



KAP on Malaria & HTN in Rural & Urban areas of Rangaraya Medical College, Kakinada

Authors

Dr K.Sowmyasudha M.D¹, Dr G.Sravana Kumar M.D²

¹Assistant Professor, A.C.S.R. Government Medical College, Nellore

Email: drksowmyasudha@gmail.com. Phone-09703500915

²Assistant Professor, Narayana Medical College, Nellore

Email: kumar.sravan811@gmail.com. Phone-09703726432

Abstract

This study was done in the view to assess knowledge on malaria as an ancient disease and hypertension as a new epidemiological transition in rural and urban areas. After analyzing the results both the groups had knowledge on both the diseases.

Keywords- Malaria, Hypertension.

Introduction

Malaria is an ancient disease, remains one of the most serious global health problem and it is a major cause of death. WHO estimates 300-500 million malaria cases annually? In South East Asia Region of WHO among 1.4 billion people 1.2 billion are exposed to the risk of malaria. SEAR contributed 2.5 million cases to the global burden of Malaria⁽¹⁾.

Of this India alone contributed 76% of the total cases. Even a century after the discovery of Malaria still remains one of challenging health problem in India. In India 10,89,795 cases are reported, among these 924 deaths annually. World Health Organisation & Government of India's Commitment is to attain Millennium Development Goal 6, target 8. Andhrapradesh state is one of the highly endemic states; Where 26,165 malaria cases are reported. East Godavari District contributes to 5,193 cases annually⁽²⁾.

Hypertension is a major risk factor for all cardiovascular diseases. Hypertension is a commonest cause for epidemiological transition⁽³⁾. Both the diseases are more prevalent in East Godavari District. To halt the prevalence of both the diseases the present study is carried out to document the knowledge on both the diseases.

Aims and Objectives

- To Assess the Knowledge, Attitude & Practices on Malaria (communicable disease) and Hypertension (non-communicable disease) in Rural & Urban areas.
- To Compare the Knowledge of Malaria and Hypertension in relation to rural and urban areas.

Materials and Methods

This study was a cross-sectional, analytical study done among the population residing in rural and

urban field practicing area of Rangaraya medical college, Kakinada in East Godavari District. During the time period between April to October 2012 for a period of 6 months.

By using a convenient sampling method a total of 200 households, n=100 from rural area of Gollala Mamidada, n=100 from urban area of Kakinada were selected randomly.

A pre-tested, semi-structured closed ended questionnaire was administered to the participants after obtaining their verbal consent. Data was analyzed by using SPSS software version 17. The results of the study were displayed in terms of percentages and the statistical analysis done by using chi-square test as it is a qualitative data.

Inclusion criteria- we included people between the age's of 18-60 yrs in this study and they should be the permanent residents of the village. Exclusion criteria- we excluded people who are not willing to participate and uncooperative people.

Results

Among the study participants 31% of Male and 26.5% of Female belongs to rural area. 19% of Male and 23.5% of Female are from urban area. 11% of Rural and 6% of Urban were illiterates. 8% of Rural and 4.5% of Urban were daily laborers. Only a few 9% in Rural and 8% in Urban were residing in katcha type of housing.

Regarding Malaria

47.5% of rural, 47% of urban participants heard the disease Malaria. 9.5% of rural, 5% of urban does not know symptoms of Malaria $p < 0.01$. (Head ache, body ache, high temperature & chills)⁽⁴⁾. 4% of rural, 5.5% of urban's had an attack of Malaria⁽⁵⁾. 45% of rural, 44.5% of urban's does not know commonest medicines used in Malaria $p < 0.01$. 44.5% of rural, 41% of urban's do not had any health workers visit to their houses.

Majority do not have blood smears by health workers. 17.5% of rural, 8.5% of urban's do not know Malaria is a communicable disease $p < 0.01$. 13.5% of rural, 7.5% of urban's do not know Malaria is a preventable Disease $p < 0.01$.

3.5% of Rural, 1.5% of Urban were not using any preventive measures (Table-1). 12.5% of Rural, 19.5% of Urban's know malaria can lead to complications if it is untreated (Fig-1). Majority knows availability of free treatment in Govt hospital and had good knowledge on mosquito breeding places⁽⁶⁾. But most of them does not know about control measures^(7, 8) (table-2). very few from both the groups not practicing any personal protective measure (fig-2).

Regarding Hypertension

Majority from both the groups heard the disease hypertension. 11% of rural, 5% of urban's do not know the risk age group for hypertension $p < 0.01$ (Table-3). 13.5% of rural, 10.5% of urban's know sex group predilection⁽⁹⁾ (females are more) for Hypertension $p < 0.01$. 29.5% of rural, 36% of urban participants checked their blood pressure checkup. 20.5% of rural, 26% of urban people and their family members were suffering with HTN. Only 19% of rural, 23% of urban were on regular treatment for HTN. $P < 0.01$. 23.5% of rural, 25.5% of urban's know the duration of treatment for HTN⁽⁹⁾. Majority knows about the time period for B.P check up, (Table-4).

