

Integration of Advanced e-FIR Lodging System with General Hospitals for Medical Report Generation

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Abstract- The advanced e-FIR lodging system will help in maintenance of law and order in a particular area by recording the actual crime rate. After getting the actual crime rate, appropriate steps can be taken to curb the activities of antisocial elements. Now, in order to achieve greater efficiency of the advanced e-FIR lodging system, there is a need to integrate its services with that of general hospitals to generate medical reports. Medical report is prime necessity in accidents, riots and wrangle cases. This research work proposes a model for the integration of technical field with that of medical field which helps in providing better services to the citizens.

I. INTRODUCTION

The civilized society from the time immemorial devised various methods of punishment to control and record the increasing crime rate and one among them is Criminal Justice System, which comprises of Police, prosecution, presiding officer and others. It is a matter of fact that whenever a crime is committed, the judicial process can't come into action unless someone reports the incident. It is true that police is the first agency in the Criminal Justice System and is expected to extend protection to every individual and take the cognizance of a crime, whenever committed in their jurisdiction. Moreover, police is not an angle to know about each and every incident which takes place in their jurisdiction. People have an onerous responsibility to report whenever any criminal act is committed in their area and the police is expected to swing into action without losing any time. It is a small percentage of the crimes committed which are actually reported to the police; most of the cases go un-noticed or are not reported at all [2].

Lodging First Information Report (FIR) is a citizen's fundamental right against any criminal offence. In fact, it is the first requirement of law to be completed for initiating criminal proceedings against any criminal offender. The police is duty bound to register the complaint of an aggrieved person. Even on the telephone an FIR can be

recorded. The accused as well as the informant are entitled to a copy of the FIR [5]. In many cases, we hear that police refuses to file a FIR unless pressurized by media or some social, official or political authority. The person is already suffering and on the other hand, police harasses him by not accepting the FIR. While not much may be done by the police even if the FIR is lodged, but its lodging becomes a must for a person in cases of theft, harassment and in case any other crime is committed against him. Not only police officials are reluctant to accept the FIR, they discourage the person/persons from lodging it [4]. But no departmental action is yet taken against the police officials who fail to perform their duty. The police officer is duty bound to lodge FIR in every cognizable case. If a police officer gets a complaint from an aggrieved person about the cognizable offense, he must lodge a FIR. When a police officer refuses to do so, one must approach the SP of the concerned area regarding it.

The recording officer and the complainant should know to the extent possible, the 11 Ws while recording/reporting the FIR [3].

1. W - What information has come to convey.
2. W - In what capacity.
3. W - Who committed crime?
4. W - Whom against crime committed.
5. W - When (Time)
6. W - Where (Place)
7. W - Why (Motive)
8. W - Which way (actual occurrence)
9. W - Witnesses.
10. W - What was taken away?
11. W - What traces were left by the accused?

For overcoming these difficulties, advanced e-FIR model is proposed. But now there is a need to integrate the services of e-FIR lodging system with that of general hospitals for medical report generation.

II. RELATED WORK

The FIR is a very important document as it sets the process of criminal justice in motion. It is only after the FIR is registered in the police station, the police start investigation of the case.

Ashok et. al. published a research paper [1] by proposing a model for e-FIR lodging system. This research paper propounds a system which is an easy and efficient way of lodging an FIR and can be placed at district or tehsil level. This will help in sustaining law and order in a particular area by recording the actual crime rate. With these records, suitable steps can be taken to put a check on antisocial elements. This research paper also discusses about the various components and services of the proposed system.

Dr. Mehraj Uddin published a report [6] on Filling of FIR: Its Efficacy and Importance which exhibit that crime is on increase throughout the globe and there is no scientific apparatus to record the actual number of the crimes committed, as most of the crimes are not reported at all and out of the crimes reported to the police only a small portion of the crimes get registered. An analysis of Crime in India 2006, the report compiled by National Crimes Record Bureau (NCRB) reveals that Delhi has the most murders, rapes, dowry deaths, kidnappings and molestation cases.

The national capital remains unsafe for women. The City recorded 31.2 percent of all the rape cases reported in major cities and had a high number of dowry deaths (120) and molestation cases (629). Among the States, Madhya Pradesh was recorded with the highest number (1,94,711) followed by Maharashtra (1,91,788), Andhra Pradesh (1,73,909), Tamil Nadu (1,48,927) and Rajasthan (1,41,992) during 2006. Madhya Pradesh earned the distinction of having the highest number of rapes 7.4 percent in 2002 to 8.2 percent during 2006. The report reveals a new trend as young people in the country are taking to crime. As many as 44.6 percent of all the criminals arrested in 2006 were between 18 to 30 years, a sharp rise from 2005, when the figure was 44.0 percent [1]. An international, independent non-profit organization, Commonwealth Human Rights Initiative (CHRI) [7] defines two types of offences:

- i. Cognizable Offence
- ii. Non-cognizable Offence

i. Cognizable Offence

A cognizable offence is one in which the police may arrest a person without warrant. They are authorized to start investigation into a cognizable case on their own and do not require any orders from the court to do so.

ii. Non-cognizable Offence

A non-cognizable offence is an offence in which a police officer has no authority to arrest without warrant. The police cannot investigate such an offence without the court's permission. The objectives of Commonwealth Human Rights Initiative (CHRI), an international,

independent non-profit organization, are to promote the practical realization of human rights in the commonwealth. CHRI educates on human rights issues and advocates for greater adherence to human rights standards. Presently it is working in the following areas:

- Police Reforms
- Prison Reforms
- Human Rights Commissions
- Right to Information
- Human Rights Advocacy
- Constitutionalism [1]

III. PROPOSED WORK

This research paper scrutinizes the integration of services of advanced e-FIR Lodging system with that of general hospitals. The basic block diagram is shown in Figure 1, which shows that if a medical report is needed, it is sent to the local general hospital for processing. The general hospital will prepare a medical report and send it to the local police station for final submission of FIR. Moreover, the process of lodging FIR will become clearer from a series of diagrams designed to show the working of advanced e-FIR lodging system with the medical report generation system.

