ASSESSMENT OF RATIONAL DRUG PRESCRIBING PATTERN IN GERIATRIC PATIENTS AT GOVERNMENT DISTRICT HEAD QUARTERS HOSPITAL, KRISHNAGIRI

INTRODUCTION

Geriatric patients can be defined as those who are over 65 years of age. Since the beginning of the twentieth century, they formed only 4.8% of the population, And the number of geriatric patients are increased to 15.2% in 1981 and about 18% in 2001. For optimal drug therapy in the elderly, a knowledge of agerelated physiological and pathological changes that might affect handling of and response to drugs is essential. This discusses the age - related pharmacokinetic and pharmacodynamic changes which may affect drug therapy and the general principles of drug usage in the elderly.
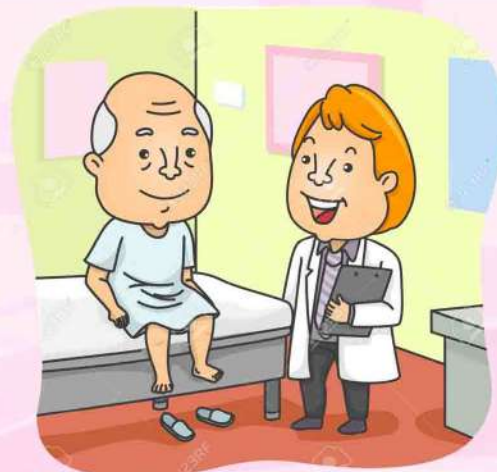
- Multiple drug use
- Multiple prescribers
- Comorbidities
- Untreated medical problems

are also affected optimal drug therapy in geriatrics

RATIONAL DRUG USE

As per WHO, patients receive medication appropriate to their clinical needs, in doses that meet own individual requirements, for an adequate period of time, and at the lowest cost to them and their community More than 50% of all medicines worldwide areprescribed, dispensed or sold inappropriately and 50% of patients fail to take them correctly.

POLYPHARMACY

Polypharmacy is defined by the WHO as "The administration of many dugs at the same time.

AIM

Determination of whether the drugs prescribed for geriatric patients in Govt.Head Quarters Hospital Krishnagiri, is Rational or by using Beer's criteria, WHO essential drug list, OTC drug list, Drug–Drug interaction in geriatric patients through a retrospective study.

The aim of the study is to measure the irrational use of drugs for geriatric patients in various diseases.

NEED OF THE STUDY

- Polypharmacy and inappropriate prescriptions are prominent prescribing issues among geriatric patients.
- The studies on the prescribing patterns seek to monitor, evaluate and suggest modifications in the practitioners prescribing habit, so as to make medical care rational and cost effective.
- The studies are require for the pattern of inappropriate prescribing and on intervention program to reduce potentially adverse health out come in elderly patient.
- This studies an attempt to prove that the irrational use of drug in geriatric patients is a common problem at government head quarters hospital krishnagiri.

OBJECTIVE

Primary Objective

Analysis of the rational use of drugs in geriatric patients & also investigate polypharmacy and drug-drug interaction.

Secondary Objective

a) Identifying the most frequently prescribed therapeutic groups.

b) Determining of the number of drugs in each prescription.

c) Identifying the drugs which was prescribed in generic names.

d) Determining the number of antibiotics prescribed.

e) Evaluating whether the drugs were prescribed by using WHO essential drug list & Beer's criteria.

f) Evaluating gender & age wise distribution of prescription.

METHODOLOGY

SITE OF STUDY

This study was conducted in Govt. Head Quarters Hospital, Krishnagiri.

STUDY DEPARTMENT

The study was conducted in the departments of general medicine at male and female geriatric ward , department of ortho, ophthalmology and OP.

STUDY DESIGN

This was a retrospective study. conducted by using geriatric patient.

STUDY PLAN

A Retrospective study on Rational drug prescribing pattern in geriatric patients by using prescription issued to the patients.

DURATION OF STUDY

This study was conducted from the period of 6 months.

STUDY POPULATION

Inpatient and outpatient with several disease, visiting various departments of Govt. Head Quarters Hospital, Krishnagiri were considered in this study.

SAMPLE SIZE

150 cases were taken based on inclusion exclusion criteria from Krishnagiri Government Hospital.

