WORLD JOURNAL OF PHARMACEUTICAL RESEARCH
SJIF Impact Factor 5.045
Volume 4, Issue 2, 952-959. Research Article ISSN 2277– 7105

RETROSPECTIVE ANALYSIS OF HOSPITAL ADMISSIONS DUE TO CUTANEOUS ADVERSE DRUG REACTIONS IN A TERTIARY CARE CENTER

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Article Received on
15 Nov 2014,

Revised on 16 Dec 2014,
Accepted on 08 Jan 2015

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ABSTRACT

Background and Objective: Adverse drug reactions are a constraint to successful outcome of Pharmacotherapy. ADRs can result in serious implications like Morbidity & Mortality which in most of the cases can be prevented. ADRs are considered a potential burden from the pharmacoeconomics perspective. This study analyses the Hospital admissions due to ADRs **Methods:** This is a retrospective study which analyzes the admissions of ADRs as the chief presenting symptoms in Sri Ramachandra medical college & hospital in the time period of 9 years (year 2004 to year 2012). In the Span of 9 years 42 cases which comprised of 31females and 11 males were admitted with a wide spectrum of presenting symptoms which pointed out to be ADRs. **Results:** Among the admitted cases the presenting symptoms which indicated ADRs were Generalized Maculopapular rash, generalized reddish scaly lesion Angioedema, urticaria and Pityriasis Rosacea. The drugs were found out to be combinations of NSAIDs with Antiepileptic, Combination of NSAIDs with Antibiotics and Antiepileptics alone sharing the top spot of causative agents , other agents being antipsychotics , hormones , retinoid , Antibiotics , NSAIDs , Antitubercular drugs , Herbal agents.

KEYWORDS: ADRs – adverse drug reactions.

INTRODUCTION

Any potent drug therapy carries an inherent risk of ADR and the use of the drug should not be withheld if the benefit risk ratio favors theraphy.Many ADRs are reversible and this

preventable nature is the motivation for ADR reporting studies. It is through reporting, high risk patient population is identified and such medications could be avoided henceforth This study is an attempt to picture the statistics of ADR related admissions during the span of 9 years (2004 to 2012) in the various departments of Sri Ramachandra Medical College & Research Centre

Aim and Objective

Retrospective study of Cases Admitted due to ADR in a Tertiary care hospital

METHODS

Source of information: - MRD computer system; Inpatient Cases tagged with ADR were taken into account and Retrospective analysis of those cases from year 2004 to 2012 were done

Inclusion Criteria

- Cases of both sexes and all age groups

Exclusion criteria

- H/o Substance abuse
- Pregnancy
- Lactation

RESULTS AND DISCUSSIONS

- The sex distribution was 31 females and 9 males (Figure 1) The Incidence of ADRs showed female predominance

