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Research article

Medical research

Comparative clinical evaluation of anti biotics on kerala zone

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ABSTRACT

Medication use research expects to evaluate if sedate treatment is sane. To look through the objective techniques for inspecting drug treatment towards discernment are vital. Many of these modern day synthetic drugs were treated for infection associated diseases condition to expelled unwanted effects and also unknowing unwanted effects found in the present survey. Questionnaire format will be prepared with the help of standard guidelines. This study was planed 1500 infected patients collected from 350 bedded tertiary care hospital- PVS Hospital (P) LTD Calicut. The survey conducted by different zones of Kerala by using questionnaire. Analysis of different demographical parameters. Results expressed that the survey only with findings expressed that the patients which are not associated with infection but they affected infection (498 numbers & 33.2%) for lesser percentage and numbers when compared with infection associated diseases (802 Numbers & 53.5%). The severe infection patients percentage 13.3%) and numbers (200) were very low when compared to infection associated diseases (802 Numbers & 53.5%) and single diseases (498 Numbers & 33.2%). In our conclusion above demographical parameter will be helps to develop medical facilities for reduce the infected patients level in kerala zone.

Keywords: sedate, infection, un wanted effects, questionnaire, patients and demographical

INTRODUCTION

The era of antibiotics has changed the pattern of treatment and outcomes of infectious diseases. But at the same time, irrational use of antibiotics has created a havoc of antibiotic resistance.[1] Worldwide spread of the antibiotic resistant organisms has gradually created the threat of antimicrobial insufficiency. Patients infected with these antibiotic resistant organisms are likely to face long durations of hospital stay and require treatment with second- and third-line drugs, which may be more toxic and less effective.[2] Medical students are going to be primary care physicians to serve the community. These future prescribers are frontline fighters against antimicrobial resistance, by rationally prescribing the antibiotics and promoting patient awareness.[3] There are sufficient evidences to support that newly licensed doctors/ prescribers are not adequately trained to prescribe

medications safely.[4,5] Lack of adequate training during medical degree course may be one of the reasons for that. There is a need to change the antimicrobial prescribing behavior of doctors and future prescribers to reduce the magnitude of the problem of antimicrobial resistance.[6] This can be ensured through the appropriate knowledge and training of next generation doctors and medical students through in a formal way.[7,8] But, before planning or strengthening any teaching or training program for any target group, it is required to have a conclusive evidence about baseline knowledge, attitude, and practices of that group. This evidence support in devising an effective curriculum and sustainable program. With this background, this study was planned with the objective to assess the knowledge, attitudes, and the practices of medical students in India with respect to antibiotic resistance and usage.

MATERIALS AND METHODS

Research work was approved by Institutional Human Ethics Committee and also assigned approval number. As per the standard guidelines subjects were selected and studied different parameters demographic data such as age sex social history family history current treatment regimen change of prescription drugs current status infection level. Literature survey based on selected Cohort study was applied to estimate the various parameters of antimicrobial drugs consuming patients on various zone of Kerala which includes south east west and north zones. The data collection related to patients for this research work was mainly performed in major five departments of the hospital such as general medicine pulmonology surgery pediatrics and intensive care units where the practice of antibiotic prescription and administration was found to be enormous in these departments. Thousand five hundred infected patients were collected from A 350 bedded tertiary care hospital- PVS Hospital (P) LTD Calicut which include visited patients and out patients A data collection form designed in particular was used to accurately record and collect the data of each patient enrolled in the work

Infected patient above 18 years and below 60 years.

2. Infected Patient With Infected With Other Co-Morbidities.

3. Infected Patient Admitted In Hospital Or Regularly Visited.

5. Infected patient were able to read and write the consent form.

5. Continuously Taken Infected Drug.

6. End of the days counted infected patients.

7. Non pregnant womans

8. Patients of all age groups except neonates

9. Postoperative Surgical Site Infections (SSIs)

10. Giving informed consent to participate

11. Excluded: Infected patient below 18 years and above 60 years. Infected patients without physician permission or without prescription. False data of other category health sciences peoples given information's. Infected patients are unconsciousness. Based on the above criteria patients counseling were conducted in hospitals. Pregnant woman's Neonates.

Standard guidelines questionnaire was prepared and get approval from specialty doctors towards patient data and Pharmaceutical care issues. The questionnaires are containing demographic data such as age sex social history family history current treatment regimen change of prescription drugs and current status of infection and consuming the antimicrobial agents. Patient demographics.