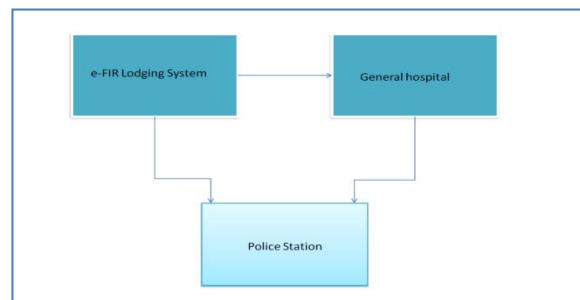


Figure 1. Basic Block Diagram showing Lodging Process

If the Lodger wants to attach the medical report with the e-FIR, then has to select the option “Yes” and the lodger has to provide following details as given in Figure 2. like number of persons, name, age and other basic details.

MODIFICATIONS IN e-FIR LODGING SYSTEM

Medical Report Required : Yes/No

If Yes Then Provide Following Details

Number of Persons Involved:- 01

Name of person: _____

Age: _____

Road Accidental/Other: _____

Accident/Incident Details _____

Address:- _____

Contact:- _____

Select the hospital to be submitted: LIST OF HOSPITALS WITH RESPECTIVE e-FIR MEDICAL REPORT GENERATION SYSTEM NUMBER.

SUBMIT

Figure 2. Modifications in e-FIR Lodging System

After the modifications, the database stored at local police station will contain FIR number, name, date of lodging, subject, medical report option, status of FIR, and an

acknowledgement button (used to send acknowledgement to the general hospital after receiving the medical report) as shown in Figure 3.

DATA BASE STORED AT LOCAL POLICE STATION							
S.No.	FIR No.	Name	D.O.Lodging	Subject/ Sub Class	Medical Report Yes/No	Status	Send Acknowledgement to General Hospital
1	12345	Ashok	30/06/2014	Information	Yes	Waiting	<input type="button" value="SEND"/>
2	12346	Harish	30/06/2014	Complaint/ Child Labor	No	Submitted	NA
3							

Figure 3. Database stored at Local Police Station

If the Lodger needs the medical report, then the request is processed to the general hospital having e-FIR medical report generation system shown in Figure 4. This system will have three cases i.e., incoming cases, processed cases and acknowledged cases.

details about the infected parts and highlighting the infected areas by drawing circle. The format for medical report is shown in Figure 6. Also, the report contains the photo and signature of the concerned medical officer which can be uploaded with the help of USB port/web cam provided with the e-FIR medical report generation system. Moreover, for authentication purpose, the concept of biometric can also be used. When the report is sent to local police station then a notification of final submission of FIR is sent to the lodger’s phone.

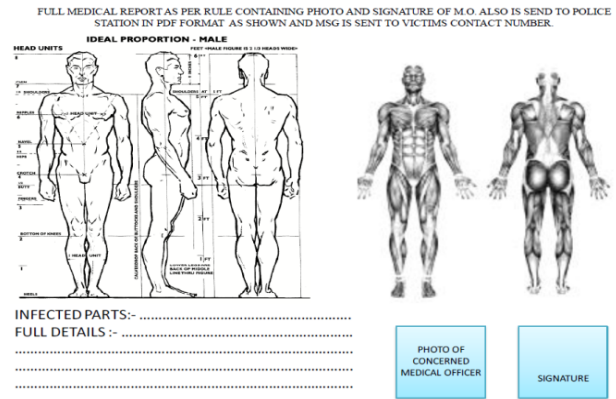
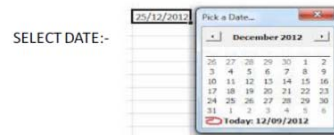


Figure 6. Format of Medical Report prepared by Concerned Medical Officer

Also, the e-FIR medical report generation system provides facility to view the processed cases date wise as shown in Figure 7.

PROCESSED CASES



S. No.	FIR No.	Number of person involved	Name of Person	D.O.B./Age	Road Accident /Other	Accident/Incident Details	Address	Contact
1	12345	01	Ashok	17/01/1991	Other	Attack from Unknown.	CDLU Sarsa	9466656661

Figure 7 Processed Cases which are sent to Local Police Station

INCOMING CASES

S. No.	FIR No.	Number of person involved	Name of Person	D.O.B./Age	Road Accident /Other	Accident/Incident Details	Address	Contact
1	12345	01	Ashok	17/01/1991	Other	Attack from Unknown.	CDLU Sarsa	9466656661

Figure 5. Incoming Cases from the e-FIR Lodging System

After clicking on the FIR number, the medical officer can prepare a medical report of the victim (client) by giving

IV. CONCLUSION

This research paper proposes a model for integration of e-FIR lodging system with the services provided by general hospitals. No doubt, this proposed integration will help the user or lodger, medical officers and policemen because the work can be completed easily, systematically and with in time. Also, transparency can also be achieved in work as the user is aware of the work done with the help of notification messages. Moreover, the medical officers can develop a better medical report (also a post mortem report in death cases). With this integration, the policemen can concentrate on sustaining law and order in spite of wasting their precious time by visiting general hospitals repeatedly.

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