to our legal counsels. This set of forensic tests were conducted on us in September 2007 by the

Asst. Director Dr. S. Malini, Bangalore FSL.

At both the laboratories we were instructed to sign a letter of consent before the commencement of these tests. Once again we declined. The Mumbai Laboratory authorities told us that such a rejection would constitute a rejection in the implementation of a court order. At Bangalore on the other hand, Dr. Malini threatened us that such a rejection would amount to the absurd logic that we were deceiving since we were therefore afraid of the truth being exposed. Ultimately, after much ruckus both of us signed the form with an additional note stating that we were not giving our consent but rather following the courts orders. Such a mandatory formal consent is empty in content with no real rights in actual practice. The Madras High Court in the case of Dinesh Dalmia (2006) aptly sums up this absurd dilemma — the person "may be taken to the laboratory for such tests against his will, but the revelation during the tests is voluntary".

### PYSCHOLOGICAL PROFILING

In Psychological profiling the FSL Psycho-analyst goes into the details of the life of the accused. His/Hers past history, family background, childhood problems, etc. are brought to fore through a friendly discussion. In this relaxed atmosphere the topic of the concerned crime is then brought before the accused, and the Psychoanalyst attempts to discover his/her's involvement in it. This test was conducted on us only at the Mumbai FSL. Obviously Bangalore's Dr. Malini believes that such psychological profiling<sup>tests</sup> are a waste of time. The Mumbai FSL Director Rukmini Krishnamurthy in Aug 2008 stated that in 97% of the cases of those who underwent Narco-analysis, the suspects revealed the same facts as revealed in psychological profiling. Many other Forensic experts also admit that the Psychological profiling was more accurate and preferable to narco-analysis.

### NARCO - ANALYSIS TEST

Before we were taken to the various FSLs a series of medical examinations were conducted on us to check our physical fitness and record our vital medical parameters. A list of the tests conducted are.— HB, TC, DC, ESR, Blood sugar, Fasting, Post Prandial, Random, Blood urea, Se, Creatinine, Urine complete analysis, BP, Chest, X-ray, ECG, Echo, TMP, HIV, HBS-Ag. We are then made to totally fast i.e denied food and water for twelve hours before SODIUM PENTOTHAL is administered. The reason behind this is to avoid nausea which is a side-effect due to the administering of the 'truth-serum'. The test is conducted in an Operation theatre of a local Government hospital having back-up facilities for surgery, etc i.e in the case of a medical emergency. During the test an anaesthetist, the interrogator or Forensic Psychologist, a physician and a person to video record the proceedings are the only people allowed to be present in the Laboratory. The police are denied entry.

At the Mumbai Narco-tests, the person operating the video camera was also writing down the discussion, verbatim. At Bangalore, Dr. Malini herself operated the video camera while asking questions; no one recorded in writing. At Both places there was no physician on standby in the Operation theatre while the test were conducted, this job was done by an unqualified laboratory hand. The Anaesthetist administered the drug intravenously diluted with Saline, while constantly monitoring the heartbeats and breathing patterns of the subject.

Before going further it is essential to understand the working of anaesthesia as quoted by Dr. Amar Jesani. "There are four different stages of anaesthesia. The first stage is called induction, which is when a person is actually given the anaesthetic substance, and its effects start. The second stage of anaesthesia is a phase of excitement and the beginning of the loss of consciousness, when the person is partly conscious or semi-conscious or is in a trance like state. As one continues to give anaesthesia, which is called the surgical plane, when a person loses sensation and is totally unconscious. This is called the surgical plane, because, in order to undertake surgery, the anaesthesia needs to be maintained at this stage by maintaining an appropriate level of concentration of the anaesthetic agent. The loss of consciousness in this stage is reversible. However if more anaesthetic substance is given than the dose required for achieving and maintaining the surgical plane, then it leads to coma. This fourth stage of anaesthesia is called coma or overdose, and is often irreversible. In the fourth stage, there is depression on the brain stem and medullary regions, and it can lead to death."