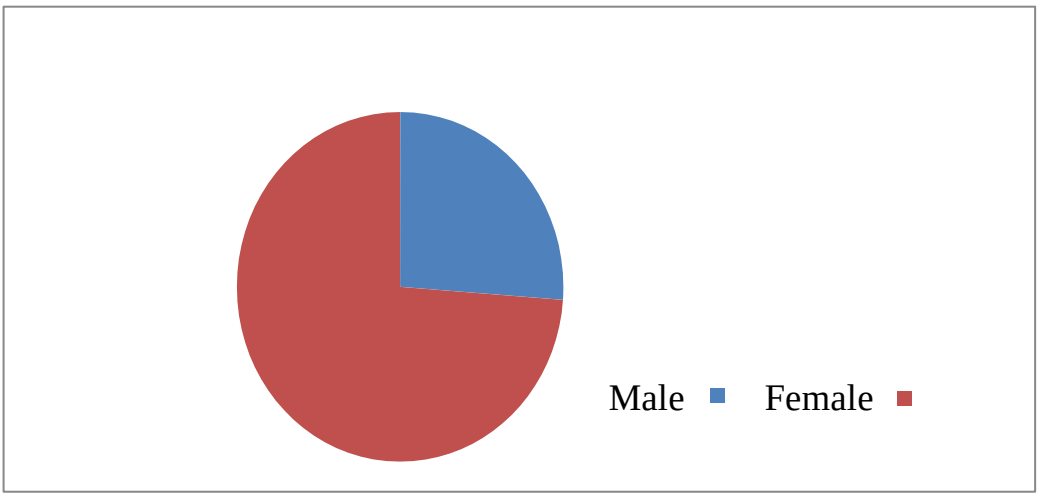
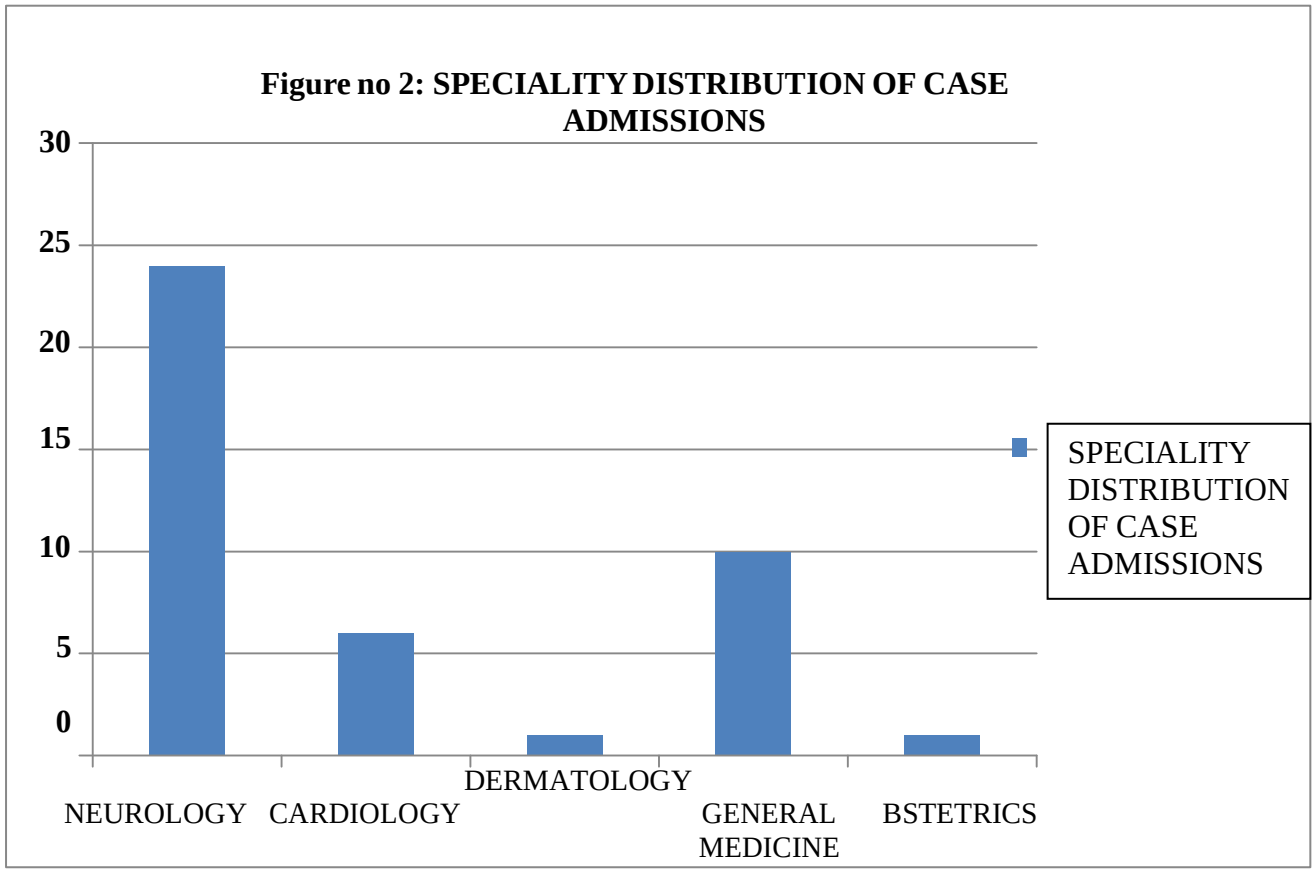


