INTRODUCING OF BARCODE TECHNOLOGY IN CREATING DRUG AWARENESS

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ABSTRACT

This study suggests and introduces a novel technology in medical informatics and medical data processing. The availability of timely information on side effects of drugs to consumers is considered to be very vital. However, due to various reasons dissemination of this information does not happen in an effective manner. This study aims to provide a solution to this problem by introducing a new bar code technique in the drugs packaging. Presently the bar code used contains product price details only. Through this paper the introduction of drug side effects details in the bar code along with pricing is suggested. This information can be transferred through medical store to the end user. The technology can be implemented and maintained through BCMA.Thus the BCMA creates drug awareness among patients and the bar code technology would impact the flow process as well as distribute the message of care for patients.

Keywords: *Big Data, Drug side effect, BCMA, Data matrix Barcode, Message send protocol HTTP.*

1. INTRODUCTION

The BCMA designed to prevent drug information and improve the quality of drug safety and awareness a bar code system is an N/W of H/W and S/W consisting primarily of mobile. Here we can use data matrix bar code. This can store 2000 ASCII characters .It can encode a lot of information in a small space and adjust to be square or rectangular. This bar code technology implemented in the electronic Drug Effect system (eDES) [10]. This eDES maintains the Drug details and updating the side effect of Drug. Fig .1 explain the niceties of processing evidence about BCMA deliberate [6] .first collect from various Drug side effect details and then take particular Drug for dispensation for new Barcode technique and each dispensation sustain everyday communication one to any more.

- Back pain drug side effect.
- Barcode technique (eDES).
- Scanning information.
- Big data maintain in server.

2. RELATED WORK

Before this research work many paper introduced only Drug information in Barcode technique [1] and about box, such as order number, items packed, quantity packed, destination, [5]. Now through this paper introduce new technique and Drug practice management software (DPMS) is used to manage the everyday activities in a drug billing information and instead of Drug side effect. This S/W used to maintain patient's bill records, patient's name, and age, about doctors, side effect of Drug and preparing how long days using this tablet and After collect details from patients after this S/W sending SMS to patients through Bar code technology and then server

maintain daily updating record about Drug and patients details [11].

HTML dynamic content is generated by a Web or application server using such Drug Awareness Website for this Project through Servlet, Java Server Pages, Personal Home Pages (PHP), Perl scripts, or Active Server Pages (ASP). This server-mail between Patients and Big Data Analysis [13]. Claim server's ability to generate the content of Patients details and Drug details. This is related to the general performance of side effect message send through SMS to Patients.
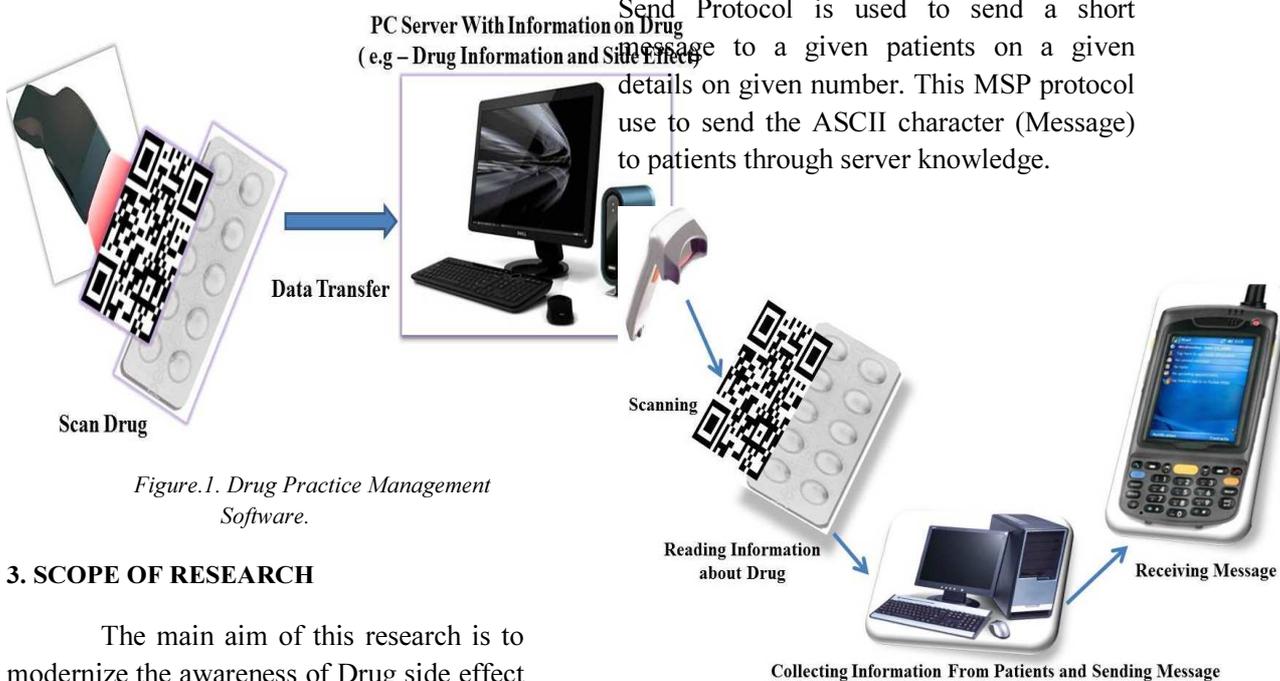