During both the Mumbai & Bangalore Narco-tests, the anaesthetist gradually regulated the concentration of Sodium Pentothal so that we would remain in the second stage of anaesthesia for a maximum period. This duration was the window wherein the forensic psychologist asked the questions. Initially the psychologist asks control questions i.e. those whose answers are indisputable. (Like, name, surname, place of birth and so on). Later on specific questions, linked to the crime are asked. At the Mumbai test, the psychologist ceased asking questions once we went into the state of unconsciousness. But at the Bangalore Narco-tests the forensic psychologist Dr. Malini continued asking questions, at times slapping and abusing the subject so that he/she may not slip into unconsciousness. Some accused of the Mumbai 7/11 serial train blast case even experienced their ears being squeezed by pliers and some were given electric shocks to keep them awake and thus extent the duration of questioning. This pain-inflicting methodology of Dr. Malini was also intended to subdue the subjects so that they may answer the questions obediently without resistance. Contrary to popular belief, it is possible to remember and recollect the treatment meted out and the questions asked although one is in a state of

rance. Somewhat like recollecting a dream after being woken up - one may not remember details with accuracy but one will definitely remember the highlights! The Bangalore forensic experts used the drug with 'police efficiency', i.e. with total disregard for medical ethics and the health of the accused. In other words the second stage of anaesthesia is 'forcefully' and artificially brought about even though the subject keeps slipping into the third stage. Similar to a wave form; where the crests of the wave represent the second stage and the troughs, the third stage. Dr. Malini regularly scolded, slapped and physically tortured the subject to jerk them out of these troughs. In Retrospect, one understands that the medical records of the subject also help the anaesthetist to use this threshold of semi-consciousness to the optimum. But eventually all this cannot continue endlessly. This exercise has to finally end due to the depletion of oxygen in the subject's body. The subject is then made to wear an oxygen mask and allowed to sleep. The subject recovers from deep sleep after about an hour and is gradually given water and a light snack to avoid vomiting. The grogginess continues for another 2-3 hours.

Dr. Malini even overcame this medical obstacle. At the Bangalore FSL, in many cases, a single subject was subjected to many narco-tests in a single day, although court permission was acquired for only one. A 7/11 Mumbai train blast accused Asif Khan Basher Khan was subjected to a total of 7 narco-tests at the Bangalore FSL. From my experience and those of other accused that I have managed to interact with in jail we can confidently conclude that the Narco-test only decreases an individual's ability to lie and is in no way a fool-proof method for uncovering the truth. The revelations supposedly made under the influence of the truth serum may contain fantasies like a person under the influence of alcohol.

Knowing this inherent flaw the government security agencies and Dr. Malini in particular have used Narco-analysis for other purposes. One wherein the video recording of the Narco analysis test is edited and manipulated so as to 'manufacture' desired results that the prosecution as desired by the prosecution. This 'fabricated' 'evidence' was deliberately leaked to the media in the case of the 7/11 train blast accused so as to generate public support for the police arrests. In the Sister Abhaya unnatural death case the CBI raised this aspect of illegal tampering of the Video CDs by the Bangalore forensic experts in the Kerala High Court (Sept. 2008). Secondly, assuming that the accused has no mental record of the questions asked and the answers given during the tests the police use this 'assumed hidden knowledge' in further interrogation sessions. They tell the accused that he/she has revealed the 'truth' during the Narco-test and should therefore 'confess' the crime since it would be pointless in putting up a resistance. In future to avoid such abuse of the subject's Human rights, the courts should make it mandatory for the concerned FSL to submit unedited copies of the Narco-VCD along with its written reports, to the accused!

