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A Cross-Sectional Study on Knowledge Attitude and Practices about Alternate Medicine use in Covid-19/Dengue in Rural village, Tamilnadu

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Abstract

Background: Many who moved away from alternate medicines towards modern medicine are now resuming their way back alternate medicine, mainly due to different assumptions and beliefs. Though 70 % of the population in India primarily use alternate medicines, research is lacking. The attitude and behavior of the patients towards alternate medicines is of great concern for regulators and policy makers. In rural villages of Tamilnadu, there is extensive use of Nilavembu Kudineer during Dengue Outbreak and of Kabasura Kudineer in COVID-19 scenario. This study aims to assess the individual's knowledge, attitude and practices about alternate medicine especially Nilavembu and Kabasura Kudineer in rural villages of Namakkal District, Tamilnadu.

Methods: This cross-sectional study was conducted among 430 persons in rural village using multistage random sampling and data collected using pretested semi-structured interviewer administered questionnaire and results were analyzed in SPSS version 16 using chi-square test.

Results: 65% of the respondents had consumed some form of alternate medicine. Knowledge, attitude and Practice concerning the different available alternative medicines, in particular, Nilavembu and Kabasura Kudineer and their ideal dose, contraindications and preparation were relatively small [33%]. Gender, family type, occupation and socio-economic class were not significant and Conversely Respondents Belief in Alternative Medicine, Previous family history of Dengue/Covid-19, Point of Health Contact, and Education were all significant in our study.

Conclusion: The results indicate a need to conduct awareness programs by AYUSH Ministry on alternate medicines in order to ensure safe usage of alternate medicines.

Key words: Knowledge, Attitude, Practice, Dengue, COVID-19, Alternate medicines

INTRODUCTION AND JUSTIFICATION

Since the beginning of his life on earth, man has been using herbal products. Long before a patient has access to health care services, alternate medicines have also been used as first aid. The use of alternate medicines has been growing worldwide [1]. Many who once moved away from alternate medicines to modern medicine are now returning to this medicine system, primarily because of their different assumptions and beliefs. Most patients are disappointed with modern medicine due to the adverse drug reactions associated with these medicines. There are various types of alternate medicines used in India [2]. While 70% of the population mainly uses alternate medicines in India, there is a lack of research on these medicines. For regulators and policy makers, the attitude and behavior of patients towards alternate medicines is of great concern. There is a proportionate increase in the production, selling and advertising of these drugs with increased interest and

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orientation towards alternate medicines. However, in this field of alternate medicines, there is a significant knowledge deficit [3]. Yet, some patients have a deep faith in most natural medicines, and consider them safe. In a group of women who used herbal medicine, a study conducted by Vickers et al. [4] showed a weak doctor-patient relationship, poor knowledge of herb drug interactions. In another study, a high prevalence (67.7%) of the use of complementary and alternative medicines (CAM) was found among 493 diabetes patients. While CAM therapy was known to patients, there was disappointment with the care, which further indicated the need for CAM education. However, in India, where alternate medicines are used in abundance, studies of this nature are very few.

Dengue/COVID-19 is one of the most common outbreaks in recent times. Dengue/COVID-19 care is symptomatic, patients should be treated at home only after proper education and if there are no DANGER signs, and doctor is to be contacted only if there are danger signs [5]. Nilavembu Kudineer at the time of the Dengue Outbreak and Kabasura Kudineer in the COVID-19 scenario are widely used in rural villages of Tamilnadu, especially in health camps [6]. The following research aims to study the knowledge attitude and practices of alternative medicine based single compound/formulation Nilavembu Kudineer/Kabasura Kudineer in the prevention/treatment of Dengue/COVID-19 in rural villages of Namakkal District, Tamilnadu.

MATERIALS AND METHODS

This Community based Cross sectional study was conducted in Siluvampatty Village, Namakkal District, Tamilnadu for a period of 1 month among Rural population living in Siluvampatty village in Ernapuram Block, Namakkal District. The sample size is calculated based on previous prevalence of 50.4% effectiveness of Kabasura Kudineer [7] with a 95% confidence and absolute precision of 5%, and 10% excess sampling to account for non - response, sample size is derived. Estimated sample size was 430.

Inclusion Criteria: Head of the family
Exclusion criteria: Households which were locked on 3 consecutive visits and those who were not willing to participate in the study.

