Empirical Analysis and Perception of Health Disparities in Rural People with Special Reference to Anaikatti Village Coimbatore

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Abstract

The goal of the present research is to comprehend the existing state of health among residents of Anaikatti village in the Coimbatore district. The most prevalent diseases and signs of health problems have been covered. The public' perceptions of health concerns and their causes are also examined. The study takes a qualitative method. The research is based on real- time data gathered from a poll of Anaikatti Village inhabitants. Convenience sampling was used to choose the respondents. The research included 168 participants in all. To analyse primary data, statistical techniques such as percentage analysis, descriptive statistics, and ANOVA are applied. The findings show that some areas of the neighbourhood have inadequate drinking water and sanitary care. Legislators and health-care practitioners, with the help of non-governmental organisations, must take adequate actions to ensure safe drinking water and sanitary facilities. Frequent health camps, free distribution of medications for common symptoms, actions to increase the nutritional content of food consumed, distribution of nutritional supplements, and frequent doctor visits may aid in the identification of previously undiagnosed illnesses and improve overall health. An in-depth research into prevalent genetic disorders is also recommended, while immunisations against seasonal diseases may aid in boosting immunity against seasonal sickness in toddlers and the elderly.

Keywords: Rural women, Anaikatti village, Women health, Rural sanitation, Rural healthcare

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Introduction

Health is a crucial input for the development of human resources and the quality of life, as well as the nation's social and economic growth. Population health improvement has been seen as an indicator of social progress. Furthermore, at the individual, community, and national levels, health is seen as a priority for long-term development measures. The health of a country's population has far-reaching ramifications for children's health and education, as well as family economic well-being and the individuals themselves.

The government has succeeded in developing infrastructure in urban areas but has failed to do so in rural areas, which support 70% of the Indian population. Though the current infrastructure for delivering health care in rural India is on the right track, the quality and quantitative availability of primary health care services falls well short of the World Health Organization's specified requirements (Bhandari & Dutta, 2007). Individuals incur a significant daily pay loss to attend Primary Health Centres and Community Health Centres due to their far location from rural regions. This leads to rural residents using the services of unregistered private health care practitioners in their communities at reasonable rates (Iyengar & Dholakia, 2012).

Because public health care is inaccessible and health care services are of poor quality, the majority of people in India seek treatment from the local private health sector. In India, 92 percent of health-care visits go to private providers, with 70 percent of the population living in cities. Private health care, on the other hand, is costly, sometimes unregulated, and of variable quality. It is not only untrustworthy for the uneducated, but it is also out of reach for low-income rural residents. Special attention must be paid to rural health care in order to prevent disease transmission and minimise rising rates of mortality due to a lack of suitable health facilities. Low quality of service, insufficient accountability, a lack of understanding, and restricted access to facilities are the major difficulties in the healthcare industry. Various groups are collaborating to enhance health care, and technology is playing an important role in facilitating this. For the effective implementation of these changes, information and communications technology presents a plethora of options (Gramvaani, 2022).

The current study makes an attempt to understand the prevailing health conditions among citizens of Anaikatti village in the Coimbatore district. The common illnesses and symptoms indicating health issues have been discussed. Also, the perception of the citizens over the health issues and their causes are also discussed.

2. Review of Literature

Das et al., (2022) visited 1519 villages in 19 Indian states to count all health care providers and assess their quality using medical knowledge exams. They provide three major results. The majority of providers (86%) are in the private sector, and the majority of those in the private sector are 'informal providers' with no professional medical training. Second, quality varies significantly among states, and formal credentials are a poor indicator of quality. Surprisingly, the proportion of informal providers does not decrease as one's socioeconomic standing rises. Instead, their quality, as well as the quality of physicians in the private and public sectors, is rapidly improving. Third, India is split not just by the quality of its health-care providers, but also by their costs: Better-performing states deliver greater quality at lower per-visit costs, implying that they are operating on a distinct production potential frontier. These trends are consistent with considerable diversity in the availability and quality of medical education among states.