Figure.1. Drug Practice Management Software.

3. SCOPE OF RESEARCH

The main aim of this research is to modernize the awareness of Drug side effect and improve the patient's life time quality through new Barcode technology. To develop new and innovative technology for Drug side effect through new Barcode information system. This scope of research mainly use to safe patients life from Drug side effect and this research method easy to solve the patient's problem and Drug Side effect collecting from various Doctors and patient's .This research method introduce to all Drugs or fussy Drug based on ending consequence.
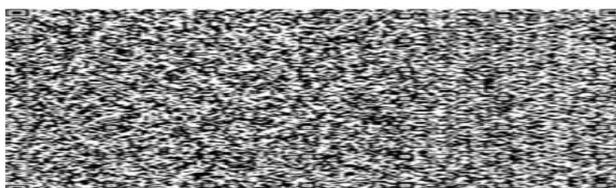
4. PROPOSED METHOD ARCHITECTURE

The message translation S/W is used to transfer the message and across multiple patients or location and it is used for mapping easy to search and loading available data and easy access the loading technique [9]. On one occasion scan the Drug the information will be fully read and equipped send the information about Drug details to system and after system collect information from patients and send message to patients for that here using Message Send Protocol MSP protocol. [9] The Message Send Protocol is used to send a short message to a given patients on a given details on given number. This MSP protocol use to send the ASCII character (Message) to patients through server knowledge.

Figure. 2. Design Process.

5. IMPLEMENTATION OF BAR-CODE TECHNOLOGY IN DRUG

A. Data Matrix:

Two Dimensional Barcode which can store 2000 ASC11 characters it can encode a lot of information in a small space. This bar code contains side effect of drugs [8]. After scanning the drug we can get the

information from the patient and we can send drug niceties to that patient through Bar code technology. This Barcode instead of Drug details and side effect. Once scan the Drug and then read all details form this Barcode [13]. After this technology convey the information to patients and server.

Figure. 3. Barcode Character.

B. Benefits of Data Matrix:

- Cost efficient.
- More accurate dispatch.
- Real time data collection.
- Storing large data's and information.

Drug Data's in Bar Code

Most common and mild side effects
- Headache
- Abdominal pain
- Diarrhea
- Constipation
- Flatulence
- Gas
- Nausea
- Vomiting
- Drowsiness

Drug Interactions
Don't take Pantocid with the following medicines without consulting your doctor
- Birth control pills
- Warfarin or other anticoagulant drugs
- Iron pills
- Antipyrine
- Naproxen
- Alcohol
- Losartan
- Paclitaxel

Figure.4. Barcode Information.