RESULTS AND DISCUSSION

The survey only with findings expressed that the Patients which are not associated with infection but they affected infection (498 numbers & 33.2%) for lesser percentage and numbers when compared with infection associated diseases (802 Numbers & 53.5%). The severe infection patients percentage (13.3%) and numbers (200) were very low when compared to infection associated diseases (802 Numbers & 53.5%) and single diseases (498 Numbers & 33.2%). Findings are represented below. The results indicated that the type-ii infection patients numbers and percentage were more

(982 numbers & 65.5%) when compared with (518 numbers & 34.5%) type-i infection. the single diseases type –i infection patients numbers and percentage were more (200 numbers & 38.6%) when compared to type-ii infection. The associated diseases condition results expressed that the type –ii infection associated diseases prevalence were low (502 numbers & 51.1%) compared to type-i infection associated diseases (300 numbers & 57.9 %). the findings of severe type- ii infection patients prevalence were more (182 numbers & 18.5 %) when compared to severe type-i infection Patients. The survey results indicated that the of total number of associated diseases in Coimbatore zone were 802 Numbers & 53.5% which includes variety of diseases such as Hypertension Hyperlipidemic Infections Thyroid diseases Inflammation Myocardial Infraction Congestive Heart Failure Tachyarrhythmias Bradyarrhythmias Angina Pectorsthuma Ulcer IBS Depression and Psychosis. The type-ii infection associated patients prevalence exponentially more (when compared to type-i infection associated patients internal type-ii infection based on the comparative statement indicated infection associated myocardial infraction patients prevalence were exponentially more when compared to other infection associates diseases such as hypertension hyperlipidemic other infections (52 numbers & 6.2%) thyroid diseases inflammation congestive heart failure tachyarrhythmias (bradyarrhythmias angina pectoris asthma ulcer ibs and depression. The type-i infection proportional statement indicated infection associated hyperlipidemic patients prevalence were more when compared to other infection associated diseases such as hypertension other infections associated conditions (27 numbers 3.4%) bradyarrhythmias angina pectorsthuma (15 numbers & 1.9 %) ulcer (17 numbers & 2.1 %) ibs (10 numbers & 1.2 %) and psychosis (1 numbers & 0.1%) thyroid diseases myocardial infarction inflammation congestive heart failure tachyarrhythmias were expressed given below.

Collected different age groups such as 20-30 30-40 40-50 & 50-60 years results indicated that the 50-60 years age groups of the patients were more prominently affected infection (640 Numbers & 42.8 %) when compared to other age groups and 40-50 years age groups of the patients were higher prevalence of infection (552 numbers & 41 %) when compared to 20-30 years (53 numbers & 3.7 %) & 30-40 years (251 numbers & 16.5 %). The results of genders which expressed that the males are affected more numbers and percentage of infection (853 numbers & 56.9 %) when compared to females (647 numbers & 43.1 %) were explained. The infection patients food habit results revealed that the non vegetarian are affected more numbers and percentage of infection (543 numbers & 36.2 %) when compared to vegetarian (957 numbers & 63.8 %). Occupation results indicated that the doing business more prominently affected infection (680 numbers & 45.3 %) when compared to professional workers (539 numbers & 35.9 %) but daily wages were working for lesser prevalence of infection (281 numbers & 18.6 %).

Family medication history findings of type- i infection (956 numbers & 63.8 %) patients prevalence were more when compared to type-ii infection patients (544 numbers & 36.2 %).

which are segregated such as 40-60 60-80 80-100 & 100-120 kgs of infection patients prevalence indicated that the 100-120 kgs body weight patients were more prominently affected

in the infection when compared with 80-100 kgs body weight patients. comparatively 80-100 kgs body weight of infection patients prevalence increased to 60-80 kgs body weight of

infection body weight patients but lesser prevalence 40-60 kgs body weight of infection.