The Sampling method used for this study is Simple random sampling. Out Of all districts in Tamilnadu Namakkal district was chosen by simple random sampling. Out of 20 blocks in Namakkal district Eranapuram Block was also chosen by simple random sampling. Out of 14 villages in Eranapuram Block Siluvampatty village was selected by simple random sampling. 430 –head of the family person will be chosen from the population of- 6489 (1769 houses) in this one village by- simple random sampling using random number generator. (with help of family register from village health nurse). If any household did not meet the inclusion criteria it was skipped and the adjacent household was chosen. Interviewer administered Semi structured questionnaire was used. The Questionnaire consisted of socio-demographic details, and questions about Knowledge Attitude and practices regarding alternate medicine. After getting informed written consent, the data was collected using interviewer administered semi structured questionnaire from head of family. It took 20 minutes to administer the questionnaire and the entire data was collected in

Section I: Included Information on Socio demographic profile of participants
Section II: Included Questionnaire Knowledge Attitude and Practices about use of Nilavembu Kudineer and Kabasura Kudineer

i. 8 Knowledge based questions. Every right answer awarded one mark and every wrong answer awarded zero. The median score was taken as cut off. The ranking of respondents was done as follows. Good (score ≥ 50 %) and Bad (Score < 50%)
ii. 10 attitude related questions. The median score was taken as cut off. The ranking of respondents was done as follows. Positive (score ≥ 50 %) and Negative (Score < 50%)
iii. 12 questions regarding self-reported practice. The median score was taken as cut off. The ranking of respondents was done as follows. Good (score ≥ 50 %) and Bad (Score < 50%)

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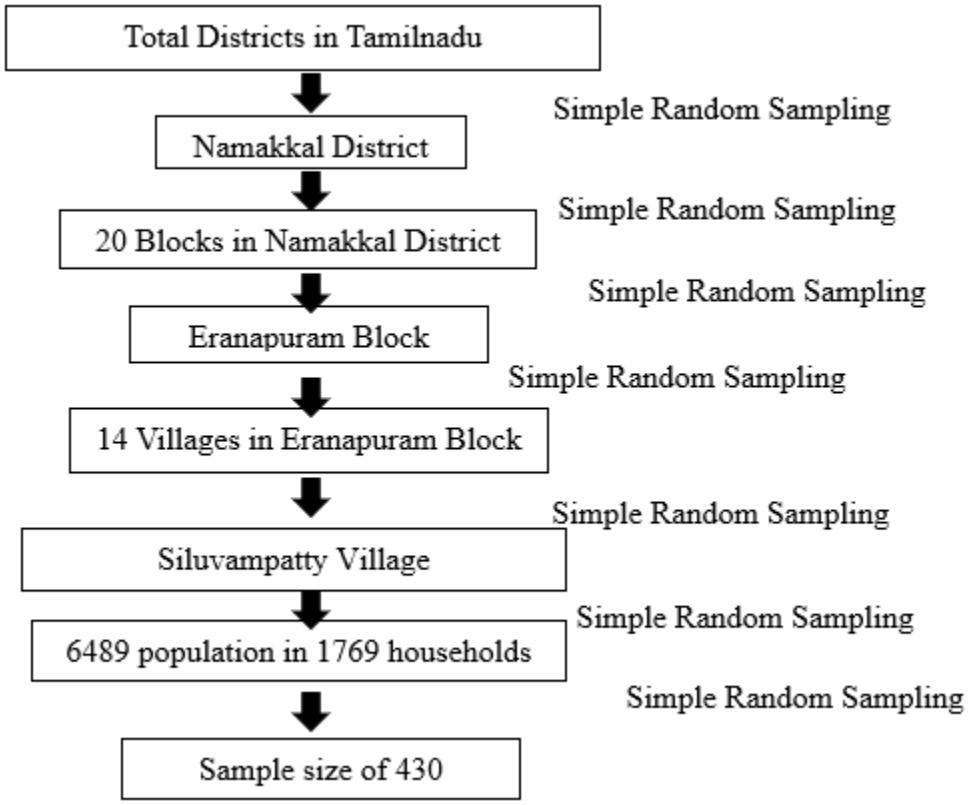
Multistage Random Sampling



RESULTS and DISCUSSION

Table 1: Socio-demographic details of the participants (N=430)