6. BAR CODE INFORMATION SYSTEM IN DRUG

The eDES introduce data matrix bar code technique. This bar code stores the drug information through eDES. Bar code may also play an expanded role in the trend towards having complete electronic drug side effects [6]. This bar code generates free text to Drug side effect along with drug details. Barcode originally were scanned by all shop keepers. Then scanner software became available in new technology. Barcode verifier should comply with the Back pain Drug. Then Barcode database link with new protocol (MSP) and new technology (eDSE) to relevant information send to patients [7].
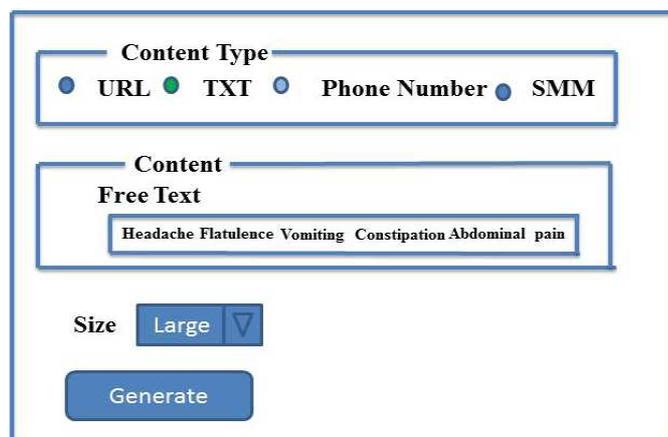

Figure. 5. Barcode Generations.

7. SELECTING BAR CODE PROCESSING

Selecting the right bar code is critical to the success of your bar code implementation plan, but here are some high level bar code technique and this bar code containing drug side effect information drug details and expiry dates.

A. Format the bar code technique:

Here we can use the GSI system because this system allows any large information and clearly sent through SMS to patients to the GSI system specify the log information in a single database. This data base transfer to many patients through this technology.

B. Build a Bar code Quality plan:

This Bar code quality improves the message transfer technique or drug awareness. It performs their known quality control (or) Bar code quality plan or more information contain N/W quality to this to build a Bar code and increase drug awareness also this Bar code quality plan.

8. METHODS

Here declared two methods for Barcode technology and implementing these two technologies for Drug side effect. The following two methods are include in electronic Drug side effect to improve and save the patient's life time from Drug side effect.

- Electronic drug record
- Action Methodology

A. Electronic drug records

The EDR electronic drug method collects various information about drug side effect from various Doctors and Patient's. Single method and delivery to various places and collect patient information from hospitals and send to electronic records. Users should be distinguished in further drug side effect records.

B. Action methodology

Some proposed method has reported sensation in bar code action disregard to patients using such action method eminence progress the results in more effective correctness. The following conscientious for battle Methodology. This methodology retains the fissure through salvage process method and getting information from one to one for daily updating for Drug Awareness.

- Bar code technology
- Pharmacy records maintainer
- Day-wise improvement result
- Message transfer technique
- System and N/W elevation performance

9. PROCESSING METHOD TO PATIENTS

Here this method can explained frame work for message transfer to patients [8]. Every shop keepers maintain one webpage through Big Data analysis storage through that getting all information from patients. The following details are collecting from patients, Doctors name, Hospital name, Patients and Drug details along with cell number. Then save all details and send message to Patients. To take more of this opportunity to be Big Data operator. In this process method will introduce new storage limits for network flow data or patients details in data base. In this webpage covered by HTTP protocol [13]. These include for all secure message transfer and maintain with Big Data analysis system [15]. The work as follows:

a. All types of information stored in backend data base.

b. The web site has a domain name it can be access by www.Drug Awareness register .com

c. This webpage processing through HTTP protocol.

d. Then the information will be share to world health Drug Awareness control.

e. Every shop keeper should maintain the patient's details and after send back to world health organization [14].