Table 1: Prevalence of Diabetes Mellitus

S.No	Disease	Type-II		Type-I		Total	
		Nos	%	Nos	%	Nos	%
1	Total.No.Patients	981	65.3	519	34.7	1500	100
2	Single	297	30.3	201	38.7	498	33.2
3	Associated	502	51.1	300	57.9	802	53.5
4	Severe infections	182	18.5	18	3.4	200	13.3

Table 2: Prevalence of infection with associated diseases

S.No	infection with associated diseases	Type-II		Type-I	
		Nos	%	Nos	%
1	Hypertension	22	2.8	32	4
2	Hyperlipidemic	42	5.2	38	4.8
3	Infections	52	6.5	28	3.5
4	Thyroid diseases	54	6.7	32	4
5	Inflammation	33	4.1	27	3.4
6	Myocardial Infraction	56	7	17	2.1
7	Congestive Heart Failure	45	5.6	14	1.7
8	Tachyarrhythmias	34	4.2	21	2.6
9.	Bradyarrhythmias	39	4.9	27	3.4
10	Angina Pectoris	28	3.5	30	3.7
11	Asthma	34	4.2	15	1.9
12	Ulcer	32	4	17	2.1
13	IBS	21	2.7	10	1.2
14	Depression	1	0.1	--	--
15.	Psychosis	--	--	1	0.1
Total		493	61.5	309	38.5

Table 3: Different Age Group of infection patients

S.No	Age Yrs	No. of Patients	% of Patients
1	20-30	53	3.7
2	30-40	251	16.5
3	40-50	552	41
4	50-60	640	42.8

Table 4: infection patients Gender variation

S.No	Sex	No. of Patients	% of Patients
1	Male	855	57
2	Female	645	43

Table 5: Food Habit

S.No	Food Habit	No. of Patients	% of Patients
1	Veg	543	36.2
2	Nonveg	957	63.8

Table 6: Occupation of infection Patients

S.No	Occupation	No. of Patients	% of Patients
1	Business	680	45.3
2	Professional	539	35.9
3	Cooly	281	18.8

Table 7: Family Medication History

S.No	Family medication history	No. of Patients	% of Patients
1	Infection type-i	956	63.8
2	Infection type-ii	544	36.2

Table 8: Body Weight of infection patients

S.No	Body Weight (Kgs)	No. of Patients	% of Patients
1	40-60	24	1.6
2	60-80	152	10.1
3	80-100	578	38.6
4	100-120	746	49.7

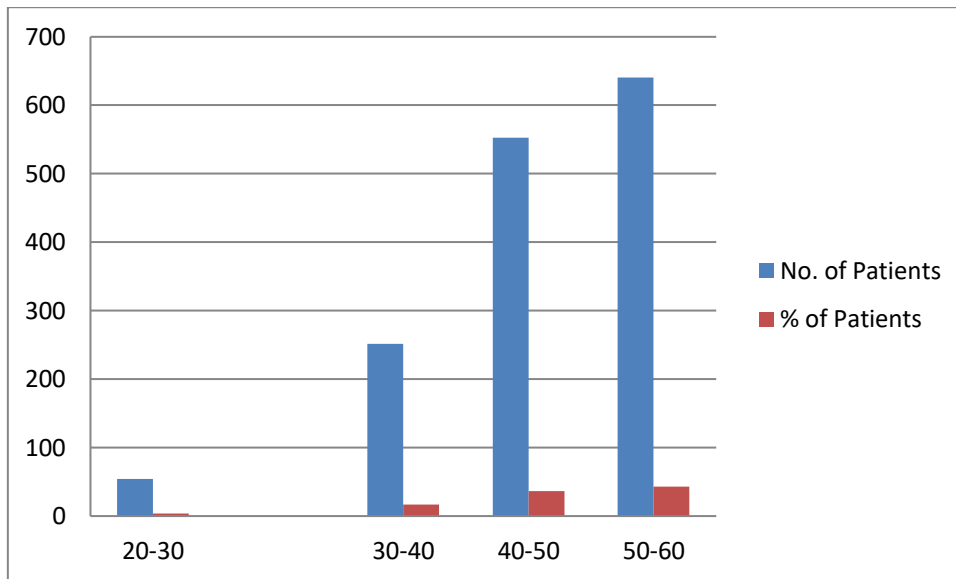


Fig 1: Prevalence of infection patients age group (Numbers & %)