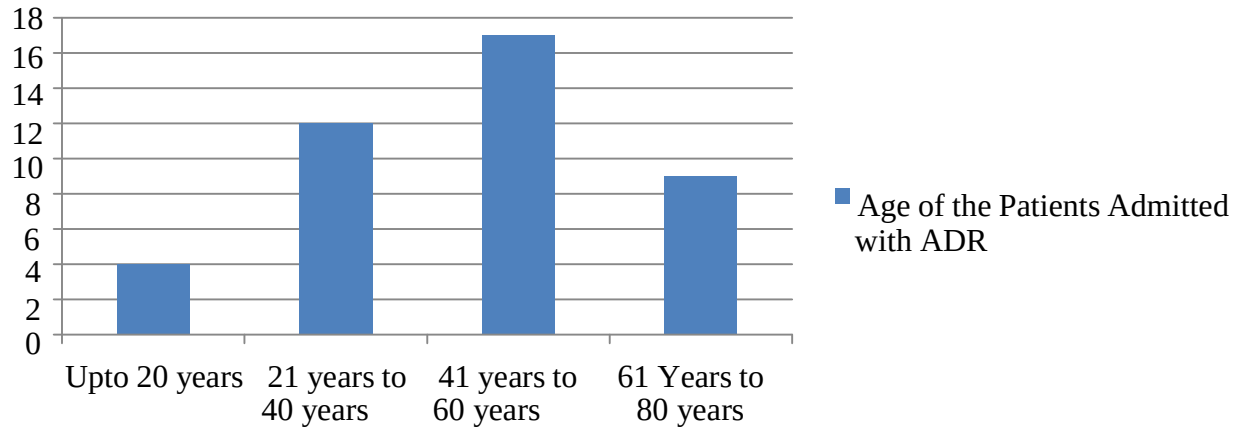
Figure 1: Gender Distribution of ADRs

- In total 42 patients were diagnosed with ADR and admitted to different specialties based on the nature of symptoms and causes of ADR. (Figure2). Maximum cases were admitted to the Dermatology specialty.



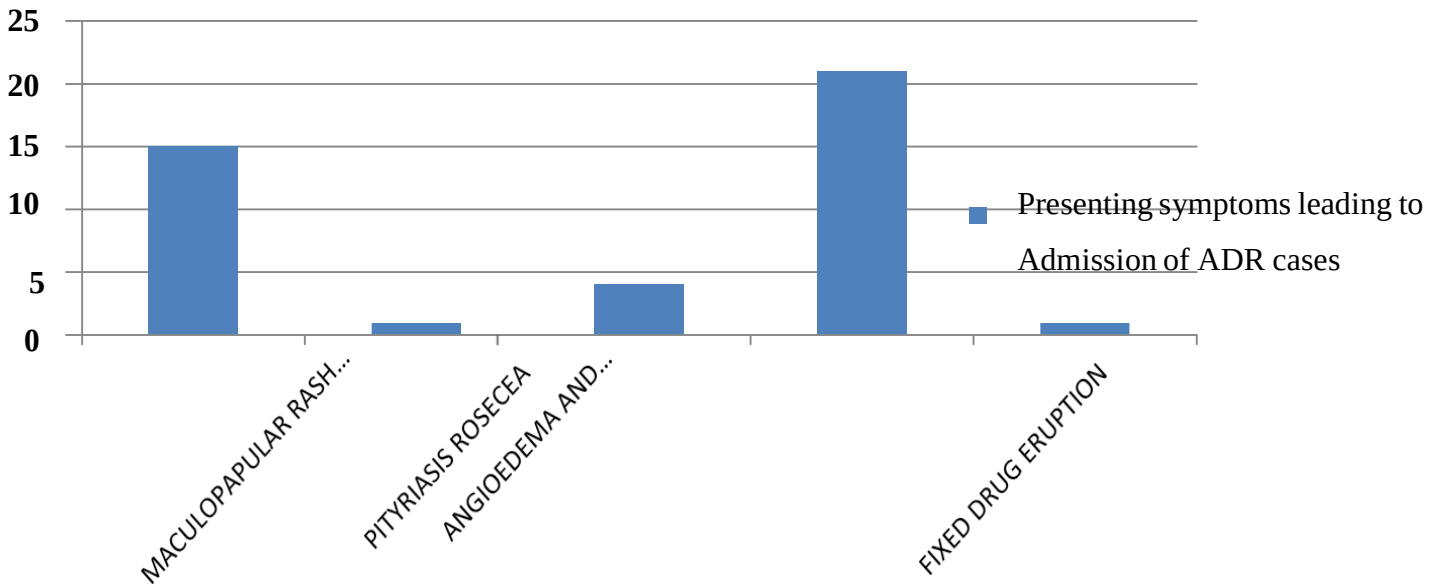
- The age distribution of the patients Admitted to Various specialties of Sri Ramachandra medical college and research Centre during a period of 9 years ranging from the year 2004 to year 2012 exhibits a predominance in the age group of 41 to 60 years and least manifestations in the age group of 0 to 20 years
  (**Figure 3)**