Anbu, (2020) analysed the health of rural people in the Kanyakumari area. Random sampling was used to pick the sample respondents. Thus, a total of 180 respondents were chosen for the current research, with 45 respondents from each of the four taluks. Improving the health of rural individuals requires a strong and persistent government commitment, a favourable policy environment, and well-targeted resources. The government should take significant efforts to strengthen the facilities of current rural health care services, both numerically and qualitatively, by building more rural-based health centres with sufficient health professionals, allowing people to get acceptable healthcare services. The health-care delivery system must be redesigned. Primary health care centres and subcentres should be placed under the complete supervision of a panchayat or a group of panchayats.

Mohan & Kumar, (2019) summarises the evidence on what works for rural primary care and then provides recommendations for strengthening healthcare in rural India based on discussions at a one-day National Consultation held as part of the World Rural Health Conference to share learnings from experiences and evidence of rural primary healthcare in India and around the world, in order to identify elements that may guide improvements in rural healthcare in India. The author believes that India has achieved considerable progress in population health over the last decade, narrowing the difference between rural and urban regions, as well as between affluent and poor. However, significant inequities persist, and access to healthcare in rural regions remains a major concern.

Kumar, (2018) seeks to build a hierarchical model for the optimal administration of rural healthcare services in India by identifying aspects linked to rural healthcare services. A questionnaire study found and connected a variety of aspects concerning Uttarakhand's rural healthcare systems. The opinions of experts were transformed into a reachability matrix and an interpretative structural model. The FMICMAC hierarchical and interpretative structural models imply four important driving factors: illnesses, climatic circumstances, population increase, and political pressure. Despite several challenges, rural healthcare services may be enhanced by considering important driving elements that policymakers can utilise as a prediction tool. The findings show that population management, service coordination with local governments, and rural health centre yearly maintenance may all be game changers for enhanced healthcare services.

Neog, (2014) investigated the daily labour load and health status of rural people in the sampling villages of the chosen socioeconomic groups in Kamrup district, Assam. The sample villages were determined using Composite Z-scores based on 11 parameters linked to rural individuals' socioeconomic status. To achieve the aims, data from both primary and secondary sources were employed. Data has been evaluated using statistical approaches such as percentage, mean, standard deviation, coefficient of variation, Z-scores, and multivariate analysis. A relationship is formed between rural women's health and their community, which is determined to be the worst among char communities, followed by tea garden,

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scheduled tribe, and scheduled caste groups. There are positive relationships between the amount of firewood consumed, the number of children per mother, and the number of illnesses. A favourable link is established between the number of diseases and the daily workload of individuals.

3. Research Methodology
The research employs a qualitative approach. The study is based on real-time data collected via a survey from Anaikatti Village residents. The respondents were chosen using convenience sampling techniques. A total of 168 people participated in the study. Statistical processes such as percentage analysis, descriptive statistics, and ANOVA are used to analyse primary data. Following a description of the findings, conclusions are reached.

4. Analysis and Interpretation
The primary data has been analysed using appropriate statistical methods and the results are presented with interpretations.

Table 1: Basic details of the respondents and survey region
Basic demographical details and a basic assessment of the respondent and region of study helps in providing a better understanding of the results.

Factor	Variable	No. of Respondents	Percent	Total Percentage
Gender	Male	82	48.8	100.0
	Female	86	51.2	
Age Group	18 to 30 years	57	33.9	100.0
	31 to 50 years	59	35.1	
	Above 50 years	52	31.0	
Family Size	Up to 3 members	59	35.1	100.0
	4 to 6 members	73	43.5	

	>6 members	36	21.4	
Anaikatti Village Conditions				
Village having drinking water facilities	No	59	35.1	100.0
	Yes	50	29.8	
	Only in some places	59	35.1	
Village has proper sanitary facilities	No	51	30.4	100.0
	Yes	56	33.3	
	Only in some places	61	36.3	

Source: Primary Data

Interpretation:

Table 1 displays the basic details related to the respondents and the survey region. Data shows that 48.8 percent of the respondent are male, and 51.2 percent are female. Based on age grouping, 33.9 percent are aged between 18 to 30 years, 35.1 percent are aged from 31 to 50 years and 31 percent are aged above 50 years. Based on the number of family members, 35.1 percent of the respondents are from families up to 3 members indicating parents and a child. 43.5 percent are from families having 4 to 6 members and only 21.4 percent are from families having more than 6 members.