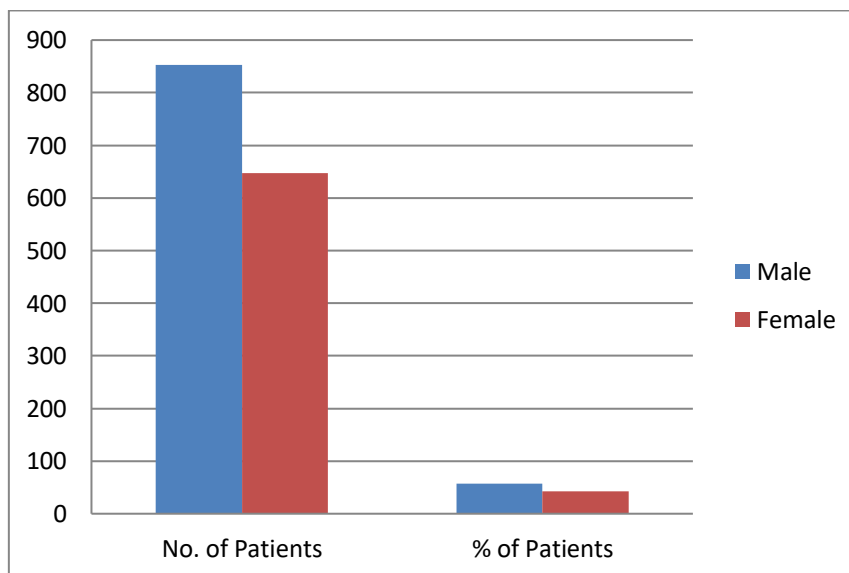


Fig 2: Prevalence of infection patients gender (% & Numbers)