Variables		Percentage
Sex	Male	97
	Female	3
Age in yrs	18-25	1.4
	26-40	8.4
	41-60	54.9
	Above 60	35.3
Religion	Hindus	87.7
	Muslims	5.3
	Christians	7.0
Type offamily	Nuclear	6.5
	Joint family	90.2
	Three generation	3.3
Occupation	Unemployed	16.3
	Unskilled	40.0
	Semi-skilled	34.4
	Skilled	2.3
	Housewife	5.3
	Professional	1.6
Education	No Formal Schooling	50.9

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	Middle school	21.6
	High school	25.6
	Diploma	1.9
Socio- economic classification	Lower	95.6
	Lower Middle	3.0
	Upper Middle	1.4
Consumption of Nilavembu Kudineer	Yes	67.7
	No	32.3
Consumption of Kabasura Kudineer	Yes	61.4
	No	38.6
Belief in Traditional Medicine	Yes	76.3
	No	24.7

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TABLE 2: Association Between Various Variables and Knowledge, Attitude and Practices of Alternate Medicine

Variables		Knowledge		p value	Attitude		P value	Practice		P value
		Good	Bad		Good	Bad		Good	Bad	
Gender	Male	5	8	**0.952575**	4	9	**0.738807**	3	10	**0.458808**
	Female	157	260		147	270		137	280	
Age group	≤ 40 years	19	23	**0.286909**	17	25	**0.443624**	13	29	**0.815147**
	>40 years	143	254		134	254		127	261	
Religion	Hindus	143	234	**0.769612**	133	244	**0.850899**	124	253	**0.694210**
	Muslims & Christians	19	34		18	35		16	37	
Education	Primary School and Above	138	203	**0.019230**	128	213	**0.039576**	119	222	**0.042739**
	No Formal Schooling	24	65		23	66		21	68	
Occupation	Employed	143	237	**0.959693**	134	246	**0.860369**	126	254	**0.464365**
	Unemployed	19	31		17	33		14	36	
SES	MIDDLE	6	13	**0.574905**	6	13	**0.741096**	6	13	**0.925771**
	LOWER	156	255		145	266		134	277	
Belief in Traditional Medicine	Yes	138	190	**0.001**	128	200	**0.002331**	118	210	**0.006689**
	No	24	78		23	79		22	80	
Previous H/O Dengue/COVID in Family	Yes	18	51	**0.030167**	17	52	**0.046574**	17	52	**0.125434**
	No	144	217		134	227		238	123	
Preferred Point of Health Care Contact	Government	82	106	**0.024998**	77	111	**0.025314**	70	118	**0.068183**
	Private	80	162		74	168		70	172	