The researcher has focussed on two major aspects of the village namely drinking water and sanitary facilities. 35.1 percent of the respondents report that no proper drinking water is available while 29.8 percent reported having drinking water facilities. 35.1 percent reported that only some places in the village have access to drinking water facilities. Concerning sanitary facilities, 30.4 percent reported lack of proper sanitary facilities while 33.3 percent reported availability of proper sanitation. 36.3 percent reported that only a few places have good sanitary facilities.

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Table 2: General health issues experienced

Data on some of the most common health issues has been presented below.

General Health Issue	No. of Respondents	Percent
High Blood Pressure	101	60.12
Low Blood Pressure	98	58.33
Diabetes (Sugar)	93	55.36
Anaemia	98	58.33
Thyroid issues	107	63.69
Kidney stones	97	57.74
Others	101	60.12

Source: Primary Data

Interpretation:
Table 2 displays the general health issues present among the rural populace. 60.12 percent of the respondents have high blood pressure, 58.33 percent have low blood pressure, 55.36 percent have diabetes, 58.33 percent suffer from anaemia, 63.69 percent are affected by thyroid issues, 57.74 percent suffer from kidney stones and 60.12 percent reported other health issues.

It could be observed that most (63.69 %) of the respondents have thyroid issues and blood pressure, and anaemia are also equally common among rural people. While certain common illnesses are easily identified and diagnosed, certain symptoms remain undiagnosed or neglected.

Table 3: Undiagnosed symptoms experienced frequently

While certain common illnesses are easily identified and diagnosed, certain symptoms remain undiagnosed or neglected.

Undiagnosed symptoms	No. of Respondents	Percent
Excessive Tiredness	95	56.55
Weakness of limbs	84	50.00

Undiagnosed symptoms	No. of Respondents	Percent
Breathlessness	102	60.71
Mouth ulcers	93	55.36
Frequent Headaches	102	60.71
Numbness	98	58.33
Pelvic pain	97	57.74
Bloating of Stomach	104	61.90
Dry Skin	101	60.12

Source: Primary Data

Interpretation:

Table 3 displays the data on common symptoms of illnesses that are mostly left unchecked due to various reasons. 56.55 percent of the respondents reported excessive tiredness, 50 percent reported weakness in limbs, 60.71 percent reported occasional breathlessness, 55.36 percent reported mouth ulcers, 60.71 percent reported frequent headaches, 58.33 reported a feeling of numbness, 57.74 percent reported pelvic pain, 61.90 percent reported bloating of stomach and 60.12 percent reported dry skin.

It could be observed that symptoms like breathlessness, headaches, bloating of stomach and dry skin were more common.

Table 4: Perception towards reasons behind health issues

	Mean	Std. Deviation
Seasonal Health issues arise due to changes in climatic conditions	3.60	1.46
Many general health issues are hereditary	3.87	1.11
Lack of nutrition is the major cause of nerve related health issues	3.66	1.28
Poor lifestyle is the reason for health issues	2.55	1.37
Poor drinking water is a major health hazard	3.38	1.66

	Mean	Std. Deviation
Poor ground water conditions create several health issues	3.27	1.48
The air around the village is too polluted creating respiratory diseases	3.10	1.71
Poor sanitary conditions and lack of toilets lead to urinary infections	2.73	1.43
Poor Accessibility to good hospitals affects prompt diagnosis of diseases	3.13	1.22
Mean = 3.25, S.D = 1.41, N= 168		

Source: Primary data

Interpretation

Table 4 traces the perception of rural people of Anaikatti with regards to reasons behind health issues. The opinion that many health issues were hereditary was most common among the villagers (3.87). Also, many villagers felt that lack of nutrition is the major cause of nerve related health issues (3.66). Seasonal health issues due to climatic changes were also acknowledged by the villagers (3.60). Another major reason behind illnesses was the lack of good drinking water (3.38) and poor ground water conditions (3.27). Reasons like poor accessibility to hospitals (3.13), air pollution (3.10), poor sanitary conditions (2.73) and poor lifestyle (2.55) received less than the average mean value indicating that their impact was not very prominent. It could be inferred that hereditary diseases, lack of nutrition, seasonal changes, drinking water and ground water issues were the main problems behind health issues in Anaikatti village of Coimbatore.

