

Assessing the scope for setting up a drug information center in the district level hospital to improve the clinical outcomes for the patients.

DISSERTATION BY

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INTRODUCTION:

- DRUG INFORMATION CENTER IS TO PROVIDE AUTHENTIC INDIVIDUALIZED, ACCURATE, RELEVANT AND UNBIASED DRUG INFORMATION TO CONSUMERS AND HEALTHCARE PROFESSIONALS REGARDING MEDICATION RELATED INQUIRIES TO NATION FOR HEALTHCARE.
- SPECTER HAUNTING TODAY'S WORLD WITH OVERLOAD INFORMATION AND MEDICAL FIELD IS NOT SPARED. ON AN AVERAGE 7000 RESEARCH ARTICLES ARE BEING PUBLISHED, IT MEANS NEARLY 17H/DAY ARE REQUIRED FOR READING THESE ARTICLES AND IT IS NOT HUMANLY POSSIBLE FOR CLINICIAN WHO SPENDS 6-8H/DAY.
- W.H.O STATES "DIC IS A CORE COMPETENT OF NATIONAL PROGRAMS TO PROMOTE THE RATIONAL USE OF DRUGS"
- A TOTAL OF 15 DRUG INFORMATION CENTER IN INDIA WHICH ARE KNOWN TO BE INDEPENDENT ARE PROVIDING CLINICAL PHARMACY SERVICES



DRUG INFORMATION CENTER

OBJECTIVES

- Provide unbiased information to those working in hospital and community field.
- Provide organized database of specialized information on medicines and therapeutic information.
- Promote patient care through rational use of medicines.
- To improve quality of patient care.

FUNCTIONS

- ✓ Drug evaluation
- ✓ Therapeutic advice(Efficacy, Optimum therapy, Therapeutic advice, Drug interactions, ADR reporting)
- ✓ Pharmaceutical advice
- ✓ Education and training
- ✓ Dissemination of information
- ✓ Research
- ✓ Ancillary activities (Pharmacovigilance, toxicology)

BENEFITS

- Promotes safe and effective usage of medicines by identifying DRP in prescription.
- Minimizes misuse of drugs
- Reduces time consumption to healthcare practitioners in reviewing drug information by increasing pharmacy productivity
- Reduces self medication and improves drug cost management by decreasing drug abuse
 - Increases patient satisfaction

References

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AIM: TO ASSESS THE SCOPE FOR SETTING UP A DIC AT DISTRICT LEVEL HOSPITAL TO IMPROVE THE CLINICAL OUTCOMES FOR PATIENTS.

PROBLEM STATEMENT:

- DEFINE WHAT SERVICES THE CENTER WILL CONTRIBUTE.
- SUGGEST A LOCATION FOR THE CENTER IN THE HOSPITAL PREMISES WHICH IS EASILY ACCESSIBLE TO ALL CATEGORIES OF PATIENTS
- DEFINE THE INFRASTRUCTURE AND MANPOWER REQUIREMENTS FOR RUNNING THE CENTER
- DEFINE THE WORKFLOW

METHODOLOGY:

- ❖ **STUDY PERIOD:** 21ST MARCH, 2022 TO 18TH JUNE, 2022
- ❖ **STUDY DESIGN & AREA:** PROSPECTIVE CROSS SECTIONAL DESCRIPTIVE WEB BASED STUDY
- ❖ **DATA COLLECTION:** WEB BASED SURVEY.
- ❖ **DATA ANALYSIS TOOL:** MS. EXCEL.
- ❖ **DATA COLLECTION TOOL:** GOOGLE FORM

FACILITIES

FINANCE

Location

Space

Personnel and training

BASIC REQUIREMENTS

- Furniture (tables, chairs, etc.)
- Computers and printers
- Scanners
- Telephone line setup
- Internet

MINIMUM ESSENTIALS

- ❖ Drug databases & access
- ❖ Subscription of journals, books and bulletins
- ❖ Telephone and internet bills.