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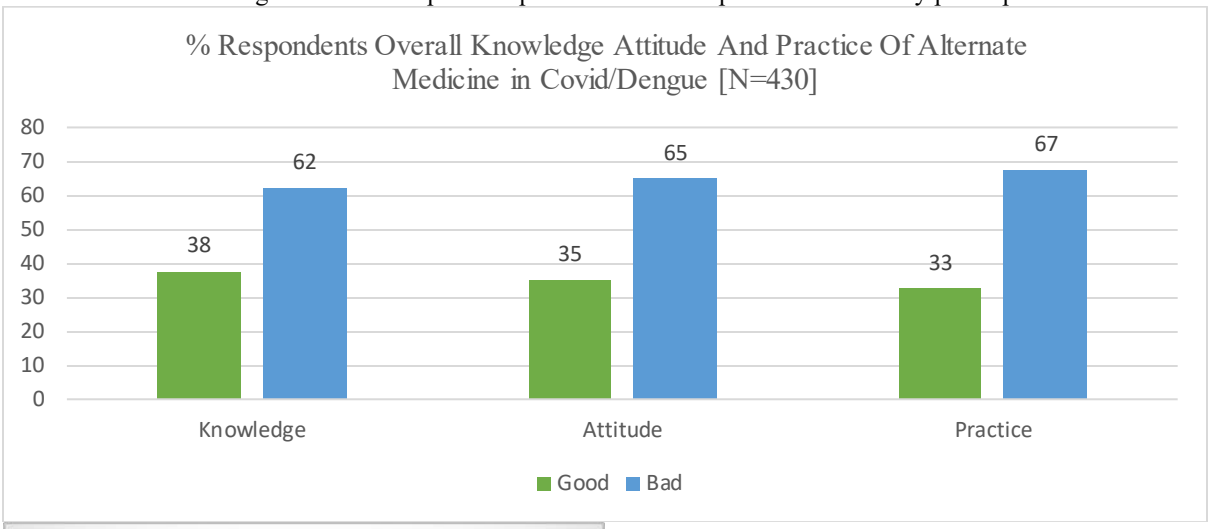
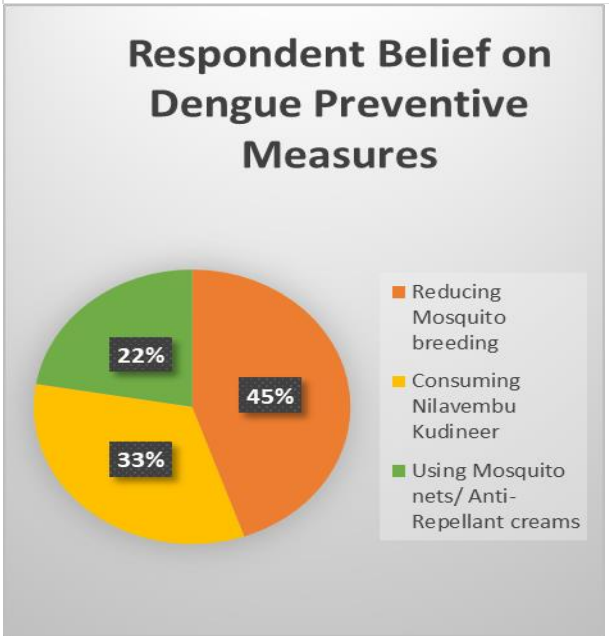
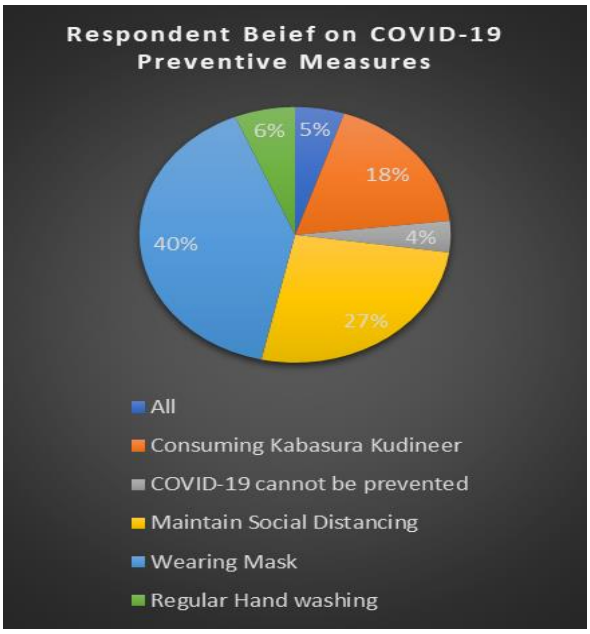
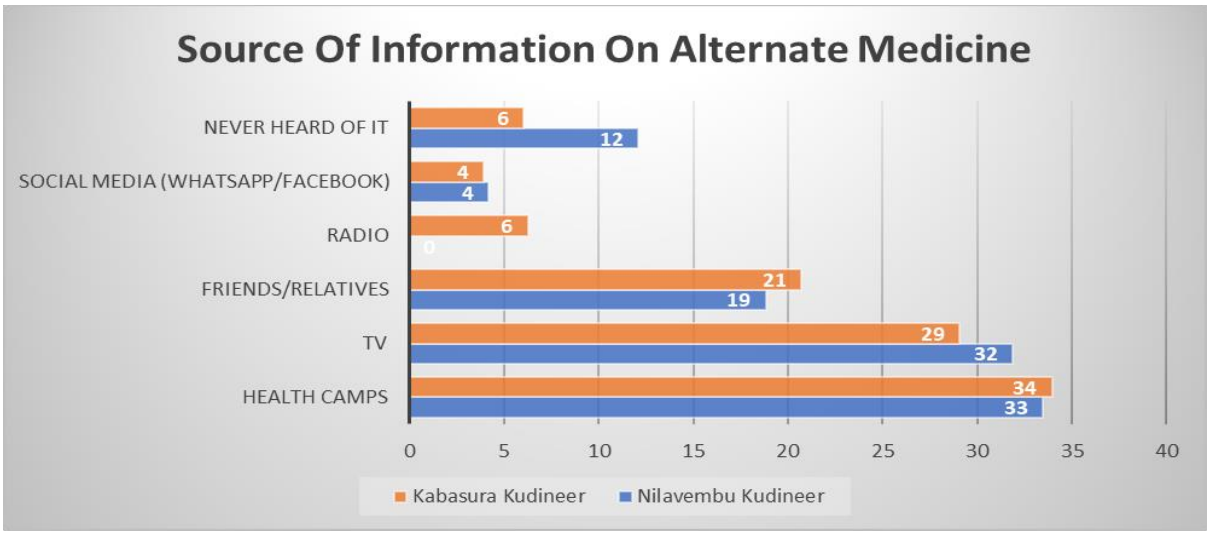
Figure 1 to 4: Graphical representation of responses of the study participants