Table 5: Age group and Perception on reasons behind health issues

Null Hypothesis (H0): There is no significant association between the Age group and Perception on reasons behind health issues.

ANOVA					
Sum Perception					
	Sum of Squares	df	Mean Square	F	Sig
Between Groups	145.297	2	72.649	1.313	.272
Within Groups	9127.411	165	55.318		
Total	9272.708	167			

Interpretation

The above table 5 shows that there is no significant relationship between the Age group and Perception on reasons behind health issues as value is greater than 0.05 level of significance. Hence the null hypothesis that there is no significant association between the Age group and Perception on reasons behind health issues is accepted.

Table 6: Family size and Perception on reasons behind health issues

Null Hypothesis (H0): There is no significant association between the family size and Perception on reasons behind health issues.

ANOVA					
Sum Perception					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	427.837	2	213.919	3.991	.020
Within Groups	8844.871	165	53.605		
Total	9272.708	167			

Interpretation

The above table 6 shows that there is a significant relationship between the family size and Perception on reasons behind health issues as value is lesser than 0.05 level of significance. Hence the null hypothesis that there is no significant association between the Age group and Perception on reasons behind health issues is rejected.

As the size of family increases, the probability of family members getting sick also increases which affects the respondents' perception towards the reasons behind health issues.

Table 7: Disease versus Perception

Null Hypothesis (H0): There is no significant relationship between Common health issues and Perception on reasons behind health issues.

Correlations			
		Common health issues	Reasons behind health issues
Common health issues	Pearson Correlation	1	-.270**
	Sig. (2-tailed)		.000
	N	168	168
Reasons behind health issues	Pearson Correlation	-.270**	1
	Sig. (2-tailed)	.000	
	N	168	168
**. Correlation is significant at the 0.01 level (2-tailed)			

Interpretation

The above table 7 shows that the Pearson Correlation value between Common health issues and Perception on reasons behind health issues is -0.270 and the significant p-value is less than 0.05 significant level and negative. Hence the result concluded that the correlation between Common health issues and Perception on reasons behind health issues is significant. The hypothesis that there is no significant relationship between Common health issues and Perception on reasons behind health issues is rejected.

But it must also be noted that the significance is negative indicating that as health issues increase, the perception of the villages behind reasons behind those diseases becomes increasingly negative.

5. Findings of the Study

The analysis data reveals that most respondents were female (51.2%) and a even distribution of age groups was maintained. Also, most families (43.5%) had 4 to 6 members. Data on the village conditions revealed that only few regions had good drinking water facilities and proper sanitary conditions while some regions were neglected.

Thyroid, blood pressure and anaemia were the most common health issues while symptoms like breathlessness, headaches, bloating of stomach and dry skin were more common. Hereditary disorders, a lack of nutrition, seasonal fluctuations, drinking water and ground water difficulties were identified as the primary causes of health problems in Anaikatti village, Coimbatore.

A significant relationship between family size and villagers' perception towards reasons behind diseases was observed. Additionally, a negative correlation between common health issues and villagers' perception towards reasons behind diseases was noted.

6. Suggestions

Based on the findings, it is suggested that more care must be taken in providing uniform drinking water facilities. Also, care must be taken to provide sanitary care to all regions of the village. Health camps must be setup to detect common health issues and medicines for very common and uncomplicated diseases may be distributed. Also, a detailed diagnosis of common health symptoms is advised.

7. Conclusions

The study sought to understand the conditions of the Anaikatti region and the consequent health issues among the villagers. The data reveals poor drinking water and poor sanitary care in certain regions of the village. Legislative members and health care providers with the assistance of NGO's must take appropriate steps to provide proper drinking water facilities and sanitary facilities. Frequent health camps, free distribution of medicines for common symptoms,

steps to improve nutritional value of the food consumed, distribution of nutritional supplements and frequent doctor visits may help in diagnosis of undetected diseases and improve the general health. A much-detailed study on common hereditary diseases is also advisable while vaccinations towards seasonal diseases may help in improving immunity towards seasonal illness in children and elders.

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