- Location of DIC within hospital has advantage than being close to different departments, hospital pharmacy, patient care area.
- More feasible when associated with ICU & EMERGENCY

- Placed in spacious facility to accommodate services staff and needs.
- Area of **200 sqft** workstation is recommended.
- Space of the above should be ideal for Medical Director, Manager & executive.

- Experience clinical pharmacologists & clinical/hospital pharmacists.
- Well trained with information searching (medline), ethical and legal knowledge of drug information, verbal and written communication skills of pharmacotherapy

RESOURCES

PRIMARY INFORMATION RESOURCES

- Medical and therapeutic Journals
- Drug and toxicology Information and Pharmacology Journals
- Pharmacy journals
- Journals in specific areas like emergency, critical care, gynecology etc.

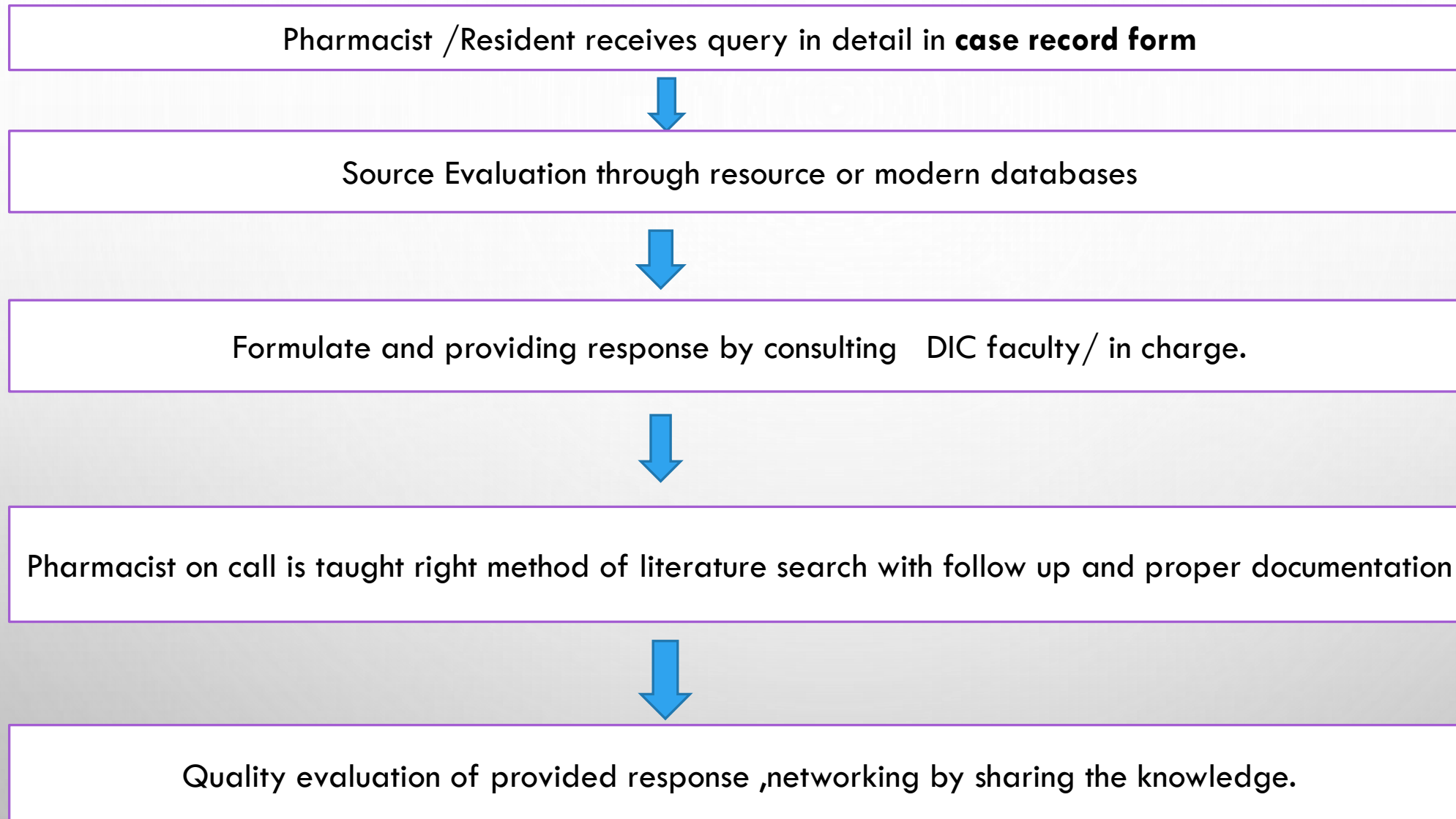
Secondary sources

- Drugdex (Micromedex)
- International pharmaceutical abstracts
- Medline, Excerpta Medica, Iowa drug information services

Tertiary sources

- Formulary manuals, standard treatment manuals, textbooks, general reference books.
- Drug bulletins and compendia.

WORKFLOW OF DIC APPROACH



Case Report Form

Patient ID: xxxxxx

Enquiry no. XXXX

Drug Information Center, Dr.B. R hospital & society

Profession:

Date of Query:

Date of response:

Time of Query:

Time of response:

Name of inquirer:

Type of Enquiry:

Level of urgency- urgent/ routine

Contact No.

Enquired via:

Query: objective / subjective (question details)

Patient related information

Age/ Sex:

Diagnosis

Relevant investigations:

Treatment received:

Generic/ prosperity name of drug:

Form of reply: Written/verbal/phone/Email.

Reference:

Source used for literature search:

JR/SR:

Consultant:

Information provided is: Excellent. satisfactory. Non-satisfactory. poor

- Figure Depicts The Location From Where DIC Response Came From So That It Helps In Building The Vast Existence Of Difference Obtained From Various Geographic Localities Building Strength To Suggestions Made With The Study Results Obtained. 35.5 % Of Responses Are From Maharashtra, 32.3 % Are From Andhra Pradesh, 11.3 % Of Responses Are From Gujarat, 4.8% From Karnataka And Uttar Pradesh, 3.2% From Tamil Nadu, And 1.6% From Rajasthan.