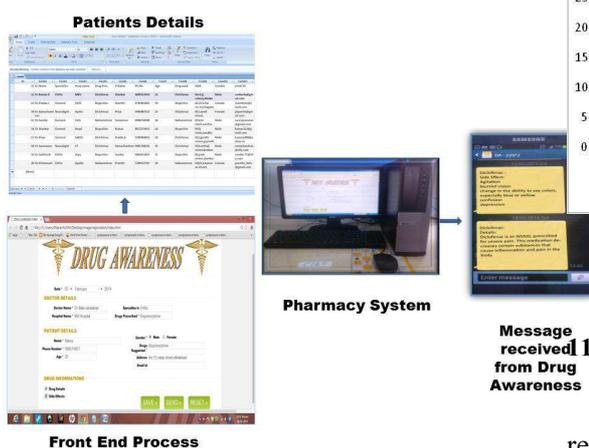f. All the confidential information should be stored at server side in encrypted form

Figure. 6. Processing Methods.

10. EXPERIMENTAL RESULT

Reports detailing the impact of the bar code technology on the drug awareness report. It can be activated through patient's details [12]. Drug details, message transfer details and improve the receiving acknowledge from patients and report increasing the drug awareness to patients and improve the weakness of previous works and develop the Barcode technology in back pain drug awareness and this research result produce positive result of this work for Drug awareness.
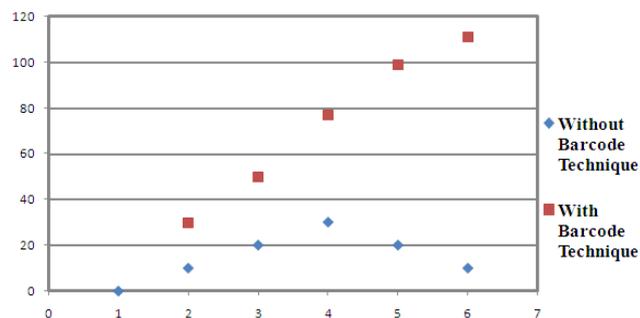

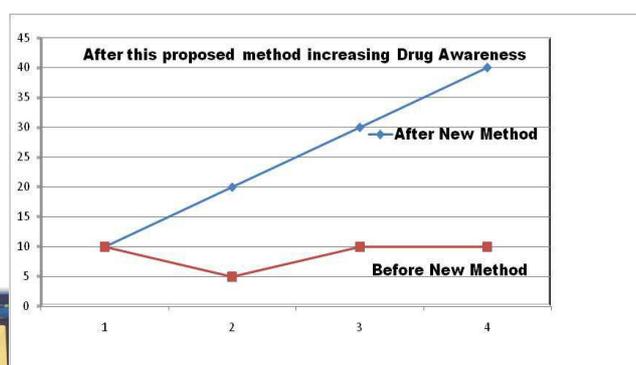*Figure.7. Stating Drug Effects With and Without Barcode.*

Figure. 8. Pointing Out the New Manner of Drug Awareness.

11. RATIO CHART

Based on the survey made in the recent year a ratio chart is fabricated. This chart clearly demonstrate of the side effects have major impact on the patient. The chart explores the degree of variance in side effects from the year 2000 to 2013[14]. In which during the period of seven years that is from 2000 to 2006 there is a gradual dwindle in the side effects faced, the drugs composition is based on the requirement since it does not concentrate on their profit. In the year 2007, there is impulsive fall in the side effect due to the scientific research augmentation and gradual drop off till the year 2009.