Figure 3: Age of the Patients Admitted with ADR

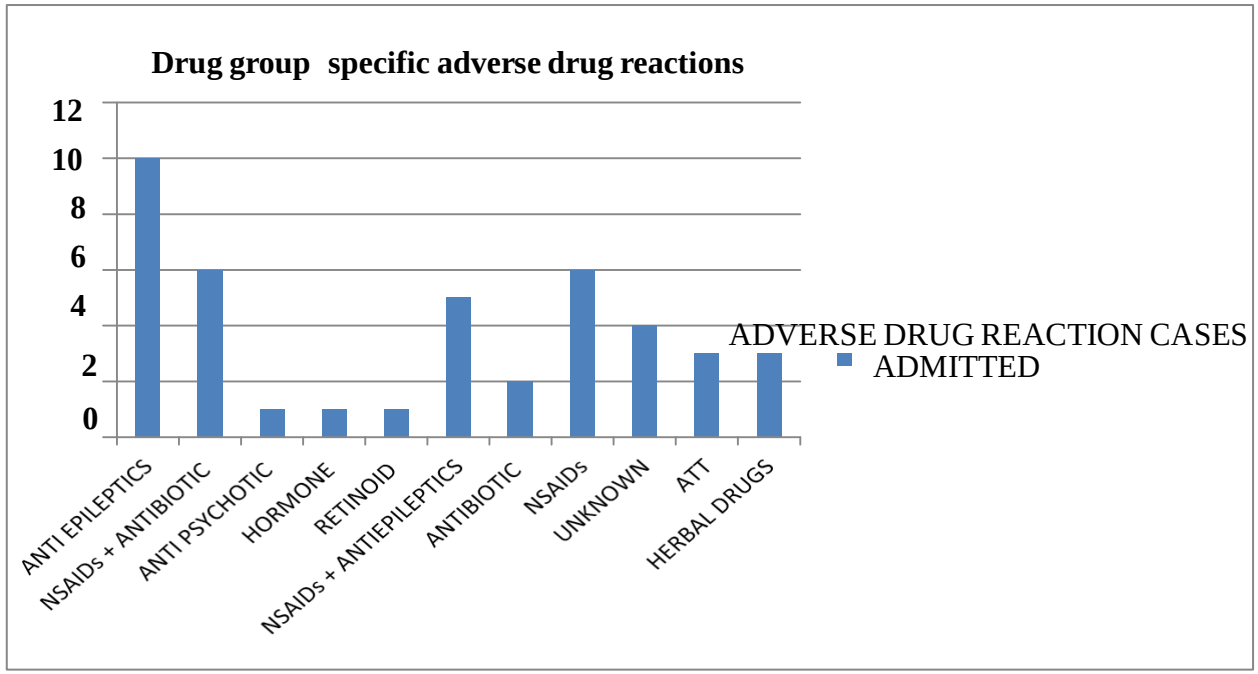


- Spectrum of clinical manifestation of ADRs were Generalized Maculopapular rash, generalized reddish scaly lesion with urticaria, Angioedema and urticaria, Pityriasis Rosacea **(Figure 4).**

Figure 4: Presenting symptoms leading to Admission of ADR cases



- The drugs individual as well as in combinations which elicited ADRs were analyzed and following inferences was drawn :- Antiepileptics, NSAIDs & Combinations of NSAIDs with Antiepileptic are the major causative agents , other agents being antipsychotics , hormones, retinoid, Antibiotics , ATT & Herbal medicines **(Figure 5).**



- Anti-epileptics the following drugs showed significant incidence of ADRs– phenytoin, Lamotrigine, carbamazepine, oxcarbamazepine. While in Anti-microbial – Clavulanic acid, Gatifloxacin, ciprofloxacin and amoxicillin & cefatoxime.
- NSAIDs – Ibuprofen& Diclofenac,
- NSAIDs combinations with Antibiotic or antiepileptic showed significant ADR cases as well.
- Few cases of ADRs were reported by Hormone – Progesterone
- Anti-psychotic: - Olanzapine,
- Anti-tubercular drugs & Herbal medicines

CONCLUSION

From the study it is significant that among the clinical manifestations of ADRs, skin lesions are the commonest causes for admission and treatment in a tertiary care center. As this is a retrospective study with recorded events; further studies are required in large numbers to claim its validity .Further the information regarding the adverse effects due to drugs if it is displayed in the computer system with front tagging & color highlighting, it will be an added tool for the therapeutic armamentarium.

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