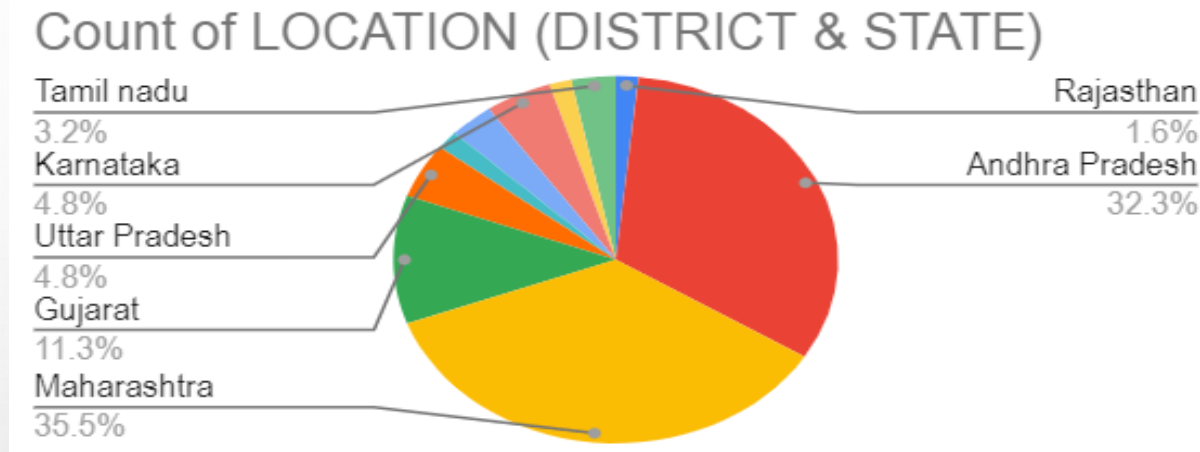
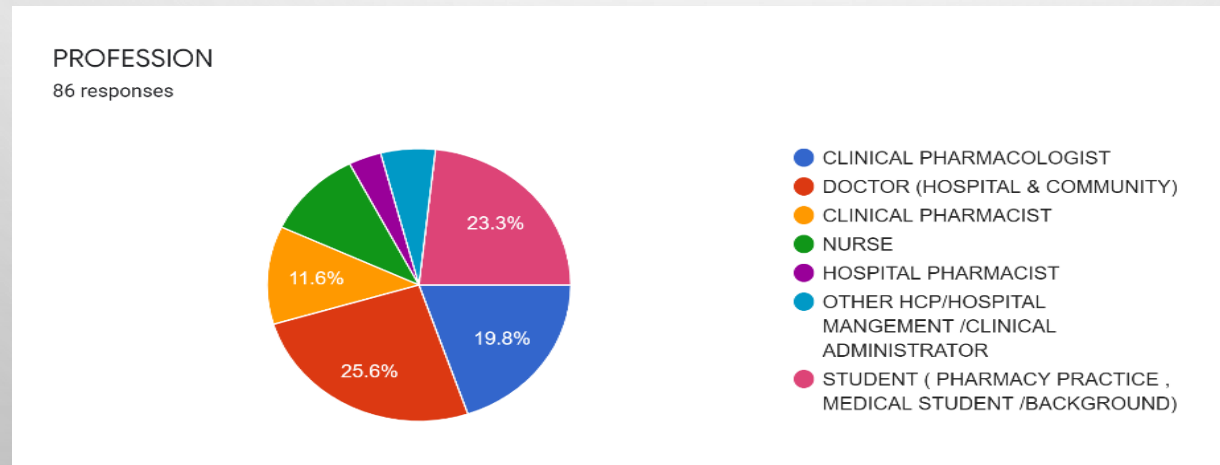