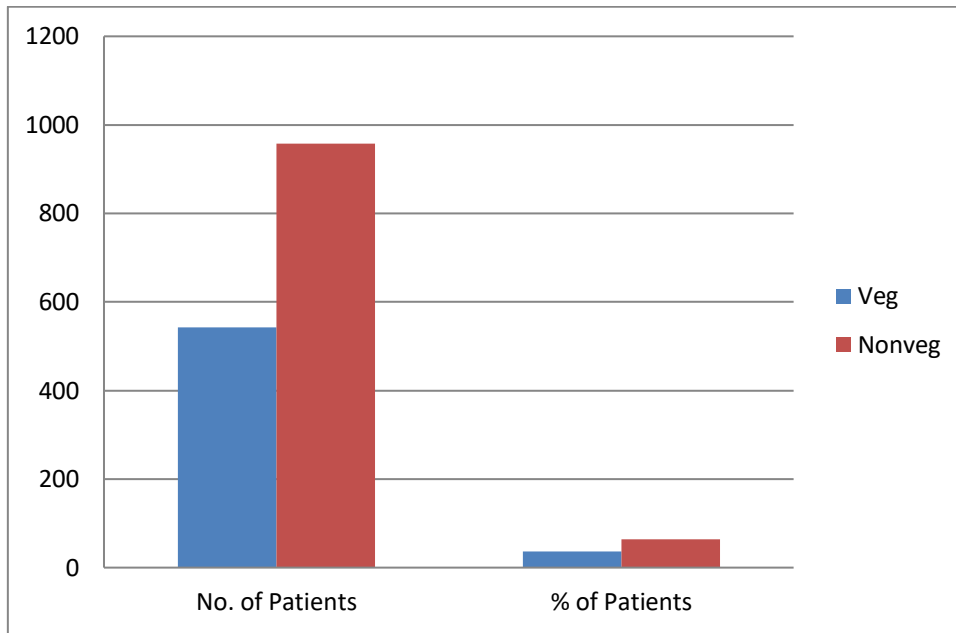


Fig 3: Prevalence of infection patients food habit details

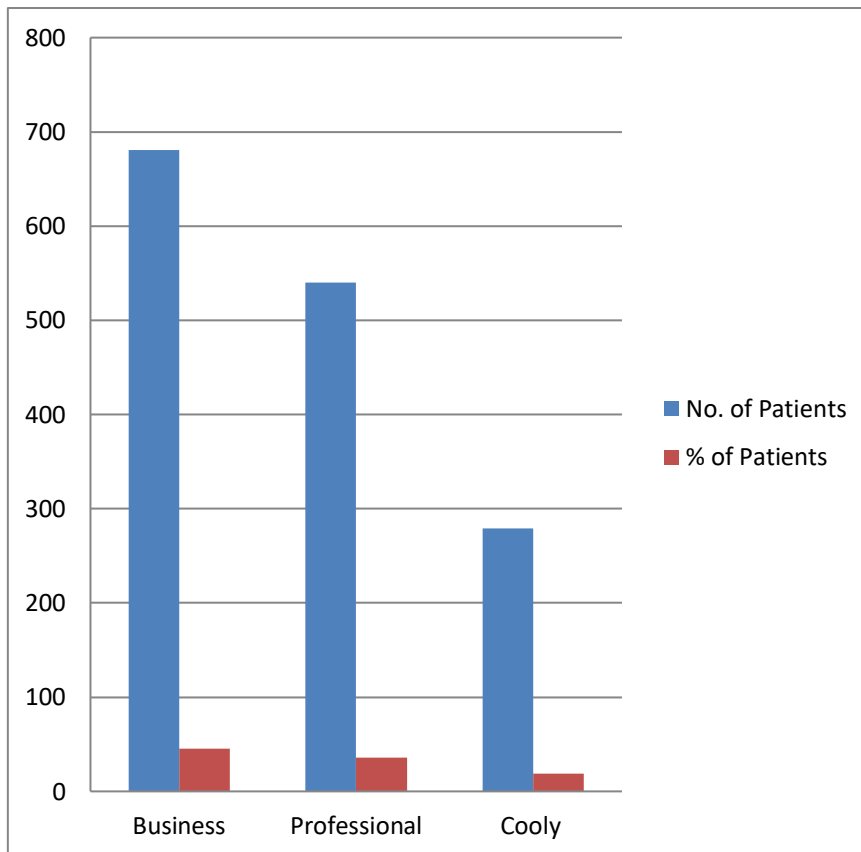


Fig 4: Details of infection patients occupation

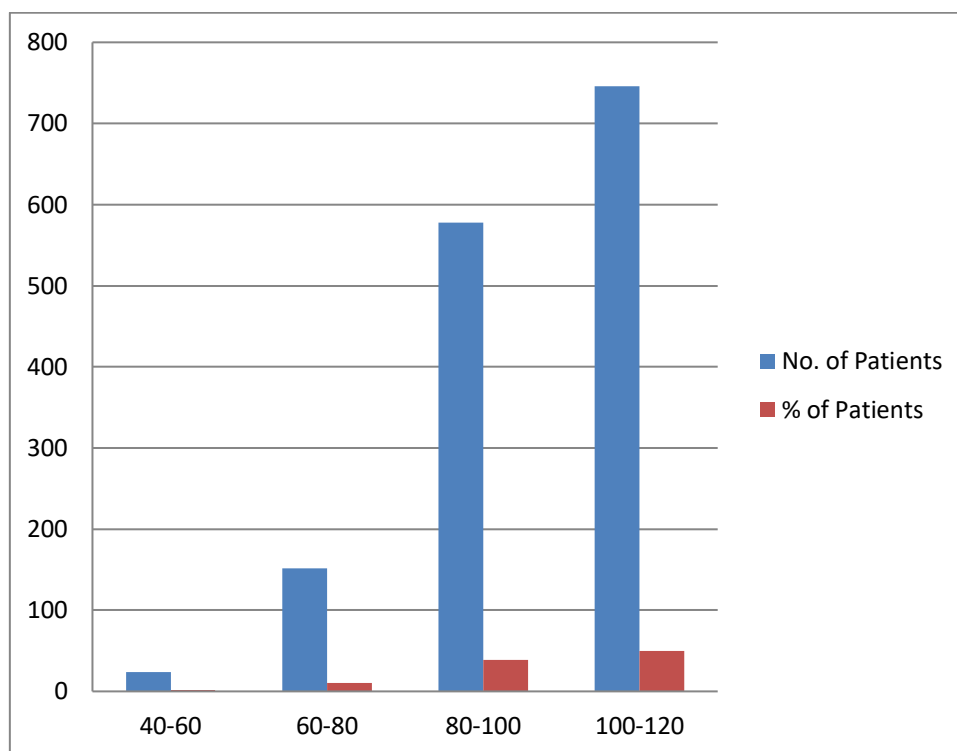


Fig 5: Infected patients body weight (Numbers & %)

CONCLUSION

Antibiotic self-medication is a global public health problem and enhances the development of antibiotic resistance. The high prevalence of antibiotic self-medication among medical students compared to general population is a matter of great concern. They will be this future drug prescribers and health

care educators. They need to be targeted repeatedly during their education and be taught the value of using antibiotics with caution. Community pharmacists could play a crucial role in controlling the irrational antibiotic use by general population. Public awareness and strict enforcement of law to control the sale of antibiotics without a valid prescription are needed to minimize antibiotic self-medication and associated risks.

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