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Half of the study population (55%) belongs to the age group of 41-60 years. Among the study population, 50.9 % of them had no formal schooling, majority of the study population (95.6%) belong to lower socio economic of modified BG Prasad classification. (Table.1) In this study, an overwhelming 76% of respondents believed in alternate medicine for treatment/prevention of Dengue/Covid-19.Among the respondents, nearly 65% of them had consumed one or the other form of alternate medicine. About 35% of the study populations knew about Nilavembu and Kabasura Kudineer from Television and another 32% knew about the same from Health Camps. 68% of the participants had consumed Nilavembu Kudineer from health camps and 62% of them had consumed Kabasura Kudineer. [Table 1]. Majority of the respondents [45%] believed that Dengue could be prevented by Reducing the sources of mosquito breeding than Consumption of Nilavembu Kudineer alone. (Figure 3). Similarly, Majority of the respondents [40%] believed that COVID could be prevented by wearing mask than Consumption of Nilavembu Kudineer alone. (Figure 3). Knowledge about various alternate medicines available and awareness about the ideal dosage of Nilavembu/Kabasura Kudineer for Adult and Child were [6.5% & 6%] Likewise Only 48% of the respondents knew about the ingredients in Nilavembu/Kabasura Kudineer. Moreover 32% of respondents believed that Health Care workers alone were responsible for distributing Nilavembu and Kabasura Kudineer. Similarly Practices about usage of alternate medicine especially the preparation of Nilavembu/ Kabasura [20.4%] and the minimum duration within which intake of the same is considered safe, were also low [33%]. The Study also revealed that over 42% of the respondents did not know that Alternate medicine, particularly Nilavembu and Kabasura Kudineer were available free of cost from all Siddha OPDs in Government PHCs. It was observed that Scores for Knowledge, attitude and Practices regarding Alternate Medicine were higher among those with at least Primary schooling when compared with those who had no formal schooling. It was found in our study that gender, type of family, occupation and socio- economic class were not associated with the Knowledge, attitude and practice of alternate medicine. Conversely Respondents Belief in Alternate Medicine, Previous history of Dengue/ Covid-19 in the family and the preferred point of Health Contact all were significant (Table 2). The study shows that it is inevitable that knowledge and awareness regarding the various aspects of a pandemic outbreak are very important among the masses to curb it. Alternate Medicine has great importance in management and prevention of disease and health.

Conclusion

In recognition of the rise in the number of cases, it is important that research on alternative medicines, be carried out in diverse populations in order to improve the current situation by limiting the number of cases. Natural and home remedies are more affordable and easily accessible for the general populace, so it is necessary to promote knowledge of various alternate medicine. This Study was done in a rural population in Namakkal District, Tamilnadu. As the study subjects were mainly Head of Family and majority of the respondents where Male there may be limitations in the Study especially in terms of Practice of Alternate Medicine. Owing to a lack of time and the present pandemic conditions, this research has been carried out in a small population and can be strengthened by using a larger population. The future scope of this research is to gain knowledge of the impact of alternate medicine on Dengue/COVID-19 as well as to explore the therapeutic effects. The study concludes that most of the participants are aware of the cause, mode of the spread, prevention options and the initiatives taken by the government to prevent Dengue/Covid-19 and one among the actions taken by the government is the use of alternate medicines, in particular, Nilavembu and Kabasura Kudineer. The results indicate a need to conduct educational and awareness programs by AYUSH Ministry on various alternate medicines in order to improve consumer Knowledge, attitude and practices towards the same in order to ensure safe usage of alternate medicines.

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