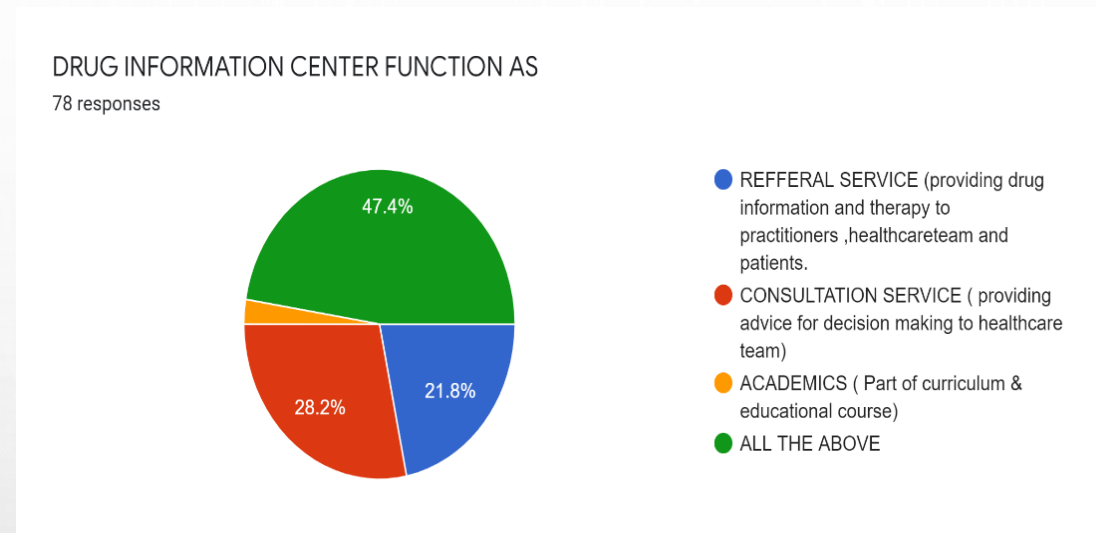