INCLUTION CRITERIA

1. Both male and female geriatric in patients.
2. Geriatric Outpatients.
3. Post-surgical geriatric patients.

EXCLUSION CRITERIA

1. Intensive care unit & surgical patients.
2. ART patients.
3. TB patients.

RESULT OF STUDY

FINDINGS FROM STUDY		WHO STANDARD PER PRESCRIPTION
% of drugs prescribed as generics	82.4% PRESCRPTIONS IN GENERIC NAME	100%
% of antibiotic in prescriptions	28% PRESCRIPTIONS NOT IN RANGE	20-26.8%
% of injections in prescriptions	22% PRESCRIPTIONS NOT IN RANGE	13.4-24.1%

FROM THE STUDY		SUGGESSION
BEERS CRITERIA OBEYING	27.5% PRESCRIPTIONS OBEYING	OBEY 100% BEER CRITERIA FOR RATIONAL PRESCRPTION
DRUGS FROM WHO ESSENTIAL DRUG LIST	36.21% DRUGS FROM WHO ESSENTIAL DRUG LIST	PRESCRIBE FROM WHO ESSENTIAL DRUG LIST FOR RATIONAL PRESCRPTION
DRUG - DRUG INTRACTION	22.5% PRESCRIPTIONS HAVING DRUG - DRUG INTERACTION	DRUG INTERCATIONS DECREASES THE ACTION OF THE DRUGS , CHECK USING INTERCTION CHECKER

CONCLUSION

Prescribing for the elderly is found to be suboptimal and there is occurrence of inappropriate prescribing. This calls for caution on the part of prescribers and pharmacist alike and the need for awareness of tools that can be used by practitioners for detecting drug therapy problems.

More studies are required on the pattern of inappropriate prescribing over a long period of time and on intervention programs to reduce potentially adverse health outcomes in elderly patients most at risk in the area where this study was undertaken.

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GLOBAL CANCER STATISTICS FOR THE MOST COMMON CANCERS (EXCLUDING NON-MELANOMA SKIN CANCER) IN 2018

SUMMARY

● Among various diseases, cancer has become a big threat to human beings globally. There were an estimated 18 million cancer cases around the world in 2018, of these 9.5 million cases were in men and 8.5 million in women.

● As per Indian population census data, the rate of mortality due to cancer in India was high and alarming with about 806000 existing cases by the end of the last century.

● Cancer is the second most common disease in India responsible for maximum mortality with about 0.3 million deaths per year.

INTRODUCTION:

Definition of a neoplasm or tumour is 'a mass of tissue formed as a result of abnormal, excessive, uncoordinated, autonomous and purposeless proliferation of cells even after cessation of stimulus for growth which caused it'

The application of current treatment techniques (surgery, radiation therapy, chemotherapy, and biologic therapy) results in the cure of nearly two of three patients diagnosed with cancer.

Finding the information about world cancer statistics for the most common cancers (excluding non-melanoma skin cancer) in 2018, the latest year available.

There were an estimated 18 million cancer cases around the world in 2018, of these 9.5 million cases were in men and 8.5 million in women.
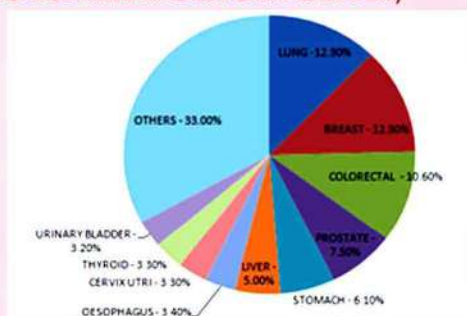
With this growing global burden, prevention of cancer is one of the most significant public health challenges of the 21st century.

GLOBAL CANCER INCIDENCE: BOTH SEXES

● Lung and breast cancers were the most common cancers worldwide, each contributing 12.3% of the total number of new cases diagnosed in 2018.

● Colorectal cancer was the third most common cancer with 1.8 million new cases in 2018

TOP 10 MOST COMMON CANCER WORLDWIDE 2018 (EXCLUDING NON-MELANOMA SKIN CANCER)

RANK	CANCER	NEW DIAGNOSED IN 2018	% OF ALL CANCER (excluding non-melanoma skin cancer) in 2018
	All cancers*	17,036,901	
1	Lung	2,093,876	12.3
2	Breast	2,088,849	12.3
3	Colorectal**	1,800,977	10.6
4	Prostate	1,276,106	7.5
5	Stomach	1,033,701	6.1
6	Liver	841,080	5.0
7	Oesophagus	572,034	3.4
8	Cervix uteri	569,847	3.3
9	Thyroid	567,233	3.3
10	Urinary Bladder	549,393	3.2
11	Non-Hodgkin lymphoma	509,590	3.0
12	Pancreas	458,918	2.7
13	Leukaemia	437,033	2.6
14	Kidney	403,262	2.4
15	Corpus uteri	382,069	2.2
16	Lip, oral cavity	354,864	2.1
17	Brain, central nervous system	296,851	1.7
18	Ovary	295,414	1.7
19	Melanoma of skin	287,723	1.7
20	Gallbladder	219,420	1.3
21	Larynx	177,422	1.0
22	Multiple myeloma	159,985	0.9
23	Nasopharynx	129,079	0.8
24	Oropharynx	92,887	0.5
25	Hypopharynx	80,608	0.5
26	Hodgkin lymphoma	79,990	0.5
27	Testis	71,105	0.4
28	Salivary glands	52,799	0.3
29	Anus	48,541	0.3
30	Vulva	44,235	0.3
31	Kaposi sarcoma	41,799	0.2
32	Penis	34,475	0.2
33	Mesothelioma	30,443	0.2
34	Vagina	17,600	0.1

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