## POLYGRAPH (LIE-DETECTOR) TESTS.

In the lie-detector (polygraph) tests we were made to sit and about 5-6 sensors were attached to various parts of our bodies. One at our finger tips, another at our arms to calibrate the blood pressure, another across the chest and across the head, one on our ear-lobe and sensory pads were kept below our feet and buttocks. These sensors monitored ~~the~~ our body's response to a series of questions (probes) which we were allowed to answer only in YES or NO. The underlying principle here, is that the deceiving person will show physiological signs of deception such as perspiration, an increase in heartbeat, change in breathing patterns and so on. Two types of probes are supposed to be asked, Control questions and specific questions. When the control questions are asked the sensors record the physiological response which ought to be at normal levels since one would not have lied while answering them. Such control questions should be mixed alongwith specific ones. A sufficient time gap should be maintained between the questions so as to normalise readings. If there is a noticeable physiological change in the answers given to the specific questions as compared to the control ones, the forensic expert then concludes that the subject has lied. In the Mumbai FSL, the forensic expert presented me and my co-accused about 16 questions each. About 8 were control ones. The questions were shown to us prior to the actual commencement of the tests. During the test the entire set of questions were asked; this time recording the readings of the sensors. This process was carried out thrice so as to average out any errors. At the Bangalore FSL this process was carried out in a totally unprofessional manner. Firstly the list of questions were huge, totalling about 60 questions. Secondly control questions were absent from the list. Thirdly, none of the questions were shown to us before the tests. This made it problematic to comprehend the question especially in the case of incorrect framing. For example Q. No. 22 was "Do you know Arunash and Taved?" - This question may have multiple answers and the subject will therefore require time to give an answer in YES or NO; thus effecting the readings. Fourthly, the entire list of questions was asked only once without much time intervals between the questions. But this erroneous methodology did not matter. Dr. Malini came to her pre-determined conclusion that we both "showed signs of deception .... indicating non-truthfulness in (our) statements given".

## BRAIN ELECTRICAL OSCILLATION SIGNATURE- BEOS. (BRAIN MAPPING TESTS)

scalp. These electrodes record the electrical activity of the brain when certain stimuli are presented before the subject. These recordings are fed into a computer which analyses the electrical oscillations by using Neuro Signature System (NSS). At the Mumbai FSL we were presented with audio stimuli while at the Bangalore FSL video slides on the computer screen were shown to us i.e. video stimuli. In BEOS, the underlying principle is that if one were part of a certain incident, event or crime in this case a video or audio stimulus (probe) regarding that particular event would bring about a response in one's experiential knowledge. If not the knowledge of that event could be called conceptual. Through the Electrical Oscillations fed into the computer, the analyst is supposed to conclude whether the accused is part of the incident or event in question. As previously mentioned, here too, two types of probes are presented - Control or Neutral probes & Specific probes. The probes are designed based on the information given by the Investigation Officer as well as the subjects. At the Mumbai FSL different sets of possible event scenarios containing about 10 to 20 probes (statements) and arranged in sequential manner order were read out to us. We were instructed to close our eyes and avoid movements. In the BEOS report from the Mumbai FSL each probe was mentioned, tabulated with a corresponding signature showing either 'Experiential knowledge' or 'Nil Experiential knowledge'. Hilarious as it may sound, the "married to my wife" probe showed 'Nil Experiential knowledge'! At the Bangalore FSL we were shown video slides on a computer screen; no auditory probes were presented. The probes did not contain any control ones. What is most unscientific at the Bangalore FSL was its final report of the BEOS test. It mentioned auditory stimuli being presented while in reality nothing such took place. Even the signatures of each video probe was not mentioned in its report. This deliberate doctoring of results by the Bangalore FSL reached heights of absurdity when we observed that both Ashok Reddy's (my co-accused) and my, BEOS reports were exactly similar - mere photocopies!

#### IN CONCLUSION

As easily noticeable this above discourse is insufficient and subjective. My experience is limited to just two Forensic Science Laboratories. There is a need for properly compiling more such experiences of subjects who have undergone these tests. I hope this endeavour will help motivate the scientific and medical community to build such a data base. It would serve as an important tool for the movement against Narco-analysis test as a form of TORTURE.

- Arun Ferreira

Central Jail, Nagpur.

December 2008.