FIGURE ASSESS POOLING OUT THE SPECIALISTS AND PROFESSIONALS WHO FILLED THE QUESTIONNAIRE



- FIGURE DEPICTS THAT WILL BE ESTABLISHING DIC IMPROVE THE QUALITY OF HEALTHCARE SERVICES.



- DEPICTS THE ACCESS OF INFORMATION PROVIDED ABOUT RESOURCES BEING CUMULATIVE.

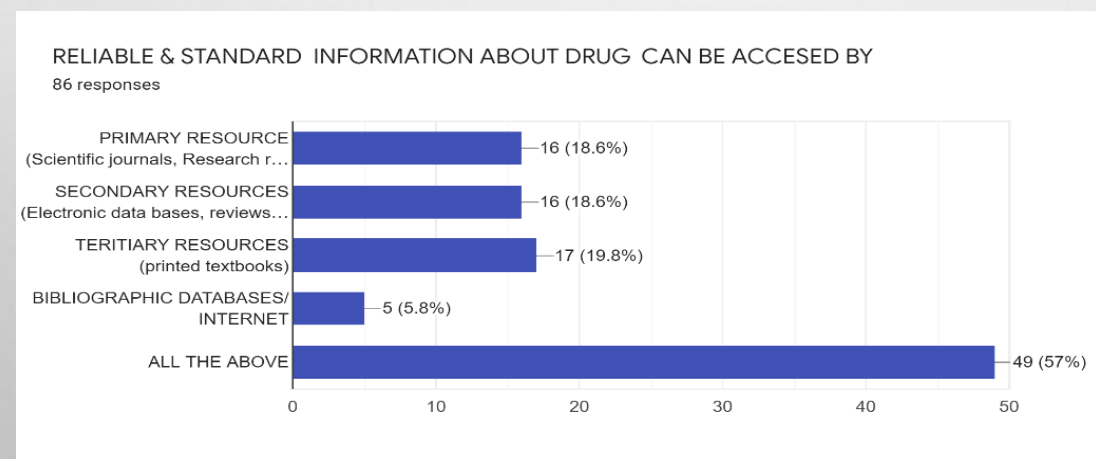


FIGURE DEPICTS THE RESPONDENT’S VIEW OF SUGGESTING THE ELECTRONIC DATABASE
SUGGESTION FOR THE PROJECT SURVEY

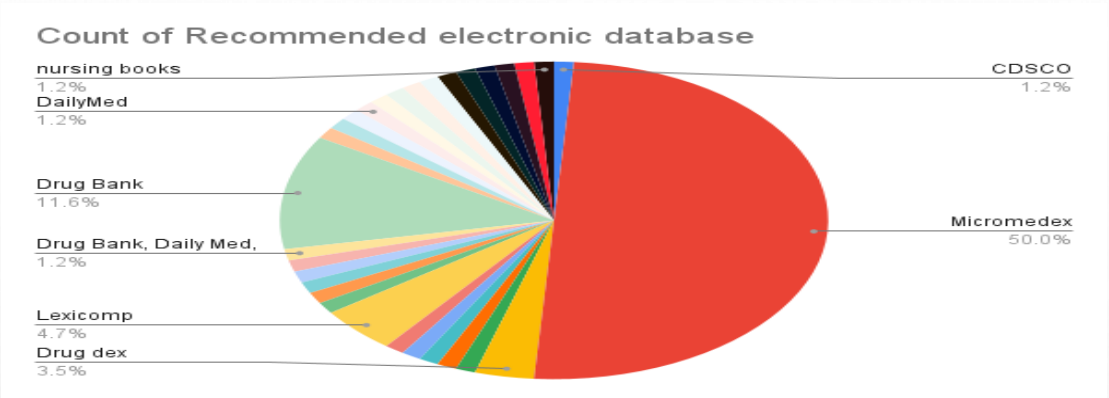
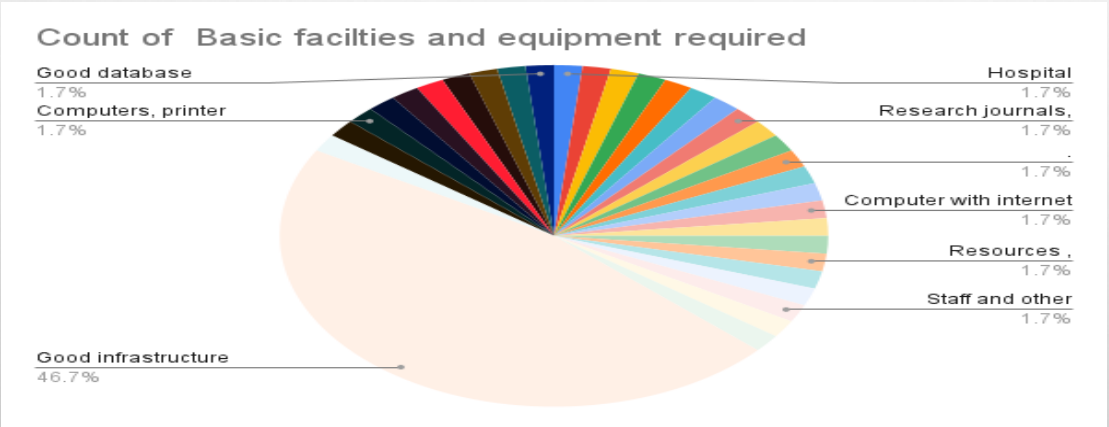


FIGURE DEPICTS THE RESPONDENTS PROVIDING BASIC FACILITIES AND EQUIPMENT REQUIRED
FOR DIC SETUP.



