



The gender composition in India has worsened over a period of time. Demographically the ratio has increased from 933 females per 1000 males to 940 from census of 2001 to 2011, however this ratio is alarmingly decreasing among children in the age group of 0-6. Indicating a continuing preference for boys in society, the child sex ratio in India has dropped to 914 females against 1,000 males, the lowest since Independence. If it continues, it's going to further deepen the gender imbalance in the society.

Sex determination of a foetus is possible only with the Sonography machine. Hence the focus is to have a monitoring solution for sonography centres performing pregnancy tests using sonography machines. As per The PCPNDT Act, it is mandatory for Sonography centers to keep the details of each and every sonography of pregnant women in prescribed formats such as form F etc. Underreporting or false reporting of the cases is one of the main threats of any PNDT ACT enforcement policy or methods. As per the act, the entire responsibility of filling, maintaining and submitting of F-form lies with the doctors, who themselves are under the scanner by the act. This is a paradoxical situation and is the root cause of malpractice observed by a few doctors. However the ACT further appoints appropriate authorities to observe the right practices but it has not been proven sufficient in the past due to the lack of information with these authorities. There exists a possibility where it is possible not to report a test in regular records which was extensively misused by the malpractionors.

Silent Observer™ (SIOB™) is an embedded device that is connected to a video port of a sonography machine, and comes handy to these authorities when it comes to the enforcement of the Act. SIOB complements the F-form in a videographic way and ensures deterrence among malpracticenors. . The data captured by SIOB™ can be anytime examined by a government appointed appropriate authorities or in the presence of an NGO representative as per the administrative guidelines to check if the center under examination was involved in any malpractice and therefore could be liable to a legal action as per the applicable government acts. On one hand, while it is of great use for authorities, it gives an added advantage to the doctors who might be alleged for performing such malpractices. Doctors can use the data to represent their cases. At the same time, the recorded sonographies can also be used for research without any further add on.