Both the groups do not know HTN is a non-communicable disease. 43.5% of rural, 22.5% of urban's do not know it is a hereditary disease $p < 0.01$. Majority from both the groups do not know the disease is more in high socio-economic group. 23% of rural, 34% of urban's know HTN can lead to complications⁽¹⁰⁾ $p < 0.01$. 29% of rural, 19% of urban's do not know about complications (stroke and renal failure). Majority from both the groups knows salt intake is related to HTN $p < 0.01$. both the groups are having good knowledge on risk factors for hypertension (fig-3).

Table-1

Preventive Measures	Rural	Urban
ITN & spraying	8(44%)	79(39.5%)
Larvivorus fish	3(1.5%)	2(1%)
oiling	2(1%)	16(8%)
Don't know	7(3.5%)	39(1.5%)

Table-3

Risk age group	Rural	Urban
<40 yrs	6(3%)	10(5%)
>40 yrs	53(26.5%)	63(31.5%)
>60 yrs	19 (9.5%)	17(8.5%)
Don't know	22(11%)	10(5%)

Table-2

Control measures	Rural	Urban
Leveling & filling	5(2.5%)	48(24%)
Construction projects	1(0.5%)	1(0.5%)
Pooling of water	12(6%)	7(3.5%)
Don't know	82(41%)	44(22%)

Table-4

Time period	Rural	Urban
Daily	1(0.5%)	3(1.5%)
Weekly	3(1.5%)	2(1%)
Fortnightly	2(1%)	10(5%)
Monthly	80(40%)	78(39%)
Don't know	14(7%)	7(3.5%)

Figure-1

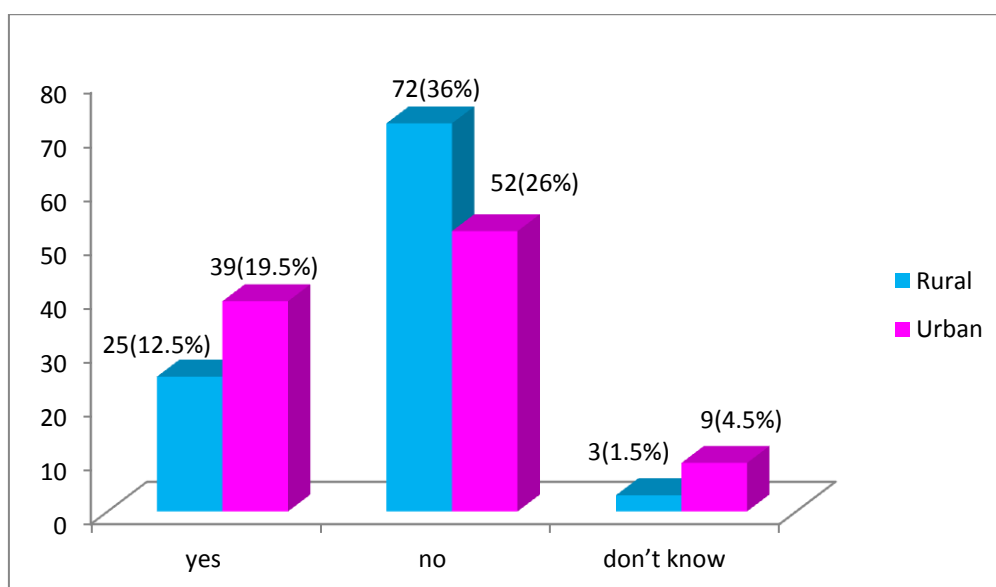


Figure-2

Few of them in both the groups were not using protective measures.