- FIGURE BELOW DEPICTS FEASIBLE LOCATION FOR DIC SETUP

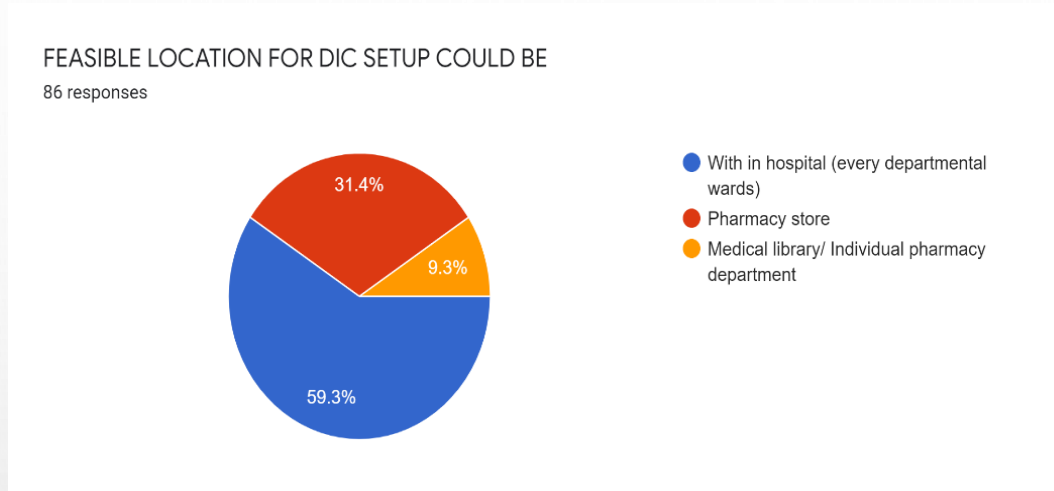


FIGURE 4.9 BELOW DEPICTS THE QUALITY ASSURANCE IN DIC

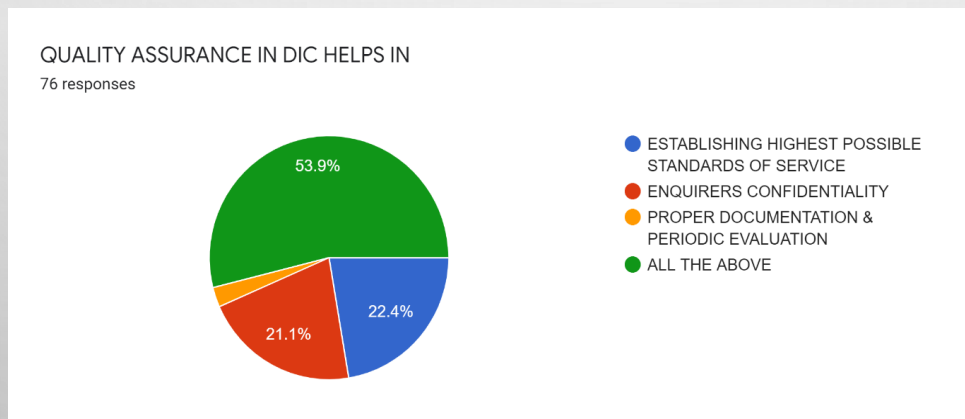
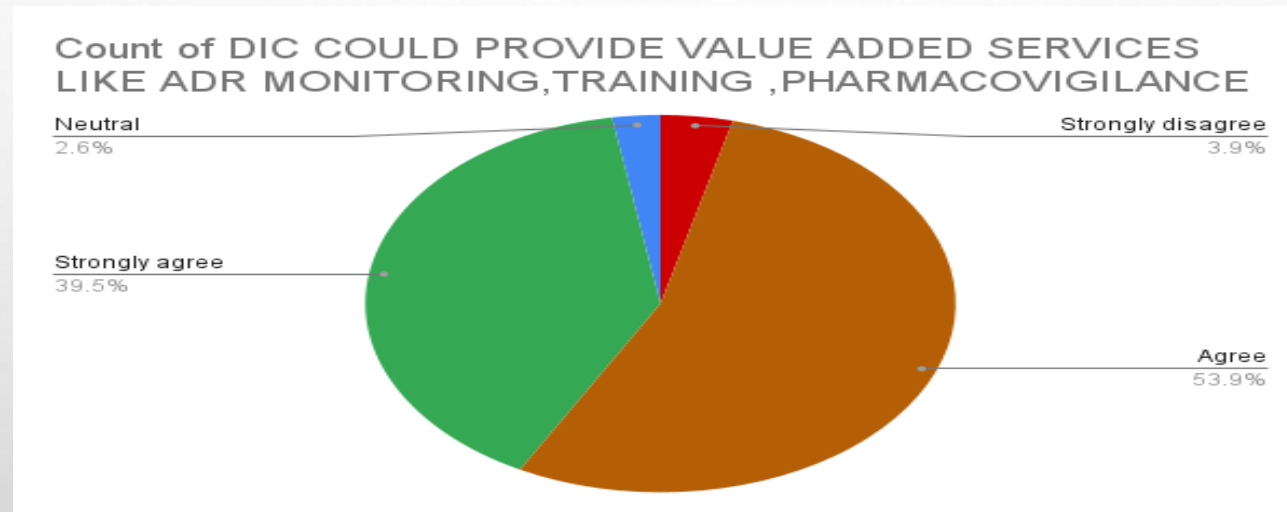


Figure Depicts That How DIC Provides Value Added Services ADR Monitoring, Training, Pharmacovigilance.