During the period 2009 to 2010 there is very high impulsive hike in the side effects

caused in mainly due to the rotation of expired date drugs which leads to many hindrance and this level is maintained till the precedent year [. The conducted study is very much useful in reducing the side effects caused by these drugs and to obtain a constant level of effects on the patients by providing precise information of the drugs to the patients.
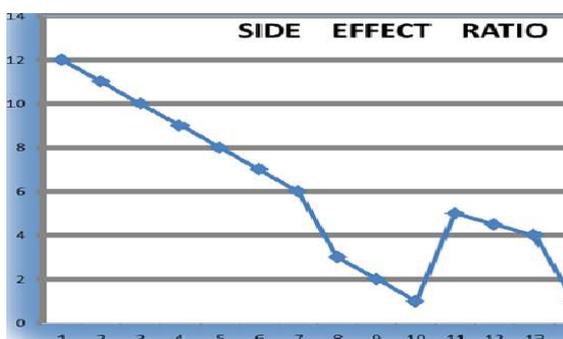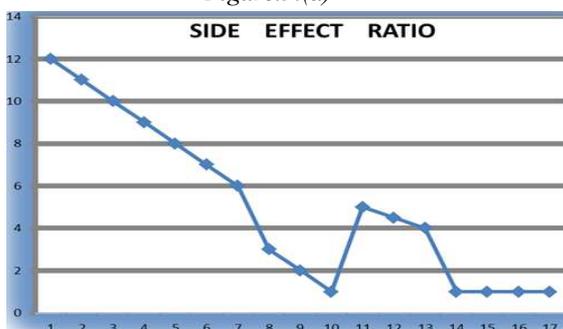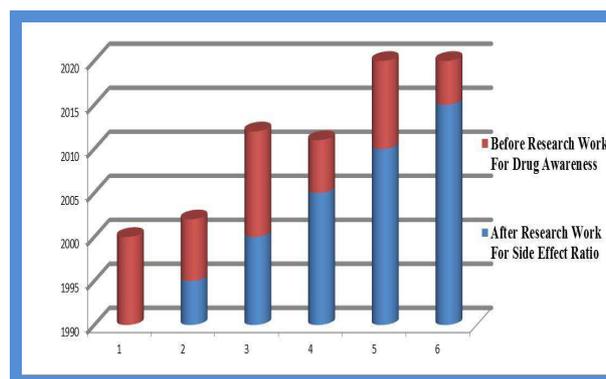

Figure.9.(a)

Figure.9.(b)

Figure – (9.a) Chart Explores the Degree of Variance in Side Effects from the Year 2000 to 2012 (1 To 13) Figure – (9.b) providing Precise Information of the Drugs to the Patients after this research work (13 To 17).

12. DRUG SIDE EFFECT RATIO ANALYSIS

The figure on unnecessary event represent through Drug Awareness. Each of this many people living Drug Side Effect. So here affirmed new technology in Drug package. Here produce two kind of chart through World Health organization for death ratio. These statistics represent a one year

time span and year wise ratio. Before this research work for Drug side effect to many people living with many Drug effect and increasing side effect death also after this research work to avoid Drug side effect and reduce death ratio. Everyone has to face this problem and Adverse Drug side effect reaction – 1.06 million 10 year death ratio. [8] So introduce this ratio work between before and after research work. It's very inconvenience between public health and world health origination [14]. Much medical science amasses tens of thousands of papers annually, but this paper representing for totally avoid Drug side effect to public in upcoming life.

This color indicates about Drug side effect and Death Ration (Last 6 Year (1 – 6)).

This color indicates reduced Drug side effect and Death Ration (Fig – 9.b).

Figure. 11. Analysis Report.

13. CONCLUSION

This paper gives information about Bar code technology for patient's drug and Awareness of Drug. The proposed method declared back pain drugs side effect reason and helps to avoid that reason to patient's aware proposed method more secure and easier method to access in drug and drug awareness. It can be easily designed and integrated with the various pharmacy

information system and this Big Data technology easy to transfer the message to patients and relevant N/W and this Big Data easy to transfer and access without any complexity and code error. Using this new technology pattern can be used one of the more drug side effects. This paper serves to describe first two years of hospitals Drug effect to improve the patient safety in drug awareness through Bar code technology and this proposed methods leadership role to improve the patient drug awareness safety in the back pain drug through (eDSE) and BCMA.

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