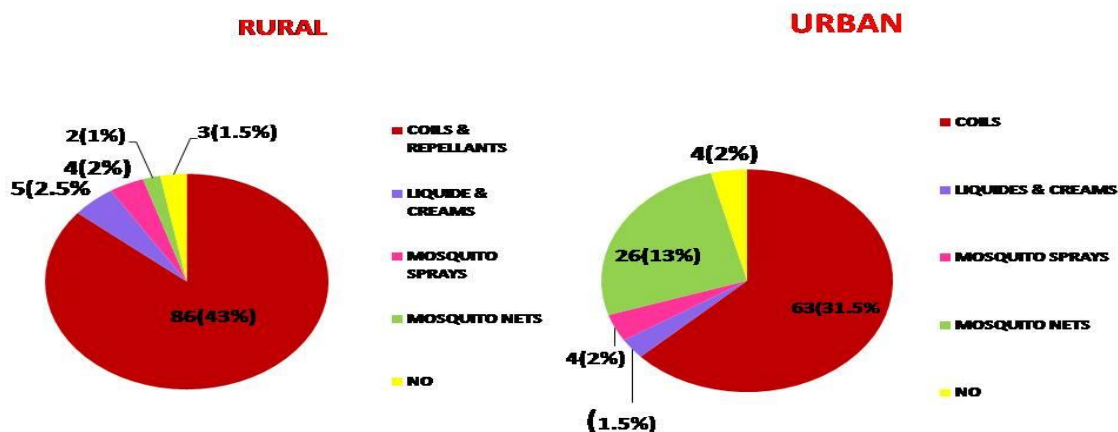
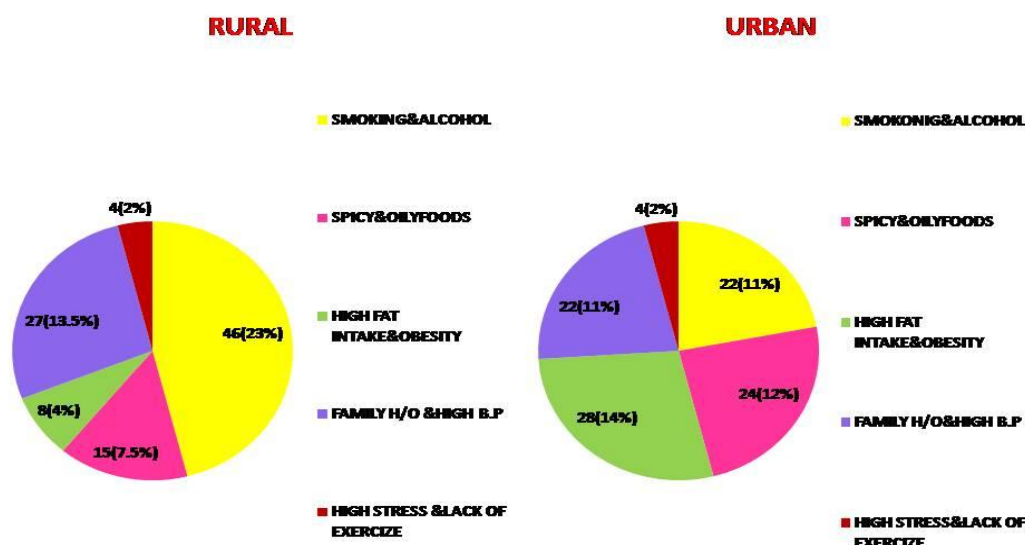


Figure-3

Risk factors for hypertension



Conclusions

Study participants from both the groups had good knowledge on malaria symptoms, mosquito breeding places. None of them don't had regular health worker visit. Both of them had poor knowledge on treatment complications, control measures. Majority were practicing protective measures. Both the groups have good knowledge on HTN, risk age group, treatment, complications & risk factors. Both of them had poor knowledge on gender predilection & hereditary tendency of the disease. More than half of study participants from both the groups are suffering with HTN & on irregular treatment.

Recommendations

Improving the availability of information on both the diseases through proper communication channels. Regularization of health workers visits.

References

1. W.H.O publication; World malaria report 2011.
2. Govt of India, 2010, annual report; 2009-2010- Ministry of Health and Family Welfare New Delhi.
3. World Health Organization: Global Status Report on Non –communicable Diseases 2010. Geneva: World Health Organization; 2011.
4. Bernard A.Okech, Isaack.Mwobobia, Anthony kamau, samuircrinoah mutiso, Joyce nyambura, cassain mwatele teruaki amino, Charles.M Wandawiro: use of integrated malaria management reduces malaria in Kenya. Public health and epidemiology. Plos one 3 (12): e4050. Doi: 10.1371/journal.pone.0004050. December 30, 2008.
5. Humphrey D.mazigo, Emanuel obasy, Wilhellmus mauka, Paulina manyiri, Maria zinga, Eliningaya J. kweka, Ladslans L.mnyone and Jorg leukelbach: Knowledge, attitudes and practices about malaria and its control in rural North West. Tanzania. SAGE; Hindawi access to research, malaria Research and treatment volume 2010, article ID 794261, 9 pages. DOI 10.4061/2010/794261.
6. Kaliya perumal karunamoorthi, abdikumera: knowledge and health seeking behavior for malaria among the local inhabitants in an endemic area of

- Ethiopia: implications for control. Vol.2 .no.6, 575-581(2010) health/journal/doi; 10.4236/health June 2010. 26085.
7. Johannes berg.Daan breederveld, anna.H. Rouen's, Yvonne hennik, marjoliju schouten, judyK.wendt and leoG.visser. Knowledge, attitudes and practices towards malaria risk and prevention among frequent business travelers of a major oil and gas company. Journal of travel medicine, volume 18, issue 6, pages 395-401, November/ December 2011.
 8. Panda R, Kanhekar LJ, Jain DC; Knowledge, Attitude and practice towards malaria in rural tribal communities of south Baster District of Madhya Pradesh. Journal of communicable diseases: 32 (3):222-227 January 2012.
 9. Aubert L¹, Bovet P, Gervasoni JP, Rwebogora A, Waeber B, Paccaud F. Knowledge, attitudes, and practices on hypertension in a country in epidemiological transition.PMID:9576126.
 10. Susan A Oliveria, ScD,^{1,2,3} Roland S Chen, MD,⁴ Bruce D McCarthy, MD,⁵ Catherine C Davis, PharmD,⁴; Hypertension Knowledge, Awareness, and Attitudes in a Hypertensive Population.J Gen Intern Med. 2005 Mar; 20(3): 219–225. doi: 10.1111/j.1525-1497.2005.30353.x PMID: PMC1490067.