- **SUGGESTIONS PROVIDED BY PHYSICIANS WHILE CONDUCTING THE STUDY ARE**
- INVOLVING STUDENTS OF CLINICAL AND THERAPEUTIC KNOWLEDGE IN WARDS OF HOSPITAL SO THAT SERVICE PROVIDED BY THEM CAN BE BENEFICIAL FOR IN PATIENTS AND NURSING DEPARTMENT.
- AWARENESS OF IMPORTANCE, FUNCTIONALITIES OF DIC TO PATIENTS BY ENCOURAGING RATIONALITY IN MEDICINES ESPECIALLY ADHERENCE TO ANTIBIOTICS.
- TO PROVIDE ANY NEW DRUG INFORMATION IN MARKET ALONG WITH CLINICAL PHARMACOKINETIC AND DYNAMIC KNOWLEDGE TO THE DOCTOR AND COMPLIANCE TO PATIENT.
- BRIDGE THE GAP BETWEEN HEALTH CARE TEAM AND PHARMACISTS BY EXCHANGING KNOWLEDGE INTERPERSONALLY.

CHALLENGES

- LACK OF TRAINED PROFESSIONALS FOR PROVIDING QUALITY INFORMATION.
- LOW HOSPITAL ATTACHED DIC CENTERS WITH CLINICAL SERVICES
- LOW RESPONSE TO QUESTIONNAIRE RAISED BY INDEPENDENT DRUG INFORMATION CENTERS.
- DEDICATED DIC TO A HOSPITAL NEEDS HIGH END FINANCIAL RESOURCE SETTING FOR DATABASE MANAGEMENT AND ANNUAL SUBSCRIPTION COSTS NEED TO BE RENEWED FOR PROVIDING QUALITY INFORMATION.
- CURRENT CENTERS DON'T HAVE DRUG INFORMATION CENTER AND MOST OF SERVICES ARE LIMITED TO COLLEGES & ACADEMIC CENTERS WHICH MOST ARE USEFUL FOR COMMUNITY BUT NOT FOR HOSPITAL.
- OUTDATED DRUG INFORMATION SOURCES USED

- **FUTURE PROSPECTS AND RECOMMENDATIONS**

- ALTHOUGH DIC HAS EXISTED LONG BACK, IT IS NOT EXPLORED LONG BACK PROPERLY AND IF THE ABOVE-MENTIONED CHALLENGES ARE PROCESSED PROPERLY THE LIMITED CENTERS IN INDIA BECOME MORE PRODUCTIVE.
- IN INDIA, IF THE BRANCH OF SCIENCE COLLABORATES WITH AYUSH SCIENCE AND ALTERNATIVE MEDICINES THE SCOPE OF SERVICE CAN BE ENHANCED WITH NOVEL INITIATIVES LIKE TOXICOLOGICAL STUDIES, TDM SERVICES, ADR MONITORING CENTER, AND FORENSIC STUDIES. EVIDENCE-BASED MEDICINE IS BEST PRACTICED WITH THE RATIONAL USE OF DRUGS AND IN THE INDIAN SETTING, IT YIELDS THE BEST PRACTICE IN THE PHARMACY FIELD.

- **CONCLUSION**

- DIC IN INDIA HAS A VERY BRIGHT FUTURE OF MEETING HEALTH CARE NEEDS IN TERMS OF QUALITY, MANAGEMENT, AND ADMINISTRATION. ALMOST ALL THE RESPONDENTS FIND IT VERY USEFUL AND ESSENTIAL IN ADDING ITS SERVICES TO THE HEALTHCARE TEAM. THE GOVERNMENT AND PRIVATE SECTOR NEED TO ORGANIZE MORE DIC CENTERS TO PROVIDE BETTER PATIENT CARE AND MORE AWARENESS PROGRAMS NEED TO BE HELD FREQUENTLY TO ENCOURAGE THE UTILIZATION OF INFORMATION SERVICES PROVIDED BY DIC.
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THANK YOU